



Università
della
Svizzera
italiana

BancaStato
BANCA DELLO STATO DEL CANTONE TICINO

FNSNF
SWISS NATIONAL SCIENCE FOUNDATION

ti Repubblica e Cantone
Ticino
Under the patronage of the Government Council
of the Republic and Canton of Ticino

Routledge
Taylor & Francis Group

LIVGA Città
di
Lugano

Regional

Studies

Association

**THE GLOBAL FORUM FOR CITY
AND REGIONAL RESEARCH,
DEVELOPMENT AND POLICY**

A WORLD OF FLOWS – LABOUR MOBILITY, CAPITAL AND KNOWLEDGE IN AN AGE OF GLOBAL REVERSAL AND REGIONAL REVIVAL

3rd – 6th June 2018, Università della Svizzera italiana
Lugano, Switzerland
#RSALUGANO



f facebook.com/regionalstudiesassociation
in linkedin.com/in/regionalstudiesassociation
t twitter.com/regstud
RS RSA_ADP



www.regionalstudies.org

Company registered by guarantee registered in England and Wales No. 4116288 Registered Charity No. 1084165



THE RSA CONFERENCE APP
To download visit your app store
and search 'RSA EVENTS'

Regional Studies Association - A Leading and Impactful Community

A World of Flows: Labour Mobility, Capital and Knowledge in an Age of Global Reversal and Regional Revival

2018 Annual Conference

3rd –6th June 2018

Università della Svizzera italiana
Lugano, Switzerland

This volume has been compiled by
Wanda Miczorek

ISBN: 978-1-897721-66-7

HISTORICAL PRODUCTION OF THRACE REGION BY MEANS OF SETTLER URBANISM IN TURKEY <i>Eda Acara</i>	1
UNDERSTANDING FUNCTIONAL CHANGES AND THE BOUNDARIES OF POLYCENTRIC METROPOLITAN AREAS WITH NEW TOOLS: THE CASE OF FLORENCE <i>Chiara Agnoletti</i> <i>Leonardo Piccini</i> <i>Claudia Ferretti</i> <i>Patrizia Lattarulo</i>	1
THE LOCATION DETERMINANTS OF EMERGING WORKPLACES: AN EMPIRICAL STUDY OF COWORKING SPACES IN ITALY <i>Mina Akhavan</i> <i>Ilaria Mariotti</i>	2
A MIXED METHOD APPROACH IN MAPPING AND EXPLORING TRANSNATIONALISM IN ARCHITECTURE AND URBANISM <i>Mina Akhavan</i> <i>Davide Ponzini</i>	2
A COMPARATIVE STUDY OF URBAN OCCUPATIONAL STRUCTURES: BRAZIL AND UNITED STATES <i>Pedro Amaral</i> <i>Clauber EM Scherer</i> <i>David C Folch</i>	3
GEOSPATIAL MODELING OF MICROCEPHALY AND ZIKA VIRUS SPREAD PATTERNS IN BRAZIL <i>Pedro Amaral</i> <i>Thiago Rocha</i> <i>Lucas Carvalho</i> <i>João Vissoci</i>	3
GEOGRAPHIC CLUSTERS OF CANCER MORTALITY IN THE USA <i>Raid Amin</i>	4
LOCATION CHOICES OF CREATIVE WORKERS AND CREATIVE INDUSTRIES <i>Sveta Angelopoulos</i> <i>Ashton De Silva</i>	4
THE DETERMINANTS OF RELATED AND UNRELATED VARIETY IN ITALIAN PROVINCES <i>Roberto Antonietti</i> <i>Chiara Burlina</i>	4
ACTORS, NETWORKS AND DEVELOPMENT TRANSLATIONS; THE CASE OF A LOCAL ECONOMIC DEVELOPMENT INTERVENTION IN GHANA <i>Benedict Arko</i>	5

WORKPLACES AS POST-PUBLIC URBAN SPACE? <i>Simonetta Armondi</i> <i>Stefano Di Vita</i> <i>Corinna Morandi</i>	5
FOREGROUNDING THE URBAN AGENDA FOR THE EU: SPATIALITY, KNOWLEDGE, POWERS <i>Simonetta Armondi</i>	6
MULTINATIONAL ENTERPRISES, SERVICE OUTSOURCING AND REGIONAL STRUCTURAL CHANGE <i>Andrea Ascani</i> <i>Simona Iammarino</i>	6
SUPPORTING TECHNOLOGY DIFFUSION? THE CASE FOR RURAL DIGITAL HUBS <i>Fiona Ashmore</i> <i>Liz Price</i>	7
A PLACE-BASED DEVELOPMENTAL REGIONAL INDUSTRIAL STRATEGY AND/FOR SUSTAINABLE CAPTURE OF CO-CREATED VALUE <i>David Bailey</i> <i>Christos Pitelis</i> <i>Philip Tomlinson</i>	8
OXFORD AND GRENOBLE: KNOWLEDGE ORGANISATIONS IN LOCAL DEVELOPMENT REVISITED <i>Nabhassorn Baines</i> <i>Dimitris Assimakopoulos</i> <i>Helen Lawton-Smith</i> <i>Saverio Romeo</i> <i>Maria Tsouri</i>	8
WHAT IS PLURI-REGIONALITY AND HOW DOES IT HELP US UNDERSTAND GLOBAL REVERSAL AND REGIONAL REVIVAL? <i>Joerg Balsiger</i> <i>Elena Koritchenko</i>	9
MEASURING POLYCENTRICITY OF URBAN REGIONS IN POLAND <i>Bartosz Bartosiewicz</i> <i>Szymon Marcińczak</i>	9
THE EFFECT OF MARKET REFORMS ON UNEMPLOYMENT DYNAMICS <i>Moreno Baruffini</i> <i>Luzius Stricker</i>	10
WHAT DOES IT MEAN TO BE CENTRAL IN THE PERIPHERY AND PERIPHERAL IN THE CENTRE? THE CASES OF THE UNIVERSITIES OF EVORA, CAMPINAS AND BRASILIA <i>Ana Paula Bastos</i> <i>Maria Conceição Rego</i> <i>Mauricio Serra</i>	10

REGIONALISING “THE 2018 AGEING REPORT” SOCIOECONOMIC PROJECTIONS USING AN EXPLANATORY FRAMEWORK <i>Filipe Batista e Silva</i> <i>Carlo Lavallo</i> <i>Nicola Pontarollo</i> <i>Pilar Vizcaino</i>	11
HOUSING POLICY IN RUSSIA: DEVELOPMENT DRIVER OR REINFORCER OF URBAN SHRINKAGE <i>Elena Batunova</i> <i>Maria Gunko</i>	11
RECOVERY OR STAGNATION? BRITAIN’S OLDER INDUSTRIAL TOWNS SINCE THE RECESSION <i>Christina Beatty</i> <i>Steve Fothergill</i>	12
INVOLVING LOCAL AUTHORITIES: THE INCLUSION OF CDPS IN SPATIAL PLANNING <i>Joris Beckers</i>	12
BEYOND OLD INDUSTRY: TOWARDS A RESEARCH AGENDA FOR THE NEW ECONOMY <i>Andrew Beer</i>	13
CAN THE EURASIAN ECONOMIC UNION BECOME ONE OF THE PILLARS OF THE NEW INTERNATIONAL WORLD ORDER? <i>Anton Bendarzsevszkij</i>	13
LOCATION CHOICES OF PRIVATE HOUSEHOLDS IN THE MUNICH METROPOLITAN REGION AND FUTURE DEVELOPMENT OPTIONS <i>Michael Bentlage</i> <i>Mariana Avezum</i>	13
GOVERNANCE OF REGIONAL DEVELOPMENT AT A MESO SCALE AND THE ROLE OF TERRITORIALITY AND POLITICS: THE CASE OF THE MIDLANDS ENGINE AND THE NORTHERN POWERHOUSE <i>Gill Bentley</i> <i>John Shutt</i>	14
GLOBAL PIPELINES OF TRANSNATIONAL ENTREPRENEURS; A CRITICAL SURVEY OF THE LITERATURE <i>Su-Hyun Berg</i>	15
BRIDGING THE GAP BETWEEN DECISION MAKERS AND CITIES. NOTES FROM CAMPANIA’S WASTELANDS (ITALY) <i>Gilda Berruti</i> <i>Maria Federica Palestino</i>	15
TOWARDS A LESS EXPERIMENTALIST MULTI-LEVEL GOVERNANCE: HOW TO EMBED MACRO-REGIONAL STRATEGIES INTO EU FUNDING PROGRAMMES? THE CASE OF EUSALP <i>Davide Gianluca Bianchi</i>	16
THE POTENTIAL IMPACT OF BREXIT ON THE UK AEROSPACE SECTOR	16

Chloe Ashton Billing
Raquel Ortega Argiles

AFRICAN DEVELOPMENT: 'HOPELESS AFRICA', 'AFRICA RISING', OR SOMEWHERE IN- 17
BETWEEN?

Tony Binns
Etienne Nel

HEADQUARTERS RELOCATION, ADVANCED BUSINESS SERVICES AND FIRM PERFORMANCE: 17
EVIDENCE FROM CHINA

Hong Bo
Xiaosheng Ju

IDENTIFYING ENTREPRENEURIAL COUNTERURBANISERS 18

Gary Bosworth
Leanne Townsend
Zografia Bika
Robert Newbery

DEEP ECONOMIC INTEGRATION, FOREIGN INVESTMENT AND INTERNATIONAL TRADE: THE 18
EFFECTS OF MEMBERSHIP OF THE EUROPEAN UNION

Randolph Luca Bruno
Nauro Campos
Saul Estrin
Meng Tian

BROADENING THE ENTREPRENEURIAL ECOSYSTEM CONCEPT INTO THE CREATIVE 19
INDUSTRIES: AN EXAMINATION OF THE FASHION INDUSTRY IN TORONTO, CANADA

Taylor Brydges
Rhiannon Pugh

"BUILD IT AND THEY WILL COME": PLACE-MAKING AND PLACE-MARKETING FOR REGIONAL 19
REVIVAL

Amma Buckley

A NIGERIAN EXPERIENCE ECONOMY: THE NOLLYWOOD HOUSE SCENE 20

Alexander Bud

IMAGE OF RUSSIAN REGIONS FUTURE IN REGIONAL STRATEGIC DOCUMENTS 20

Ksenia Budaeva

REGIONAL DISPARITIES IN LABOR PRODUCTIVITY IN THE RUSSIAN FEDERATION 21

Anna Bufetova

ASSESSING THE EFFECTIVENESS OF POLYCENTRICITY FOR SMART, INCLUSIVE AND 21
SUSTAINABLE DEVELOPMENT: A FRAMEWORK AND SOME EVIDENCE FROM THE ITALIAN
URBAN REGIONS

David Burgalassi

DOES IT PAY TO BE NEAR? THE EFFECT OF BANK PROXIMITY ON ITALIAN FIRM'S 22
PERFORMANCE DURING THE ECONOMIC CRISIS

<i>Chiara Burlina</i> <i>Daniela Bragoli</i> <i>Flavia Cortelezzi</i> <i>Giovanni Marseguerra</i>	
GROWING SOCIAL SPATIAL DIFFERENTIATION AND MIGRATION PATTERNS IN LITHUANIA <i>Donatas Burneika</i> <i>Rūta Ubarevičienė</i>	22
SETTLEMENT SYSTEM DENSITY AS A BASIS FOR CULTURAL REGENERATION IN THE URAL'S SMALL INDUSTRIAL TOWNS <i>Tatiana Bystrova</i>	23
THE IMPACT OF EVENT TOURISM ON URBAN AND LOCAL ECONOMIES: THE CASE OF THE KNAVESMIRE FESTIVAL IN YORK, UNITED KINGDOM <i>Ignazio Cabras</i> <i>Nadine Waehning</i>	23
EU REGIONAL CONVERGENCE IN THE AGRICULTURAL SECTOR: ARE THERE SYNERGIES BETWEEN AGRICULTURAL AND REGIONAL POLICIES? <i>Elena Calegari</i> <i>Enrico Fabrizi</i> <i>Gianni Guastella</i> <i>Francesco Timpano</i>	24
HUMAN DEVELOPMENT AND LAND TENURE IN BRAZIL <i>Bernardo Campolina</i> <i>Alexandre Arbex Valadares</i> <i>Fernando Gaiger Silveira</i> <i>Nikolas de Camargo Pirani</i>	25
"WHATEVER YOU HIT CALL IT A TARGET": ON SEGMENTATION AND TARGETING OF INVESTMENT PROMOTION POLICY <i>Pawel Capik</i>	25
BORDERING DYNAMICS IN CROSS-BORDER REGIONAL INNOVATION SYSTEMS <i>Francesco Cappellano</i> <i>Christophe Sohn</i> <i>Teemu Makkonen</i>	26
DETERMINANTS OF GROWTH DIFFERENCES BETWEEN EASTERN AND SOUTHERN EU COUNTRIES: A PANEL-DATA APPROACH <i>Helen Caraveli</i> <i>Ioannis Chatzigiatrioudakis</i> <i>Evangelos Paravalos</i>	26
THE GREAT CITIES VERSUS THE REST: PROBING INTO A POLITICAL DIVIDE <i>Rodrigo Cardoso</i>	27
SMART CITY RESEARCH AND THE GEOGRAPHY OF INNOVATION	27

Luis Carvalho
Willem van Winden
Mário Vale

EMERGING MARKET MULTINATIONAL ENTERPRISES TAKING OVER UNITED STATES TRADEMARKS: PREDATING OR LEVERAGING?	28
---	----

Carolina Castaldi
Arianna Martinelli
Elisa Giuliani

INTEGRATED TERRITORIAL APPROACHES: HOW EU ACTS SOFT OVER HARD NATIONAL PLANNING	29
--	----

Cristina Cavaco
João Pedro Costa

SPATIAL BEHAVIOURS OF EMPLOYEES IN WARSAW BUSINESS DISTRICTS - CENTRE VS. PERIPHERIES	29
--	----

Dorota Celinska-Janowicz

DIFFERENT TRENDS IN THE RE-INDUSTRIALISATION OF THE POST-SOCIALIST SMALL AND MEDIUM INDUSTRIAL TOWNS IN ROMANIA	30
--	----

Andreea-Loreta Cercleux
Ioan Ianos
Florentina-Cristina Merciu

PARTNERSHIP BUILDING FOR SMART SPECIALISATION: CONSTRUCTING A REGIONAL BIOECONOMY	30
--	----

David Charles
Sara Davies
Stephen Miller
Keith Clement

THE EU AS A SAVIOUR AND A SAINT? CORRUPTION AND PUBLIC SUPPORT FOR EU COHESION	31
---	----

Nicholas Charron
Monika Bauhr

CHINA'S MOVING SLUMS: A HIDDEN GEOGRAPHY OF RECYCLING AND HOUSING INJUSTICE ON THE EDGE OF BEIJING	31
---	----

Guo Chen
Jia Feng

AGENCY IN REGIONAL ENERGY TRANSITION: TOWARDS A MORE DETAILED UNDERSTANDING OF INSTITUTIONAL CHANGE	32
--	----

Camilla Chlebna
Jannika Mattes
Meike Löhr
Sebastian Rohe

THE WHOLE EARTH TECHNOSPHERE SUSTAINABILITY CHALLENGE AND WORLDWIDE CITY- REGIONS NETWORK RESPONSE: AN URBAN PLANET THEORY	32
---	----

Tom Christoffel

THE DIGITAL TRANSFORMATION OF TRADITIONAL MANUFACTURING SYSTEMS: A COMPARATIVE ANALYSIS OF DIFFERENT UPGRADING PATHS	33
---	----

Simona Ciappei
Lisa De Propriis
Paulina Ramirez
Erica Santini

UNPACKING THE ‘TERRITORIAL POLICY COMMUNITY’: WALES (UK) AS AN ILLUSTRATIVE CASE	34
---	----

Nick Clifton
David Pickernell
Celia Netana

COHESION POLICY’S CONTRIBUTION TO DIGITALISATION: AN ADEQUATE APPROACH?	35
---	----

Louis Colnot
Julie Pellegrin

EXPLORING SMART MOBILITIES, ASSEMBLAGES AND ALIGNMENTS	35
--	----

Matthew Cook
Alan-Miguel Valdez

LAND USE AND SPATIAL PLANNING IN THE LISBON METROPOLITAN AREA: A GAP BETWEEN STATUTORY AND SOFT PLANNING PROCESSES?	36
--	----

João Pedro Costa
Cristina Cavaco

SMART CITIES AND ECONOMIC RESILIENCE	36
--------------------------------------	----

Adam Cox
Gianpiero Torrissi

THE NEW GEOGRAPHIES OF URBAN PRODUCTION: THE CASE OF CHINA’S CONTEMPORARY URBANIZATION	37
---	----

Olivier Crevoisier
Thierry Theurillat
Delphine Rime
Nelson Vera

THE POTENTIAL OF PARTICIPATORY DEVELOPMENT IN SLUM UPGRADING PROCESSES	37
--	----

Ráhel Czirják

LABOUR MOBILITY, HIGHER EDUCATION, AND URBAN CENTRALITY IN BRAZIL	38
---	----

Ana Carolina da Cruz Lima

DOWNLOADING EUROPE ON A REGIONAL LEVEL – THE PROCESS OF EUROPEANIZATION IN THE REGIONS OF EASTERN POLAND <i>Anna Dabrowska</i>	38
CIRCLING THE SQUARE: GOVERNANCE OF THE CIRCULAR ECONOMY IN THE AMSTERDAM METROPOLITAN AREA <i>Marcin Dabrowski</i> <i>Erwin Heurkens</i>	39
IMPACT OF MIGRATION OF RESIDENTS ON THE LOCATION OF CLUSTERS WITH HIGH LEVEL OF DEMOGRAPHIC AGING IN THE URBAN SPACE OF POZNAN <i>Adam Dąbrowski</i> <i>Sylwia Filas-Przybył</i>	39
INVISIBLE NETWORK OF SISTER CITIES – GENERATION Z EXPERIENCE <i>Leszek Dąbrowski</i>	40
WAGES, CREATIVE DESTRUCTION, AND UNION NETWORKS <i>Harald Dale-Olsen</i>	40
THE SHIFT TOWARDS WELLBEING ECONOMICS: IMPLICATIONS FOR REGIONAL DEVELOPMENT POLICY <i>Paul Dalziel</i> <i>Caroline Saunders</i> <i>John Saunders</i>	41
DEVELOPING INDUSTRIAL CULTURE CONCEPT: FROM BATA'S FORDIST TO CREATIVE CITY <i>Lukáš Danko</i> <i>Pavel Bednar</i>	41
PLANNING AND 'THE END OF IDEOLOGY'? <i>Simin Davoudi</i> <i>Daniel Galland</i> <i>Dominic Stead</i> <i>Frank Othengrafen</i>	42
IMPROVING A NEW, LANDMARK DISPLACEMENT POLICY BY ACKNOWLEDGING THE COMPLEXITY OF URBAN DISPLACEMENT IN THE PACIFIC <i>Jennifer Day</i>	42
UNDERSTANDING THE EMERGENCE OF THE SPANISH URBAN AGENDA: TOWARDS A NEW MULTI-LEVEL URBAN POLICY SCENARIO? <i>Sonia De Gregorio Hurtado</i> <i>González-Medina Moneyba</i>	43
BREXIT, BIRMINGHAM AND THE 2022 COMMONWEALTH GAMES: AN OPPORTUNITY FOR REGENERATION AND REJUVENATION? <i>Alex De Ruyter</i> <i>David Hearne</i> <i>Julian Beer</i>	43

SOCIAL MAPPING AS A DEVELOPING NEW METHODOLOGY OF URBAN PLANNING, THE EXPERIENCE OF SUCH IN VILLA 31, BUENOS AIRES CITY <i>Mitchell de Sousa</i> <i>Mora Kestelman</i>	44
THE ROLE OF INNER PERIPHERIES IN THE EUROPEAN POLICY DEBATE: A REVIEW <i>Andrea De Toni</i> <i>Matteo Vizzarri</i> <i>Bruno Lasserre</i> <i>Paolo Di Martino</i> <i>Giovanni Carrosio</i>	44
WORKING FROM HOME AND THE WILLINGNESS TO ACCEPT A LONGER COMMUTE <i>Duco De Vos</i> <i>Evert Meijers</i> <i>Maarten Van Ham</i>	45
GLOBAL OPEN INNOVATION PRACTICES OF SMES AND THE CREATION OF REGIONAL INNOVATION ECOSYSTEMS <i>Marcus Dejardin</i> <i>André Spithoven</i>	45
THE CULTURE-SPECIFIC CHARACTERISTICS OF THE TALENTS ATTRACTION: AN EXPLORATORY ANALYSIS ON EUROPEAN CULTURAL CLUSTERS <i>Maria Del Sorbo</i> <i>Bice Della Piana</i>	46
SUBNATIONAL STRATEGIC BEHAVIOR FOR DEVELOPMENT: A CONTRIBUTION TO THE ANALYSIS OF ARGENTINE REGIONAL ECONOMIES <i>Javier Diaz Bay</i> <i>Giuliano Pontoriero</i> <i>Pablo Tillan</i> <i>José A. Camacho Ballesta</i>	46
LONG REGIONAL TIME SERIES ON COHESION POLICY AND REGIONAL ACCOUNTS <i>Lewis Dijkstra</i>	47

THE CONTRIBUTION OF CROATIAN POLYTECHNICS TO BUILDING OF SCIENCE-INDUSTRY LINKS <i>Irena Dokic</i> <i>Ana Kralj</i>	47
A SPATIAL SCIENTOMETRIC ANALYSIS OF SCIENTIFIC PUBLICATIONS MADE BY THE EUROPEAN COMMISSION <i>Nicola Francesco Dotti</i> <i>Walter Ysebaert</i>	48
HYBRID PATTERNS OF DEVELOPMENT – SECTORAL AND TERRITORIAL HYBRIDIZATION IN CENTRAL EUROPE <i>Adam Drobnik</i>	48
THE BELT AND ROAD INITIATIVE: A NEW DIRECTION FOR THE DEVELOPMENT OF THE WORLD ISLAND? <i>Michael Dunford</i>	49
UTILIZING KNOWLEDGE FOR ADAPTATION IN FURNITURE CLUSTERS OF DIFFERENT HISTORIES AND INSTITUTIONAL CONTEXTS. <i>Wojciech Dyba</i>	49
NEW REGIONAL DEVELOPMENT TOOLS AND REINDUSTRIALISATION IN FRANCE: TERRITORIAL STAKEHOLDERS, BENEFICIARIES AND FUNDING AGENCIES <i>Ildiko Egyed</i>	49
SPENDING ON ARTS CULTURE: DOES IT REALLY IMPACT WELLBEING – AN EXPLORATORY STUDY INTO LOCAL GOVERNMENT IN VICTORIA <i>Meg Elkins</i> <i>Bronwyn Coate</i>	50
LAND, IS IT A RESOURCE OR A PLACE-MAKING ELEMENT? URBAN DESIGN FOR MULTI-LATERAL APPROACH OF ‘POD DEVELOPMENT’ CRISIS <i>Abeer Elshater</i>	50
WORKERS' PARTICIPATION IN REGIONAL ECONOMIC CHANGE FOLLOWING ESTABLISHMENT CLOSURE <i>Rikard Eriksson</i> <i>Lars-Fredrik Andersson</i> <i>Therese Danley</i> <i>Martin Henning</i>	51
SERVICE SECTOR SURVIVAL IN CRISIS: EVIDENCE FROM ANTALYA TOURISM CITY <i>Hilal Erkuş Öztürk</i> <i>Kemal Türkcan</i>	51

LOCAL INFRASTRUCTURE ASSETS AND THE CREATION OF ALTERNATIVE VALUES THROUGH INDUSTRIAL SYMBIOSIS AND THE CIRCULAR ECONOMY	52
<i>Aksel Ersoy</i>	
<i>John Bryson</i>	
<i>Ellen van Bueren</i>	
ASSESSING THE COMPETITIVENESS OF BRITAIN'S CORE CITIES	52
<i>Emil Evenhuis</i>	
<i>Ron Martin</i>	
<i>Ben Gardiner</i>	
<i>Peter Tyler</i>	
<i>Peter Sunley</i>	
CHARACTERISTICS OF THE INNOVATION PROCESSES IN OIL AND GAS FIRMS DURING A MARKET DOWNTURN.	53
<i>Kaya Færøvik</i>	
<i>Natalia Mæhle</i>	
MECHANISMS FOR AND PRACTICES OF GREENING LOCAL ECONOMIC DEVELOPMENT	53
<i>Fabian Faller</i>	
HOW SUSTAINABLE IS REGIONAL DEVELOPMENT?: AN APPLICATION OF AN REGIONAL SUSTAINABLE ACCOUNT (RSA) MODEL IN EAST KALIMANTAN, INDONESIA	54
<i>Akhmad Fauzi</i>	
<i>Margiyono Margiyono</i>	
BEYOND CITIES AND METROPOLIS, A DIFFERENTIATED PORTRAIT OF URBANISATION IN ITALY	54
<i>Valeria Fedeli</i>	
<i>Alessandro Balducci</i>	
<i>Camilla Perrone</i>	
<i>Francesco Curci</i>	
LINKING COHESION POLICY AND CITIZENS' IDENTIFICATION WITH THE EU IN REGIONS: BETWEEN OPPORTUNISM AND EUROSCEPTICISM IN THE NETHERLANDS	55
<i>Ana Maria Fernandez Maldonado</i>	
<i>Marjolein Spaans</i>	
<i>Ana Maria Fernandez-Maldonado</i>	
<i>Marcin Dąbrowski</i>	
<i>Roberto Rocco</i>	
INVESTMENT TO HUMAN CAPITAL IN CZECH REGIONS IN THE CONTEXT OF INDUSTRY 4.0: OVERVIEW AND PREPAREDNESS TO NEW CHALLENGES	55
<i>Marek Feurich</i>	
IS PUBLIC ENTREPRENEURIAL FINANCING CONTRIBUTING TO TERRITORIAL SERVITIZATION IN MANUFACTURING AND KIBS IN THE US?	56
<i>Maria Figueroa-Armijos</i>	

INDIVIDUAL AND FAMILY PREDICTORS OF SELF-EMPLOYMENT AS A SUSTAINABLE CAREER OPTION AMONG MILLENNIALS <i>Maria Figueroa-Armijos</i> <i>Serge P. da Motta Veiga</i>	56
INTERNATIONAL ECONOMIC DISINTEGRATION: A METHODOLOGICAL ACCOUNT <i>Anton Filipenko</i>	57
HOW DOES INNOVATION AFFECT JOB CREATION AND WAGES? <i>Rune Dahl Fitjar</i> <i>Andrés Rodríguez-Pose</i>	57
WHO IS THE POLICY-MAKER? AGENCY IN REGIONAL INNOVATION POLICY IN GREATER MANCHESTER AND THE BASQUE COUNTRY <i>Keiron Flanagan</i> <i>Eduino Magro</i> <i>Elvira Uyarra</i> <i>James Wilson</i>	57
THE ROLE OF FINANCIAL SERVICES IN SPATIAL PROCESSES <i>Balazs Gyorgy Forman</i>	58
ONE OR MANY REGIONAL POLICIES? TAXONOMIZING A WIDESPREAD YET ELUSIVE TERM <i>Ugo Fratesi</i>	59
UNDERSTANDING EFFECTIVENESS IN SUB-REGIONAL/SUPRA-LOCAL GOVERNANCE: INSTITUTIONAL DYNAMICS FOR STRATEGIC TERRITORIAL GOVERNANCE IN BETWEEN PATH DEPENDENCE AND REGIONAL DIVERSIFICATION <i>Chiara Farné Fratini</i> <i>Filippo Randelli</i> <i>Patrizia Romei</i> <i>Francesco Dini</i>	59
MOBILITIES IN RURAL COASTAL REGIONS: DYNAMICS OF RESILIENCE IN NORTHERN CYCLADES (GREECE) IN TIMES OF CRISIS <i>Loukia - Maria Fratsea</i> <i>Apostolos G. Papadopoulos</i>	60
CO-WORKING SPACES – A NEW WORKING ENVIRONMENT FOR URBAN ENTREPRENEURS AND START-UPS THAT CREATES A SOCIAL AND BUSINESS CLIMATE <i>Amnon Frenkel</i>	61
EUROPEANISATION OF NATIONAL AND SUB-NATIONAL METROPOLITAN POLICIES THE APPEARANCE OF CITY-REGIONAL ISSUES IN THE EUROPEAN MULTI-SCALAR POLITY <i>Carola Fricke</i>	61
KNOWLEDGE PERSISTENCE IN REGIONAL NETWORKS <i>Michael Fritsch</i> <i>Moritz Zoellner</i>	62

THE FUNCTIONAL URBAN HIERARCHY IN GERMANY AND SWITZERLAND: A COMPARISON OF 2009 AND 2018 <i>Nadine Anna Fritz</i> <i>Michael Bentlage</i> <i>Stefan Lüthi</i> <i>Silke Zöllner</i> <i>Alain Thierstein</i>	62
USING THE CITY AS AN INNOVATION PLAYGROUND: GETTING CORPORATIONS INTO THE GAME <i>Anita Fuezi</i> <i>Dariusz Sikora</i> <i>Lidia Gryszkiewicz</i>	63
NETWORK STRUCTURE OF LOCAL TRADING COMPANY AND REGIONAL ECONOMY IN JAPAN <i>Haruhisa Fujimot</i>	63
HOW TO GET GREAT EMPLOYEES? MAKE SURE THEY CAN ENJOY THEIR LEISURE TIME <i>Luisa Gagliardi</i> <i>Teresa Schlueter</i>	64
APPLICATION OF THE BIG-DATA APPROACH TO CREATE A COUNTRY-WIDE, GIS-BASED, MONITORING SYSTEM OF FUNCTIONAL ZONES AND URBAN COMPACTNESS BASED ON LAND USE/LAND COVER ANALYSIS IN POLAND <i>Agnieszka Gajda</i> <i>Lukasz Pancewicz</i>	64
THE ROLE OF MEDIUM-SIZED ENTERPRISES IN URBAN DEVELOPMENT: STATISTICAL RESEARCH OF ENTREPRENEURIAL ECOSYSTEMS <i>Gergő Gajzágó</i>	65
URBAN PLANNING AND POLICY STYLES FOR THE SUSTAINABLE TRANSFORMATION OF CITIES. A COMPARATIVE STUDY OF OSLO AND HANNOVER <i>Daniel Galland</i> <i>Frank Othengrafen</i>	65
GOVERNANCE CAPACITY AND STRATEGIC COUPLING: STATE POLICY AND THE RISE OF THE CHONGQING LAPTOP CLUSTER <i>Boyang Gao</i> <i>Michael Dunford</i> <i>Glen Norcliffe</i> <i>Weidong Liu</i>	66
CHANGING URBAN SUBCENTERS WITH TRANSPORT INFRASTRUCTURE IN BOGOTÁ <i>Miguel Andrés Garzón-Ramírez</i>	66
ONE ASPECT OF SMART CITY DEVELOPMENTS: DIGITAL COMPETENCES, E-GOVERNMENT POTENTIALS. THE STATE AND PERSPECTIVES OF HUNGARY <i>László Gere</i>	67
MULTIPLE EQUILIBRIA IN INSTITUTIONAL AND SPATIAL DUAL-SECTOR POVERTY TRAPS	67

Herman Geyer

A QUALITATIVE STUDY OF SOCIOCULTURAL FACTORS THAT LIMIT ENTREPRENEURSHIP IN ASPIRANT TECHNOLOGY CLUSTER REGIONS 67

Brett Anitra Gilbert

HETEROGENEOUS EU REGIONS' PERFORMANCE IN THE UPGRADING FOR THE DIGITAL AGE 68

Petros Gkotsis

Emanuele Pugliese

Antonio Vezzani

SPATIAL EFFECTS OF DIGITAL TRANSFORMATION: AN ANALYSIS ON THE EXAMPLE OF AN AUTOMOTIVE R&D NETWORK 68

Jonas Glaesser

Alain Thierstein

THE HAMBURG GAMING INDUSTRY FROM A MULTI-SCALAR INSTITUTIONAL PERSPECTIVE 69

Huiwen Gong

Robert Hassink

RECONCILING MULTIPLE AND DIFFERENTIATED SPATIALITIES: LINKING DISADVANTAGED PEOPLE TO TRAINING AND EMPLOYMENT OPPORTUNITIES IN THE UK 70

Tony Gore

Richard Crisp

Aidan While

A NEW MEASURE FOR THE NEW RURAL ECONOMY: AFFINITY PROPAGATION AS THE NEXT STEP TO IDENTIFY REGIONAL TRENDS. 70

Marcello Graziano

Benjamin Heumann

Maurizio Fiaschetti

INVESTIGATING SPATIAL CONTIGUITY EFFECTS IN SUSTAINABLE COMMUTING TRANSPORT MODES' CHOICE: AN APPLICATION TO A MULTI-LOCATED ITALIAN UNIVERSITY 71

Daniele Grechi

Elena Maggi

Daniele Crotti

THE IMPACT OF PUBLIC POLICY ON CAPITAL FLOWS FOR GROWTH-ORIENTED ENTERPRISE 71

Geoff Gregson

URBAN GROWTH AND SUSTAINABLE SOCIO-ECONOMIC DEVELOPMENT IN AFRICA 72

Gianni Guastella

Silvia Beghelli

Stefano Pareglio

RESILIENCE OF INFORMAL CAR SHARE (ICS): A CASE STUDY WITHIN QUITO'S PERIPHERAL COMMUNITIES <i>Vanessa Guerra M</i> <i>Tripp Shealy</i>	72
TOWARDS AN INNOVATIVE COMMONS POLICY <i>Tina Haisch</i> <i>Hugues Jeannerat</i>	72
KNOWLEDGE AND CONFIDENCE IN THE GYŐR AUTOMOTIVE INDUSTRIAL DISTRICT <i>Melinda Hajdu-Smahó</i>	73
LOCAL FOOD NETWORKS AND REGIONAL DEVELOPMENT: GOVERNANCE, INSTRUMENTS AND EVOLUTION <i>Henrik Halkier</i> <i>Laura James</i>	73
NATIONAL CENTRE CITIES: A CHINESE URBAN POLICY PUZZLE <i>Chris Hamnett</i> <i>Yang Jing</i> <i>Amy Liu</i>	74
TRACKING EMBODIED CARBON TRANSFER FLOWS OF BELT AND ROAD INITIATIVE AREA <i>Mengyao Han</i>	74
LABOUR TRAJECTORIES OF CAREER MOBILITY AND UNDEREMPLOYMENT <i>Emelie Hane-Weijman</i>	75
INDUSTRIAL REGIONS IN TRANSITION – DISCUSSING REGIONAL DEVELOPMENT AND IDENTITY ALONG THE NOTION OF INDUSTRIAL CULTURE <i>Joern Harfst</i>	75
PERSPECTIVES ON THE CHANGING GEOGRAPHIES OF REGIONS AND TERRITORIES: TOWARDS CONSOLIDATED REGIONAL GEOGRAPHIES <i>John Harrison</i> <i>Anssi Paasi</i> <i>Martin Jones</i>	76
CO-EVOLUTION IN CONTEMPORARY ECONOMIC GEOGRAPHY: TOWARDS A THEORETICAL FRAMEWORK <i>Robert Hassink</i> <i>Huiwen Gong</i>	76
REAL REGIONAL INCOMES IN THE UK <i>David Hearne</i> <i>Alex De Ruyter</i>	76
HYDROPOWER – A KEY TO SUSTAINABLE REGIONAL DEVELOPMENT IN THE SWISS ALPS <i>Werner Hediger</i> <i>Marc Herter</i>	77

THE REGIONAL IMPLICATIONS OF AUTOMATION IN ECONOMIC PROCESSES <i>Dylan Henderson</i> <i>Calvin Jones</i>	77
REGIONAL LABOUR FLOWS BETWEEN MANUFACTURING AND BUSINESS SERVICES <i>Martin Henning</i>	78
KEY COMPONENTS OF STRATEGIC SPATIAL PLAN-MAKING AND –IMPLEMENTATION IN EUROPEAN URBAN REGIONS: THE SPLAMI FRAMEWORK <i>Anna M. Hersperger</i> <i>Simona R Grădinaru</i> <i>Eduardo Oliveira</i> <i>Sofia Pagliarin</i> <i>Gaëtan Palka</i>	78
INTERNAL MIGRATION IN AUSTRALIA: THE INFLUENCE OF LABOUR MARKET AND LIFE STYLE FACTORS <i>John Hicks</i> <i>Kishor Sharma</i>	79
LIANGJIANG NEW AREA IN CHONGQING CITY AS TERRITORIAL STRATEGY: STATE-OWNED ENTERPRISES AND FISCAL REGIME IN URBAN CHINA <i>Miguel Hidalgo Martinez</i>	79
GEODEMOGRAPHICS AND THE FUNCTIONAL REGIONALISATION OF COMMUTING: A FRAMEWORK APPLIED TO ENGLAND AND WALES <i>Stephen Hincks</i>	80
THE DEMOCRATIC FOUNDATIONS OF THE JUST CITY: URBAN PLANNING POLITICS IN THREE EUROPEAN CITIES <i>Charlotte Jayne Hoole</i> <i>Peter Lee</i> <i>Eric Chu</i> <i>Roman Zwicky</i> <i>Oliver Dlabac</i>	80
THE VISION AND MISSION OF HUNGARIAN MEDIUM-SIZED ENTERPRISES <i>Reka Horeczki</i>	81
DEFINING NEW URBAN AGENDAS FOR CITY-DISTRICTS FROM A MULTILEVEL PERSPECTIVE. LESSONS LEARNED FROM THREE DISTRICTS IN BERLIN <i>Georg Hubmann</i> <i>Cristian Matti</i>	81

BREXIT AND TERRITORIAL POLITICS IN THE UK: THE RESCALING OF FISHERIES POLICY <i>Christopher Huggins</i> <i>John Connolly</i> <i>Craig McAngus</i> <i>Arno van der Zwet</i>	82
IMPACTS OF THE “BELT AND ROAD” INITIATIVE ON CHINA’S BORDER AREAS’ DEVELOPMENT <i>Liu Hui</i>	82
LOCATION MATTERS: HOW FIRM LEVEL DETERMINANTS AND REGIONAL EXTERNALITIES SHAPE FIRM PERFORMANCE DURING MACROECONOMIC STABILITY AND INSTABILITY <i>Christian Hundt</i> <i>Linus Holtermann</i> <i>Jonas Steeger</i> <i>Johannes Bersch</i>	83
A MEASURE OF THE SPILLOVER EFFECTS AMONG COMPANIES OF THE SAME NATIONALITY IN LOCATION CHOICE FOR FDIS <i>Seok-Joon Hwang</i> <i>Xiaomin Li</i>	83
CAN FDI IMPROVE HOST REGIONS’ TECHNICAL VOCATIONAL EDUCATION AND TRAINING SYSTEMS IN EMERGING ECONOMIES? – EMPIRICAL EVIDENCE FROM SOUTHEAST ASIA <i>Eduardo Ibarra-Olivo</i>	84
COUNTER-URBANIZATION, ENTREPRENEURSHIP AND SUSTAINABLE RURAL DEVELOPMENT IN DEVELOPING COUNTRIES: THE NIGERIAN EXAMPLE <i>Oladayo Ibrahim</i> <i>Toba James Oyebanji</i>	84
THE ROLE OF POPULATION ABSORPTIVE CAPACITY IN ENVIRONMENTALLY SUSTAINABLE SPATIAL PLANNING AT THE LOCAL LEVEL <i>Piotr Idczak</i> <i>Karol Mrozik</i>	85
IDENTIFYING INTER-FIRM TRADING STRUCTURE IN LOCAL ECONOMY: HOW DO LOCAL BUSINESSES INFLUENCE THE LOCAL ECONOMY? <i>Yoshifumi Ikejima</i>	85
URBAN REGENERATION OF SMALL AND MEDIUM-SIZED CITIES IN ROMANIA <i>Oana Ramona Ilovan</i>	86
LOCAL DEVELOPMENT, COMPLEXITY AND FERTILITY: INSIGHTS FROM ITALY <i>Niccolò Innocenti</i> <i>Luciana Lazzeretti</i> <i>Daniele Vignoli</i>	86

THE KEY ACTORS OF KNOWLEDGE PRODUCTION FUNCTION IN TURKEY: THE ROLE OF UNIVERSITIES AS KNOWLEDGE PRODUCER	87
<i>Selen Isik Maden</i>	
<i>Aykut Sezgin</i>	
<i>Ayşegül Baykul</i>	
<i>Sevim Unutulmaz</i>	
<i>Murat Ali Dulupçu</i>	
TERRITORIAL POLITICS AND DEVELOPMENT POLICY OF BORDER REGIONS IN INDONESIA	87
<i>Doddy Iskandar</i>	
ASYMMETRY OF CROSS-BORDER AREAS - DIMENSIONS AND CONSEQUENCES	88
<i>Andrzej Jakubowski</i>	
RENEWING THE INNOVATION REFERENTIAL THROUGH A "SMART CITY" MODEL OF VALUATION	88
<i>Hugues Jeannerat</i>	
<i>Ariane Huguenin</i>	
<i>Olivier Crevoisier</i>	
DEFENSIVE INSTITUTION-BUILDING AND CHANGING SOCIAL AND POLITICAL BOUNDARIES: LOCAL AGRICULTURAL REGIMES AND AGRICULTURAL REFORM IN JAPAN	89
<i>Hanno Jentzsch</i>	
SMART URBAN GOVERNANCE: A CONTEXTUALIZED APPROACH	89
<i>Huaxiong Jiang</i>	
<i>Stan Geertman</i>	
<i>Patrick Witte</i>	
REGIONALISING SPATIAL JUSTICE: THE ROLE OF THE WELL-BEING OF FUTURE GENERATIONS ACT IN WALES	90
<i>Rhys Jones</i>	
<i>Michael Woods</i>	
<i>Bryonny Goodwin-Hawkins</i>	
LOCAL PUBLIC FINANCE AND WELL-BEING	90
<i>Dylan Jong</i>	
<i>Philip McCann</i>	
<i>Viktor Venhorst</i>	
APPRENTICE SCHEME IN ICT INDUSTRY: A KEY INSTRUMENT OF VOCATIONAL TRAINING TO ALIGN THE NEEDS OF PRIVATE SECTOR WITH EDUCATIONAL PROGRAMS IN ALBANIA	91
<i>Jolta Kacani</i>	
<i>Erka Caro</i>	
ENHANCING LABOR SPECIALIZATION TO FACILITATE PLACEMENT IN FOREIGN ENTERPRISES OPERATING IN ICT INDUSTRY: THE CASE OF ALBANIA	91
<i>Jolta Kacani</i>	
<i>Erka Caro</i>	
FROM MIGRANT LABOUR TO MIGRANT STUDENTS – A SOUTH AFRICAN CONUNDRUM	92

Michael Kahn
Thandi Gamedze
Joshua Oghenetega

TERRITORIAL GOVERNANCE AND CITY-REGIONS: LESSONS LEARNED FROM THE 'PIECEMEAL' APPROACH IN ENGLAND	92
---	----

Tamás Kaiser

THE EFFECT OF THE EUROPEAN DEBT CRISIS ON FOREIGN DIRECT INVESTMENT: CASE OF TURKEY	93
---	----

Mustafa Kartal

CONCEPTUALIZING TERRITORIAL IMPACT ASSESSMENT – COMBINING MEASURES FOR HARD AND SOFT SPACES	93
---	----

Jiannis Kaucic

LEAVES IN THE WIND? THE EFFECT OF LOCAL POLICIES ON THE ECONOMIC STRUCTURE OF SMALL AND MEDIUM-SIZED TOWNS IN METROPOLITAN REGIONS	94
--	----

David Kaufmann

Meili Rahel

URBAN VISION – BETWEEN CONTEST AND COLLECTIVE ENTERPRISES – CASE OF INDIAN CITIES	94
---	----

Purushottam Kesar

PERCEPTION OF ECONOMIC FACTORS IN SOCIAL ACCEPTANCE DEBATES OF WIND ENERGY SYSTEMS	95
--	----

Çağdaş Kılıç

Mutlu Yılmaz

Ramazan Sari

METROPOLITAN GOVERNANCE MATTERS: THE SLUGGISH ECONOMIC PERFORMANCE OF METROPOLITAN REGIONS IN SOUTH KOREA	95
---	----

Sung-Bae Kim

UNIVERSITIES' ROLE IN REGIONAL INNOVATION SYSTEMS WITH DIFFERING CONCENTRATION OF SMES	96
--	----

Anna-Maria Kindt

Matthias Geissler

Kilian Bühling

INTER-GOVERNMENTAL TRANSFERS, POLITICAL ALIGNMENT AND PORK-BARRELLING: A PANEL ANALYSIS OF DISTRIBUTIVE POLITICS IN GREECE	96
--	----

Tasos Kitsos

Antonios Proestakis

THE IMPACT OF AWARENESS FOR INNOVATION AND R&D RESOURCES ON INNOVATION SUCCESS OF TURKISH MNES, DEVELOPED COUNTRIES MNES AND LOCAL TURKISH FIRMS IN ISTANBUL <i>Timo Kleiner</i> <i>Ingo Liefner</i>	97
SOUTHEAST ASIA IN THE NEW WORLD ORDER – US-CHINA RIVALRY AND THE CASE OF THE PHILIPPINES <i>Péter Klemensits</i>	97
BIRDS OF A FEATHER STICK TOGETHER? THE IMPACT OF GENDER SEGREGATED OCCUPATIONS ON THE ACQUISITION GRADE OF THE UNDERREPRESENTED SEX - THE CASE OF DALARNA <i>Anna Klerby</i> <i>Peter Möller</i> <i>Daniel Brandt</i>	98
EXPENDITURE ASSIGNMENTS IN RUSSIA: CHALLENGES AND POLICY OPTIONS <i>Vladimir Klimanov</i>	98
SOCIO-ECONOMIC DISPARITIES BETWEEN RURAL REGIONS AS FUNCTION OF THEIR PERIPHERAL LOCATION <i>Krzysztof Kluza</i>	99
SKILL SHORTAGE WITHIN REGIONAL INDUSTRY CLUSTERS <i>Tobias Koenig</i> <i>Andreas Koch</i>	99
KNOWLEDGE SPACES – THE EVOLUTION OF THE INVENTOR-FIRM-LOCATION NEXUS <i>Dieter Kogler</i>	100
AGGLOMERATION ECONOMY AND CITY DEVELOPMENT IN POST-SOVIET RUSSIA <i>Evgeniya Kolomak</i>	100
INTRODUCING EU-WIDE PLATFORMS TO PRODUCE, SHARE AND VISUALIZE URBAN AND REGIONAL DATA <i>Mert Kompil</i> <i>Carlo Lavallo</i> <i>Nicola Pontarollo</i> <i>Carolina Serpieri</i>	101
THE BABY-BOOMER CONSUMER AND RETIREMENT VILLAGE ACCOMMODATION: THE INFLUENCE OF AGE AND LIFESTYLE ON CHOICE <i>Foula Kopanidis</i> <i>Linda Robinson</i> <i>Mike Reid</i>	101

THE DETERMINANTS OF INEQUALITIES IN LOCAL PUBLIC SPENDING ON CULTURE. AN ANALYSIS FOR POLISH RURAL MUNICIPALITIES <i>Agnieszka Kopańska</i>	102
EXPORT-IMPORT DEPENDENCY OF THE V4 COUNTRIES <i>Attila Korompai</i>	102
CULTURAL DIVERSITY AND KNOWLEDGE IN EXPLAINING ENTREPRENEURIAL OUTCOMES IN EUROPEAN CITIES <i>Julia Korosteleva</i> <i>David Audretsch</i> <i>Maksim Belitski</i>	103
WHAT TO DO WHEN THE ROBOTS COME? LABOUR MARKET STRATEGIES OF EMPLOYEES IN JOBS AFFECTED BY AUTOMATIZATION <i>Sierdjan Koster</i>	103
THE ROLE OF COMPETING VISIONS IN THE DEVELOPMENT OF ENERGY POLICY: SUSTAINABILITY COMPROMISED? <i>Anastasia Koulouri</i> <i>Nikolai Mouraviev</i>	104
IS A BASIC SCHOOL IMPORTANT FOR A LOCAL DEVELOPMENT IN SMALL RURAL VILLAGES? CASE STUDY OF THE STREDOCESKY REGION IN THE CZECH REPUBLIC <i>Jana Kourilova</i>	104
TYPES OF FINANCIAL DISTANCES – THEORIES AND EVIDENCE <i>Sandor Zsolt Kovacs</i>	105
REGIONAL TRENDS, PATTERNS AND INEQUALITIES AMONG MEDIUM-SIZED FIRMS OF THE HUNGARIAN MANUFACTURING SECTOR <i>Szilard Kovacs</i> <i>Balázs Páger</i>	106
DO SMALL INDUSTRIAL TOWNS PERFORM WORSE IN SOCIO-ECONOMIC WELL-BEING INDICATORS? A CASE STUDY OF SLOVENIA <i>Jani Kozina</i> <i>David Bole</i> <i>Jernej Tiran</i>	106
LAND SCARCITY AND POLYCENTRIC URBAN SPATIAL STRUCTURE - AN UNDEREXPLORED FIELD <i>Angelika Krehl</i>	107

MIGRATION EXPERIENCE AS A SOURCE OF HUMAN CAPITAL AMONG YOUNG, MOBILE ADULTS <i>Zaiga Krisjane</i> <i>Elina Apsite–Berina</i> <i>Maris Berzins</i> <i>Guido Sechi</i> <i>Janis Krumins</i>	107
THE EVOLUTION OF REGIONAL DISPARITIES IN EUROPE, 1990-PRESENT <i>Iryna Kristensen</i> <i>Shinan Wang</i> <i>Timothy Heleniak</i>	108
PROFESSION: MAYOR. THE SCALE AND EFFECTS OF MULTI-TERM MAYORALTY ON LOCAL POLITICAL SCENES IN EUROPE <i>Joanna Krukowska</i> <i>Pawel Swianiewicz</i>	108
GLOBAL VALUE CHAINS IN TRANSITION ECONOMIES: INTEGRATION PATHS IN CENTRAL AND EASTERN EUROPE <i>Pijus Krūminas</i> <i>Egidijus Rybakovas</i> <i>Agnė Paliokaitė</i>	109
DIVERSIFYING POPULATION DEVELOPMENT: EVIDENCE FROM THE RIGA URBAN AGGLOMERATION <i>Janis Krumins</i>	110
SPATIAL PATTERNS OF POPULATION GROWTH AND DECLINE IN URBAN, SUBURBAN AND RURAL AREAS IN POLAND <i>Sławomir Kurek</i>	110
BLOCKCHAIN BETWEEN PRACTICE AND HYPE: THE URBAN SCOPE OF RADICAL TECHNOLOGY DIFFUSION <i>Arnoud Lagendijk</i> <i>Bas Hillebrand</i> <i>Eva Kalmar</i> <i>Ingrid van Marion</i> <i>Maarten van der Sanden</i>	111
DEVELOPING AN INTER-REGIONAL INNOVATION SYSTEM: WHAT MAKES IT WORK <i>Mandy Lalrindiki</i> <i>Valerie Brett</i> <i>Bill O’Gorman</i>	111
SMALL TOWNS DEVELOPMENT TRAJECTORIES IN A POLYCENTRIC AGGLOMERATION RESULTING FROM CLUSTERING WITH THE USE OF KOHONEN NEURAL NETWORK <i>Viola Larionova</i> <i>Tatiana Bystrova</i> <i>Evgeny Sinitsyn</i>	112

NETWORK BROKERS IN THE PERIPHERY: A STUDY ON BUSINESS NETWORKING AND KNOWLEDGE SHARING IN RURAL-PERIPHERAL REGIONS	112
<i>Birgit Leick</i>	
<i>Susanne Gretzinger</i>	
<i>Mads Bruun Ingstrup</i>	
SECOND HOME SUBURBANISATION IN RUSSIA: REGIONAL AND INTRA-REGIONAL ASPECTS	113
<i>Mikhail Levchenko</i>	
URBAN INTENSIFICATION IN SWITZERLAND, INSIGHTS FROM INSTITUTIONAL ECONOMIC THEORY	114
<i>Melanie Lienhard</i>	
SMALL CITIES IN NON-CORE AREAS IN RUSSIA: GENERAL OVERVIEW, CASES OF REGROWTH AND REASONS OF RESILIENCE	114
<i>Leonid Limonov</i>	
<i>Marina Nesena</i>	
GOVERNANCE RESCALING AND THE ROLE OF META-GOVERNANCE: CHANGES AND CHALLENGES FOR METROPOLITAN SPATIAL PLANNING	115
<i>Valeria Lingua</i>	
DYNAMICS OF INTERDEPENDENT TRADE NETWORKS	116
<i>Michael Lischka</i>	
<i>Mossig Ivo</i>	
THE MACROECONOMIC CONSEQUENCES OF REGIONAL FISCAL DECENTRALISATION	116
<i>Katerina Lisenkova</i>	
<i>Alastair Greig</i>	
<i>Peter McGregor</i>	
<i>Kim Swales</i>	
THE STRUCTURE AND EVOLUTION OF TRADE RELATIONS BETWEEN COUNTRIES ALONG THE BELT AND ROAD	117
<i>Zhigao Liu</i>	
DISCURSIVE CONSTRUCTION OF THE BELT AND ROAD INITIATIVE: FROM NEOLIBERAL TO INCLUSIVE GLOBALIZATION	117
<i>Weidong Liu</i>	
<i>Michael Dunford</i>	
<i>Boyang Gao</i>	
INDUSTRY CLUSTER POLICY AND PRACTICE: EVIDENCE FROM U.S. STATES	118
<i>John Lombard</i>	
EMERGING SUBURBS IN POST-SOVIET COUNTRIES: THE ROLE OF PRIVATIZATION OF LAND IN URBAN PLANNING, THE CASE OF SOKILNYKY, LVIV, UKRAINE	118
<i>Roman Lozynskyi</i>	
POLITICAL ECONOMY OF CITY REGIONALISM: CLASS INTEREST AS “GENERAL INTEREST” IN THE ADOPTION OF CITY REGIONALIST ACCUMULATION STRATEGY IN FINLAND	119

Juho Luukkonen
Heikki Sirviö

MEDIUM-SIZED MANUFACTURING ENTERPRISES IN PERIPHERAL ECONOMIES: INSIGHTS FROM THE HUNGARIAN “MITTELSTAND” 119

Gabor Lux

NORDIC VIEW ON THE ROLE OF PUBLIC ACTORS IN SMART SPECIALISATION PROCESS 120

Antti Mäenpää

SIMULATION OF DYNAMICS OF URBAN RETAILERS’ FREIGHT PROVISION THROUGH AN AGENT-BASED MODEL: THE CASE OF TURIN 120

Elena Maggi

Elena Vallino

Elena Beretta

FDI & SECTOR INTERDEPENDENCE IN SWITZERLAND: A SPATIAL ECONOMETRIC ANALYSIS 121

Federica Maggi

REGIONAL RESILIENCE AND POLICY: WHAT IS IT FIRST? INSIGHTS FROM THE BASQUE COUNTRY 121

Edurne Magro

Mikel Navarro

Jesus Maria Valdaliso

SECTORAL, TECHNOLOGICAL AND NATIONAL SYSTEMS OF ENVIRONMENTAL INNOVATION: THE CASE OF THE FINNISH MARINE SCRUBBER SYSTEMS INDUSTRY 122

Teemu Makkonen

Tommi Inkinen

WRITTEN IN DESTINY: BACKGROUND FACTORS AND CAREER PATHS A SEQUENCE ANALYSIS APPROACH 122

Paolo Malfitano

TRACING THE EVERYDAY REALITIES OF PRECARIOUS MIGRANTS IN DIRTY, DANGEROUS AND DIFFICULT JOBS IN BRITAIN 123

Constantine Manolchev

Steffen Boehm

Cahit Agar

Siddhartha Dabhi

THE GEOGRAPHY OF POLITICAL IDEOLOGIES IN SWITZERLAND 123

Daniele Mantegazzi

CHINA-AFRICA COOPERATION IN THE FIGHT AGAINST HIV/AIDS: CAN CHINA HELP THE STRUGGLING ECONOMIES OF AFRICA BY COMBATING THE VIRUS? 124

Fanni Marácz

TOURISM, POPULATION DYNAMICS AND SOCIAL INFRASTRUCTURE IN CROATIAN MAJOR COASTAL CITIES 124

Sven Marcelic

COMMUTING PATTERNS AND URBAN FORM: EVIDENCE FROM POLAND 125 <i>Szymon Marcinczak</i> <i>Bartosz Bartosiewicz</i>	125
TRENDS IN THE PROVISION OF BASIC GOODS IN REMOTE AREAS – THE LUXURY OF TOMORROW? <i>Naja Marot</i> <i>Barbara Kostanjšek</i>	125
AN INVESTIGATION OF PUBLIC SERVICES DELIVERY CAPACITY IN ITALY WITHIN ECONOMICALLY INTEGRATED REGIONS AND MESO-SCALE ADMINISTRATIVE SUBDIVISION <i>Federico Martellozzo</i> <i>Chiara Fratini</i> <i>Filippo Randelli</i> <i>Patrizia Romei</i> <i>Francesco Dini</i>	126
EU INTEGRATION AND THE IMPACT ON REGIONAL-SECTOR SPECIALISATION, CONCENTRATION AND AGGLOMERATION <i>Ron Martin</i> <i>Ben Gardiner</i>	126
MOBILITY AND ENTREPRENEURSHIP: FINDING VALUE IN GEOGRAPHIC DIVERSITY <i>Mikhail Martynovich</i>	127
CORDOBA, THE ARGENTINIAN SILICON VALLEY? COMMON NARRATIVES, INSTITUTIONAL EXPERIMENTS, AND MUTUAL ADJUSTMENTS TO DEVELOP A REGIONAL INNOVATION SYSTEM OUTSIDE BUENOS AIRES <i>Andres Matta</i> <i>Sergio Montero</i>	127
BREXIT AND THE UK SUB-NATIONAL LEVEL GOVERNANCE AND POLICY CHALLENGES <i>Philip McCann</i> <i>Chloe Billing</i> <i>Raquel Ortega-Argiles</i>	128
THE MAKING OF SUCCESSFUL INLAND PORTS IN THE UNITED STATES <i>Erin McLaughlin</i>	129
GROWTH OR COHESION? AN ANALYSIS OF SHIFTING LABOUR MARKET DYNAMICS BETWEEN AND WITHIN EU REGIONS <i>Leaza McSorley</i>	129

EU FUNDS AND THE DEVELOPMENT OF TRANSNATIONAL INDUSTRIAL POLICY ON EUROPE'S EASTERN PERIPHERY <i>Gergo Medve-Balint</i> <i>Vera Sceanovic</i>	130
DIVERSE DIVERSITIES – OPEN INNOVATION IN SMALL TOWNS AND RURAL REGIONS <i>Rahel Meili</i> <i>Richard Shearmur</i>	131
THEORETICAL ARGUMENTS AND EMPIRICAL EVIDENCE IN RUSSIAN STRATEGIC PLANNING <i>Larisa Melnikova</i>	131
THE EMERGENCE OF RELATEDNESS: EXPLORING OFFSHORE OIL AND GAS AS WELL AS OFFSHORE WIND ENERGY IN ESBJERG/DENMARK <i>Max-Peter Menzel</i> <i>Mads Bruun Ingstrup</i>	132
AN EMPIRICAL INVESTIGATION AMONG FDI, TERRORISM AND OTHER DETERMINANT FACTORS IN DEVELOPING ECONOMIES <i>Theodore Metaxas</i> <i>Polyxeni Kechagia</i>	132
"IT'S VOLUNTEERING, IF IT'S GOOD FOR YOU". ABOUT THE POTENTIALS AND LIMITS OF PENSIONERS' CIVIC ENGAGEMENT FOR SERVICE PROVISION <i>Tobias Mettenberger</i>	133
CHANGING GOVERNANCE AND ADAPTATION STRATEGIES IN WASTE MANAGEMENT: A CASE STUDY OF PÉCS <i>Cecília Mezei</i> <i>Viktor Varjú</i>	133
DOES GEOGRAPHICAL PROXIMITY MATTER FOR BUSINESS AND TECHNOLOGICAL KNOWLEDGE FLOWS BETWEEN SMES? THE CASE OF POLISH IT SERVICE COMPANIES <i>Grzegorz Micek</i>	134
FROM ABSTRACT THEORIES TO TANGIBLE ACTIONS: HOW SUSTAINABILITY PRACTITIONERS INTERPRET AND APPLY ACADEMIC BUZZWORDS <i>Ola Aleksandra Michalec</i> <i>Enda Hayes</i> <i>James Longhurst</i>	134
ON TRANSPARENCY, TRUST AND COMMUNICATING NEW TECHNOLOGIES: A CASE OF METERING IN BRISTOL, UK <i>Ola Aleksandra Michalec</i>	135

HOW LARGE ARE ROAD TRAFFIC EXTERNALITIES IN THE CITY? THE HIGHWAY TUNNELING IN MAASTRICHT, THE NETHERLANDS	135
<i>Thomas Michielsen</i>	
<i>Joep Tijm</i>	
<i>Raoul van Maarseveen</i>	
<i>Peter</i>	
ENTREPRENEURIAL ECOSYSTEMS AND ENTREPRENEURIAL UNIVERSITIES: DEVELOPING CAPACITY AND CAPABILITIES FOR OPPORTUNITY DEVELOPMENT AND IMPLEMENTATION	136
<i>Jay Mitra</i>	
<i>Su-Hyun Berg</i>	
DIASPORA BRAIN CIRCULATION AND TRANSNATIONAL ENTREPRENEURSHIP: THE BLACK AFRICAN SME DIASPORA'S APPROACH TO INTERNATIONALISATION IN THE UNITED KINGDOM	136
<i>Jay Mitra</i>	
<i>Busayo Ajayi</i>	
CONCEPTUALIZING THE THIRD PHASE OF KNOWLEDGE-BASED ECONOMIZATION: THE RISE OF A START-UP CITY/STATE	137
<i>Sami Moisio</i>	
BETWEEN THE FUTURE AND THE PAST. INTERDISCIPLINARY CONNECTIONS AMONG REGIONAL AND HISTORICAL STUDIES	137
<i>Marijn Molema</i>	
<i>John Tomaney</i>	
IS THE REALLOCATION OF THE WORKFORCE LEADING TO A CHANGING GENDER DIVISION IN THE LABOUR MARKET? -THE CASE OF DALARNA	138
<i>Peter Möller</i>	
<i>Daniel Brandt</i>	
<i>Anna Klerby</i>	
FRAGILE GOVERNANCE AND LOCAL ECONOMIC DEVELOPMENT: THEORY AND EVIDENCE FROM LATIN AMERICAN PERIPHERAL REGIONS	138
<i>Sergio Montero</i>	
<i>Karen Chapple</i>	
HOW TERRITORIAL COMPETITIVENESS INFLUENCES FIRMS: EVIDENCE FROM TERRITORIAL CAPITAL IN THE NORTH AND SOUTH OF ITALY	139
<i>Valentina Morretta</i>	
<i>Leandro Sepulveda Ramirez</i>	
<i>Stephen Syrett</i>	
THE CRISIS AND REGIONAL UNEMPLOYMENT IN EUROPE: RESILIENCE AND THE ROLE OF TECHNOLOGICAL CAPITAL	139
<i>Andrea Morrison</i>	
<i>Riccardo Cappelli</i>	
<i>Fabio Montobbio</i>	

GOVERNANCE FOR REGIONAL GROWTH: PUBLIC-PRIVATE PARTNERSHIPS FOR BUSINESS CLUSTERS AND REGIONAL VALUE CHAINS <i>Nikolai Mouraviev</i>	140
THE ROLE OF INTERNATIONAL FINANCIAL INSTITUTIONS IN DELIVERING EU FINANCIAL INSTRUMENTS. THE EBRD CASE <i>Olga Mrinska</i>	140
SPATIAL DIVERSIFICATION OF THE IMPLEMENTATION COSTS OF THE UPDATED NATIONAL WATER AND ENVIRONMENTAL PROGRAM IN POLISH FUNCTIONAL URBAN AREAS <i>Karol Mrozik</i> <i>Piotr Idczak</i>	141
THE GERMAN POLYCENTRIC URBAN REGIONS: CONCEPTUAL, EMPIRICAL AND INTERNATIONAL COMPARATIVE PERSPECTIVES <i>Angelika Muenther</i>	141
SPATIAL RETROFITS HOW TO DEVELOP BUSINESS SITES FOR THE KNOWLEDGE ECONOMY IN METROPOLITAN REGIONS: A CONCEPTUAL PAPER <i>Christiane Müller</i> <i>Michael Bentlage</i> <i>Alain Thierstein</i>	142
POLISH EXPERIENCES WITH THE JESSICA INITIATIVE <i>Ida Musialkowska</i> <i>Piotr Idczak</i>	142
SPEEDING UP THE TRANSITION OF CITIES? EXPLORING SYSTEMIC CHANGES IN THE SMART CITIES OF VIENNA, AMSTERDAM AND SANTANDER <i>Jörg Musiolik</i> <i>Vicente Carabias Hütter</i> <i>Bettina Furrer</i>	143
SITTING ON THE RUINS? THE IMPACT OF THE RUSSO-UKRAINIAN WAR ON THE DONBAS ECONOMY AND THE ROLE OF UKRAINIAN INTERNALLY DISPLACED PEOPLE <i>Vlad Mykhnenko</i>	144
IMMIGRANT MOBILITY CULTURES? STATUS OF TRANSPORT MODES, RELATED ATTITUDES AND EXPERIENCES AMONG TURKISH IMMIGRANTS IN GERMANY <i>Robert Nadler</i> <i>Janina Welsch</i>	145
FIGHTING PERIPHERALIZATION - THE WAY TOWARDS BALANCED METROPOLITAN GOVERNANCE <i>Júlia A. Nagy</i> <i>József Benedek</i>	145

ADAPTATION IN CULTURAL INDUSTRY UNDER CONSERVATION PRESSURE: A CASE STUDY OF TWO CHINESE EMBROIDERY CLUSTERS	146
<i>Kyung-Min Nam</i> <i>Xin Li</i> <i>Hui Jiang</i>	
LEARNING BY INTERACTING: EXPERIENCES FROM THE SMART-MR PROJECT	146
<i>Janez Nared</i>	
A CROSS-SECTION SPATIAL ANALYSIS OF ENGLISH REGIONAL HOUSE PRICES	146
<i>Ilir Nase</i>	
CAN WOMEN EMPOWERMENT EXPLAIN CROSS-COUNTRY DIFFERENCES IN INEQUALITY? A GLOBAL PERSPECTIVE	147
<i>Amjad Naveed</i> <i>Cong Wang</i>	
VULNERABILITY TO THE CONSEQUENCES OF BREXIT. EVIDENCE FROM THE TWO EUROPEAN COUNTRIES' REGIONS' TRADE	147
<i>Jarosław Nazarczuk</i> <i>Stanisław Uminski</i> <i>Laura Marquez-Ramos</i>	
RE-ENGAGING WITH PLACE: NEW ZEALAND'S NEW REGIONAL GROWTH PROGRAMME AND THE CHALLENGES OF EVOLVING POLICY, GOVERNANCE AND STRATEGY FORMULATION.	148
<i>Etienne Nel</i>	
DEVELOPMENTAL SUB-REGIONALISM IN EUROPEAN STRATEGY FOR DANUBE REGION (EUSDR) FOR MULTI-LEVEL POLICY	148
<i>Soavapa Ngampramaun</i>	
THE HUNGARIAN SME SECTOR-RELATED INDUSTRY 4.0 ECOSYSTEM	149
<i>Gábor András Nick</i>	
ACCESS TO NON-WORK ACTIVITIES: WHAT IS THE IMPACT OF DAILY LABOUR MOBILITY?	149
<i>Michał Niedzielski</i>	
TERRITORIAL ASSOCIATION: PUBLIC OR PRIVATE A PROVINCIAL COMPARATIVE ANALYSIS OF BOGOTA'S METROPOLITAN AREA GOVERNANCE	150
<i>Jose Nino Amezquita</i> <i>Carlos Jimenez</i>	
FINANCIAL INSTRUMENTS NOW AND AFTER 2020	150
<i>Gyorgyi Nyikos</i>	
IMPROVING REGIONAL RESILIENCE AND THE NEGATIVE IMPACT OF NATURAL DISASTERS ON THE REGIONAL ECONOMY	151
<i>Kenji Ogai</i>	
NATURAL DISASTERS AND RECOVERY PROCESSES IN ITALY. DO COMMUNITIES SHAPE RESILIENCE?	151

Stefania Oliva
Luciana Lazzeretti
Martina Bianchi

THE ROLE OF STRATEGIC PLANS IN REDUCING LAND DEGRADATION IN EUROPEAN URBAN REGIONS 152

Eduardo Oliveira
Anna Hersperger

CITIES AND THE 'NEW' LOCAL INTEGRATION GOVERNANCE: STORIES ABOUT SOMETHING NEW, SOMETHING BORROWED, AND SOMETHING OLD IN GÖTEBORG 153

Daniela Olmunger
Patrik Zapata
Maria José Zapata Campos

THE LODGING INDUSTRY AND LOCATION PATTERNS: THE CASE OF URBAN HOTELS IN ANKARA 153

Ezgi Orhan

ILLCIT FINANCIAL FLOWS IN LOW-AND MIDDLE-INCOME COUNTRIES: A HINDRANCE TO HUMAN DEVELOPMENT 154

Bienvenido Ortega
Jesús Sanjuán
Antonio Casquero

CONNECTIVITY AND SPATIAL PATTERNS: DYNAMICS IN THE MACHINERY INDUSTRY IN SWITZERLAND 154

Kathrin Ottiger

THE ROLE OF REGIONAL ENTREPRENEURSHIP ECOSYSTEM IN THE PRESENCE OF PRODUCTIVE FIRMS IN THE CEE REGIONS 155

Balazs Pager

KNOWLEDGE WORKERS AND WORKPLACE MOBILITY – DEATH OF THE OFFICE, OR A NEW MEANING FOR EMPLOYMENT LOCATION? 155

Filipa Pajevic
Richard G. Shearmur

GOVERNANCE TURN IN LOCAL ECONOMIC DEVELOPMENT IN HUNGARY 155

Ilona Pálné Kovács

NETWORKING TOWARDS SUSTAINABLE TOURISM: REGIONAL DEVELOPMENT BETWEEN GREEN GROWTH AND DEGROWTH STRATEGIES 156

Sabine Panzer-Krause

LOOKING AT MIXED MIGRANT FLOWS THROUGH THE LENS OF SOCIAL AND TERRITORIAL JUSTICE: PRESENTING TENTATIVE EVIDENCE FROM GREECE <i>Apostolos Papadopoulos</i> <i>Loukia-Maria Fratsea</i>	157
IMPLEMENTING SMART SPECIALISATION IN CATCH-UP REGIONS: THE IMPORTANCE OF CAPACITY BUILDING <i>George Papamichail</i> <i>Alessandro Rosiello</i> <i>David Wield</i>	157
SOCIO-DEMOGRAPHIC CHANGE AND URBAN GOVERNANCE AS DRIVERS OF LAND USE IN OECD COUNTRIES <i>Stefano Pareglio</i> <i>Silvia Beghelli</i> <i>Giovanni Guastella</i>	158
A PRELIMINARY STUDY ON RESHORING IN THE REGION OF VENETO IN ITALY <i>Diletta Pegoraro</i> <i>Lisa De Propriis</i> <i>Agnieszka Chidlow</i>	158
CONTRADICTIONS IN EU'S RURAL DEVELOPMENT POLICY IN THE CONTEXT OF INTENSIFYING NEOPRODUCTIVIST PRESSURES <i>Martin Pelucha</i> <i>Edward Kasabov</i>	159
ASSESSING THE REGIONAL IMPACT OF COHESION POLICIES THROUGH A TERRITORIAL PROOFING TOOL <i>Leonardo Piccini</i> <i>Patrizia Lattarulo</i>	159
GALICIA: THE CHALLENGE OF GOVERNING AN AUTONOMOUS REGION FROM THE OFFICE <i>Maria Jose Pineira</i> <i>Rubén Camilo Lois González</i> <i>Daniel Barreiro Quintans</i>	160
THE ROLE OF INTERMEDIARY ORGANIZATIONS IN THE RESILIENCE OF THE DUTCH-FRISIAN DAIRY CLUSTER, 1960-1990 <i>Ronald Plantinga</i> <i>Marijn Molema</i>	160
MOBILITY AND WORK: EXPLORING THE RELATIONSHIP BETWEEN EMPLOYERS, EMPLOYEES AND PLACE <i>Jörg Plöger</i> <i>Robert Nadler</i>	161

THE IMPACT OF AIR TRANSPORT CONNECTIVITY ON RESEARCH COLLABORATION <i>Adam Ploszaj</i> <i>Xiaoran Yan</i> <i>Katy Börner</i>	161
THE TENDENCIES OF SOCIO-SPATIAL TRANSITION IN RURAL PERIPHERAL AREAS IN LITHUANIA <i>Gintare Pociute-Sereikiene</i> <i>Edis Kriaučiūnas</i>	162
PARTICIPANTS IN PARTICIPATIVE PROCESSES – WHO THEY ARE AND WHAT DO THEY THINK ABOUT PARTICIPATION <i>Kim Pollermann</i>	162
SIMPLIFICATION V. CONTROL: MANAGING PERFORMANCE AND ACCOUNTABILITY IN ESI FUNDS MANAGEMENT AND DELIVERY <i>Laura Polverari</i> <i>Martin Ferry</i>	163
THE REGIONAL RENEWAL CAPACITY AND ITS DETERMINANTS <i>Nicola Pontarollo</i> <i>Carolina Serpieri</i>	163
SYNERGY IN THE KNOWLEDGE BASE OF U.S. INNOVATION SYSTEMS AT NATIONAL, STATE, AND REGIONAL LEVELS: THE CONTRIBUTIONS OF HIGH-TECH MANUFACTURING AND KNOWLEDGE-INTENSIVE SERVICES <i>Igone Porto Gomez</i> <i>Loet Leydesdorff</i> <i>Caroline S. Wagner</i> <i>Jordan A Comins</i>	164
FOSTERING A RESILIENT REGIONAL ECONOMY IN THE SADC THROUGH REGIONAL INTEGRATION AND INDUSTRIALISATION <i>Ockert Rudolf Pretorius</i> <i>Johannes Ernst Drewes</i> <i>Mariske van Aswegen</i>	164
LANDING AIRPORTS <i>Mariëlle Prins</i>	165
HIGH TECHNOLOGY FIRM MIGRATION: THE MAGNETISM OF CORE REGIONS <i>Daniel Prokop</i>	165
THE RELATIONSHIP BETWEEN PRIOR START-UP EXPERIENCE AND SOCIAL TIES IN TRANSNATIONAL ENTREPRENEURSHIP <i>Sarika Pruthi</i> <i>Anuradha Basu</i>	166

REVISITING GOVERNANCE CAPACITY: EXISTING APPROACHES AND POTENTIAL SYNERGIES TO ANALYZE AND MEASURE GOVERNANCE IMPACTS <i>Marco Pütz</i> <i>Mario Reimer</i>	166
ENTREPRENEURIAL DYNAMICS WITHIN ENTREPRENEURIAL ECOSYSTEMS: PATH DEPENDENT PROCESS OR MARKET COMPETITION? <i>Korneliusz Pylak</i> <i>Marcus Dejardin</i>	167
PERSISTENCE OF ENTREPRENEURSHIP IN DIFFERENT HISTORICAL CONTEXT: THE EMPIRICAL PLAYGROUND OF POLAND <i>Korneliusz Pylak</i> <i>Michael Fritsch</i> <i>Michael Wyrwich</i>	168
SPATIAL-ECONOMIC RESTRUCTURING IN SUBURBAN BEIJING: THE IMPACT ON RURAL MIGRANTS AND THEIR LIVING ENVIRONMENT <i>Miao Qiao</i> <i>Cecilia Wong</i> <i>Wei Zheng</i>	168
ACADEMIC INVENTORS AND THE GENERATION OF GREEN TECHNOLOGIES. A REGIONAL ANALYSIS OF ITALIAN PATENT DATA <i>Francesco Quattraro</i> <i>Alessandra Scandura</i>	169
BUSINESS ENGAGEMENT WITH LOCAL GOVERNMENT: CREATING A SOCIAL CONTRACT FOR BUSINESS <i>Martin Quinn</i>	169
THE ORGANISATIONAL RESILIENCE OF REGIONAL HIGHER EDUCATIONAL INSTITUTIONS AND LOCAL INSTITUTIONAL CHANGE. INSIGHTS FROM KURESSAARE, ESTONIA AND SEINÄJOKI, FINLAND <i>Garri Raagmaa</i> <i>Jari Kolehmainen</i> <i>Anne Keerberg</i>	169
ASSESSING THE ECONOMIC AND ENVIRONMENTAL EFFICIENCY OF DAIRY FARMS ACROSS UK REGIONS <i>Annum Rafique</i> <i>Max Munday</i> <i>Kent Matthews</i>	170
VOLUME AND CHARACTERISTICS OF THE LAST EMIGRANT WAVE OF YOUNG PEOPLE FROM CROATIA <i>Nada Rajic</i>	170

THE TERRITORIAL EMBEDDEDNESS OF RURAL BIOREFINERIES: WHAT SOCIO-ECONOMIC ISSUES?	171
<i>Miravo Rakotovao</i>	
<i>Julie Gobert</i>	
<i>Sabrina Brullot</i>	
SPATIAL CHALLENGES TO UNIVERSAL HEALTH CARE IN FINLAND AND SWEDEN	171
<i>Daniel Rauhut</i>	
<i>Christopher J Smith</i>	
UNDERSTANDING DIFFERENCES BETWEEN MOBILITY INTENTIONS AND BEHAVIOUR – THE CASE OF RECENT GRADUATES IN THE EUREGIO MEUSE-RHINE	172
<i>Julia Reinold</i>	
<i>Inge Hooijen</i>	
NETWORK EVOLUTION OF EUROPEAN OUTWARD FOREIGN DIRECT INVESTMENTS	172
<i>Giorgio Ricchiuti</i>	
<i>Giulia De Masi</i>	
PAST RURAL PATH OF NON-CORE REGIONS AS SUPPORT OF PRODUCTIVE AND RESIDENTIAL ECONOMIC DEVELOPMENT: THE CASE OF THE REGION GRUYÈRE (SWITZERLAND)	173
<i>Delphine Rime</i>	
<i>Heike Mayer</i>	
TERRITORIAL SUSTAINABILITY IN EUROPEAN REGIONS: COMPOSITE INDICATORS AND IMBALANCE MEASURES	173
<i>Paolo Rizzi</i>	
<i>Antonio Dallara</i>	
THE FUTURE OF TOURISM WORKFORCE DEVELOPMENT IN THE KOOTENAY-ROCKIES, BRITISH COLUMBIA, CANADA	174
<i>Danielle Robinson</i>	
OPPOSITION TO ON-SHORE WIND POWER – A STUDY OF SPILL-OVER EFFECTS FROM LOCAL FAILED PROJECTS IN GERMANY AND THE UK	174
<i>Johannes Rode</i>	
<i>Marcello Graziano</i>	
THE INFLUENCE OF TOUR OPERATORS ON THE PERFORMANCE OF SME HOTELS: A COMPARISON BETWEEN COASTAL AND INLAND AREAS IN SPAIN	175
<i>Isidoro Romero</i>	
<i>Rafael Cáceres-Carrasco</i>	
<i>José Fernández-Serrano</i>	
IS INTERNAL MIGRATION DECLINING IN EUROPE?	175
<i>Francisco Rowe</i>	
RESTRATEGISING THE EMS-DOLLART REGION: THE ACCIDENT OF THE FRIESENBRÜCKE	175
<i>Joost Ruiter</i>	
INNOVATIVE LEARNING CREATES KNOW-HOW TO REGIONAL CHALLENGES	176

Essi Ryymin
Laura Vainio

FIELDS OF CREATIVE POWER. MAPPING THE DYNAMIC EVOLUTION OF CULTURAL VIBRANCY IN HALLAND, SWEDEN 177

Pier Luigi Sacco
Massimo Buscema
Guido Ferilli
Christer Gustafsson

SPATIAL SPECIALIZATION TREND OF KNOWLEDGE INTENSIVE BUSINESS SERVICE'S IN TURKEY 177
Mehmet Tahsin Sahin

UNIVERSITIES' THIRD MISSION AND STRUCTURAL FUNDS PROGRAMMES 177
Maria Salomaa

CITY LEADERSHIP AND GOVERNANCE DURING ECONOMIC CHANGE – EVIDENCE FROM AUSTRALIA, EUROPE AND US 178
Alessandro Sancino
Sarah Ayres
Andrew Beer

PATH RENEWAL AND CREATION IN SPECIALIZED REGIONAL INNOVATION SYSTEMS. A COMPARATIVE ANALYSIS OF TWO TEXTILE DISTRICTS IN ITALY AND SWEDEN 178
Erica Santini
Marco Bellandi
Cristina Chaminade
Monica Plechero

GATEWAY CITIES FOR THE OIL INDUSTRY IN THE SOUTH AMERICA: AN ANALYSIS BASED ON INVESTMENT FLOWS AND NETWORKS' GATEKEEPERS 179
Mariane Santos Françoso
Moritz Breul
Celio Hiratuka
Javier Revilla Diez

EVALUATING THE EFFECT OF BUSINESS ADOPTION AND USE OF ICT-ENABLED TECHNOLOGIES ON PRODUCTION EFFICIENCY: A WELSH PERSPECTIVE 179
Anna Scedrova
Max Munday

REGIONAL REVIVAL AND LABOR MOBILITY: ECONOMIC MIGRANTS IN BENGALURU <i>Kala Seetharam Sridhar</i>	180
THE DEVELOPMENT OF SYNERGIES BETWEEN PRODUCTIVE AND RESIDENTIAL TERRITORIES IN SWITZERLAND <i>Alain Segesse</i> <i>Bregnard Thierry</i>	180
REGIONAL DISPARITIES: THE CHOICE BETWEEN DIRECTIVE AND INDICATIVE INSTRUMENTS OF REGULATION <i>Olga Shevchenko</i>	181
THE ROLE OF TAX HAVENS IN GLOBAL INDUSTRIAL NETWORKS: A SOCIAL NETWORK ANALYSIS USING STOCK EXCHANGE FIRM DATA <i>Thomas Sigler</i> <i>Kirsten Martinus</i> <i>Ben Derudder</i> <i>Iacopo Iacopini</i>	181
THE STRATEGIC POSITIONING OF HOUSING BY LOCAL GOVERNMENT TO SUPPORT SUCCESSFUL AGEING- AN AUSTRALIAN CASE STUDY <i>Sarah Sinclair</i> <i>Sveta Angelopolous</i>	182
PUBLIC POLICY, INDUSTRIAL STRATEGY AND THE LOW-SKILLS LOW-WAGE TRAP – EVIDENCE FROM EMPLOYERS IN THE WEST MIDLANDS <i>Paul Sissons</i> <i>Anne Green</i> <i>Amir Qamar</i> <i>Kevin Broughton</i>	182
IMPLEMENTATION OF THE SMART CITY CONCEPT WITHIN THE COHESION POLICY IN THE CZECH REPUBLIC: ANALYSIS OF FUNDED PROJECTS IN PROGRAMMING PERIOD 2007-2013 <i>Lenka Smékalová</i> <i>Filip Kučera</i>	183
LOCATION PATTERNS OF ADVANCED PRODUCER SERVICE FIRMS IN WARSAW: A TALE OF AGGLOMERATION IN THE ERA OF CREATIVITY <i>Maciej Smetkowski</i> <i>Katarzyna Wojnar</i>	184
PUBLIC SPENDING CHOICES, TERRITORIAL INEQUALITY AND DEMOCRATIC ENGAGEMENT IN EUROPEAN REGIONS: WHAT IS THE ROLE OF A TERRITORIAL COHESION APPROACH? <i>Ian Smith</i> <i>Stephen Hall</i> <i>Maria Casado-Diaz</i> <i>Andrew Tallon</i>	184

SPATIAL CORRELATION COEFFICIENT BASED ON REGIONAL SPATIAL MOVING AVERAGE <i>Andrzej Sokołowski</i> <i>Małgorzata Markowska</i> <i>Marek Sobolewski</i> <i>Sabina Denkowska</i>	185
A STUDY ON THE SPATIAL EVOLUTION OF BORDER CITIES IN YUNNAN, CHINA <i>Tao Song</i>	185
SMART SPECIALISATION AND PLACE LEADERSHIP: DREAMING ABOUT SHARED VISIONS, FALLING INTO POLICY TRAPS? <i>Markku Sotarauta</i>	185
TO BE OR NOT TO BE CULTURAL TOWN? DILEMMAS OF THE CULTURAL POLICY OF SMALL TOWNS IN POLAND <i>Stefania Środa-Murawska</i> <i>Leszek Dabrowski</i> <i>Jadwiga Biegańska</i>	186
THE CROSS-BORDER LAKE CONSTANCE REGION ON THE WAY TO THE FUTURE <i>Simone Strauf</i> <i>Roland Scherer</i>	186
WOULD YOU LIKE TO BECOME A RURAL BROADBAND PROVIDER? <i>Dirk Strijker</i> <i>Koen Salemink</i>	187
TAX INCENTIVES AND FDI LOCATION IN INDONESIA <i>I Putu Suidiana</i> <i>Jonathan Jones</i> <i>Colin Wren</i>	188
BOOSTING VUKOVAR'S ECONOMY THROUGH LOCAL AND SECTORAL PRODUCTION SYSTEMS <i>Marijana Sumpor</i> <i>Goran Buturac</i> <i>Irena Đokić</i>	188
HOUSING DEMAND BY IMMIGRANTS <i>Ozden Sungur</i>	189
TOWARDS INSTITUTIONALISED GREEN ECONOMY IN FINLAND <i>Nina Suvinen</i> <i>Markku Sotarauta</i>	189
DYNAMICS AND TRADE PATTERNS OF EXPORT INTERMEDIARIES. A CASE STUDY OF THE POLISH REGIONS <i>Barbara Szejgiec-Kolenda</i>	190

THE RELEVANCE OF QUANTITY AND QUALITY ENTREPRENEURSHIP FOR REGIONAL PERFORMANCE: THE MODERATING ROLE OF THE ENTREPRENEURIAL ECOSYSTEM <i>László Szerb</i> <i>Esteban Lafuente</i> <i>Krisztina Horváth</i> <i>Balázs Páger</i>	190
CAN TOKYO SAVE JAPAN? <i>Masaaki Takemura</i>	191
EMPLOYMENT POLARIZATION IN REGIONAL LABOR MARKETS. EVIDENCE FROM THE NETHERLANDS <i>Nikolaos Terzidis</i> <i>Raquel Ortega-Argiles</i>	191
TERRITORIALIZATION OF THE ENERGY TRANSITION IN SWITZERLAND: RECONFIGURATION OF CURRENT PRODUCTION AND DISTRIBUTION PATTERNS <i>Thierry Theurillat</i> <i>Milena Properzi</i> <i>Ariane Huguenin</i>	192
ENHANCING CULTURAL ASPIRATIONS IN THE CITY: THE GRADUAL TRANSFORMATION BY INDIGENOUS ECONOMIC INNOVATION <i>Michelle Thompson-Fawcett</i> <i>Janice Barry</i> <i>Alex Kitson</i>	192
MOBILE CAREER PATHS? EXAMINING THE SWEDISH TOURISM AND HOSPITALITY SECTORS <i>Maria Thulemark</i> <i>Tara Duncan</i>	192
RE-INVIGORATING REGIONAL CAPABILITIES FOR BALANCED GROWTH: THE OPPORTUNITIES AND LIMITATIONS OF SMART SPECIALISATION <i>Phil Tomlinson</i> <i>Mariachiara Barzotto</i> <i>Carlo Corradini</i> <i>Felicia Fai</i> <i>Sandrine Labory</i>	192
LOCALLY GROWN SMART CITIES: HOW THE POLITICAL-INSTITUTIONAL CONTEXT INFLUENCES GLASGOW, UTRECHT AND CURITIBA <i>Zsuzsanna Tomor</i>	194
RESIDENTIAL AND HOUSEHOLD PREFERENCES OF INDIVIDUALS RESIDING IN BUCHAREST-ILFOV METROPOLITAN AREA <i>Cristian Tosa</i> <i>Hitomi Sato</i> <i>Tomio Miwa</i> <i>Takayuki Morikawa</i>	195

SPECIAL ECONOMIC ZONES AS A POLICY TOOL FOR REGIONAL DEVELOPMENT: MEXICO AND SOUTH KOREA CONTRASTED	195
<i>Alejandra Berenice Trejo Nieto</i>	
ENTREPRENEURIAL ACTIVITY AND REGIONAL DEVELOPMENT IN RUSSIAN	196
<i>Yulia Tsareva</i>	
<i>Vera Barinova</i>	
<i>Stepan Zemtsov</i>	
EXPLORING NETWORKS FOR KNOWLEDGE DEVELOPMENT AND DIFFUSION IN TECHNOLOGICAL INNOVATION SYSTEMS OF RENEWABLE ENERGY TECHNOLOGIES	196
<i>Maria Tsouri</i>	
<i>Jens Hanson</i>	
THE ROLE OF PRODUCTIVE STRUCTURE IN ECONOMIC RESILIENCE OF BRAZILIAN REGIONS AND THE CASE OF MINAS GERAIS STATE	197
<i>Igor Tupy</i>	
<i>Fernanda Silva</i>	
<i>Pedro Amaral</i>	
<i>Anderson Cavalcante</i>	
ECONOMIC LINKS BETWEEN RUSSIA AND CHINA: FROM CROSS-BORDER TO INTERREGIONAL COOPERATION	197
<i>Irina Turgel</i>	
A REVIEW ABOUT SMART SPECIALISATION THROUGH USING THREE STAR ANALYSES: THE CASE OF ISTANBUL, ANKARA, IZMIR	198
<i>Suat Tuysuz</i>	
<i>Mutlu Yilmaz</i>	
<i>M.Tahsin Sahin</i>	
CONTRASTING REGIONAL INNOVATION AND DEVOLUTION SCHEMES ACROSS EUROPE	198
<i>Ivan Ureta Vaquero</i>	
<i>Igor Calzada</i>	
POLICY IMPLEMENTATION AND INSTITUTIONAL CHANGE	199
<i>Elvira Uyarra</i>	
<i>Kieron Flanagan</i>	
THE RESOURCE WISDOM ROADMAP AS A TOOL FOR REGIONAL DEVELOPMENT	199
<i>Laura Vainio</i>	
ACCOUNTING FOR THE RESILIENCE OF THE MACHINE TOOL INDUSTRY IN SPAIN (C. 1960-2015)	200
<i>Jesus Valdaliso</i>	
ORGANIZING REGIONAL DEVELOPMENT: THE ROLE OF REGIONAL CONDITIONS AND SOCIAL RELATIONS	200
<i>Arlette van den Berg</i>	

INNOVATING FOR SMART CITIES: A FIRM-CENTRIC PERSPECTIVE ON EXPLORING AND EXPLOITING SMART CITY TECHNOLOGIES	201
<i>Daniel Van den Buuse</i>	
<i>Wieke Schrama</i>	
<i>Willem van Winden</i>	
RESCALING URBAN DEVELOPMENT IN THE EU? INTEGRATED PLACE-BASED APPROACHES IN COHESION POLICY IN 2014-20	201
<i>Arno van der Zwet</i>	
<i>Carlos Mendez</i>	
<i>Sylwia Borkowska-Waszak</i>	
SPATIAL STRUCTURE AND PRODUCTIVITY IN EUROPEAN REGIONS	202
<i>Frank Van Oort</i>	
<i>Wessel Ouwehand</i>	
<i>Nicola Cortinovis</i>	
ENGAGING START-UPS IN CHALLENGE-BASED PUBLIC PROCUREMENT: THE CASE OF AMSTERDAM'S "START-UP IN RESIDENCE" POLICY	202
<i>Willem van Winden</i>	
<i>Luis Carvalho</i>	
TRANSFER OF REGIONAL CIRCULAR ECONOMY (CE) SOLUTIONS AND KNOWLEDGE: OVERCOMING THE PLACE-BASED BARRIERS	203
<i>Viktor Varju</i>	
<i>Marcin Dąbrowski</i>	
'SMART CITY' POLICIES AND PRACTICES IN HUNGARY: RESETTING URBAN DEVELOPMENT IN THE POST-SOCIALIST CONTEXT?	203
<i>Krisztina Varro</i>	
LEARNING, UNLEARNING AND FORGETTING FROM INTERNATIONALIZATION. THE CASE OF THE MACERATA-FERMO FOOTWEAR INDUSTRIAL DISTRICTS	204
<i>Claudia Veccioli</i>	
<i>Marco Bellandi</i>	
<i>Lisa De Propriis</i>	
COMMUNITY WELL-BEING AND REGIONAL INNOVATION SYSTEMS - CO-EVOLUTION OR CONTEST	205
<i>Caroline Veldhuizen</i>	
<i>Lars Coenen</i>	
<i>Bruce Wilson</i>	
<i>Leo Goedegebuure</i>	
CITIES IN THE OECD AND BEYOND. HARMONISING DEFINITIONS AND COMPARE PERFORMANCE	205
<i>Paolo Veneri</i>	

GROWTH OF REGIONAL ATTRACTIVENESS THROUGH PASSIVE PORTFOLIO INVESTMENT: IMMUNIZATION OF MUNICIPAL BONDS <i>Darko Vukovic</i> <i>Zhanna Belyaeva</i>	206
ENTREPRENEURSHIP: IT TAKES MORE THAN A VILLAGE <i>Kevin Walsh</i>	206
CAN CHINA DEVELOP CITY-CLUSTERS WITHOUT CITY-REGION? <i>Xuefeng Wang</i>	207
THE ORGANIZATIONAL MODEL AND BORDER PORT HINTERLAND OF THE CHINA-EUROPE RAILWAY EXPRESS <i>Jiaoe Wang</i> <i>Jingjuan Jiao</i> <i>Li Ma</i>	207
THE IDENTIFICATION OF GLOBAL STRATEGIC SHIPPING PIVOTS AND THEIR SPATIAL PATTERNS <i>Chengjin Wang</i> <i>Peiran Chen</i> <i>Yunhao Chen</i>	208
SKILLED MIGRATION AND LABOUR'S GEOGRAPHY IN HONG KONG ICT SECTOR <i>He Wang</i> <i>Di Lu</i>	208
THE IMPACT OF REGIONAL REDISTRIBUTION POLICIES ON INTERREGIONAL MIGRATION IN GERMANY <i>Sven Wardenburg</i> <i>Brenner Thomas</i>	209
TERRITORIAL COHESION OF WHAT AND WHY? TRACING THE MEANING AND JUSTIFICATIONS FOR TERRITORIAL COHESION AND POLICIES FROM EU DOCUMENTARY <i>Mikko Weckroth</i> <i>Sami Moisio</i> <i>Juho Luukkonen</i>	209
INDUSTRIAL STRATEGY AND THE REGIONS: THE UK'S FLAWED APPROACH <i>Peter Wells</i> <i>Steve Forthergill</i> <i>Tony Gore</i>	210
DETERMINANTS OF PATIENT CHOICE OF HEALTHCARE PROVIDERS: BANGKOK CASE <i>Muanmas Wichiensin</i> <i>Patiwat Kalinkao</i>	211

REGIONAL ENDOWMENT AND STRATEGIC CHOICE: DOES THE ENVIRONMENT DICTATE SMES' BUSINESS MODELS? <i>Dominik Wilhelm</i> <i>Erik E. Lehmann</i>	211
GOVERNANCE ENTREPRENEURS OF REGIONAL DEVELOPMENT <i>Yasmine Willi</i> <i>Marco Pütz</i> <i>Heike Mayer</i>	211
REGIONAL REVIVAL AND GLOBAL MARKETS <i>Bruce Wilson</i> <i>Lars Coenen</i> <i>Leo Goedegebuure</i> <i>Caroline Veldhuizen</i>	212
SPATIAL INDUSTRIAL RESTRUCTURING OF CITY REGIONS AFTER THE CRISIS: EMPLOYMENT GROWTH AND HUMAN CAPITAL IN COPENHAGEN 2008-2015 <i>Lars Winther</i> <i>Høgni Kalsø Hansen</i>	213
INTRAPRENEURSHIP AND ABSORPTIVE CAPACITIES: THE DYNAMIC EFFECT OF LABOR MOBILITY <i>Katharine Wirsching</i> <i>David B. Audretsch</i> <i>Erik E. Lehmann</i> <i>Matthias Menter</i>	213
FINANCIAL INSTRUMENTS IN EU COHESION POLICY: PATTERNS, TRENDS AND ISSUES IN REGIONAL IMPLEMENTATION <i>Fiona Wishlade</i> <i>Rona Michie</i> <i>Oskar Penje</i>	214
POSITIONING STRATEGIES OF SWISS SMALL AND MEDIUM-SIZED TOWNS IN CONTEXT: HOW TAX COMPETITION AND LOCATION SHAPE A TOWN'S ECONOMIC STRUCTURE <i>Stefan Wittwer</i>	214
TESTING PARALLEL CONVERGENCE <i>Piotr Wójcik</i>	215
FROM COLLECTIVE TO CORPORATE: DYNAMICS OF CHANGING LOCATION FACTORS AND PATTERNS OF CO-WORKING SPACES. THE CASE OF WARSAW. <i>Katarzyna Wojnar</i>	215
PREDICTING LOCAL GOVERNMENTS FISCAL DISTRESS USING DISCRIMINANT ANALYSIS <i>Agnieszka Wojtasiak-Terech</i>	215

AN IMAGINATION FOR NON-URBAN REGIONAL DEVELOPMENT- A CASE STUDY OF CULTURAL CLUSTERING IN THE EAST COAST OF TAIWAN <i>Jiun-Yi Wu</i>	216
FRAMING 'INDUSTRIAL CULTURE' <i>Andreas Wust</i>	216
THE PATTERNS AND MODELS OF CHINA'S OUTWARDS INVESTMENT IN CENTRAL ASIA <i>Yeerken Wuzhati</i> <i>Zhiago Liu</i>	217
LABOUR MARKET RETURNS TO DOUBLE-QUALIFICATION AND TO MOBILITY <i>Gabriele Wydra-Somaggio</i> <i>Anne Otto</i>	217
TOWARDS A MULTILEVEL-DIMENSIONALITY CONCEPT OF TRANSNATIONAL ENTREPRENEURSHIP <i>Sakura Yamamura</i> <i>Paul Lassalle</i>	218
EFFECTS OF REGIONAL AND REGULATION POLICES ON CHINA'S PROVINCIAL OFDI <i>Tong Yin</i> <i>Lisa De Propriis</i> <i>Liza Jabbour</i>	218
RURAL REGENERATION: CHANGING URBAN-RURAL RELATIONS IN CHINA'S LOWER YANGTZE DELTA REGION? <i>Sheng Zhong</i> <i>Shengxi Xin</i>	219
STRATEGIC COUPLING OF GLOBAL TECHNOLOGY LEADERS IN RURAL AND URBAN REGIONS <i>Pavla Zizalova</i> <i>Martin Srholec</i>	219
MAPPING THE COURSE OF TIME: COMPARATIVE VISUALIZATIONS OF THE KNOWLEDGE ECONOMY IN GERMANY AND SWITZERLAND <i>Silke Zöllne</i>	220
SPATIO-TEMPORAL DYNAMICS IN THE GERMAN AND SWISS KNOWLEDGE ECONOMY: A CONCEPTUAL PAPER <i>Silke Zöllner</i> <i>Stefan Lüthi</i> <i>Nadine Anna Fritz</i> <i>Michael Bentlage</i> <i>Alain Thierstein</i>	221

Historical Production of Thrace Region by Means of Settler Urbanism in Turkey

Eda Acara, Baskent University, Turkey

Dismantling of imperial states such as the Ottoman Empire, Austro-Hungary, and the Soviet Union has demonstrated contingent and highly problematic territorial/ideological questions of the modern nation-state system. Two processes occur simultaneously: the creation of new territorial boundaries and the delimitation of ideal ethnic and ideological criteria that defines belonging to the nation and legal citizenship. After the Ottoman Empire, in the wake of the world war and the nationalist revolt, of the remaining regions, only one set of provinces emerged as a fully independent nation-state: even that state was an unstable territorial entity, the territorial boundaries of the Turkish Republic would continue to be adjusted until the 1930s (with the addition of Syrian Hatay) and would force ruling elites to create a new sense of territoriality of the nation and a peculiar ethno-religious community which distinguished itself from the past multi-religious/multi-ethnic empire and from neighboring Christian and Muslim states and colonies. Working through this historical context, the paper explores state spatial strategies to re-settle and re-territorialize the Thracian countryside, as a regional part of the nation-state. I argue that this re-territorialization was done by politics of settlement of populations, construction of ideal villages and state factory settlements, which are spatial tactics of settler urbanism during the early republican era of Turkey.

Understanding Functional Changes and the Boundaries of Polycentric Metropolitan Areas with New Tools: the Case of Florence

Chiara Agnoletti, IRPET - Istituto Regionale Programmazione Economica Toscana, Italy

Leonardo Piccini, IRPET, Italy

Claudia Ferretti, IRPET, Italy

Patrizia Lattarulo, IRPET, Italy

Metropolitan settlements are undergoing an intensive period in terms of morphological and functional changes and challenges. Understanding these changes and defining territorial boundaries is a central issue because reading the urban development processes and defining the perimeter of issues we want to govern is fundamental for policy effectiveness.

This topic is important especially for European metropolitan areas in which the main share of population, production and consumption is concentrated. The metropolitan areas do not fit well within administrative boundaries. Their assimilation with the administrative city, region or province usually introduces several drawbacks when the metropolitan area is only a part of this territorial unit or when it considerably exceeds the administrative boundaries. In order to identify actual metropolitan areas it is necessary to study settlements with two separate, but complementary, approaches taking into account the dialectics between stocks and flows. The first point of view is in terms of settlement concentration (morphological approach), the second is in terms of territorial interdependencies and functional complementarities (functional approach). Both aspects are crucial to investigate spatial and functional configuration of metropolitan areas. The morphological dimension can be investigated referring to the organization of economic activities and the size-distribution of population. The second aspect can be analyzed by mutual relationships between cities in the polycentric metropolitan area. The interaction between cities is given by the commuting flows, properly integrated with other available data sources, such as Gps Data, which are useful to read the complex networks of flows in metropolitan areas.

The Location Determinants of Emerging Workplaces: An Empirical Study of Coworking Spaces in Italy

Mina Akhavan, Politecnico di Milano, Italy

Ilaria Mariotti, Politecnico di Milano, Italy

With a rising globalization of the economy and society, the ICT development, and the economic restructuring and downturn, working is becoming less dependent on distance, location and time; people can work outside regular working hours, often outside the traditional office, where new technologies are used extensively. These are some of the reasons that have fostered the development and diffusion of new workspaces such as makers' spaces, fablab, and coworking spaces. Such emerging workplaces offer geographical proximity and non-hierarchical relationships, which may generate socialization and, consequently, business opportunities. Although this is a new phenomenon, specifically in the case of coworking spaces (CSs), most recently scholars from varied disciplines- geography, sociology, urban planning, business, management, etc.- are showing interest in studying different aspects related to their spatial characteristics (work place layout/ features and location factors), socio-economics patterns (proximity features, social interaction, business model and economic performance); and effects on the urban context. Contributing to the existing literature, this paper aims at exploring the location patterns of the 560 CSs located in Italy at the year 2018. To reach this goal, an original GIS database of these coworking spaces is enriched with the traditional location factors, infrastructure, services and intangible assets, environmental and social context, policy framework and information costs at the municipality and NUTS3 province levels. Descriptive statistics and econometric analysis are run to investigate: the attractiveness of the larger metropolitan areas vs. peripheral and rural areas, and the role played by the traditional location factors (i.e. agglomeration economies – including district economies –, accessibility, innovation, high skilled labour availability, policy tools, etc.). The conclusion provides a summary of an initial exploration and discussion of this empirical research.

A Mixed Method Approach in Mapping and Exploring Transnationalism in Architecture and Urbanism

Mina Akhavan, Politecnico di Milano, Italy

Davide Ponzini, Politecnico di Milano, Italy

Up to date, many studies have conducted single (mainly qualitative) method research in studying the effects of singular architectural production on city transformation - such as the Bilbao effect. Considering the complex nature of such worldwide spreading phenomenon of transnationalism in architecture and urbanism, it seems essential to conduct a mixture of qualitative and quantitative methods. Drawing on the expanding literature on transnationalism and mobilities studies, this paper discusses a new mixed method approach for the mapping and spatial analysis of transnational architectural practice. This paper attempts to demonstrate the merits of such methods in urban research and policy, through three steps: the research design, gathering data, and testing and discussing the results. The study is centered on an original GIS database, created by collecting data on global transnational design firms and their projects (buildings, landscape design and infrastructures) completed in the period 1990-2015. Similar to other processes of globalization, we expect that internationalizing architectural production is not a simple and linear process, as it faces several layers

of national policies and the planning system, local planning requirements, political and economic interests, and other case-specific factors.

A Comparative Study of Urban Occupational Structures: Brazil and United States

Pedro Amaral, CEDEPLAR - Universidade Federal de Minas Gerais, Brazil

Clauber EM Scherer, Universidade Federal de Minas Gerais, Brazil

David C Folch, Florida State University, United States

This paper compares the occupational structure of cities in Brazil and United States aiming at the evaluation of the extension to which the economic structure of these urban agglomerations is associated with the different stages of development, specifically when comparing a rich and a developing country. Using a harmonized occupational database and microdata from the Brazilian 2010 Demographic Census and the U.S. American Community Survey (2008-2012), results show that Brazilian cities have a stronger connection between population size both with occupational structure and human capital distribution than the one found for cities in the United States. These findings suggest a stronger primacy of large cities in Brazil's urban network and a more unequal distribution of economic activity across cities when compared to USA, indicating a strong correlation between development and occupational structure.

Geospatial Modeling of Microcephaly and Zika Virus Spread Patterns in Brazil

Pedro Amaral, CEDEPLAR - Universidade Federal de Minas Gerais, Brazil

Thiago Rocha, UFMG, Brazil

Lucas Carvalho, Cedeplar/UFMG, Brazil

João Vissoci, Duke University, United States

Microcephaly and Zika virus infection were declared Public Health Emergency of International Concern (PHEIC) by the World Health Organization in 2016. Brazil was considered the epicenter of the epidemic. However, the occurrence of both Zika virus infection and microcephaly in Brazil were not evenly distributed across the country's regions. In this paper, we investigate the regional characteristics at the municipal level that can be associated with the incidence of microcephaly and the relation between the disease and Zika virus infection. Using exploratory spatial data analysis and spatial autoregressive Tobit models, our results show that microcephaly incidence in Brazil is significantly related to access to primary care, population size, GNP, mobility and environmental attributes of the municipalities. There is also a significant spatial autocorrelation of the dependent variable, indicating that municipalities that have high incidence of microcephaly tend to be clustered, even after controlling for their attributes and Zika virus incidence. On the other hand, Zika virus incidence proved not significant for the country as a whole to explain microcephaly. Nonetheless, when we analyze only the Northeastern municipalities, the Zika virus incidence on the 2nd quarter of the previous year is significant to explain microcephaly, a time lag related to the lapse between Zika notification during pregnancy and microcephaly confirmation after birth. These findings corroborate recent literature showing that only Zika virus alone cannot explain the high incidence of microcephaly in Brazil. Other factors, including regional attributes, played an important role in the spread of the epidemic.

Geographic Clusters of Cancer Mortality in the USA

Raid Amin, University of West Florida, United States

Cancer mortality data on 29 types of cancers were obtained from the University of Washington (Institute for Health Metrics and Evaluation). First, we created heat maps showing the cancer mortality rates for each cancer type for the contiguous USA and for the years 1980-2014. The advanced software, ArcGIS was used to create the spatial cluster maps. Then, we reduced the number of cancer types for the cluster analysis to 16 to match what has been studied in the literature on cancer mortality. For each of these 16 cancer types, we did a purely spatial cluster analysis with the modern disease surveillance software SaTScan. Cluster maps were then created with the software ArcGIS. When needed, a second round analysis of each large sized cancer cluster was done to identify “hotspots” with SaTScan. In order to be better able to identify associations between the mortality rates of the 16 cancer types, a principal components analysis was performed on the data, which resulted in having only 5 important principal components, reducing the dimensionality from 16 to 5. The principal components values were then used to be used in purely spatial cluster analysis on each of the first 5 principal components. The mortality incidences were adjusted for 8 covariates with a regression analysis, and the resulting residuals were used in the cluster analysis. We also adjusted mortality for each covariate at a time, allowing us to see on the cluster maps the role of each covariate.

Location Choices of Creative Workers and Creative Industries

Sveta Angelopoulos, RMIT, Australia

Ashton De Silva, RMIT University, Australia

The disparity in the economic growth of regions has led to debate among economists, urban planners and policy makers. A particular focus is on the importance of creative contributions to the nation and the concept of creativity as a way of addressing regional inequities. Creative and cultural research continues to grow around the world, reflecting the importance of creativity in the eyes of regional decision makers. The desire of policy makers to improve the comparative advantage of their areas and thereby enhance the well-being of their residents and businesses in our knowledge-intensive societies inevitably leads them to seek ways and means to encourage innovation and entrepreneurship. Luring creative workers and industries into their regions may be a means of achieving these objectives. Existing research that focuses on creativity often directs its attention to creative workers or creative industries, often in the form of specific region case studies. This study brings together both the residential choice of creative workers and the location of creative industries at the local government area. We examine the concentration of creative workers’ residences against creative industry clusters and assesses the commonalities (in terms of various economic and demographic characteristics) of these regions. The study will provide a better understanding of the nature of regions that attract and retain creative residents and industries to better advise policy makers in their planning decisions.

The Determinants of Related and Unrelated Variety in Italian Provinces

Roberto Antonietti, University of Padova, Italy

Chiara Burlina, Catholic University of Milan, Italy

In this paper, we investigate the factors affecting the level, and the rate of change, of related and unrelated variety in Italian NUTS 3 regions (i.e. administrative provinces) in 2004-2010. Among others,

we focus on two main drivers of regional industry variety: quality of institutions and the level of economic complexity. The former is a composite index that mimics the country-level index provided by Kaufmann et al. (2011), and includes the following five elements: control of corruption, voice and accountability, government effectiveness, regulatory quality and rule of law. The latter is computed following Hidalgo et al. (2007) and Hidalgo and Hausmann (2009) using export data for Italian provinces and relying on a matrix of revealed comparative advantage across a series of 3 digit industries.

We also separate the period before the 2008 economic recession (i.e. 2004-07) from that of the recession (i.e. 2008-10) so to assess whether results are sensitive to the business cycle.

Our (preliminary) estimates show that only some specific elements of regional institutional quality matter: specifically, while related variety is positively affected by the quality of regulation and control of corruption, unrelated variety is (albeit weakly) affected by the effectiveness of regional government. Interestingly, what drives more unrelated variety is the degree of economic complexity of the region. However, results become weaker during the economic recession.

Actors, Networks and Development Translations; The Case of a Local Economic Development Intervention in Ghana

Benedict Arko, University of Bayreuth, Germany

Development interventions hardly turn out as envisioned due to translation processes of actors involved in the intervention. The agency of these actors cannot be divorced from the social structures within which they operate. These social structures offer the opportunities, beliefs and constraints within which actors navigate as they pursue their interests. The pursuit of these interests creates the networks within which these interventions are translated. The frontiers of this existing knowledge can be broadened by a look at the diffusion of local economic development strategies to the global south by international development agencies. The study takes the case of the first local economic development strategy implemented in Ghana. This is the Ghana Decent Work Programme implemented by the International Labour Organization from 2003 to 2009 in two districts in southern Ghana. The study is based on a qualitative methodology making use of expert interviews, participant observations and review of programme documents. The unease to devolve power from the centre as envisioned in decentralization, practices within international development cooperation, local political culture and other local socio-economic structures provides the social structures within which this intervention is translated. Actors within these social structures create networks that translate a vision of an institutionalized participatory local economic development platform back to the pre-existing hierarchical local state-centred approach to development.

Workplaces as Post-Public Urban Space?

Simonetta Armondi, Politecnico di Milano, Italy

Stefano Di Vita, Politecnico di Milano, Italy

Corinna Morandi, Politecnico di Milano, Italy

The temporal and spatial intersection of information and communication technologies, creative and knowledge economies, and digital manufacturing systems is affecting urban spatial configurations. The emergence of the fast-growing phenomenon of innovative workplaces to accommodate these

changes, such as coworking and makerspaces (MSs) is more the object of political and media rhetoric. Nevertheless, it demands for further scientific investigation in order to understand their positive effects in comparison with their possible negative impacts on the urban region.

In the existing surveys a weak attention seems to be paid to the effects in the physical environment where the new workplaces are located. The relation often evoked with urban regeneration processes does not show to be proved by means of empirical studies.

The article is focused on the first results of an ongoing research on MSs located in Italy and makes a significant contribution in the advancing of contemporary urban studies through an innovative empirical methodology. After a recognition of the literature framework concerning makers, a first part of the analysis consists of an on-line survey addressed to MSs. A second part of the survey is meant to recognize the specificities of MSs geographies, and to explore the effects of these new spaces on the urban environment and if and how any of these effects are related to policy tools implemented in the areas.

The paper also aims at understanding if and how current first attempts of developing a public policy for MSs phenomena foster their still limited effects, which could nonetheless contribute to create a 'post-public' urban spatiality, a shared urban space different from the traditional public space.

Foregrounding the Urban Agenda for the EU: Spatiality, Knowledge, Powers

Simonetta Armondi, Politecnico di Milano, Italy

The Urban Agenda for the European Union forms one of the emerging elements of contemporary European Union policy framework. The paper analyses the concept of the Urban Agenda in critical perspective, focusing on the power/knowledge/space nexus. The article puts forward that Urban Agenda ought to be conceptualized as 'dispositif' of governmentality for the conceptualization of the European Union spatialities. The complex relationship between powers and territories is at the centre of the concept of governmentality. On the one hand, Urban Agenda supports new ways of organising and managing the European territories; on the other, despite its voluntary basis, it produces new territories by both mobilizing a new spatial order, and introducing implicit considerations in order to distinguish between the 'winner' and 'loser' cities and citizens. Therefore, Urban Agenda discourse counts as a 'soft' powerful tool for the production of mechanism of political legitimisation of the urban age in the wake of austerity measures.

The paper intends to produce a sympathetic critique of the UA, seeking to contribute to the conceptual challenge of the UA: questioning conventional assumptions and ways of thinking about a 'neutral' agenda. This is done by conceptualizing UA through two lenses: governmentality and spatiality. This because UA is essentially about the 'governability' of the urban spatiality 'at another scale' and, therefore, inevitably engaged with territorial politics. This is the result produced by an increasingly city-centric competitiveness agenda in European societies, driven by globalization, between growing concentration of economic opportunities on urban nodes and the 'rest' outside or in-between these nodes.

Multinational Enterprises, Service Outsourcing and Regional Structural Change

Andrea Ascani, Utrecht University, Italy

Simona Iammarino, London School of Economics, United Kingdom

This paper offers a joint analysis of two phenomena characterizing most advanced economies in recent decades: the rise of foreign ownership in manufacturing activities and the pervasiveness of the service economy. The aim of the study is to examine the structural transformation of regional economic systems within the UK by focusing on the role played by foreign multinational enterprises (MNEs) in manufacturing in facilitating the development of the service sector. From a conceptual perspective, this research brings together different strands of literature on the impact of foreign investment (FDI) on recipient economies, on regional structural transformation, and on the identification of local multipliers. From an empirical standpoint, the paper focuses a specific demand-side channel for structural change: namely, the forward linkage established by foreign manufacturing MNEs with local service providers through outsourcing. Descriptive evidence shows that service outsourcing by foreign plants operating in manufacturing is pervasive compared to outsourcing by their domestic counterparts. On this basic premise, we estimate the multiplicative effects that foreign manufacturing activity has on the creation of new service jobs in a region (i.e. local labour market level). In order to produce reliable estimates of such a local multiplier, the methodology adopts an instrumental variable approach. Our findings suggest that foreign presence in manufacturing operations can be a catalyst of regional structural change by stimulating the generation of new jobs in the tertiary sector via demand linkages.

Supporting Technology Diffusion? The Case for Rural Digital Hubs

Fiona Ashmore, University of Lincoln, United Kingdom

Liz Price, University of Lincoln, United Kingdom

Across rural Europe, broadband infrastructure, opportunities for digital services and skill development are limited, creating spatial digital divides. The CORA project, COnnecting Remote Areas with digital infrastructure and skills, seeks to minimise these by working with local authorities and policymakers to identify training opportunities, develop tools and pilot innovative solutions to enhance digital awareness among different target groups. As part of this project, we are exploring fixed and mobile ‘digital hubs’ as sources for digital engagement.

Existing literature on hubs focuses on their impact across a range of settings, i.e. as coworking or networking spaces; as innovation spaces in specific economic development contexts; as spaces for emergent technology demonstration; or as public access points to broadband. However, there has not yet been a holistic and systematic review of digital hubs to create a complete understanding of what role they may play in digital technology diffusion. In this paper, we seek to bring these related, yet currently disparate, strands together to define and create a typology of ‘digital hubs’, analysing their role and purpose. We will use initial findings from the CORA project to further evidence this typology. We will then present early analysis from CORA on how digital hubs may alter the local digital environment, focusing on rural regions. How do hubs work in practice? Does engagement with a hub lead to greater diffusion of technology? Does it lead to the improvement of digital competencies? Our findings will help inform regional policies about digital hubs as tools for digitalisation.

A Place-Based Developmental Regional Industrial Strategy and/or Sustainable Capture of Co-created Value

David Bailey, Aston University, United Kingdom

Christos Pitelis, Brunel University London and Queens' College Cambridge, United Kingdom

Philip Tomlinson, University of Bath, United Kingdom

This paper critically assesses recent place-based approaches to industrial and regional policy epitomised in the EU's 2020 'smart specialisation' programme. It suggests that these are a move in the right direction in so far as they acknowledge 'place' as a key, constituent part of policy making. Drawing upon examples from across the world, we emphasise the importance of regions pursuing strategies that allow them to capture - in a sustainable way - a part of the value they help create and/or co-create with other entities, such as multinational firms and other organisations. This involves policymakers acting as public entrepreneurs, devising and implementing structures, strategies and policies to enable the regional eco-system and all of its constituent parts to capture value sustainably. In addition to the extant focus on linkages and embeddedness, a key aspect of this involves the adoption of regional positioning strategies.

Oxford and Grenoble: Knowledge Organisations in Local Development Revisited

Nabhassorn Baines, De Montfort University, United Kingdom

Dimitris Assimakopoulos, EMLYON Business School, France

Helen Lawton-Smith, Birkbeck, University of London, United Kingdom

Saverio Romeo, Birkbeck, University of London, United Kingdom

Maria Tsouri, University of Trento, Italy

In the early 2000s the performance and pathways to development of the high tech Grenoble (France) and Oxfordshire (UK) were compared (Lawton Smith 2003) with the focus on national laboratories as territorial actors. This paper explores how these two high-tech city-regions, twin towns, have developed over a decade. Since the early 2000s, there have been a number of shifts in national policy in each country alongside new pathways to regional economic development informed by the EU's smart specialization policies. Hence, the theme shifts to the different forms that inter-relationships between key organisations at each location take. By using the dyad and network as an underpinning theoretical concept, how these key anchors operate, including how they influence the growth of clusters are explored.

The findings summarise the key characteristics of the dyadic relationships. The major differences lie in the emphasis placed on what the locality gives. While in each location knowledge and information resources are important, in Grenoble, the focus has been on the role of MINALOGIC, a construct of public policy as the creator of anchors and dyadic communication. In contrast, in Oxfordshire, local recruitment is the main driver of dyadic communications, with knowledge and information resources being important but of secondary importance. As in Grenoble, links with the group of research laboratories have remained important dyadic relationships for two of the leading firms, based on the local concentration of expertise in cryogenics. Another theme that emerges from this is that traded inter-dependencies (Storper 1995) are increasingly non-local and increasingly international.

What is Pluri-Regionality and How Does it Help Us Understand Global Reversal and Regional Revival?

Joerg Balsiger, University of Geneva, Switzerland

Elena Koritchenko, University of Geneva, Switzerland

Regions abound in the contemporary world, as does scholarly interest in them. As a consequence, debates between scholars from (and within) different disciplines about what constitutes a region have become legend as they cover the entire spectrum between realist and constructivist positions. Such debates have contributed to a better understanding of regional phenomena, which is needed during this time of “global reversal and regional revival”, and have helped foster interdisciplinary dialogue. However, we suggest that an important dimension has so far been ignored and that this omission adds to the “territorial trap” that continues to plague much regional theorizing. As a partial remedy, we introduce the term pluri-regionality as a travelling concept to refer to situations where regions overlap (spatially, institutionally, functionally, etc.), forcing certain actors to contend with often competing regional logics in the pursuit of their objectives. We offer a conceptual framework that delineates the nature and dynamics of pluri-regionality; identify and discuss theoretical and empirical sources of inspiration including regional environmental governance, planning studies, legal pluralism, and public administration; and outline a set of research questions for addressing pluri-regionality. We illustrate the relevance of the concept with examples from the Russia-Europe interface and from transboundary mountain regions.

Measuring Polycentricity of Urban Regions in Poland

Bartosz Bartosiewicz, University of Lodz, Poland

Szymon Marcińczak, University of Lodz, Poland

The studies dealing with the issue of polycentric urban development, both functional and morphological, often promote different approaches to measure polycentricity. Relying on the data on commuting patterns and the intra-regional distribution of population in Poland in 2011, we apply selected measures of polycentricity to shed more light on the functional and morphological development of urban regions in Poland; we also explore the relationship between the two dimensions of polycentricity. We use the six most commonly applied measures (rank-sized distributions index; functional/morphological primacy index; general functional polycentricity index; entropy index; exchange and cross-commuting (nodality) indexes) to assess the degree of polycentric urban development. The results reveal that, for some regions, different measures suggest divergent conclusions. Also the strength and statistical significance of the relationship between the two dimensions of polycentricity appears to depend on the measure used. As, in our opinion, the measure advocated by Burger et al (2012) seems to best differentiate between the different forms of urban structure, we use it to summarize the patterns of polycentric urban development in Poland. The results illustrate that the form indeed function in urban regions in Poland, and that the level of morphological polycentricity is higher than the degree of functional polycentricity in regions with high nodal density.

The Effect of Market Reforms on Unemployment Dynamics

Moreno Baruffini, Università della Svizzera italiana (USI), Switzerland

Luzius Stricker, Università della Svizzera italiana (USI), Switzerland

A large number of economic studies have been devoted to the question of how labour markets respond to economic policy in changing local and international macroeconomic environments: due to its high “internal heterogeneity”, Switzerland is an ideal test base. This paper examines the impact of the fourth partial revision of the law of unemployment insurance (AVIG) to unemployment dynamics in Switzerland, at a cantonal level.

These measures were enacted starting with April 2011, as a consequence of a recovery plan developed in order to fight the amount of debt of the unemployment insurance system. Latin Switzerland was considered to be stronger affected than the German-speaking part, due to a reduction of the beneficiary period in case of locally high unemployment rates, which affected those regions in particular.

We apply a new matching method, the synthetic control method (SCM) to comparative case studies. The counterfactual of the cases studied is assessed by combining a control group of several untreated units, providing a better comparison to the treatment group than a single unit. The control unit is therefore designed as a weighted average of the available control units and that it takes into account the similarities of the chosen controls with the treated unit.

Once we control for the policy changes, we find a significant effect on the unemployment rate at a cantonal level: the reform had a discernible impact on lowering the unemployment rate in the cantons of Latin Switzerland.

What Does It Mean to Be Central in the Periphery and Peripheral in the Centre? The Cases of the Universities of Evora, Campinas and Brasília

Ana Paula Bastos, Universidade de Brasília, Brazil

Maria Conceição Rego, University of Evora, Portugal

Mauricio Serra, University of Campinas, Brazil

We are not particular attached to one paradigm of the centre-periphery theory, in which centrality is usually related to diversity and decision power. and the peripheries are less connected and more dependent on external political and industrial decision. Because of its complexity, universities play a central role in space, do not exist in every human agglomeration and polarised users from a wider distance. Irrespective of its own history or path dependency, any university may decide to be completely conventional, carrying out its traditional teaching and research missions with competence in the hope of converging to the centre of the system. Another possibility is to be unorthodox. This means playing an active role in regional development policies, which demands a stronger interaction with other regional actors and society as a whole. By large, the expansion of the Higher Education system around the world is based on the strategy implemented by developed economies that sought to promote an increase in both the number of universities and placement of students not always related with regional demands and needs. This paper aims at analysing the different strategies and practices adopted by three universities that play an active role in its regions, placed in distinct contexts: the Portuguese university of Evora, which is peripheral in the centre, and two Brazilian universities - Brasília and Campinas, which are central in the periphery but, at the same time, are located in macro-regions that differ in social and economic terms.

Regionalising “The 2018 Ageing Report” Socioeconomic Projections Using an Explanatory Framework

Filipe Batista e Silva, European Commission Joint Research Centre, Spain

Carlo Lavallo, European Commission Joint Research Centre, Italy

Nicola Pontarollo, European Commission Joint Research Centre, Italy

Pilar Vizcaino, European Commission Joint Research Centre, Italy

Long-term socioeconomic projections at country level are produced by European Commission services to assess the economic and budgetary implications of population ageing (The 2018 Ageing Report). To enable further applications, we have developed an approach that disaggregates country-level projections of GDP, employment and population to NUTS-3 regions in an integrated and recursive manner, supported by an explanatory framework for regional growth that includes the following drivers and conditions: convergence forces, human capital, economic structure, agglomeration effects. The estimation of the regional growth equation is based on socioeconomic data spanning 2000-2015, using a switching-regression model with spatial effects to capture 1) variability of elasticities between countries with different levels of development and, 2) spatial spillovers of regional growth. This framework can be used to generate a baseline scenario or alternative ones by assuming shocks to model variables or parameters.

The results of the baseline scenario show that the geography of regional development is not likely to change radically until 2030, but the convergence process will bring East European regions closer to the EU average in terms of GDP per capita. Ireland, Eastern capitals, Lisbon and a few other regions will further lift above the EU average, while growth in northern Italy, Austria, parts of Germany, Netherlands and the UK will slow down thereby getting closer to the EU average. Lagging regions in Greece and Southern Italy are expected to continue diverging. Population and employment are set to decrease, particularly in Eastern Europe, but with less pronounced losses in capital regions.

Housing Policy in Russia: Development Driver or Reinforcer of Urban Shrinkage

Elena Batunova, Politecnico di Milano, Italy

Maria Gunko, Institute of Geography Russian Academy of Sciences, Russia

Decisions, undertaken in urban planning, are often defined based on current and projected housing demand. Nowadays in Russia, housing construction has become the main factor shaping local urban plans and strategies. However, the country's deeply polarized spatial development means that shrinkage and growth here take place simultaneously: few growing centres which concentrate financial and human resources and where construction boom takes place are surrounded by vast territories experiencing population decline. And even though over 70% of Russia's cities shrink, the growth paradigm is still the prevailing one in planning due to several factors: use of obsolete methodology inherited from the Soviet period when cities were viewed as engineering systems; still unsatisfied housing need (both in terms of quality and quantity) and a strong national policy aimed at housing provision; misunderstanding of contemporary demographic trends and their nature. The combination of above factors leads to the inadequacy of proposed solutions and creates conditions for future housing surplus and, accordingly, negative effects of shrinkage which manifest themselves in the cityscape, i.e. vacancies and fragmentation of urban fabric.

The present research aims at the analysis of the relation between the characteristics of existing housing stock and the previous dynamic of its construction in most severely shrinking Russian cities in

the period between 1990 and 2013, as well as measures proposed in local urban planning and housing policies. Such analysis allows evaluating the adequacy of local housing policy in current conditions. The empirical base includes around one hundred shrinking cities located in different regions

Recovery or Stagnation? Britain's Older Industrial Towns Since the Recession

Christina Beatty, Sheffield Hallam University, United Kingdom

Steve Fothergill, Sheffield Hallam University, United Kingdom

Britain's older industrial towns have long been known to face economic problems following the demise of the mining and manufacturing that once underpinned their economies. However, since the recession triggered by the 2008 financial crisis, recorded unemployment in the towns has fallen to historically low levels. Is this evidence of recovery, or does the superficial data hide more disturbing trends?

This paper deploys a 'labour market accounting' approach to measure the contributions of changing levels of employment, population, migration, commuting, labour market participation and recorded unemployment to the overall pattern of change in Britain's older industrial areas towns between 2010 to 2016. The paper also compares labour market flows in older industrial towns with trends in the main regional cities, in London, and across the UK as a whole.

Disaggregating flows in the labour market in this way generates significant new insights. The local impact of international migration is quantified for the first time, and the labour market accounts expose the limited extent to which growth in the big cities has had positive spill-overs in neighbouring towns. In particular, there is no evidence that London's rapid growth during the recovery has been of any direct benefit to the labour market in older industrial towns. The paper concludes that the reduction in recorded unemployment since 2010 tends to flatter Britain's older industrial towns.

Involving Local Authorities: The Inclusion of CDPs in Spatial Planning

Joris Beckers, University of Antwerp, Belgium

The rise in B2C e-commerce is changing the urban freight landscape. Persisting growth rates of online sales together with the expectation of home deliveries is disturbing the balance between efficient and sustainable delivery systems. Courier, express and parcel companies try to cope with this new complexity by adapting their traditional distribution flows (Browne et al., 2014; Hesse, 2002).

One such measure is the introduction of a collection and delivery point (CDP) network (Morganti et al., 2014; Van Duin et al., 2016). While in a first step being the location to leave failed deliveries, CDPs are becoming an expression of the courier's service level in today's highly competitive market. In Belgium, this drove couriers to an aggressive expansion of their networks, resulting in a proliferation of CDPs within the cities. Despite holding the promise of being a more sustainable delivery model, the current evolution is shattering those expectations.

As we demonstrate in this paper with an analytical analysis of the current situation in the city of Antwerp, this expansion resulted in an unsustainable geographical situation of the different CDPs from the perspective of the local government. Yet, due to high adversity and resulting insular behaviour in the sector, the initiative for change lies in the hands of local governments themselves. The inclusion of CDP-zones within spatial plans holds potential for consolidation, efficient use of urban

infrastructure and various pick-up or drop-off alternatives and fits in the current narrative of sustainable urban logistics planning.

Beyond Old Industry: Towards a Research Agenda for the New Economy

Andrew Beer, UniSA Business School, Australia

This paper acknowledges the substantial changes taking place in many parts of developed economies as many older industries decline, new service and knowledge based enterprises rise, and as global connection continues to drive innovation. An increasing focus on environmental issues, including measures to reduce fossil carbon emissions, has further fuelled the pace of change in developed and developing economies alike. Using the Australian car-making industry as a case study, the paper explores the implications for contemporary labour markets and, critically, considers how researchers can extend their insights into these phenomenon through more robust and comprehensive research methodologies.

Can the Eurasian Economic Union Become One of the Pillars of the New International World Order?

Anton Bendarzsevszkij, PAIGEO - Pallas Athene Innovation and Geopolitical Foundation, Hungary

After the collapse of the Soviet Union the dreams of creating one integrated economic and political space in Eurasia – on the basis of the Post-Soviet countries – have not disappeared but have been there in the minds of Russian leadership ever since. The integration process was launched officially in 2010, after Russia managed to centralize its economic power and income, and started its major military reform. The Customs Union was created in 2010, the Eurasian Economic Space in 2012, and the Eurasian Economic Union in 2015. The goal is to create the Eurasian Union, which could be an interesting hybrid of the European Union and the Soviet Union on the geographical space of its predecessor. The current research focuses on the potential of the Eurasian Union based on its declared goals (supranational institutions, common currency, common military force, free market and etc.) as compared to the current realities: differences of the countries in the Post-Soviet geopolitical space, conflicts of interests, lack of money and lack of political will at some of the participants. Will the Eurasian Union be able to overcome all these difficulties and become one of the pillars of the new international world order at the Eurasian geopolitical space?

Location Choices of Private Households in the Munich Metropolitan Region and Future Development Options

Michael Bentlage, Technical University of Munich, Germany

Mariana Avezum, Germany

Regional and urban development is driven by the decisions of private households, companies and the state. According to the concept of emergence, macrostructures such as the development of urban regions arise from the agency of these individual elements. However, the momentum of emergence is unpredictable and represents a challenge for urban and regional planners. In order to better understand future development, a micro foundation is useful but it requires a conceptual link between these micro behavior and macrostructures. Agglomeration advantages play a crucial role in such

development processes. This paper discusses a conceptual framework to link micro-behavior to the development of urban regions. Firstly, we disaggregate commuting patterns on a scale below municipalities. Therefore, we combine several data sets including firm locations, fine grained population and traffic information. Secondly, this paper uses results from an analysis of location choices of private households (Thierstein et al. 2016). Thirdly, it aims to discuss an appropriate application of simulation techniques in order to visualize future development options of the metropolitan region of Munich. The paper sets a focus on working, living and mobility. We conclude with a discussion on emerging polycentric urban structures in combination with new modes of transportation.

Governance of Regional Development at a Meso Scale and the Role of Territoriality and Politics: The Case of the Midlands Engine and the Northern Powerhouse

Gill Bentley, University of Birmingham, United Kingdom

John Shutt, Leeds Beckett University, United Kingdom

In the late 2010s, the UK has undergone yet other round of reconstitution and rearticulation of various scales and forms of state activity. Following the general election of 2017, central government ministries were restructured and new policy priorities devised. However, prior to the election, new sub-national meso scale agencies had been formed: The Northern Powerhouse and the Midlands Engine which sit between centre and local administrations. These meso-scale institutions seemed to presage the emergence of autonomous regional governance structures, to reflect the idea that there exists a functional economic geography at a meso-scale that requires economic management. Given regional governance can be defined as ‘the vertical and horizontal coordination of regional transformation processes beyond administrative boundaries by state and non-state actors’ and with Willi et al (2018) providing 5 dimensions of regional governance and in turn 21 indicators, we critically assesses the extent to which the Northern Powerhouse and the Midlands Engine represent regional governance. The analysis must be placed within the context of the discussion of devolution and decentralisation issues in the UK in relation to these new meso scale bodies. The questions arise: How are the regional development strategies in this context designed and implemented? To what extent is central government really awarding power and responsibility to this sub-national meso-regional scale? Do these new bodies provide the scope for leadership at sub-national scale? The UK government has published an Industrial Strategy which aims at and at raising productivity levels and rebalancing the UK economy. We show that the meso-scale of governance does not represent a re-territorialisation of policymaking but is in fact a Regionalisation of national policy, representing a delegation of the administration of national policy to the meso-scale. Nonetheless, it can be argued that it represents an attempt by central government to co-ordinate industrial policy across different scale geographies of production and consumption in which a role is played by these meso-scale structures. Strategies are designed by central government and implemented by sub-national authorities further down the spatial scale through public-private sector partnerships, mediated by the meso-scale but also represent the attempt by central government to co-ordinate a coherent strategy across the different spatial scales.

Global Pipelines of Transnational Entrepreneurs; a Critical Survey of the Literature

Su-Hyun Berg, United Kingdom

In this conceptual paper, the use of the global pipelines concept for explaining knowledge transfer of transnational entrepreneurs (TEs) is explored. While knowledge transfer is at the forefront of the current debate in TEs studies, the discussion has not yet permeated on the dynamics of external knowledge sourcing and knowledge exchange among networked TEs. The paper identifies contributions and limitations of various strands of literatures and inserts global pipelines (Borghini et al., 2004; Owen-Smith and Powell, 2004; Bathelt et al., 2004; Bathelt, 2005) in the literature with particular reference to Asian entrepreneurs with transnational ventures in Europe and Asia. The paper concludes that the inclusion of the global pipelines in the debate provides a new insight into the current development barriers faced by TEs, as the concept particularly has important potential in helping to explain the degree of growth of transnational entrepreneurial activities by creating a dynamic process of knowledge creation, facilitating knowledge exchange, extending a TE's knowledge base, and enabling TEs to avoid negative lock-in.

Bridging the Gap Between Decision Makers and Cities. Notes from Campania's Wastelands (Italy)

Gilda Berruti, Federico II University of Naples, Italy

Maria Federica Palestino, Federico II University of Naples, Italy

Today, Circular Economy theories are quite developed and start to impact on the industrial world. Considering waste as a resource, in fact, has become a useful argument in order to move from theory to practice. While experiences taking advantage of waste flows are underway, the transition to practice appears more difficult with respect to wastelands, that are at the core of the REPAiR project.

The paper focus on how wastelands challenge the territorial governance, starting from the urban region of Naples. Here, like in the rest of Italy, a gap between policies and the city can be observed, that points out how chances for innovation, coming from local contexts, are often ignored by the institutions.

Such a gap is made wider by the ongoing transition of Italy' large cities from provinces to metropolitan cities, with the relative change of power balances, as well as by the current reorganization of the waste cycle in the Campania region.

In the underway shift, the Campania region is prescribing rules that set up a construction of the problem which is far from the real answer to it; the municipalities are finding difficult to overcome local egoisms; the metropolitan city is excluded from the waste management and is still defining its own role.

In this framework, it is urgent to transform the fragmented set of measures in a strategic vision collectively constructed. In so doing, we argue that both the activation of interinstitutional processes and the involvement of communities are indefeasible steps to transform wastelands into resources.

Towards a Less Experimentalist Multi-level Governance: How to Embed Macro-regional Strategies into EU Funding Programmes? The Case of EUSALP

Davide Gianluca Bianchi, PoliS-Lombardia, Italy

With the adoption of its first ‘macro-regional’ strategy in 2009 – the EU Strategy of the Baltic Sea Region (EUSBSR) – the European Union has started to charter new territory in transnational cooperation and cohesion policy. Subsequently, other macro-regions have begun to self-identify – such as the Danube (2011), the Adriatic-Ionian basin (2014), the Alpine (2015) and the North Sea regions – and are in the process of developing similar strategies of their own. According to the European Commission, a macro-regional strategy is an integrated framework relating to member states and third countries in the same geographical area, addresses common challenges and benefits from strengthened cooperation for economic, social and territorial cohesion. Through qualitative analysis tools – interviews and participant observation – the paper studies the problems occurring in the implementation of macro-regional strategies reported by the actors, looking with particular attention at EUSALP (Alpine Region). About this, the main bottleneck is the rule of the three no's – No new EU legislation, No new EU institution, and No new EU funding – that is at the base of the strategies: the actors in fact strongly ask for the ‘embedding’ of the macro-region strategies into the EU programmes post 2020, so that they can have specific financings. Nonetheless, the ways in which to achieve this goal are many and above all far from easy.

The Potential Impact of Brexit on the UK Aerospace Sector

Chloe Ashton Billing, University of Birmingham, United Kingdom

Raquel Ortega Argiles, University of Birmingham, United Kingdom

With the increasing number of satellite-enabled applications there has been a marked trend towards greater dependence on space-based capabilities by governments, the public and commercial users. This growing dependence means that disruption to the production of these applications poses significant security, societal and economic risks. To help mitigate these risks it is important that we have a clear understanding of the long-run competitiveness positions of the aerospace sector and how robust or vulnerable it would be if exposed to change. Presently, there is no greater change on the horizon than the UK-EU trade relations which may arise from Brexit.

Every sector will be affected differently by Brexit, as some will be more sensitive and susceptible to change than others. Aerospace has been identified as likely to be one of the more affected sectors, partly due to the geographical fragmentation of its value chains. This paper will investigate the economic impacts of Brexit on the UK Aerospace sector, by exploring: (i) the nature of the UK's post-Brexit trade agreements with both the EU and the WTO, including any transitional agreements with both organisations; (ii) the changes in local development policy and governance settings induced by leaving the EU; (iii) the “nature of competition” and organisation of production of the UK aerospace sector.

The analysis will consider qualitative (interviews) as well as a quantitative analysis (based on secondary sources of industry data such as trade, employment, and turnover).

African Development: ‘Hopeless Africa’, ‘Africa Rising’, or Somewhere In-Between?

Tony Binns, University of Otago, New Zealand

Etienne Nel, University of Otago, New Zealand

Readers of The Economist may be critical of the generalisations made about Africa in the last twenty years. At the start of the new millennium in 2000, an Economist article titled “Hopeless Africa”, started with a depressing statement about Sierra Leone’s capital city, Freetown, in the midst of the decade long civil war, with the writer concluding that “Sierra Leone manifests all the continent’s worst characteristics”. In 2011, a second Economist article was much more upbeat about the continent. Titled “Africa Rising”, the article reported on bustling local markets, a commodities boom, improvements in health care, peaceful and democratic governance and China’s involvement in upgrading infrastructure and stimulating the manufacturing sector.

This paper reflects on key dimensions of Africa’s development and associated challenges in recent years. Consideration is first given to the global context, before questioning whether there is ‘growth without development’ and the role that resource exploitation plays within this context. After examining what achievements towards meeting the Millennium Development Goals can tell us about the continent, the paper concludes with a call to pay closer attention to the grassroots needs and aspirations of Africa’s people.

Headquarters Relocation, Advanced Business Services and Firm Performance: Evidence from China

Hong Bo, United Kingdom

Xiaosheng Ju, National University of Defence Technology, China

We examine headquarters(HQs) relocation using 1081 Chinese listed firms during 2004-2012. The underlying theories include agglomeration and its applications to corporate HQs location/relocation decisions, as well as co-agglomeration between advanced business services (ABS) and manufacturing firms.

Using matched data from various sources and applying both a Probit model and the Propensity Score Matching (PSM) method, we obtain evidence that (1) Firms intend to move into cities where ABS is more developed and where more other HQs in the same industry are located. This result supports both the Marshallian effect and the Jacob’s effect. (2) Firms increase R&D input after the relocation in response to the enhanced degree of agglomeration with more ABS and other HQs. (3) Firms’ accounting performance is improved after the relocation due to more ABS. (4) The impact described in both (2) and (3) are more profound for firms moving into cities that do not have national science and technology zones (STZs) as compared to firms relocating themselves into cities that have STZs.

HQs relocation is important to investigate particularly when China is undergoing structural adjustment and industry upgrading. We provide new evidence on whether standard theories developed in mature economies explain HQs relocation in the Chinese context. The research provides insights into what local/city governments should do to attract co-agglomeration between manufacturing firms and ABS to promote innovation and economic efficiency. Moreover, policy makers should re-consider/improve the design of China’s national STZs given that they are not as effective as being designed in promoting innovation.

Identifying Entrepreneurial Counterurbanisers

Gary Bosworth, University of Lincoln, United Kingdom

Leanne Townsend, Aberdeen University, United Kingdom

Zografia Bika, University of East Anglia, United Kingdom

Robert Newbery, Newcastle University, United Kingdom

This paper reveals a range of factors that stimulate entrepreneurship among rural in-migrants and then attempts to align them with perceptions of rural destinations and wider motivations for moving home. Analysis explores the extent to which in-migrants' entrepreneurial behaviour is shaped by their perceptions of a rural place and its attractiveness as a migration destination. Previous research has examined the economic contribution of counterurbanisation yielding many positive conclusions associated with entrepreneurial in-migrants in terms of job creation (Stockdale, 2006; Bosworth, 2010), human and social capital (Atterton, 2007; Bosworth, 2009) and business creation (Mitchell & Madden, 2014), including social entrepreneurship (Bosworth & Glasgow, 2012). However, to date scant attention has been paid to the dynamic processes linking rural migration and entrepreneurial emergence.

Re-analysing narrative interviews from a collection of past projects, a critical incident approach is used to identify the timings, the spatiality and the social context of decision making. In particular, this approach can capture the geography of key network connections and the importance of human and social capital originating from both within and outside of the rural regions. This approach allows us to test the hypothesis that as in-migrants become increasingly embedded in a locality, their businesses are more likely to draw on local resources and emerge somewhat differently to those maintaining stronger connections beyond their locality and to other urban centres. Our findings will also inform new primary research designed to interrogate the "latent entrepreneurship" phase that many rural in-migrants pass through prior to establishing a rural business.

Deep Economic Integration, Foreign Investment and International Trade: The Effects of Membership of the European Union

Randolph Luca Bruno, University College London, United Kingdom

Nauro Campos, Brunel University, West London, United Kingdom

Saul Estrin, London School of Economics and Political Science, United Kingdom

Meng Tian, London School of Economics and Political Science, United Kingdom

We estimate a structural gravity model using data for 34 OECD countries between 1985 and 2013 for bilateral FDI flows, bilateral distance, GDP and GDP per capita (for sender and target countries) and the shares of manufacturing output, exports and imports in total GDP. Our data represent more than 70% of global FDI flows and, because the countries are all OECD members, they are collected in a homogenous manner and are of uniform and high quality.

We find that, between 1985 and 2013, EU membership led FDI inflows to be greater by about 28%. We use a variety of econometric techniques and sensitivity analyses to ensure the robustness of our findings, including dynamic estimation, lags, stock rather than flow measures of FDI, and addressing selection issues. Our estimates of the impact of deep economic integration via EU membership underlines the role of FDI as a channel for benefits from deep integration. The effect of EU membership on FDI is always estimated to be positive, ranging by estimation method from 14% (Heckman) to 33% (OLS) to 38% (Poisson estimates). Furthermore, when the impact of EU membership

on trade and FDI are estimated jointly using seemingly unrelated regression (SUR) methods, the impact on FDI is again found to be positive and falling within the previously estimated range, while the effect on trade is also positive and approximately twice as large.

Broadening the Entrepreneurial Ecosystem Concept into the Creative Industries: An Examination of the Fashion Industry in Toronto, Canada

Taylor Brydges, University of Bern, Switzerland

Rhiannon Pugh, Uppsala University, Sweden

This research elucidates a discussion of the entrepreneurial ecosystem (EE) concept set against a context - an averagely performing EE in Canada -and sector - fashion - that has been overlooked thus far in the literature. Although the EE research field is rapidly developing, some important lacunae still exist. As Spigel (2017) points out, research is still ongoing into how the different actors and institutions create the system within which entrepreneurs operate. The EE literature is heavily focussed on certain types of entrepreneurship and innovation activities, namely exceptional, "high-tech" and "scientific" sectors, and we find very little discussion of cultural and creative industries (Jeffcutt, 2004). Notably, this literature tends to be blind on issues of gender, and problematic both in terms of the industries it focusses on, with tech being notoriously "male", and also in the un-problematized discussion of what an entrepreneur is and who fits into this mould (Blake and Hanson, 2005; Hanson, 2009; Ekinsmyth, 2011; 2013). In this presentation, we seek to address these gaps. Drawing on 87 interviews with fashion designers and key informants and extensive observations of the activities and practices in the fashion industry in Canada, three key factors will be explored: policy and governance, industry institutional fragmentation, and network culture. Taken together, we argue that while the Toronto entrepreneurial ecosystem does have strengths, it is the weaknesses that prevent it from functioning as a whole in an optimal manner.

"Build it and They Will Come": Place-making and Place-marketing for Regional Revival

Amma Buckley, Curtin University, Australia

By 2050, Western Australia's population is projected to double from 2.5 to 5 million creating enormous pressure on Perth (the State's capital), to absorb the bulk of this growth. In anticipation of this, transformational approaches are being adopted to not only prepare regional towns for population expansion but to develop the capacity, vibrancy and commercial and industry base for these locations to become attractive alternatives to the metropolis. Largely, concern about where Australia's population is located and future geographic distributions remain high on the national policy agenda. For some decades, population strategies have sought to address the perennial issue of how all levels of governments can encourage populations to move to and stay in rural and regional Australia. Since 2012, the Western Australian (WA) government has heavily invested in building stronger regional centres to encourage more people to live outside of the capital. This paper examines and critiques the progress of a regional centre development scheme (SuperTowns) involving nine towns focused on creating livable and vibrant regional places that are sustainable, well-connected and serviced with growing and diverse job opportunities and lifestyle options. This contribution will contextualize how this approach varies from other population orientated regional development strategies used in Australia (and elsewhere). It will include profiles of relevant demographic data and

key informant thematic content to ascertain the effectiveness, albeit in the early stages, of strategies that foster the making and marketing of place.

A Nigerian Experience Economy: The Nollywood House Scene

Alexander Bud, Open University/University of Edinburgh, United Kingdom

An extraordinarily high concentration of large houses and hotels has been a distinctive feature in Igboland, south-eastern Nigeria, for four decades. These properties form a key stage in an economy that sees seasonal residents return home for large-scale consumption events. Since the early 1990s, the story of this system has become entangled with that of the local film industry (Nollywood).

I investigate these phenomena with reference to Anne Lorentzen, Olivier Crevoisier and Hughes Jeannerat's comparative approach to experiential economy scenes and creative industries clusters. These constitute consumptionist and productionist orientations respectively. I argue that the mutual articulation of these dynamics led to a powerful fertilization - resulting in innovation in both the Nollywood House Scene and the Nollywood Production Cluster.

The intertwining of the property landscape with filmmaking added reflexivity to the scene - as the houses and hotels were vividly pictured in films (and widely emulated throughout Igboland as a result). Simultaneously, they provided essential factor inputs into film production as shooting and lodging locations.

However, the relationship was unstable - with a multi-stranded crisis between homeowners and filmmakers leading to the end of free house access. Whilst the Nollywood House Scene fractured, filmmakers' needs for locations still grew. One result was the commodification of domestic space, as homeowners demanded high fees for access. Second, the scene became mobile, relocating to other regional cities. Lastly, entirely new types of spaces were created, melding together aspects of film sets and living residences.

Image of Russian Regions Future in Regional Strategic Documents

Ksenia Budaeva, Institute for Public Finance Reform, Russia

The most important feature of regional development in Russia is that a value of regional disparities is considerably higher than in developing countries.

In Russia there are more than 300 strategic documents which must correspond with each other. At subnational level regional strategy of economic and social development is the main document of strategic planning system.

In the study the main indicators of socio-economic development of regions in strategies have been systematized for 3 dates (2007, 2017 and strategy expiration date).

To study the correspondence of model trajectories and real trends in regional development, the ratio of actual and planned gross regional product and total unemployment was revealed in regional strategies. The analysis demonstrates differences in forecast correctness for social and economic indicators. Forecasting of economic indicators is more correct than in relation to labor market issues.

The values of forecast indicators for strategy expiration date were checked for dependence on various factors: volume of GRP in the base year for strategy, duration of strategy, the base year of forecast and other factors. Regression models have been evaluated to test the effect of factors mentioned above.

The results indicate that the earlier the forecast was developed, the higher are the values of the following indicators in the forecast year: GRP, real disposable money incomes and average monthly nominal gross salary per capita. Also the results of model evaluation testify that the values of the above indicators depend directly on the forecast duration.

Regional Disparities in Labor Productivity in the Russian Federation

Anna Bufetova, Novosibirsk State University, Russia

The aims of this work were to study the general trends in regional labor productivity, to analyze the evolution of distribution of regions by labor productivity and the role of spatial externalities in its dynamics.

We study the evolution of regions distribution by labor productivity and convergence process among regions by analyzing the change of the region relative position inside the cross-sectional distribution of regions by labor productivity. The growth process is modeled as a first-order Markov chain. Spatial effects in our study are introduced within the Markov chain framework using regional conditioning and spatial Markov chain.

The results of our study suggest that growing regional inequality by labor productivity in the period of 2001-2015 was formed by the dynamic of only two resource-extracting regions. Disparity of all other regions decreases. At the same time, there is a long-run trend towards polarization of regions in terms of labor productivity.

The dynamic of labor productivity in regions is highly constrained by its geographical environment.

Significant lagging behind by labor productivity from geographical neighbors prevents manifestation of positive spatial externalities, retards productivity growth, and contributes to further increase of inequality. Reducing the lag from more developed regions promotes the manifestation of positive spatial externalities. The growth of labor productivity has cumulative character: regions that exceed their neighbors by labor productivity demonstrate better dynamics of relative transitions within the distribution than regions that are lagging behind their neighbors.

Assessing the Effectiveness of Polycentricity for Smart, Inclusive and Sustainable Development: a Framework and Some Evidence from the Italian Urban Regions

David Buralassi, University of Pisa, Italy

The spatial structure of cities, urban systems and regions has become a significant concept to be included in policies aimed to reach urban and regional competitiveness, cohesion and sustainability. Among others, the concept of polycentricity (and “polycentric urban region”) has been particularly promoted in the European context. However, notwithstanding the relevance and the huge and increasing amount of research about the pros and cons of polycentricity, the question whether polycentric regions would be more smart, inclusive and sustainable than other regions appears still far from being completely assessed and consolidated.

The aim of this piece of research is twofold. Firstly, the article provides a review of the most relevant studies effects of polycentricity on urban and regional development, in order to highlight what has been consolidated in the research and what still needs to be clarified when analysing the outcomes of polycentricity. Secondly, the paper gives a framework to study the linkages between polycentricity and development under a multi-dimensional vision of development. A special attention is given to the definitions and subsequent measures of polycentric regions and the indicators that can be used to assess their development. In order to do so, the paper presents some results from the analysis of the Italian urban system.

The results of the paper allow for a critical analysis of the concept of urban and regional polycentricity and the methods to assess its effectiveness when developing and evaluating development policies.

Does it Pay to be Near? The Effect of Bank Proximity on Italian Firm's Performance During the Economic Crisis

Chiara Burlina, Catholic University of Sacred Heart, Italy

Daniela Bragoli, Catholic University of Sacred Heart, Italy

Flavia Cortelezzi, Insubria University, Italy

Giovanni Marseguerra, Catholic University of Sacred Heart, Italy

The aim of this paper is to study how firm economic performance is affected by local credit availability, in particular before and after the Great Financial Crisis of 2007-2008. On one hand, existing studies on relationship lending support the advantages related to the geographical proximity between firms and banks (Antonietti et al., 2015; Presbitero et al., 2014; Zhao & Jones-Evans, 2016), on the other, the recent literature shows a reduction of credit availability due to the uncertainties related to the economic crisis, in particular for small and medium size enterprises (Cenni et al., 2015; Cotugno et al., 2013; Wehinger, 2014).

In this paper we focus on the real effects of relationship lending on firm's performance, using a dataset of Italian manufacturing firms and banks at the province level from 2004 to 2015. The empirical analysis is divided in two steps: firstly, we examine how firm performance is affected by the location in areas characterized by different levels of operational and functional distance (Alessandrini et al., 2009). Secondly, we investigate how the crisis, interacted with the two distance indicators, impacts on firm's performance. In fact, the more a firm is proximate to the lender, the higher is the probability to be financed (relationship lending) and the more the company will have higher performances (Brancati, 2014; Montoriol Garriga, 2006).

Our preliminary results demonstrate that both indicators are negatively related with our performance variables, and their magnitude is higher during economic turmoil periods. Relationship lending had thus a role in mitigating the effects of the economic crisis.

Growing Social Spatial Differentiation and Migration Patterns in Lithuania

Donatas Burneika, Lithuanian Social Research Centre, Lithuania

Rūta Ubarevičienė, Lithuanian social research centre, Lithuania

The paper deals with the recent trends of differentiation of wellbeing and resulting migration patterns in Lithuania. Paper concentrates on the trends taking place since the last economic crisis. It's a quantitative analysis of various indicators helping to reveal impacts of related migrations and growing

social disparities in the one of the most evenly inhabited European countries. Multinodal urban structure of the country did not help to ensure even economic development in post-soviet era. The economic development, jobs and finally income become highly differentiated spatially and as a consequence settlement system of the country starts to change adopting to the new reality. This change brings even deeper problems to “loosing” regions.. The similar situation is common to the migration processes. Various indirect indicators have been used for the revelation of differences of social wellbeing and migration flows at municipal level because there is no reliable official statistical data to measure it at lower than NUTS 3 level. Our findings show that notwithstanding the growing dominance of the capital city Vilnius, the country withholds multi nodal development as Kaunas and Klaipeda continue to play role of interregional development centres concentrating better paid jobs there as well. On the other hand, peripherization processes overtake remaining country, which is losing population at impressive pace. The processes of redistribution of population are making certain impact on spatial social structure of population as migrations, which are not slowing down during the last years, are highly selective. Keywords: Migrations, uneven development, Lithuania, residential differentiation.

Settlement System Density as a Basis for Cultural Regeneration in the Ural's Small Industrial Towns

Tatiana Bystrova, Ural Federal University, Russia

The settlement system in Urals (Russia), established in the 18th century with the participation of Wilhelm de Gennin (1676–1750), has over 200 small industrial towns. Nowadays socio-economic, demographic, and cultural situation in most of them is a difficult one. Meanwhile, they have a great potential for developing new high-tech factories, secondary special education, domestic and inbound tourism, crafts and sports, as elements of the dense and well-developed settlement system existing since the late bronze age and regularly reproduced until 1950s.

The article briefly describes the origin of settlement system in the Urals, and compares the development thereof with that of a number of other metallurgical provinces in different countries. All Urals towns are distanced within 15–40 km. They have a rational, compact planning structure, with a dam, a factory, a factory management building, a church, and a house of factory owners (until the 1917 Revolution) in the centre. These buildings are not always still preserved but may be considered centres of cultural and neoindustrial clusters.

This article analyses data for 5 small industrial towns of the Urals, which located at different distances from a big city, and where population is decreasing fast enough. Their critical situation is caused by resource depletion and factory shut-downs, and underestimation of the resources of towns in their interaction by their population and administrations. The article defines measures for cultural regeneration of these towns.

The Impact of Event Tourism on Urban and Local Economies: the Case of the Knavesmire Festival in York, United Kingdom

Ignazio Cabras, Newcastle Business School, United Kingdom

Nadine Waehning, York S.John University, United Kingdom

In recent years, the number of food-related festivals and gastronomic events has significantly increased worldwide. Local authorities as well as national governments have started to see these

events as drivers of international tourism and, particularly in developing countries, a potential source of economic growth (Tiwari, 2011). Several empirical studies on tourism-led growth (see, for instance, Gani, 1998; Cantavella and Balaguer, 2002; Proença and Soukiazis, 2008) indicate tourism as an effective contributor to long-run economic growth. Given its potential in terms of creating jobs, promoting growth, and generating tax revenue, the benefits from tourism can cascade to a wider range of the population with positive effects on residents' income (Dritsakis, 2004).

At a local level, event tourism, thus tourism associated with specific cultural or gastronomic events, frequently involves whole communities in their organisation and management. Many local businesses and entrepreneurs benefit from these events, although their success often relies on residents' participation and active engagement on what they believe they will gain from encouraging tourism in their area. In the UK, an example of the increasing importance of event tourism is probably associated with the rising number of craft beer festivals, which growth significantly in the past ten years. These festivals, mainly organised with the support of local volunteers, provide important venues for brewers to show-case their products, and for visitors to experience both traditional and innovative beers. Beer festivals also attract a considerable number of people to different locations, who frequently decide to spend part of their visit to explore other areas not necessarily located in the nearby of the festival. In this sense, beer festivals become important touristic attractions, with enormous potential to generate economic impact and businesses opportunities at a local level.

Despite this potential, however, there is a significant paucity of studies about the impact of beer festivals and similar events on local economies and communities. With this research, we aim to fill this gap by investigating and analysing the Knavesmire Beer Festival at York, United Kingdom. In doing so, we analyse the craft beer movement in the UK by exploring the expansion of breweries in terms of number, beer variety and local supply chains; in order to understand the surge in the number of small and medium beer festivals organised in the country. We then focus on the city of York to study the impact of the local beer festival, examining a wide range of data including information collected via means of a survey questionnaire which gathered responses from 1,100 visitors at the last event organised in 2017. Findings from our analysis provide new research with regard to how food and drink variety - and beer-related events in the specific - could act as a driver for event tourism in the UK and worldwide, providing a platform for economic opportunities and development for local and urban economies.

EU Regional Convergence in the Agricultural Sector: Are there Synergies Between Agricultural and Regional Policies?

Elena Calegari, Università Cattolica del Sacro Cuore, Piacenza, Italy

Enrico Fabrizi, Catholic University of the Sacred Heart, Italy

Gianni Guastella, Catholic University of the Sacred Heart, Italy

Francesco Timpano, Catholic University of the Sacred Heart, Italy

Since it has been created, in the mid '60, the Common Agricultural Policy (PAC) is one of the main chapters of the European Union budget. Even if in principle it was designed as a sectorial policy, with a system of product-related subsidies to sustain farmers' income, after some major reforms the PAC has acquired also a territorial approach, focusing on territorial development. In recent years the actions of the CAP for the development of the Agricultural sector are mainly promoted through two lines of intervention. The first pillar of the CAP is related to the common organisation of the markets (CMO) in agricultural products and to the direct payments to farmers, whereas the second pillar is

represented by the Rural Development Policy. On the other hand, also the Cohesion Policy (CP), aiming to reduce \disparities between the various regions and the backwardness of the least-favoured regions (European Commission, 1986) and concerning all sectors of regional economic activity, may exhibits effects on Agriculture. Therefore, although the second CAP pillar and the CP have different targets, there are spaces for possible synergistic interactions.

The present study describes a model to disentangle the effects of CAP and CP in the development of the Agricultural Sector in the European regions, focusing on the extent to which the interactions between policies influence the regional performance. To account for the possibility of regional income club convergence in the agricultural sector, as described by several New Economic Geography scholars, the model is estimated through a Threshold Regression. The contribution of this this technique to the topic is twofold: rstly it helps to test the hypothesis that the e ect of CAP and CP funds on regional performance strictly depends on the regional initial level of agricultural development, secondly it allows to quantify the level of development that de ne a region as \less developed". The study considers the convergence in the agricultural sector in terms of gross value added per worker between 2006 and 2013, in order to catch the effect of the CP programming period 2007-2013. The analysis is based on a sample of 203 NUTS-2 European regions. Results highlight signi cant synergies between the Common Agricultural Policy and the Cohesion Policy in improving the regional performances in Agriculture, but those synergies are different between less developed regions and more developed ones. Speci cally, it shows that the CAP has a signi cant positive effect for Agriculture in more developed regions, but a negative effect on the development of the agricultural sector in the less developed ones.

Human Development and Land Tenure in Brazil

Bernardo Campolina, Federal University of Minas Gerais, Brazil

Alexandre Arbex Valadares, IPEA, Brazil

Fernando Gaiger Silveira, IPEA, Brazil

Nikolas de Camargo Pirani, UNPD, Brazil

The perpetuation of profound socio-economic inequalities between the countryside and the city, inscribed in the differences between their respective quality of life indicators, allows us to state that rural and urban environments still have distinct social realities, despite territorial contiguity and the rising intercommunication between these spaces. This study proposes to investigate how living conditions and human development in the rural environment might be linked to a structural characteristic of the Brazilian countryside: the high concentration of land tenure. There is a review on the literature, followed by a discussion over the database and methodological strategy, then we present some stylise facts, followed by results and conclusion. The link between life quality and land tenure are very strong and have important regional differences.

"Whatever you Hit Call it a Target": On Segmentation and Targeting of Investment Promotion Policy

Pawel Capik, Keele University, United Kingdom

Foreign direct investment (FDI) remains one of the staple propositions and a focal point of national and regional development policies world over. Economy ministries, specialised public agencies, regional development bodies, and private site developers compete for mobile investment projects in

hope to secure employment, innovation, links to global supply and knowledge networks leading to growth and development of their locales.

Previous research shows the importance of targeted investment promotion policy (Charlton et al 2004, Harding & Javorcik 2012). Other studies demonstrate targeting to be often misunderstood and an overall uncommon practice dominated by generic messages and undifferentiated offer (Aharoni 2010, Schotter & Beamish 2013, Monaghan 2015). If at all applied, the two dominant approaches in investment promotion, segment the foreign investors based on their nationality or sector of operations (Beal & Pinson, 2014, Almond et al 2015).

The paper argues such an approach is outdated and insufficient, and offers a more robust approach to segmentation and targeting of investors. The proposed approach recognises the ever-increasing diversity of foreign investors and argues for their segmentation based on strategy and behavioural characteristics in addition to country-of-origin and type of activity.

Presented discussion is underpinned by international business strategy, place marketing and regional development literature, and provides policy guidance on the relationship between differentiated place offer to investors, internal segmentation of the group and possible targets with it.

Bordering Dynamics in Cross-border Regional Innovation Systems

Francesco Cappellano, Università Mediterranea - Reggio Calabria, Italy

Christophe Sohn, Luxembourg Institute of Socio-Economic Research (LISER), Luxembourg

Teemu Makkonen, Institute for Advanced Social Research University of Tampere, Finland

The role of international borders has been considered mainly as a barrier in the current “cross-border regional innovation system” (CBRIS) framework despite that cross-border regions are deemed to possess unexploited potential for innovation. The CBRIS model envisions a simplified linear stage development model from weakly integrated to strongly integrated CBRISs. Through this paper, we propose to conceive borders as intrinsically multidimensional and ambivalent processes. In this view, they can also represent an interface, a marker of difference or a symbol. Moreover, we suggest an evolutionary perspective recognizing border as processes or dynamic institutions susceptible to change over time according to contrasted trajectories (i.e., debordering and rebordering). Taking these aspects of borders into account allows us to revisit the CBRIS model and to highlight the fact that borders are not a mere contextual effect, but they represent a key factor in the strategies and dynamics of CBRISs. This new suggested approach enables us to better understand the impacts of borders on their neighboring communities for the benefit of local/regional as well as international authorities (e.g. EU) in grasping their ongoing bordering processes and designing cross-border innovation policies.

Determinants of Growth Differences Between Eastern and Southern EU Countries: A Panel-data Approach

Helen Caraveli, The Athens University of Economics and Business, Greece

Ioannis Chatzigiattoudakis, AUEB, Greece

Evangelos Paravalos, AUEB, Greece

Following the EU enlargements in the decade of 2000s, the economic significance of many Central and Eastern European Countries (CEECs) was raised placing them in an advantageous position vis-à-vis

southern EU countries, which still enjoy higher levels of development and standards of living. The phenomenon was aggravated from the worsened economic performance of the latter since the beginning of the crisis, resulting in a halt of their convergence process. This paper attempts to examine the basic factors underlying differences in growth paths between the eastern and the southern periphery of Europe through a country-level panel-data econometric analysis based in two models. Per capita GDP and labour productivity are regressed against a set of macroeconomic variables, as well as education, innovation and economy openness, depicting variables along with dummies that incorporate periphery specific effects into the analysis. The estimation considers both fixed and random effects, using a data set from 1995 to 2016 for the EU-28 countries. The empirical results establish the strong determining role of labour productivity in growth differences but also the periphery-related effects upon per capita GDP and labour productivity.

Key words: eastern vs. southern EU periphery; growth and productivity differences among eastern and southern EU member-states; eastward shift of economic dynamism; country-level panel-data; fixed effects; random effects

The Great Cities Versus the Rest: Probing into a Political Divide

Rodrigo Cardoso, TU Delft, Faculty of Architecture and the Built Environment, OTB, Portugal

This paper brings scholarly attention to the urban-rural political divide. This topic is now under intensive scrutiny in the media and political commentary outlets after recent political events in the United States and Western Europe where it featured prominently. Aggregate voting patterns in different countries suggest that the largest cities (and some smaller cities, e.g. university cities) are politically at odds with small towns and rural areas, with population in the former tending to adopt socially progressive values and the latter adhering to more conservative, protectionist and populist messages. The urgency to address this issue lies in the fact that, whether real or perceived, the potential of that opposition to restrict debate, empathy and cooperation within and between regions is great and runs from the individual to the institutional level. The problem is framed under the broader question of whether and why urban environments are able to engender a specific socio-political ethos and electoral preferences. It reviews the assumptions behind the ‘urban-rural divide’ and inserts some complexity into the ‘urban voter’ concept, first by addressing notions of causality and the pitfalls of individual and aggregate trends, and then by analysing the effects of spatial settings on political inclinations and of spatial mobility on individual beliefs change. The paper concludes by drafting a research agenda which reconsiders the factors underlying the ‘divide’ for a time when boundaries between urban and non-urban have been dissolved, both in terms of individual mobility and identity and socio-spatial interdependence, and accounts for the territorial and policy implications of this situation.

Smart City Research and the Geography of Innovation

Luis Carvalho, University of Porto, Portugal

Willem van Winden, Amsterdam University of Applied Sciences, The Netherlands

Mário Vale, University of Lisbon, Portugal

Over the last decade, a whole new assemblage of technologies, devices and associated innovations started to become deployed and experimented in cities. Under the banner of the “smart city”, those include sensors, meters and software alongside the city’s infrastructure (e.g. energy, mobility, water),

urban operating systems, (open) data platforms, the development of city apps, and many other technologies and IT-related innovations that promise to make cities better, cleaner, safer, more efficient, transparent, etc. These developments increasingly mobilise different types of actors, ranging from global tech companies to local grassroots movements, drawing on multiple geographies, local and global, permanent and temporary, which may influence how these innovations unfold and become embedded (or not) in society. Thus far, scholarship in urban geography and urban studies has developed a vigorous critique on smart city development but has paid less attention to the geographical and (socio-technical) innovation dimensions associated with it. At the same time, research focusing on the geographies of knowledge and innovation has not yet actively looked into smart city innovation as a new (multi) knowledge and industrial domain that can bring new insights to current frameworks. In this paper, we identify a number of ways through which these two research streams could productively inform one another, both in terms of conceptual frameworks and empirical evidence.

Emerging Market Multinational Enterprises Taking Over United States Trademarks: Predating or Leveraging?

Carolina Castaldi, Eindhoven University of Technology, The Netherlands

Arianna Martinelli, Sant'Anna School of Advanced Studies, Italy

Elisa Giuliani, University of Pisa, Italy

From Lenovo acquiring IBM to TATA becoming the owner of Jaguar, the bold acquisitions of companies from emerging economies, have spurred much debate on the strategies of emerging market multinational enterprises (EMNEs) in conquering international markets' strategic assets. The extent to which EMNEs benefit from their acquisitions remains a conundrum for scholarship and practice. In this context, this paper investigates EMNEs' trademark acquisition strategies. Trademarks are the legal basis for building valuable brands and represent reputational assets that often account for a substantial part of firms' market value in global markets. When they invest in advanced countries, EMNEs are expected to suffer from home country liabilities. This motivates them to acquire foreign brands, either by taking over existing firms in the host countries and appropriating their trademark portfolio, or by acquiring one or more trademarks as a solo operation. In this study, we investigate whether EMNEs really benefit from acquiring foreign trademarks in the advanced countries. In particular, we look at whether EMNEs enrich their trademark portfolio after the trademark acquisitions and what influences this outcome. More specifically, we are interested in understanding EMNEs' trademark appropriation strategies and investigate whether they are predatory strategies – i.e. they acquire trademarks but do not develop new ones after the acquisition, or leveraging strategies, a strategy where the EMNE develops new trademarks in the target markets after the acquisition. We test our theoretical hypotheses in a sample of acquisitions of USPTO trademarks by EMNEs from eight different countries, between 1981 and 2014.

Integrated Territorial Approaches: How EU Acts Soft Over Hard National Planning

Cristina Cavaco, CIAUD, Faculty of Architecture, University of Lisbon, Portugal

João Pedro Costa, CIAUD, Lisbon School of Architecture, University of Lisbon, Portugal

In the last decades, national planning systems showed increasing convergence with the European spatial planning rationale. A new discourse towards spatial planning and territorial governance emerged making room for soft planning practices.

This paradigm shift happened in two different ways:

- (i) By means of the revision and adaptation of the statutory systems in line with the principles and doctrine of the EU spatial planning, following the “effect of Europe”;
- (ii) Under the allocation of Structural Funds and the direct incorporation at a domestic level of ECP tools and EU-led initiatives oriented towards the promotion of soft planning spaces.

However, the meeting between these two apparently confluent pathways has not led to convergence. On the contrary, a number of tensions and mismatches arise from the coexistence between the statutory planning systems and the soft planning tools raised by the community programming cycles for regional development purposes.

The paper addresses the development of Integrated Territorial Approaches (ITA) in the Portuguese planning system having into account how these have been encouraged by EU-led initiatives and regulations and supported by European Structural Funds. A particular emphasis will be put in the current programming cycle 2014-2020.

By exploring the connections between spatial planning and operational programming within the Portuguese context, this paper aims at contributing not only to better understand the impacts of EU-led policies in the domestic sphere of national policies but also to enrich the debate regarding the meeting between hard and soft planning spaces, formal and informal planning.

Spatial Behaviours of Employees in Warsaw Business Districts - Centre vs. Peripheries

Dorota Celinska-Janowicz, University of Warsaw, Poland

Contemporary changes in the economic structure of metropolitan areas, especially increased significance of the service sector for enterprises, have resulted in a distinctly greater demand for modern office space in major cities. The largest enterprises and their providers in the sphere of financial, advisory, advertising and ICT services, as well as media corporations, need high-quality offices adapted to their specific needs. At the same time, the spatial dimension of growing polycentricity of the existing spatial structures can be observed, with centrality becoming increasingly fuzzy in the metropolitan space. The main symptom of this process has been the ongoing deconcentration of jobs, especially in business services sector resulting in the emergence of secondary business districts and their increasing role.

The aim of the paper is to present results of the empirical research on spatial behaviours of office employees conducted in central and secondary business district in Warsaw, Poland. The study was based on the results of the questionnaire survey conducted among ca. 200 employees. The analysis revealed that in many aspects spatial practices are in both business areas relatively similar. The main differences reveal in the employees' perception and assessment of the quality of the public space as well as spatial and temporal patterns of shopping and using services.

Different Trends in the Re-industrialisation of the Post-Socialist Small and Medium Industrial Towns in Romania

Andreea-Loreta Cercleux, Faculty of Geography and CICADIT, University of Bucharest, Romania

Ioan Ianos, Faculty of Geography and CICADIT, University of Bucharest, Romania

Florentina-Cristina Merciu, Faculty of Geography and CICADIT, University of Bucharest, Romania

The study focuses on the analysis of industrial activities at the present day in the small and medium industrial towns in Romania. The de-industrialisation that started after the transition to the capitalist economy has meant the decline of many traditional industrial specializations developed in a large number of the Romanian towns. If, generally, the heavy industry has been and is still nowadays diminishing, in contrary, the manufacturing activities around food, beverages products and textiles are mostly developing among others, following in many cases a same pattern: a new investment on the historical activities replacing the former state industry model or the creation of new type of activities from scratch or with potential relocations of production lines from another place. The launch of new activities meant an important step in the re-industrialisation process of some small and medium industrial towns, especially after 2000s, which have been facing a phase of economic regress due to abandonment and investment disinterest. The outcome was the emergence of industrial parks in different places in Romania. In this study, the small and medium industrial towns are analysed in relation with the distribution of industrial parks and the participation of the corresponding companies within one or more clusters, by emphasizing the main specialisations they are part of. The analysis highlights the different levels of industrial performance in the small and medium industrial towns from Romania.

Partnership Building for Smart Specialisation: Constructing a Regional Bioeconomy

David Charles, Northumbria University, United Kingdom

Sara Davies, University of Strathclyde, United Kingdom

Stephen Miller, United Kingdom

Keith Clement, United Kingdom

Collaboration and partnership in innovation is often seen as the answer to a variety of problems, especially when governments seek to influence firms to be more innovative and sustainable, or to further regional development through clustering activities. The idea of regionally based consortia to promote innovation and the development of new industries has developed from regional innovation systems and cluster theory on the basis that an ecosystem of interdependent firms and institutions are required to promote place-based innovation. Subsequently smart specialisation has also emerged, sketched out in theoretical terms but rapidly adopted by EU policymakers. Central issues in the development of smart specialisation include the identification of future opportunities by a form of entrepreneurial discovery process which might involve a variety of stakeholders, the formation of partnerships to develop those opportunities, and the construction of new assets based on existing areas of knowledge and expertise.

One such area of opportunity is the bioeconomy, which anticipates new industrial activities based on biological feedstocks and biotechnological processes. Many countries and regions have sought to develop bioeconomy strategies to develop this industry from research foundations through the development of innovation systems and more recently smart specialisation initiatives. The

bioeconomy has particular needs in terms of partnership as it brings together some traditional land-based activities with high tech industry, university research and public regulatory bodies. There is also a place for civic society due to the ethical issues involved in some aspects of the bioeconomy as well as the public as a source of wastes that might be recycled.

This paper examines the development of the bioeconomy strategy in Scotland, the development of a partnership to pursue the strategy and the mix of actors enrolled in the strategy as it developed. Implications are developed for the involvement of the wider civic society in such regional economic development strategies.

The EU as a Saviour and a Saint? Corruption and Public Support for EU Cohesion

Nicholas Charron, University of Gothenburg, Sweden

Monika Bauhr, Sweden

While the European Union is plagued by massive social and economic inequality, in particular at the sub-national level. Yet in general, and in particular in the wake of both the enlargement and the financial crises, we know surprisingly little about the sources of public support for redistribution and further economic integration. This paper investigates the determinants of public support for the EU's most significant tool for reducing inequalities: Cohesion Policy. We suggest that support for redistribution is highly contingent upon both the quality of domestic institutions and individual level perceptions of corruption. In examining this, we present unique and newly collected survey data on citizen attitudes regarding the main idea behind Cohesion Policy; inter-EU redistribution. We show that perceptions of domestic corruption increases support for Cohesion but only in contexts where the quality of government (QoG) is low and public service delivery deficient. Using sub-national data for QoG, we show that regions where the QoG is high, perceptions of corruption have no such effect. We conclude that perceptions of domestic corruption will only drive support for cohesion in contexts where the EU can be perceived as both a potential savior and- relative to domestic government- a saint. Thus, the QoG determines whether the EU is seen as able to compensate for the deficiencies of domestic institutions or whether perceptions of corruption simply captures a general distrust in the redistributive capacity of elites. Implications for the future of Cohesion Policy are discussed.

China's Moving Slums: A Hidden Geography of Recycling and Housing Injustice on the Edge of Beijing

Guo Chen, Michigan State University, United States

Jia Feng, China

Close to 30% of China's urban population live in slum conditions according to UN-Habitat (2010). China's rapidly expanding large cities continue to face an "urbanization of poverty" marked by the coupling of staggering urban growth with increasing rural-urban migration, shifting environments at the rural-urban interface, and exclusion of rural-urban migrants from urban privileges. China's post-reform urban scholarship often treats slums as historical or geographical exceptions. The recent state urban slum eradication/upgrade plan has excluded rural migrant settlements from the scope of the plan. By introducing the concept of moving slums in China, we interrogate both the "slum-free" vision in the Global South and the scholarship on China's slum-absent urbanism. We argue that China's hukou divide, land politics, and property-driven urban (re)development regime under neoliberal-authoritarian state governance has necessitated the spatial mobility of Chinese de facto slums, which

has, in turn, enabled the state to selectively eliminate informality in order to paint an image of order and prosperity, both discursively and practically, to attract investments and boost land value. We draw evidence from visually enriched, sociospatial and ethnographic data based on years of in-depth fieldwork and participatory research in Henan migrant-run recycling enclaves that have existed at the edge of Beijing for decades. We contend that engaging with the geographical concept of moving slums fills a gap in knowledge and practice to redresses inadequate attention to the “hidden” migrant communities and the increasing inequality and distributive justice in China.

Agency in Regional Energy Transition: Towards a More Detailed Understanding of Institutional Change

Camilla Chlebna, University of Oldenburg, Germany

Jannika Mattes, University of Oldenburg, Germany

Meike Löhr, University of Oldenburg, Germany

Sebastian Rohe, University of Oldenburg, Germany

The introduction of renewable energies into the energy system leads to change processes that are analyzed as energy transitions. Despite a vivid debate, we still only partly understand what actually happens in these transition processes and how different kinds of actors shape the observed institutional change.

Our contribution sheds light on the role of actors and their interactions for institutional change in the context of regional energy transitions. By combining insights from transition research with elements of the regional innovation systems approach (from economic geography) and strategic action fields (from sociological studies), we aim to explain in more depth why and how actors and institutions from different social fields shape institutional change.

According to the regional innovation systems approach, the involved actors can be grouped into science and education, industry, politics and administration, intermediaries and finance as well as civil society. Building upon strategic action field theory, energy transitions can be regarded as social processes based on individual and collective contributions from regional and extra-regional actors. Driving the transition process, these actors assume new roles, build groups, re-negotiate their positions within the regional field, establish new norms and learn from each other. Based on isomorphic mutual adaptation, path dependencies and the varying social skills of the involved actors, the regional field is constantly being restructured.

We analyze the occurring restructuration processes in their strategic, normative and cognitive dimensions and show how agency in institutional change takes place as a process of negotiation, norming and learning with different fields in focus.

The Whole Earth Technosphere Sustainability Challenge and Worldwide City-Regions Network Response: An Urban Planet Theory

Tom Christoffel, Regional Intelligence - Regional Communities, LLC, United States

“There is only one region-the surface of the earth-on which mankind finds its home,” wrote W.G. East in 1967. Likewise, there is one built environment of the earth, the technosphere. Technologies invented by humanity since the Neolithic have consumed, depleted and polluted the bio-, litho-,

atmos- and hydro- spheres. The technosphere is estimated to be 30 trillion metric tonnes, over 4,000 tonnes per person.

The planet earth has been urbanized with the deployment of communication and GPS satellites. Urban services can be placed anywhere and urban wastes are everywhere. The entire world, our local planet has been connected through the worldwide network of cities/towns, each serving a local region and perhaps many regions of different scales, overlapping for convenience.

With complete human dependence on technology and all problems needing more and better technologies to solve them, progress is the problem. Sustainability is not simply a local or regional challenge, but a whole earth challenge. Earth Overshoot Day data totals to a 2017 cumulative shortfall of 4,052 days, or 11.17 years.

Worldwide networked comprehensive planning is a way to restore the natural systems. Profit motive can be managed by the community motive present in historical spiritual and civic teachings and set out as practice through institutional law to protect the commons and avoid greater tragedy. Profit motive thinking minimizes long term risk and damage to the ability to perpetuate civilization. An urban planet requires such a perspective for self-management. It is for this reason it is put forward as a theory.

The Digital Transformation of Traditional Manufacturing Systems: A Comparative Analysis of Different Upgrading Paths

Simona Ciappei, Fondazione per la Ricerca e l'Innovazione, Italy

Lisa De Propriis, University of Birmingham, United Kingdom

Paulina Ramirez, University of Birmingham, United Kingdom

Erica Santini, Fondazione per la Ricerca e l'Innovazione, United Kingdom

Nowadays digital technologies are one of the most important resources of value creation in the global competition. Specifically, the big innovations in the field of information and communication technology (ICT) are shaping all sectors of the economy, creating completely new models of production both inside the factory and between firms. In this regard, traditional manufacturing industries are challenged by the technologies related to the so-called fourth Industrial Revolution. Such industries are likely to need an upgrade of their business models and organisational structures, embedding digital technologies as inputs of their value creation processes. This is a non-trivial process, especially when the manufacturing models are locked in traditional organizational and productive configurations. This paper aims to shed light on the various learning strategies adopted by traditional manufacturing firms in order to absorb and embed digital technologies into their products and production processes. The paper provides evidence from the European industrial landscape where some forms of digital manufacturing appear to be strongly triggered by specific local infrastructures, such as universities or new local actions such as the open spaces for experimentation processes. Others appear to be the result of big pressures coming from demanding global customers. However, it seems that some traditional manufacturing industries are not able to seize the opened opportunities. The investigation of the new forms of manufacturing and their capabilities to foster cross-sectoral relations, or internalise new competences, is an important field of research in order to outline consistent policies for a manufacturing renaissance.

Nick Clifton, Cardiff Metropolitan University, United Kingdom

David Pickernell, University of Portsmouth, United Kingdom

Celia Netana, University of South Wales, United Kingdom

In this paper we consider the roles and interactions of a range of representative and interest articulation groups and how these play out in policy formulation and delivery at the regional (ie sub-nation state) level. This diverse collection of governmental, quasi-governmental, third and private sector bodies acting at this level has been referred to by Keating et al (2009) as the ‘territorial policy community’. The idea being that as that as nation states rescale, the levels at which interests are articulated and policies are negotiated and enacted will shift to the regional level, although this is not a uniform process. The actual nature of the interactions and their relative influence has however been relatively unexplored, hence a key motivation for this paper. Moreover the authors are also motivated by the experience of spending perhaps more time than they might care to remember residing in, observing, studying and in some small ways participating in the economic and political lives of the case study region – Wales – from which results are presented herein. The trials and tribulations of Wales as an asymmetrically devolved ‘lagging’ region (or more correctly – nation) within a larger nation state are well documented, as is the sense that a number of the contributory factors to this situation are as much institutional as they are structural (Clifton and Cooke, 2005; Pickernell, 2011; Pugh 2017). If these can be thought of as motivational factors at the ‘macro’ level, recent work which the authors of this paper have been involved in - investigating the potential for the development of a Welsh body along the lines of the Small Business Administration in the US (see Netana et al, 2015) - served to shape the research question addressed herein more directly. Of course, although potentially useful, findings which are specific only to one region will ultimately be of limited interest; thus in this paper we attempt to frame research within a more broadly applicable framework. Hence the paper proceeds as follows; first we provide some contextual background on the economic and political trajectory of Wales, serving to outline the value of Wales as an illustrative case.

Moreover we suggest that there is significant value in studying ‘ordinary regions’ rather than the, in fact, much rarer exemplars of unquestionable success and/or best practice (Hospers and Benneworth, 2005; Hepburn, 2011). More specifically with regards to Wales, as noted by Pugh (2017), Wales holds potential relevance for other regions facing the challenges of structural weaknesses, peripherality, and multifaceted governance arrangements.

The discussion is then broadened to outline the role of policy-making within the European smart specialisation agenda. Following this, we outline the concept of the territorial policy community as a framework for investigation, and how this relates more generally to the idea of ‘new regionalism’. Having outlined the research question to be addressed, attention is then turned to the methodology adopted – a mapping of the various stakeholder bodies that feed into the policy design and delivery landscape within Wales. The nature of linkages between them and Welsh Government are investigated and delineated by type of body involved and the level of integration observed in relation to the territorial policy community framework. This is augmented via augmented via focus group sessions with key stakeholders, and an analysis of linkages and affiliations at the micro level in relation to publically available steering board membership data. Fundamentally, we identify a disconnect between those members of Wales’ territorial policy community engaged in formulating policy (i.e. the inputs) and those charged with delivering (or at least overseeing) its outputs. Finally, recommendations for future policy making in Wales are outlined, and limitations of the present study and the scope for further research discussed. Ultimately it is posited that such an analytical framework may be generalisable to other comparator regions.

Cohesion Policy's Contribution to Digitalisation: An Adequate Approach?

Louis Colnot, CSIL - Centre for Industrial Studies, Italy

Julie Pellegrin, CSIL - Centre for Industrial Studies, Italy

Digital technologies are seen by academics and policy-makers as a major driver of growth and innovation, capable of triggering radical transformations in both businesses' operations and citizens' life and welfare. Their potential is therefore considerable, yet difficult to assess with certainty. The EU has been a pioneer institution in promoting the digitalisation of its economy. Its main ambition is to harness the potential of Information and Communication Technologies for growth and well-being. Its long-lasting support has been delivered through different types of interventions, notably regulatory and financial tools. However, the EU economy is generally held to be below its digitalisation potential. Additionally, large disparities in digitalisation performance are observed within and between Member States. This prevents from drawing the full benefits linked to ICT.

The regional level is fundamental to address the challenges arising from digitalisation, as it can articulate bottom-up and top-down initiatives in a consistent place-based manner. In particular, Cohesion Policy has supported digitalisation for several programming periods, combining a prominent funding mechanism with a relevant territorial approach.

Based on case studies and a review of secondary sources, this paper contributes to the existing literature by discussing the advantages and drawbacks of Cohesion Policy to tackle the challenges of digitalisation. As such, it highlights the core lessons learnt, success factors and persistent issues at stake that are relevant to this particular approach of regional policy. The analysis notably suggests that Cohesion Policy's contribution to digitalisation is strongly linked to its ability to favour partnerships and stakeholders' involvement.

Exploring Smart Mobilities, Assemblages and Alignments

Matthew Cook, The Open University, United Kingdom

Alan-Miguel Valdez, The Open University, United Kingdom

Actually existing smart cities are constituted by the relationship between urban and global processes as well as the relationships and flows (of people, capital, ideas) operating on the urban-global nexus. Mobile ways of thinking about the smart city such as frames, plans and development concepts are therefore highly relevant to the governance of smart city developments in particular locales. Since space is not a resultant formation but a "multiplicity of stories-so-far" (Massey, 2005), mobile smart city concepts encounter and are translated through local histories and institutional contexts in governance networks.

How do smart concepts encounter local histories in governance networks, mobilise actors and transform cities in various ways? How does smart mediate and mobilise relations between the current and potential city, rendering some relations of interest and others less so? What forms of power are at work as smart concepts travel? Drawing on a case study of Milton Keynes, we begin to address these questions by exploring how the spatialities and temporalities of urban assemblages (in relation to particular smart city developments) can be captured, structured, and storied more effectively and with greater influence by mobile ways of thinking about the smart city. We explore how particular actors (human and non human such as policy makers and smart city concepts and technologies)

exercise power in smart city governance including manipulation, inducement, coercion, seduction, and instrumental and associational powers, all of which are different in their character and reach. We conclude by demonstrating the pervasive quality of reach: the ability of powerful governance actors to permeate everyday life in smart city developments.

Land Use and Spatial Planning in the Lisbon Metropolitan Area: a Gap Between Statutory and Soft Planning Processes?

João Pedro Costa, CIAUD, Faculty of Architecture, University of Lisbon, Portugal

Cristina Cavaco, CIAUD, Lisbon School of Architecture, University of Lisbon, Portugal

The paper analyses how spatial planning is taking place in the Lisbon Metropolitan Area's (LMA), trying to observe how is the statutory land use planning dealing with the instruments of spatial planning that are encouraged by EU-led initiatives and regulations, supported by European Structural Funds.

A particular emphasis will be put in the current programming cycle 2014-2020, analyzing the coordination between the LMA Spatial Plan (2002), which establish the main territorial orientation for the municipal land use plans; and with the 2015's Integrated Strategy for the LMA Territorial Development, which, not being formally a spatial plan, coordinates the application of the 2014-2020 European founding, being closer to the content of the 2014's new National Spatial Planning Law.

The paper will argue that, although different approaches occur through time, statutory planning ended up always by not being the key strategic element to support the main metropolitan investment decisions. As a result, a question arises: do the unsuccessful metropolitan planning effective results represent a continuous learning process of planning itself? Or did it anticipate that spatial development is not adjusted to rigid statutory instruments, having soft planning forms being the answer "in practice"?

In a time of uncertainty and speed of change; in a contemporary process of territorial and governance rescaling; the paper discusses the strong need for regional tool to coordinate the plausible future scenarios, to communicate spatial ideas and to stimulate the share of responsibilities and resources among planning actors.

Smart Cities and Economic Resilience

Adam Cox, University of Portsmouth, United Kingdom

Gianpiero Torrì, University of Portsmouth, United Kingdom

Smart specialisation strategy and policy have become an important objective of the European Union (EU) Cohesion Policy (RIS3 - Research and Innovation strategies for smart Specialisation). Adopting a Discriminant Function Analysis (FDA) the paper investigates the effects of both smartness and identification with the EU discourse on economic resilience at city level. Results show that both factors play a crucial role in determining the reaction to the business cycle at city level, compared to the national counterpart. The paper uses a (sigma-mu) methodology to compute a composite index of smartness which can disentangle the overall level of smartness from the balance between its components. The analysis shows that a more balanced smartness can increase the so-called engineering resilience as compared to more focussed smart specialisation strategies. Building upon this evidence we conjecture that higher levels of smartness of EU cities could increase the extent to which private sector practitioners align with policy-makers in working toward the goals of a

sustainable and robust growth. The resulting joint effort, in turn, can increase the level of efficiency at local level making the economies able to cope better with the impact of an economic downturn. This research is part of the Perception and Evaluation of Regional and Cohesion Policies by Europeans and Identification with the Values of Europe (PERCEIVE) project funded by European Commission H2020 GA No. 693529.

The New Geographies of Urban Production: The Case of China's Contemporary Urbanization

Olivier Crevoisier, (GRET), Universite De Neuchatel, Switzerland

Thierry Theurillat, Western Applied Sciences University (HES-SO), Switzerland

Delphine Rime, University of Bern, Switzerland

Nelson Vera, University of Neuchâtel, Switzerland

This article proposes a reading of contemporary production of urban built environment (real estate and infrastructures) from a territorial perspective. Three stylized models of urban production are highlighted in the first section. The first model is based on the production competitiveness paradigm – wither from Marxian, neoclassic or institutionalist approaches – where built environment is viewed as induced. While urban competitiveness, either based on the spatial division of labor or on innovation, is related to the city as a place of production exporting goods and services for external demands, consumption and real estate make a coherent local system that is induced from the multiplier effect of the redistribution of revenues. The second model results from the increasing mobility of people/consumers which implies a growing geographical disjunction between the places of production generating revenues for workers and the places of their expenses. In this perspective, the city is viewed as a living environment where urban production functions as a trigger to attract people to settle down as residents or to spend some time as consumers (tourists, students, etc.). Large-scale projects such as attraction parks, leisure and shopping centers, exhibition centers, etc. would be iconic examples of the consumption paradigm of competitiveness. In the third model, built environment is a financial asset which, as a result of financialization, has been attracting investment increasingly at national and global scales. This article posits that these three stylized roles of built environment, which take specific forms in their territorial context, have to be combined to address contemporary urban production. The second section of the article develops an understanding of China's contemporary urban production out of the stylized models of urban production.

The Potential of Participatory Development in Slum Upgrading Processes

Ráhel Czirják, PAIGEO - Pallas Athene Innovation and Geopolitical Foundation, Hungary

Slum upgrading is a highly relevant issue in Africa, as more than half of the continent's urban population (56%) live in slums – due to the urbanisation crisis existing in the developing world.

Two development types can be differentiated based on the stakeholders, participating in the development process: on the one hand there is the conventional, expert-led development, when a professional developer – as an external participant who isn't affected by the difficulties directly – explores the problems and works out the solution. This is the most common method in international development cooperation practice – despite that inclusion and partnership have become key words in the developmental discourse. On the other hand, however, the participatory, or community development operates with the active attendance of people directly affected by the problems: the slum dwellers articulate their problems and work out solutions with the assistance, and coordination

of the facilitator. In my paper I compare the two types of development through two slum development programmes in Kenya – the Kenya Slum Upgrading Programme in Kibera, as an instance of expert-led development, and the BIP:PUP project in Kitale to demonstrate the participatory development. Through the conclusion of the analysis, my aim is to enhance the efficiency of the international development cooperations.

Labour Mobility, Higher Education, and Urban Centrality in Brazil

Ana Carolina da Cruz Lima, Universidade do Estado do Rio de Janeiro, Brazil

The changes occurred in labour displacements in Brazil since the 1990's point out to a transitional period, which gradually seeks to rupture the inertial character of its dominant pattern (Northeast-Southeast). The internalization of the urbanization process stimulated the emergence and the consolidation of new migrant-absorbing areas, polarized by medium-sized cities, which emerge as important regions of economic growth. In this context, the aim of the paper is to analyze the interactions between labour mobility and urban development in Brazil, highlighting the productive characteristics of the migrants (education, professional qualification, etc.) and the returns to migration and to education in these areas. For this purpose, microdata of the Brazilian Demographic Censuses of 2000 and 2010, provided by the Brazilian Institute of Geography and Statistics (IBGE), are analyzed, and utilized to estimate wage determination equations, including the possible existence of self-selection between migrants (these individuals tend to have a more risk-prone behavior and they are positively selected in relation to education and age group). The results indicate that more educated migrants living in metropolitan areas receive higher wages than non-migrants and low-skilled migrants in Brazil. To sum up, once the displacement of individuals with characteristics more competitive in labour markets (male, white, young, higher education) is accomplished, the returns to migration tend to be positive, specially in urban centers.

Downloading Europe on a Regional Level – the Process of Europeanization in the Regions of Eastern Poland

Anna Dabrowska, University of Warsaw, Poland

The European Union has gradually modified the direction of intervention under the framework of the European Cohesion Policy – from cohesion towards innovation (Medeiros 2017). According to the concept of Europeanization as a top-down process we can expect different possible reactions of EU Members to the adaptation pressure (Radaelli 2003).

The research question is: Are the changes in the development priorities at EU level reflected in the regional policy in Poland?

The research considers five regions in Eastern Poland, which receive additional support from European Funds targeting the poorest areas in the EU. The subject of analysis were their strategic documents prepared for two financial periods: 2007-2013 and 2014-2020. By taking advantage of content analysis I looked at the frequency of appearance of defined linguistic units in relation to the total number of linguistic units in the document and at the context, in which they were used. Among analyzed words there were words reflecting current development priorities related to supporting innovation (e.g. “innovation”, “research”, “smart specialization”) as well as words from the former paradigm with lower level of focus on innovation (e.g. “tourism”, “infrastructure”, “transport”).

The main conclusion of the research is, that a clear reorientation of the regions toward the new development priorities related to support innovation is visible. It illustrates the effects of Europeanization on formulating regional policies, although it is not possible to confirm whether the observed changes are purely declarative or if they became deeply adapted as part of a true transformation process (Börzel & Risse 2003).

Circling the Square: Governance of the Circular Economy in the Amsterdam Metropolitan Area

Marcin Dabrowski, Delft University of Technology, The Netherlands

Erwin Heurkens, Delft University of Technology, The Netherlands

Circular economy, the new 'buzzword' in urban and regional studies and policy debates, is about shifting from linear production process towards a circular in which the generation of waste is minimised, materials circulate in 'closed loops' and waste is not considered a burden but rather a resource that brings new economic and spatial opportunities.

Transitions towards circular economy, concern a range of policy areas, from waste management, mobility, land use, to agriculture and innovation support, thus calling for collaboration across policy sectors and stakeholder groups. It also requires working across geographical scales and levels of government, as the flows of materials are seldom contained within the borders of a municipality. Hence, new strategies, policies and platforms are needed to explore and connect them in innovative ways. Against this background, one can ask what challenges and barriers need to be overcome to support transitions towards circular economy in an urban region.

Drawing on the H2020 REPAiR project (grant agreement No 688920) and the case of Amsterdam Metropolitan Area, one of the leading urban regions on the path towards circular economy, the paper seeks to better understand the governance barriers that obstruct this transition. It explores and classifies those barriers and proposes policy solutions for overcoming them. By doing so, the paper contributes to the emerging literature on circular economy transitions in the built environment.

Impact of Migration of Residents on the Location of Clusters with High Level of Demographic Aging in the Urban Space of Poznan

Adam Dąbrowski, Statistics Poland, Poland

Sylwia Filas-Przybył, Statistics Poland, Poland

Over the last few years Polish cities have witnessed rapid changes in their demographic structure, particularly as regards aging and suburban migrations. Until now there has been no data on a sufficient level to analyze those process within the city boundaries. Fortunately, the latest census in Poland (2011) has produced detailed information, including geographic coordinates, which can be used to perform more in-depth spatial analysis.

5 demographic indicators have been calculated to identify areas of high level of demographic aging. They have been aggregated to a grid of 500m x 500m squares. One advantage of the grid approach over administrative boundaries is its stability over time, making it possible to monitor changes and analyze their dynamics. By calculating demographic indicators and using Moran's I spatial autocorrelation measure we were able to detect homogenous, in terms of the demographic situation, areas.

This part of work has been prepared as a part of the project funded from the European Union funds from "Technical Assistance" Operational Programme 2014-2020: "Identification of specific areas within provincial capital cities and their functional areas in terms of the demographic and economic situation of their inhabitants using GIS-based spatial analysis".

The aim of this article is to present the impact of migration on spatial distribution of areas affected by demographic problems in Poznan by comparing the current picture of the location of the areas with the highest share of old people to migration streams in previous years.

Invisible Network of Sister Cities – Generation Z Experience

Leszek Dąbrowski, Nicolaus Copernicus University in Toruń, Poland

The idea of city partnership dates back to the oldest times in the history of mankind. There are several terms defining cooperation between cities. One of them is "sister cities" which refers to the cooperation of cities, which are usually far away from each other; this cooperation is often international. Sometimes it appears in the context of not only cities but communes or regions as well.

It is noted that in the literature there are analyzes of sister cities, which on a global scale can be described as large, medium or small, however, there are no analyzes for the smallest cities (less than 20,000 inhabitants).

The aim of the study is to analyze how international networks of sister cities shape attitudes towards different cultures in relation to generation Z experience. Generation Z includes people born after 1995. The study was based on the example of the Nowe Miasto Lubawskie in Poland (a small town with around 10,000 inhabitants) and its sister cities: Hude, Germany; Soleczniki, Lithuania; Biełogorsk, Ukraine; Gurjewsk; Russia; Fiume Veneto; Italy; Arnage, France. The analysis includes strategic documents of each sister city, surveys with the representatives of generation Z of Nowe Miasto Lubawskie and the interview with a representative of the local self-government of Nowe Miasto Lubawskie.

It is assumed that long-term relationships between sister cities, directly and indirectly, shape the attitudes towards different cultures which is especially important in relation to the community of such a small city.

Wages, Creative Destruction, and Union Networks

Harald Dale-Olsen, Norway

Do unions promote creative destruction? In many modern economies today union membership is in decline. One observes this in major industrial countries as the UK and Germany, but also in the previously strongly organised Nordic countries. The implications from such a decline depend on what unions do. One could argue that unions contribute positively to job creation and innovation, but also that they cause job destruction and create inefficiencies. In this paper we apply a shift-share approach and historical unionisation data from 1918 to study the impact of changes in regional unionisation on regional wage and productivity growth and job creation and destruction during the period 2003-2012. As local regional-industrial unionisation increases, wages grow. Lay-offs through plant closure and shrinking workplaces increase, but entry and new hires are unaffected by increased unionisation. Overall, the increased unionisation yields a positive impact on regional productivity, exceeding the

wage growth, partly due to the closure of less productive firms, but also enhanced productivity of the survivors and new entrants. Thereby increased unionisation contributes to creative destruction. One implication is that the recent decline in union membership could potentially contribute to stagnancy by less creative destruction, and thus this decline is worrisome.

The Shift Towards Wellbeing Economics: Implications for Regional Development Policy

Paul Dalziel, AERU, Lincoln University, New Zealand

Caroline Saunders, AERU, Lincoln University, New Zealand

John Saunders, IDEA Centre, University of Leeds, United Kingdom

Regional development policies have traditionally prioritised (although not exclusively) initiatives that foster economic growth. Since the conclusion in the 2009 Stiglitz, Sen and Fitoussi report that “the time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people’s well-being”, policy advisors have begun to pay more attention to other indicators of wellbeing.

In 2017, the authors were commissioned to write a book on Wellbeing Economics: The Capabilities Approach to Prosperity, which will be published as part of the Palgrave Pivot series in 2018. The book describes a wellbeing economics policy framework, drawing on sources such as the capabilities approach of personal wellbeing developed by Amartya Sen and Martha Nussbaum, the capabilities theory of the firm developed in particular by David Teece, and the capabilities analysis of regional opportunities proposed by Fabrizio Barca, Dominique Foray and others.

This paper explains the theoretical framework being used in the new book, with particular reference to its implications for regional development. Consistent with the foundations of the European Union’s Smart Specialisation platform, for example, the creation and access to knowledge capital is vital in the framework, alongside six other types of capital.

Developing Industrial Culture Concept: From Bata's Fordist to Creative City

Lukáš Danko, Tomas Bata University in Zlín, Czech Republic

Pavel Bednar, Tomas Bata University in Zlín, Czech Republic

The old industrial medium-sized cities outside agglomeration areas undergo the transition from former drivers of change in terms of entrepreneurship and innovation to knowledge oriented economy. This phenomenon is based on re-industrialisation using re-interpretation and re-production of their industrial heritage. Moreover, these cities are more dependent on local workforce and knowledge to remain competitive, compared to agglomeration areas. Nevertheless, their intrinsic locally specific mind-sets, competencies and skills in the field of their former production are considered to be an intangible heritage of their industrial age, which refers to industrial culture. Raising awareness of their specific milieu is becoming a driver of the transition. Hence, the main aim of the paper is to evaluate this transition, more specifically by applying concept of the industrial culture on medium-sized double disadvantaged city, i.e. being former industrial centre of the world-wide known shoe-making company – Bata Corporation as well as socialist city lagged in undergoing of the global change compared to market oriented countries. Employed semi-structured interviews with key actors and stakeholders in local creative industry ecosystem confirm that the specific mind-sets, traditions and skills used in the former shoe-making Fordist production can become a driver of the city

transition re-interpreting design and multimedia as a new brand of the city in the national economy, i.e. the creative city. Thus this case study presents an example of the best practice locally embedded industrial culture, but oriented towards a wider market, implementing bottom-up approach for using the Quadruple helix concept under the cluster development.

Planning and ‘The End of Ideology’?

Simin Davoudi, Global Urban Research Unit, United Kingdom

Daniel Galland, Norwegian University of Life Sciences, Norway

Dominic Stead, Technical University of Delft, The Netherlands

Frank Othengrafen, University of Dortmund, Germany

In 1998, Tony Blair, as British Prime Minister, declared that ideology was dead; all that counted in government was that policies should work. His declaration of a post-ideological era was provocative but not entirely new. The ‘end of ideology’ thesis originated with neoconservatives who saw the rise of liberal capitalism as the dawn of a political era that would be determined not by ideology but by practical, evidence based solutions. Although much of end-of-ideology debate depends on how ideology is defined, we argue that the emphasis on the demise of ideology is itself an ideological act aimed at cloaking the reforms of planning in post-ideological rhetoric. Indeed, the 1990s marked an ongoing process of ideological shifts in many western countries with significant ramifications for planning ideas, institutions and practices. This paper aims to explore these ramifications through the lens of illustrative examples from the UK, the Netherlands and Denmark. A number of theoretical insights are drawn upon including Freeden’s (1998) ‘morphological’ definition of ideology and discursive institutionalism (Schmidt, 2008; Davoudi, 2018) to explore the interactive processes through which ideological concepts are de-contested, circulated and legitimated, and the role of planning as both object and subject of such de-contestation processes. We argue that ideologies do not simply work through temporary de-contestation of a series of concepts. They are also mediated through ‘rhetorical’ activities of political actors. By examining different rhetorical appeals we explore how planning institutions enact, embed, adapt to, or resist the changing ideological landscapes.

Improving a New, Landmark Displacement Policy by Acknowledging the Complexity of Urban Displacement in the Pacific

Jennifer Day, The University of Melbourne, Australia

This paper examines a new policy on forced displacement and its interplay with climate change, migration, and aid-driven recovery from a natural disaster in urban and peri-urban Port Vila, Vanuatu. The policy is the first of its kind in the Pacific and one of only a handful in the world. I situate it both in its local urban context and in the international context of the confluence of aid, development, and emergency humanitarian response in the world’s poorest cities. The context is an island nation in the South Pacific that is managing an international humanitarian, NGO, and intergovernmental organisation presence remaining from the catastrophic Tropical Cyclone Pam in March 2015 – including the flows of knowledge, information, and capital associated with the recovery efforts. This policy will be used to inform future efforts to make policy in Vanuatu, and it could also generate a platform for dialogue among Small Developing Island States in the Pacific region to engage in high-level dialogue in similar institutional capacity-building to enhance resilience and self-reliance.

The findings are partly based on recent fieldwork in Port Vila, including interviews with 55 households that have been affected by resettlement since 2014, local activists, policy makers, and intergovernmental agency representatives working directly on the policy. I argue that the new policy is disproportionately focused on displacements driven by direct hits of natural disasters and slow-onset climate change – without consideration for complex interactions between climate, disaster, urbanisation, and economic development.

Understanding the Emergence of the Spanish Urban Agenda: Towards a New Multi-level Urban Policy Scenario?

Sonia De Gregorio Hurtado, Universidad Politécnica de Madrid, Spain

González-Medina Moneyba, Universidad Autónoma de Madrid, Spain

In the last years, urban issues have gained visibility in the international scenario on the basis of the definition of supranational urban agendas. These instruments, particularly the New Urban Agenda of United Nations (October 2016) and the Urban Agenda for the European Union (in process), are acting as drivers that call for policy attention to cities and urban issues in decision-making at a national scale. This has led to the definition of urban national agendas in many countries. In the framework of the European Union, Spain is one of the Member States that is following this path as in 2014 committed to developing its national agenda and in the Spring of 2017 the Ministry of Public Works announced the beginning of the work for its definition. The preparation of this instrument is still in progress in the framework of a policy process that arises as full of contradictions and uncertainty when it is contextualized in the national scenario on urban policies. However it has a relevant potential to transform a public domain characterized by fragmentation of competences between different tiers of government and lack of specific attention to urban issues (particularly to urban regeneration) by the national and regional governments (with only few interesting exceptions). The paper will address the emergence of the Spanish Urban Agenda in the framework of the evolution of urban development policies in the country in the past 40 years. The analysis will be focused on the policy-making process through which it is being shaped on the base of in depth interviews to key stakeholders and the revision of official documents. The objective is to provide a better understanding of this process and to foster the reflection about its influence towards a multilevel Spanish urban policy scenario.

Brexit, Birmingham and the 2022 Commonwealth Games: An Opportunity for Regeneration and Rejuvenation?

Alex De Ruyter, Birmingham City University, United Kingdom

David Hearne, Birmingham City University, United Kingdom

Julian Beer, Birmingham City University, United Kingdom

This article explores the awarding of the 2022 Commonwealth Games to Birmingham in the context of Brexit. Much has been made of the potential for major international sporting events to provide a stimulus to urban areas in urgent need of regeneration, for which Manchester and Glasgow are often cited as classic examples in the UK, having previously hosted the Games.

In this sense, the conventional perspective of the Commonwealth Games, as a major sporting event, would analyse the hosting of them in terms of the multiplier effects on the regional economy and prolonged legacy effects. However, Brexit adds a new piquancy to this given the desire by senior UK

Government figures to rejuvenate ties with the Commonwealth. The article critically assesses the potential of the 2022 Games to support this agenda.

The Brexit result also poses a challenge for regional stakeholders, who have to intermediate between competing national agendas on the one hand and differences of opinion amongst their own local constituencies on the other. Brexit in the UK has thrown these tensions into sharp focus, placing a particular set of pressures upon conventional approaches to place leadership.

As such, the article examines the economic arguments around the Games from the conventional perspectives of regional multiplier and legacy effects, before turning to the current Brexit context through utilising interview data gathered with key local and regional stakeholders. The final section revisits the notion of regional policy in a (post-) Brexit context.

Social Mapping as a Developing New Methodology of Urban Planning, the Experience of Such in Villa 31, Buenos Aires City

Mitchell de Sousa, University of Buenos Aires, Argentina

Mora Kestelman, University of Buenos Aires, Argentina

Actual planning tendencies are somewhat returning to some of the approach into the territory by a more pedestrian experience and by such, planners are in some instances, trying to recover some of the infamous views of how we studied cities by some of the greatest authors in urban planning of the 60s. One of these authors, Kevin Lynch, who was retrieving a more down-to-earth concept, the concept of imageability, where the roles of those who actually live the cities, their inhabitants, are the priority in how to deal the problems on actual urban development. Developing the idea of social mapping by putting the main focus on planning on the hands of its inhabitants producing their own perceptions of their cities and how their daily life around them is drawn it's an approximation that goes far from the technocratic and neoliberalist way of viewing and developing the cities. This method nowadays seems to have a lot of good results as applied but all those experiences are pretty much undertaken on the territory without a really support of a theoretical framework concept that holds them up. That means that the work that we are trying to achieve by these is focusing on creating a conceptualization of such method by understanding cities especially in cases of cities in underdeveloped countries. In this study, we focused on the way of how social mapping resulted successful to study the identity on segregated areas in some places in the Buenos Aires agglomeration and how the works of other professionals are contributing on the work of the field on building a completely new concept around social mapping.

The Role of Inner Peripheries in the European Policy Debate: A Review

Andrea De Toni, Università degli Studi del Molise, Italy

Matteo Vizzarri, Università degli Studi del Molise, Italy

Bruno Lasserre, Università degli Studi del Molise, Italy

Paolo Di Martino, Università degli Studi del Molise, Italy

Giovanni Carrosio, University of Trieste, Italy

Lorenzo Sallustio, Università degli Studi del Molise, Italy

Joan Noguera, University of Valencia, Spain

The concept of "Inner Peripheries" has been recently debated in the European context. The binomial "peripherality-marginality", at the basis of this concept, associates the spatial location and poor

accessibility to services, to the socio-economic dynamics. Negative demographic trends, social exclusion and economic decline in such areas may be dealt with European Cohesion and Rural Development Policies' funds aiming to improve the local welfare systems and to support the sustainable rural development. The present work aims to provide a preliminary evaluation of the consistency between Inner Peripheries concept coupled with Cohesion and Rural Development Policies as well as to check possible research gaps in current Academia debate, through a literature review exercise. Main findings reveal that Inner Peripheries concept associated with Cohesion Policy is a relatively new issue in the research field, especially at EU scale. Moreover, most review results describing the connection between Cohesion Policy and Inner Peripheries are mainly focused on the Italian National Strategy for Inner Areas. On the other hand, Rural Development Policy did not result directly related with peculiar common issues regarding Inner Peripheries. Finally, no document treating Policies related to Inner Peripheries was found, highlighting the need to bridge the research gap between EU Policies and Inner Peripheries.

Working from Home and the Willingness to Accept a Longer Commute

Duco De Vos, Delft University of Technology, The Netherlands

Evert Meijers, TU Delft, The Netherlands

Maarten Van Ham, TU Delft, The Netherlands

It is generally found that workers are more inclined to accept a job that is located farther away from home if they have the ability to work from home one day a week or more (telecommuting). Such findings inform us about the effectiveness of telecommuting policies that try to alleviate congestion and transport related emissions, but they also stress that the geography of labour markets is changing due to information technology. We argue that estimates of the effect of working from home on commuting time may be biased because of sorting based on residential- and commuting preferences. In this paper we investigate the relationship between telecommuting and commuting time, controlling for preference based sorting. We use 7 waves of data from the Dutch Labour Supply Panel and show that on average telecommuters have higher marginal cost of one-way commuting time, compared to non-telecommuters. We estimate the effect of telecommuting on commuting time using a fixed-effects approach and we show that preference based sorting biases cross-sectional results upwards. This suggests that the bias due to sorting based on residential preferences is strongest. Working from home allows people to accept 2.1 percent longer commuting times on average, and every additional 8 hours of working from home are associated with 1.5 percent longer commuting times.

Global Open Innovation Practices of SMEs and the Creation of Regional Innovation Ecosystems

Marcus Dejardin, University of Namur and Université catholique de Louvain, Belgium

André Spithoven, Belgian Science Policy Office & Universiteit Gent, Belgium

Innovation accounts for a significant part of regional economic growth and contributes to the resilience of regions by creating a regional innovation ecosystem (Acs et al., 2017). As the complexity of innovation increases, the adequate knowledge base of SMEs can be questioned. SMEs rely increasingly on boundary spanning activities, referred to as open innovation (OI) practices. The paper considers three OI practices – knowledge spillovers, external R&D and collaborative linkages – and their effects on performances –radical product innovation and the innovative turnover it generates. OI practices are relevant for SMEs since they struggle with the liability of smallness; scale limitations,

and fewer technological assets to bargain with (Dahlander and Gann, 2010; Chesbrough, 2011). As SMEs install OI practices, their interactions with actors in the ecosystem are posited beneficial to SMEs performance (Spithoven et al., 2013). These performances feed back into the regional ecosystem.

Five waves of the European innovation survey are analysed (2004-2012) for the regions in Belgium. Each region has its specific ecosystem to which innovative SMEs contribute.

First findings point to differences of OI practices across regional ecosystems. SMEs in the Flemish Region show more open innovation strategies than the Brussels-Capital and Walloon Region. Inclusion of relevant control variables shows that open innovation practices in innovative SMEs differ in their impact on introducing radical innovation and generating innovative turnover across regions. This implies that SMEs also differ across regions when it comes to translating their openness in innovative performances. These will inevitably have a bearing on the regional ecosystem.

The Culture-specific Characteristics of the Talents Attraction: An Exploratory Analysis on European Cultural Clusters

Maria Del Sorbo, European Commission- Joint Research Centre, Italy
Bice Della Piana, University of Salerno, Italy

The talents mobility is becoming increasingly central to economic growth and competitiveness of the regions. The aim of this study is to explore whether culture is associated to the diversity of skills across European cultural clusters. Do EU regions attract diverse skilled people? What talents are culture-specific? To reach this goal we assess mainly the performances of two composite indicators, the Global Talent Competitiveness Index and the Cultural and Creative Cities Monitor Index using the institutional theory as main conceptual background. First findings show that the Nordic Europe scores the best average in the Global Talent Competitiveness Index 2017 ranking, immediately followed by the Anglo cluster. The Nordic Europe keeps the leading position in terms of enabling, growing and retaining talents to generate vocational skills. However, the Anglo cluster takes the lead with regards to the capacity of attracting talents to generate global skills. Nevertheless, the Germanic Europe takes the lead in terms of capacity to generate vocational skills. Also, according to the Cultural and Creative city monitor index on average the cities belonging to the Germanic Europe, e.g. Eindhoven, Amsterdam and Linz record the best performances. On the other hand, on average the cities that better enable environment by human capital and openness, trust and tolerance belong to the Nordic Europe; the Germanic Europe cities immediately follow. However, the Anglo cities are the most frequent among the top performers followed by the Germanic ones. Surprisingly, Latin Europe and Eastern Europe cities lack among the best performers respectively in terms of tolerance and trust; and human capital and education.

Subnational Strategic Behavior for Development: A Contribution to the Analysis of Argentine Regional Economies

Javier Diaz Bay, Universidad Nacional de Luján, Argentina
Giuliano Pontoriero, IIECST - UCCuyo, Argentina
Pablo Tillan, IIECST - UCCuyo, Argentina
José A. Camacho Ballesta, IDR - U. de Granada, Spain

Composite indicators are increasingly recognized as a useful tool for performance evaluation in policy analysis. The development possibilities of a subnational space are conditioned by several factors

among which we can highlight: the economic environment, the fiscal behavior, the relationship between subnational government and its Federal State and the institutionality. In a systemic vision, subnational governments act as complex organizations that operate in turbulent environments and need to assume strategic behavior. The paper is aimed to develop an approach to track and analyze subnational strategic behavior to compare Argentine provinces and its dynamics in 2003-2015. We consider a technique focused on the estimation of composite indicators for the provinces using homogeneous individual indicators into those dimensions mentioned. A double objective is proposed: methodologically the development of an instrument that allow the simultaneous evaluation of strategic behavior of different subnational spaces and, on the other, to generate useful information for governmental decision making.

Long Regional Time Series on Cohesion Policy and Regional Accounts

Lewis Dijkstra, EU Commission, Belgium

Cohesion Policy is the EU's main investment policy. However, consistent data on its commitments and expenditure has been hard to come by. This presentation will show the newly created, consistent time series that have been created with regard to commitments and expenditure. In addition, longer time series with data from regional accounts, the labour force survey and demographic data will also be provided to facilitate the analysis of the impact of Cohesion Policy.

The Contribution of Croatian Polytechnics to Building of Science-Industry Links

Irena Dokic, The Institute Of Economics, Zagreb, Croatia

Ana Kralj, Regional Development Agency Međimurje REDEA d.o.o., Croatia

Education is a type of an investment that can result in significant economic benefits for individuals and for the society. It becomes a precondition for innovation activities which commonly lead to economic growth, and improvement of overall quality of life. A number of studies suggest that teaching and basic research conducted by higher education institutions (HEI) have positive effects on regional development, especially in small and medium-sized regions.

An opportunity to improve the educational structure in order to increase regional competitiveness had been sought, by some county administrations in Croatia, in establishing HEI, i.e. polytechnics. Today, 14 public and private polytechnics exist in 12 Croatian cities/towns, offering 101 study programmes. Establishing polytechnics in county capitals led to increasing accessibility of higher education to local population and adjusting study programmes to the needs of local economy. Our research should reveal the following:

- To what extent the HEI in Croatia contribute to building the links between the science and industry?
- Do HEI's study programmes provide a relevant education for future deployment of key enabling technologies in their or other Croatian regions?
- To what extent are education programmes at HEI complementary to the RIS3 strategy and its expected achievements/objectives?

Using various statistical methods and available data, authors will explore if these education structures contributed to positive and/or negative changes in regional economies. Results of this research should

provide policy-makers recommendations on how this potential should be more or better exploited, to provide long-term positive impacts on various aspects of economic development.

A Spatial Scientometric Analysis of Scientific Publications Made by the European Commission

Nicola Francesco Dotti, Vrije Universiteit Brussel (VUB), Belgium

Walter Ysebaert, Vrije Universiteit Brussel (VUB), Belgium

In the recent year, spatial scientometrics has emerged as a way to map the geography of scientific publications, co-authorship and citations (see, e.g., Frenken et al., 2009). Several methods and tools have been developed to identify top scholars and most influential institutions moving forward our understanding of the spatial dynamics of research and knowledge.

Within this framework, we aim to analyse an exceptional actor: the EU Commission (EC), namely the directorate generals in charge of urban and regional policy (DG-Regio). Despite being mainly an administrative body, the EC as a whole has a rather impressive track list of scientific publications. A simple analysis in Scopus shows over 300 scientific articles per year published by EC-affiliated authors, and this result by excluding the Joint Research Centres. This result is rather impressive as such while providing the opportunity to understand the existing scientific cooperations between EC-affiliated authors and other scholars.

The paper aims to identify the authors, journals and institutions that are the primary scientific partners of the EC regarding co-authorships and citations. Acknowledging the limitations of these indicators, the paper relies on consolidated techniques of spatial scientometrics to identify the most influential cities and regions having scientific relationships with EU policymakers through peer-reviewed publications. Specific attention is devoted to publications made by DG-Regio in comparison to other EC's DGs to identify potential geographical mismatches and spatial cognitive biases.

Hybrid Patterns of Development – Sectoral and Territorial Hybridization in Central Europe

Adam Drobniak, University of Economics in Katowice, Poland

The business response to globalization changes assumes a rapid search for new products and markets to gain a competitive advantage. This is accompanied by combining the mobility of private capital with public intervention, the mobility of human capital with increasing access to information, attractive residence and work. These linkages take place in a space of different legacy. The consequences of these interactions are various flows of assets and effects in space.

Interactions between business (reorganization of value chains subordinate to the efficiency criterion) and public ventures (amenities subordinate to location benefits) can lead to different development patterns. Polarization patterns result from the strengthening or weakening of the interaction between business and public ventures. The high variability of the growth dynamics of both the business sector and the territorial units indicates the existence of a hybrid development pattern manifested by: the emergence of growth dynamics in peripheries, the weakening growth dynamics in core areas, lack of direct relations between the potential of spatial units and the growth dynamics.

The article aims at searching for the causes of significant differentiation of the growth dynamics of territorial units in Central Europe, manifested in hybrid development patterns. It was divided into three parts. The concept of hybrid pattern of development was outlined in the first. Then, the a-spatial

organization of value chains in selected business sectors was demonstrated (individual direct interviews). In the third part, a large heterogeneity and changeability of development effects of territorial units in Central Europe was demonstrated (cluster analysis).

The Belt and Road Initiative: A New Direction for the Development of the World Island?

Michael Dunford, Chinese Academy of Sciences, China

Drawing on the concept of uneven and combined development I shall seek to compare two phases of Eurasian and global development: in the postwar Keynesian Golden Age and in the phase of neo-liberal globalization. In this light I shall ask in what sense the BRI offers the potential for new development trajectories.

Utilizing Knowledge for Adaptation in Furniture Clusters of Different Histories and Institutional Contexts.

Wojciech Dyba, Adam Mickiewicz University in Poznan, Poland

One of the key factors of successful adaptation of firms and industries is new knowledge. It allows to adapt both to evolutionary and radical market changes. Special conditions for acquiring and utilizing new knowledge appear in clusters, where firms and institutions representing selected economic sectors are networking with each other and with institutions. Acquiring and utilizing new knowledge (both technological and business, explicit and tacit) may lead to positive results for firms: higher sales, and exports or innovativeness. The more successfully adapting firms, the more resilient the industry and region where they operate.

To investigate that issue empirically, research was conducted in two furniture clusters (districts) with different histories and institutional contexts: Livenza Furniture District in Treviso and Pordenone (Northern Italy) and Kępno Furniture District in Wielkopolska (Western Poland). The first one, Livenza Furniture District – is a renowned worldwide and mature cluster – with long traditions of furniture production, operating in a shaped business environment. The second – Kępno Furniture District – is younger, with potential for further growth, located in the economy where organisations cooperating with firms are still novel. Both clusters achieve good economic results and have gone quite mildly through the most recent economic crisis. The research consisted of a representative survey among furniture firms (213 firms from Livenza and 100 from Kępno) as well as interviews with firms that had successfully adapted to market changes. The study showed differences in knowledge management in both clusters allowing to formulate variant paths of adaptation of firms and clusters.

New Regional Development Tools and Reindustrialisation in France: Territorial Stakeholders, Beneficiaries and Funding Agencies

Ildiko Egyed, HAS Centre for Economic and Regional Studies, Hungary

Despite the significant results of voluntaristic regional policy in the industrialisation of underdeveloped regions, France is among the most de-industrialised countries of Europe. The dominant trends of metropolisation, creating „non-places” in formerly integrated territories and the current transformations affecting production systems have led to the aggravation of socio-economic disparities between and within regions. The emergence of functional voids (sensitive urban zones,

abandoned sites, etc.) explains the declining performance of territorial production systems in regions most severely affected by deindustrialisation.

The decisive focus of regional and industrial policy on maximising the contribution of the most productive territories to national growth objectives reflects a paradigm change of regional policy previously dedicated to enhancing the attractiveness of less industrialised regions. The prioritization of key enabling technologies in regional smart specialisation strategies further contributes to the erosion of less technology-intensive firms and traditional industrial activities located in medium-sized and small settlements. SMEs' growth into intermediate-sized firms is impeded by various obstacles, and their innovative and export performance is deemed insufficient. The recent focus on intermediate-sized firms (250-2000 employees) notwithstanding, the French economy remains dominated by large groups.

The presentation, by assessing, through case studies and international comparisons, the success of new funding mechanisms for firms at the level of local and national strategies, will interrogate the role of the state in the identification of winning sectors and territories. Accordingly, funding schemes targeting SME growth, innovation support, the role of competitiveness poles, and a diverse set of different territorial production systems will be considered.

Spending on Arts Culture: Does it Really Impact Wellbeing – An exploratory Study into Local Government in Victoria

Meg Elkins, RMIT University, Australia

Bronwyn Coate, RMIT University, Australia

Spending on Arts and Culture for local governments is often viewed as a merit good due to the externalities created. Previous research has demonstrated the relationship between regional economic growth and regional expenditure on arts, culture and heritage. However, there is a limited evidence to suggest there is a link between how much local governments are spending in arts and culture and whether this has any correlation with community wellbeing outcomes.

In this research we use expenditure data from several local government councils in regional and metropolitan Victoria and recognised measures on wellbeing; the Victorian Health Indicators Survey and an OECD's wellbeing measures to examine this relationship. The findings of this research have significant implications for policymakers at a time when public authorities are under increased scrutiny in the effective management of public finances. This paper can evidence as to the effectiveness of the spending on wellbeing for their constituents. In particular, how local governments can use their resources in human, social, economic and natural capital to enhance future wellbeing in their communities.

Land, is it a Resource or a Place-making Element? Urban Design for multi-lateral Approach of 'Pod Development' Crisis

Abeer Elshater, Ain Shams University, Egypt

Further alteration in the morphological composition of urban districts is that from outward-facing urban blocks to inward-focused complexes of buildings often referred to as 'pods'. In 'pod' developments, each use; the fast-food outlet, shopping mall, office park, residential construction, hotel, housing cluster, etc., is considered as a separate part, enclosed by its allied parking and generally

with its entrances toward a collector or main distributor road. The literature argues the idea of separation in the point of walking distances from one side and/or the segregation on the social interaction. Besides some has mentioned against these to pedestrian-oriented which might be in Egyptian communities has the character of being private spaces with access and behaviour tightly controlled and regulated. The current research tries to combine the different approaches to come over the problem of waste in lands as a natural resource whether these lands are small parcels or significant areas in the city. The investigated cases in Cairo show the gap in linking disciplines of Architecture and the holistic gaze of Egyptian urban designer.

The current research follows the ex-post facto analysis and extent of the analytical investigation of the case study. The work applies a unitary approach to understanding and researching the phenomenology of lost spaces and resettlement plans. The contribution lays on giving a different perspective of sustain recourses where land is one of it that should be reserved for the efficient uses. The current research follows the ex-post facto research and extent of the analytical investigation of the case study. The work applies a unitary approach to understanding and researching the phenomenology of lost spaces and resettlement plans. The contribution lays on giving a different perspective of sustain recourses where land is one of it that should be reserved for the efficient uses.

Workers' Participation in Regional Economic Change Following Establishment Closure

Rikard Eriksson, Umeå University, Sweden

Lars-Fredrik Andersson, Umeå universitet, Sweden

Therese Danley, Umeå universitet, Sweden

Martin Henning, Gothenburg University, Sweden

This article analyses if and when workers affected by economic destruction in the form of establishment closures move to more productive or newly started establishments in the region, become self-employed, leave the region, or become displaced. Results from multinomial probit models show that the majority of these workers face destructive employment outcomes from a Schumpeterian point of view compared to a matched sample of workers not subject to a closure. However, we do find indications of a creative destruction as a small, albeit significant, share become employed in young establishments. Different types of human capital influence the likelihood of triggering positive or negative regional outcomes. While higher education significantly decreases the risk for unemployment, high income earners more often become engaged in creative outcomes. Firm tenure increases the likelihood of becoming employed in younger establishments. There are significant spatial differences where metropolitan regions excel as loci of creative change, whereas smaller and peripheral regions face far less creative outcomes of economic transformation.

Service Sector Survival in Crisis: Evidence from Antalya Tourism City

Hilal Erkuş Öztürk, Akdeniz University, Turkey

Kemal Türkcan, Akdeniz University, Turkey

The survival of companies in tourism cities has always been in discussion, particularly because their economies are dominated by localization economies. Crises make tourism cities more fragile which makes these cities an ideal case to analyze the effects of crisis on firm survival. Antalya, the leading mass tourism city of Turkey has been negatively affected by the economic and political crisis in 2015 and 2016. Companies in service sector, mainly hotels, have been negatively affected by the crisis

(economical and political). This paper aims to determine factors influencing service firms' survival in a touristic city that is in crisis. By using firm entry and exit data in service sector, discrete-time survival analysis with a complementary log-log hazard function is employed to analyze the determinants of the survival. Findings explore indicators for service sector firm survival and shed light on adaptation and recovery strategies of cities specialized on one sector, especially service sector.

Local Infrastructure Assets and the Creation of Alternative Values through Industrial Symbiosis and the Circular Economy

Aksel Ersoy, Delft University of Technology, The Netherlands

John Bryson, University of Birmingham, United Kingdom

Ellen van Bueren, Delft University of Technology, The Netherlands

Cities are complex entities consisting of interwoven capital-intensive infrastructures that rely in turn on financial infrastructure. While infrastructure investments are based on specific measures, there is a need to understand alternative values related to infrastructure system interdependencies that would benefit the wider economy and society. This paper explores the application of industrial symbiosis and the circular economy to the development and management of local infrastructure assets through the analysis of four (2 UK and 2 Dutch) cases that challenge conventional approaches.

Assessing the Competitiveness of Britain's Core Cities

Emil Evenhuis, University of Cambridge, The Netherlands

Ron Martin, University of Cambridge, United Kingdom

Ben Gardiner, University of Cambridge, United Kingdom

Peter Tyler, University of Cambridge, United Kingdom

Peter Sunley, University of Southampton, United Kingdom

Over the past 15 years or so, there has been a considerable rise in interest in cities, as they are seen as the key loci in which various flows in an increasingly globalised world come together and in which many of the high-powered functions of the global economy are concentrated. Also in the UK, cities have assumed new prominence in policy, prompting a renewed interest in the long-standing issue of the clear disparities between London (and its immediate hinterland) and other major cities in Britain. This paper analyses the performance of the Core Cities (the 10 largest cities in the UK outside London) since the early 1970s. For this we will use a series of datasets on a range of aspects concerning the economic development of British cities, which have been newly assembled as part of a collaborative project on "Structural Transformation, Adaptability and City Economic Evolutions" (see www.cityevolutions.org.uk). The paper will examine the aggregate performance across the Core Cities (also in comparison to London), and then consider various interrelated factors which may explain the clear differences in performance and overall competitiveness: industrial structure, productivity, innovation, human capital, agglomeration economies, and policy. On the basis of this detailed analysis of the competitiveness of the Core Cities, the paper then also presents some observations about the probable impact of Brexit for these cities. We will conclude with several lessons for enhancing the competitiveness of the Core Cities, and for supporting their role in spatially rebalancing the economy of the UK.

Characteristics of the Innovation Processes in Oil and Gas Firms During a Market Downturn.

Kaya Færøvik, Western Norway University of Applied Sciences, Norway

Natalia Mæhle, Western Norway University of Applied Sciences, Norway

When the crude oil price dropped in 2014 it presented the firms in Western Norway, a region heavily dependent on the oil industry, with a challenging situation. To stabilise itself against future market fluxes, the oil and gas firms need to undergo a restructuring process to develop a more diverse, environmentally sustainable and less oil dependent industry. To understand this development, the current paper looks at the innovation processes of these firms with emphasis on the firms' path dependence, innovation capability and resilience. We have a special focus on the characteristics of the innovation process and how a firms' path changes and evolves as a result of an industry downturn. Firms' path evolution depends on how past and present events affect firms' organisational components, such as competence, structure, cross-industry innovation capability and network.

The paper analyses and compares six small to medium sized oil and gas firms in Western Norway. The empiric data is gathered through qualitative interviews with each firm, both in 2014 at the pre-set of the oil crisis, and again in 2018 as the industry is stabilising. During the interviews we discuss the various elements of the innovation processes, from structural implications to external influences. As a result, we analyse how the firms' paths evolved during these years, and which characteristics of the firms' innovation processes have enabled them to survive in a challenging situation. By conducting a longitudinal comparison of the firms, we develop a framework for innovation processes in times of market downturns.

Mechanisms for and Practices of Greening Local Economic Development

Fabian Faller, Kiel University, Germany

The greening of economic activity is a key concern of sustainable local economic development. Previous studies focussing mechanisms of industrial and local greening dealt i.e. with the role of local government and governance, questions of agency and leadership, or institutional environments in the processes of greening. This paper brings together these different strands in order to give a full account of mechanisms that foster a green turn in local economic development. The conceptual insights lead over to a qualitative in-depth case study on the green economy in the local context of the City of Kiel, Germany. I present an ex-post evaluation of greening processes in order to develop a better understanding of the evolution of green economic practices in context. These greening processes lead to reductions in resource consumption and greenhouse gas emissions through inner-firm management systems or formalised institutional rules, but also through economic and political power to steer development or social processes of environmental bargaining. The paper presents key drivers and barriers of these processes with a focus on economic and political practices in the realm of a green economy agenda as well as on their relations. Examples of mechanisms for implementing green economic practices in Kiel are manifold, spanning e.g. from firm to parent group decision, from production to user driven ecological innovation, or from local to European policy stimuli.

How Sustainable is Regional Development?: An Application of an Regional Sustainable Account (RSA) Model in East Kalimantan, Indonesia

Akhmad Fauzi, Bogor Agricultural University (IPB), Indonesia

Margiyono Margiyono, Graduate School of Regional and Rural Development, Bogor Agricultural University, Indonesia

East Kalimantan (Borneo) is one the richest provinces in Indonesia. Endowed with abundant natural resources such as oil and gas, coal, and forest, economic growth in East Kalimantan during the 1990s and the 2000s was among the highest in Indonesia, with an average growth of more than 7% per year. Recently, however, East Kalimantan experienced contraction of -1.28 in its economic growth even though the province has high score in human development index and environmental composite index. This is an interesting sustainable development paradox and worth of further investigation. This study aims to address such a phenomenon using a more comprehensive sustainable assessment so called Regional Sustainable Account or RSA. The RSA is sustainable accounting technique incorporating three sustainable accounts i.e., economic account, social account and ecological account. The approach is a modification of LQ model used in regional assessment combined with Geographical Information System (GIS). The results of study show a classification of region according to their sustainability grade ranging from chronic unsustainable to good sustainable. The results of this could be used as policy recommendation for policy makers in order to develop its regions in a more sustainable way based on comprehensive measure of economic, social and ecological accounts. The results of this study could also be used as lesson learned for other provinces in Indonesia as evaluation instrument for regional development.

Beyond Cities and Metropolis, a Differentiated Portrait of Urbanisation in Italy

Valeria Fedeli, Politecnico di Milano, Italy

Alessandro Balducci, Politecnico di Milano, Italy

Camilla Perrone, Università di Firenze, Italy

Francesco Curci, Politecnico di Milano, Italy

the paper aims at presenting the most critical results of a recent national research project (funded by the Italian national Ministry for Education and University 2013-2016), dedicated to observe measure and depict main processes of socio-spatial-economic and institutional change in contemporary Italy. Adopting as an explorative dispositive the port-manteau concept of post-metropolis introduced by Soja, the research started from the necessity to renew some among the traditional and consolidated representations of the urban phenomena in Italy, like “metropolitan areas/inner areas”, “north–south divide” but also hierarchical polycentrism (big cities/small and medium towns). A comparative research work that brings together case studies of a number of Italian cities and their hinterlands together with an ‘Atlas of post-metropolitan territories’ are the methodological tools adopted to look at new urban(ity) forms. With such methodological tools the paper digs into questions of sustainability, land, infrastructures (as corridors, which host social and economic dynamics), governance (as re-assembling/rescaling of either institutional fragmentation or new geographies of inter-city cooperation), and habitability. As a result of this exploration an updated portrait of contemporary Italian urban phenomena is provided. The necessity to adopt a transcalar perspective on the multiple spatial, social, economic and institutional changes of urban Italy — that is a spatial flux, rather than a spatial fix perspective — is presented as a major conclusion by the research project. Finally the paper presents some conclusions on the methodological challenges for the interpretation

of the forms of contemporary urban while contributing to the debate on a new urban theory in order to feed a new urban agenda.

Linking Cohesion Policy and Citizens' Identification with the EU in Regions: Between Opportunism and Euroscepticism in the Netherlands

Ana Maria Fernandez Maldonado, TU Delft, The Netherlands

Marjolein Spaans, Delft University of Technology, The Netherlands

Marcin Dąbrowski, Delft University of Technology, The Netherlands

Roberto Rocco, Delft University of Technology, The Netherlands

Cohesion Policy being the EU's policy, bringing investment funds to European regions, has arguably the most tangible impacts on the citizens' environment and livelihoods. One could thus expect that it has a significant positive impact on the ways in which citizens perceive the EU. But does it? How does the regional context affect this linkage between the use of European funding for regional development and the identification with the EU? This paper brings an element of response to this question through study of two Dutch regions -Flevoland and Limburg - conducted as part of the Horizon 2020 COHESIFY project (Grant Agreement no 693427). The first used to be a substantial receiver of Structural Funds, but today finds itself marginalised in the stream of EU funding, while the latter is at the heart of a cross-border area with deeply embedded cooperation long-supported by Cohesion Policy. Although citizens in both regions show attachment to the EU, the perception of how the EU works tends to be negative. To what extent are those views related to the ways in which EU Cohesion Policy has been implemented in those regions? Drawing on interviews with the key policy stakeholders, surveys and focus groups with citizens, the paper explores this question and sheds light on the capacity of Cohesion Policy to mobilise positive European identification from the perspective of a country that is a net contributor to EU budget.

Investment to Human Capital in Czech Regions in the Context of Industry 4.0: Overview and Preparedness to New Challenges

Marek Feurich, University Of Economics Prague, Czech Republic

Czech Republic is historically very industry oriented country. Czech industry currently creates almost one third of GDP. Therefore, the upcoming fourth industrial revolution will affect the large part of the population and will have an essential impact on the demanded qualification and the labor market in general. These impacts will lead to changes in the role of employees and changes in workload of many professions. The Industry 4.0 as well as all previous technological changes will have an impact on employment and unemployment and will lead to the disappearance of certain professions / industries and vice versa. New automation and optimization processes will push out simpler and repetitive activities which will result in the release of less qualified workforce. All these changes requires a new set up of labor market and education policies. But, is the Czech Republic well prepared for these challenges? Differences between regions in the Czech Republic are significant therefore the individual approach in many regions must be implemented. This paper presents a brief overview of what new labor market and educational policies in which regions have been so far implemented and what investments to human capital have been made or are planned to be made in a near future.

Acknowledgements: This work was funded by the Internal Grant Agency of the University of Economics, Prague under the title 'Trends and context of human resources development in Czech

Republic regions - theoretical basis, problems, strengths, risks and opportunities of new challenges in period 4.0' [grant number F5/40/2018].

Is Public Entrepreneurial Financing Contributing to Territorial Servitization in Manufacturing and KIBS in the US?

Maria Figueroa-Armijos, Kogod School of Business, American University, United States

This study uses territorial innovation theory and recent interdisciplinary research advances on territorial servitization to examine the effect of public financing on firm survival and employment in the manufacturing sector in the United States, in comparison with the knowledgeintensive based services sector (KIBS). The goal of this study is to inform servitization efforts on the effect of public entrepreneurial financing to support the renaissance of manufacturing. I use logistic and multivariate regression analysis on over one million firm-level observations from SBO PUMS. Results indicate that both public start-up capital and public expansion capital, in the form of government loans and government guaranteed loans, increase firm survival, and the firm's receipts and employment in the manufacturing sector, and also for the knowledgeintensive sector, when compared to private sources of capital. In sensitivity analyses, no effect is observed for government grants. For both public start-up and expansion capital, the highest effect on firm survival and performance indicators is observed in the manufacturing sector, followed by the average for all sectors, and the knowledge-intensive sector.

Individual and Family Predictors of Self-Employment as a Sustainable Career Option Among Millennials

Maria Figueroa-Armijos, Kogod School of Business, American University, United States

Serge P. da Motta Veiga, American University, United States

Evidence indicates that millennials –born between 1980-95 seek work-life balance, flexibility, and making a difference in their organization above higher pay or other extrinsic work values, which has set distinctive contextual career goals and expectations for this generation in the workforce. Self-employment seems to present a good fit for millennials' career goals and expectations. Indeed, the literature suggests that people are attracted to work settings that align with their values and interests. But what factors drive millennials to pursue selfemployment?

In this study, we align research on millennials and self-employment with research on sustainable careers to investigate the dynamics driving millennials' self-employment choice, ranging from the influence of parental style and career-related advice (family-level predictors) to life and career satisfaction (person-level predictors). Results on parental style and career-related advice indicate that, overall, higher autonomy and less parental dependency are positive predictors of millennials' self-employment decision, which is consistent with research on millennials. Results at the person-level suggest higher job and life satisfaction among millennials leads to higher levels of self-employment.

International Economic Disintegration: A Methodological Account

Anton Filipenko, National Taras Shevchenko University Of Kyiv, Ukraine

The process of international economic disintegration is a newly, sophisticated and complex phenomenon. It has economic, political, social, psychological, historical, institutional and other measurements. That postulates indispensable of using transdisciplinary methodology in this area particularly evolutionary and behavioural economic methodologies. The methodological basis of behaviourism is largely based on the evolutionary theory of Darwin. Biology along with mathematics is a paradigm base for solving static and dynamic problems. Regarding economic statics (defined as the logic of coordination), biology provides its paradigmatic pillar in the form of a systematic approach for organic systems. The historical dynamics of the system, as its second pillar, is described by the concept of ontogenesis and phylogenesis.

Mechanisms of disintegration process are based on the methodology of systems analysis, include a policy of coordination, game theory, decision-making theory. The coordination policy is illustrated by the prisoner dilemma, the game theory may pose 'Trust Game', 'Ultimatum Game' and 'Dictator Game'. In the theory of decision-making, the starting point is the theory of social choice, based on K. Arrow's Impossibility Theorem and Kahneman-Tversky's Prospect Theory. The methodological basis for the study of the consequences of international economic disintegration are the Computable General Equilibrium model, Gravity Models and New Quantitative Trade Models.

How Does Innovation Affect Job creation and Wages?

Rune Dahl Fitjar, University of Stavanger, Norway

Andrés Rodríguez-Pose, London School of Economics, United Kingdom

Regional development policy increasingly focuses on innovation as the main driver of regional competitiveness and growth. However, there is a dearth of studies on how the rents created by innovation are distributed, and in particular on its effects on workers. This paper examines how product and process innovation in firms affect employment growth and wage levels in the firm itself and in other proximate firms. We rely on data from Norwegian employment registers - including information on firm of employment and individual wages - and from the Community Innovation Survey to examine in a fixed-effects model how wages and employment levels change following a successful product or process innovation by the firm.

Who is the Policy-maker? Agency in Regional Innovation Policy in Greater Manchester and the Basque Country

Keiron Flanagan, University of Manchester, United Kingdom

Eduño Magro, University of Deusto, Spain

Elvira Uyarra, University of Manchester, United Kingdom

James Wilson, University of Deusto, Spain

The policy landscape around the promotion of innovation-driven economic development is becoming increasingly complex, especially in the regional context. Innovation 'policy mixes' are complex multi-level, multi-actor phenomena that evolve over time and in which a variety of goals and means, not necessarily compatible, collide together (Flanagan et al., 2011). Regions are increasingly important 'policy spaces' in relation to innovation –stages on which the impacts of policy actions and decisions

taken at different levels, by a range of actors, are played out (Uyarra and Flanagan, 2010). Finally, there has been a blurring of boundaries between public and private, political and administrative, and traditional and non-traditional actors in policy design and implementation processes, so that it is increasingly difficult to say who 'the policy-maker' is. Accepting that a wide range of actors have agency as active members of policy networks or even as policy entrepreneurs, shaping public policies and their implementation (Flanagan et al., 2011), this paper explores multi-actor policy dynamics in two different contexts, namely the Greater Manchester conurbation in the North West of England, and the Basque Country region in Spain.

Within the UK, English city-regions have been characterised by low levels of fiscal and administrative devolution and fragmented governance, London excepted. Competences and instruments of innovation policy have been largely held by central government. However, Greater Manchester (GM) has been in the vanguard of developments to pool municipal sovereignty to win new devolved powers. Central to this story are not only the expected government and municipal actors, universities and large firms coming together in traditional ways (but also novel and surprising constellations), but also highly influential property developers. The GM case is characterised by dense and overlapping governance public/private networks in which mutual co-ordination, active collaboration but also significant tensions, can be observed. The policy discourse is increasingly influenced by US ideas about innovation districts rather than more traditional cluster or 'smart specialisation' theories. It's also a discourse about competing geographies, with the relevant 'Manchester' for innovation policy being different to different actors.

The Basque region of Spain, in contrast, is widely recognised as one of only a few European regions with almost complete competences in innovation policy. There is a complex formal arrangement of governmental institutions (administrations and their agencies) at different levels (regional government, provincial councils, counties, local municipalities). The region's three very different universities, key knowledge actors such as technology centres and cooperative research centres, and private companies also all play important roles in regional innovation policy making, especially in the framework of the smart specialisation strategies.

By exploring these two very different but equally dynamic cases, the paper will generate reflections on the important question of who has agency in innovation policy today, and how this is evolving.

The Role of Financial Services in Spatial Processes

Balazs Gyorgy Forman, Corvinus University of Budapest, Hungary

The role of financial services in spatial processes

Three elements of financial services were examined in the spatial processes. These were the commercial banks' accounts and the ATM network, retail products and services, services to businesses, savings habits and investments in the population. The substitutability between different types of investment. Forms of accumulation of assets are entrepreneurial capital or real estate investments.

One of the reasons for the slow development of rural areas is that relatives withdraw their income from businesses immediately. Thus, there is no capital accumulation in enterprises. Because of this, they are unable to grow, modernize and recruit new staff. Due to low capital supply, they will not be creditworthy in the long run, they will not be competitive.

In my opinion, the key to long-term development lies not in large-scale financial support, but in the development of financial awareness, entrepreneurship, and the exploitation of local resources in the effective competition regulation of local and regional markets.

One or Many Regional Policies? Taxonomizing a Widespread Yet Elusive Term

Ugo Fratesi, Politecnico di Milano, Italy

The literature on regional policy is very wide and a very large number of papers is published every month with ideas on how to implement it, how to make it more effective, what type of regional policy is best suited to different situations.

Yet, the concept of regional policy is very articulated, comprehending a large number of different policies. The distinction between these ones is rarely explicit in the literature, where the term is used regardless of the different analyses.

Aim of this paper is to review the regional policy literature and build a classification of regional policy based on its various different dimensions.

These dimensions will include: the spatial scale at which regional policy is applied, the objectives of the policy and its intended beneficiaries, the entity implementing it and the governance of the interventions, the financing source of the policy, the time span over which the objectives are supposed to be achieved, the regional context in which the policy is implemented, the theoretical framework justifying the implementation of the policy.

Things are made more complex by the fact that these categories are often non mutually exclusive, as real world policies might, for example, target a combination of beneficiaries, include a combination of institutions or a multiplicity of objectives.

Examples coming from the policy practice and the regional academic literature will help shed light on how to classify regional policies.

The purpose of this classification is to invite scholars and policy-makers to be more explicit in identifying what type of regional policy they are talking about, so that literature results obtained for one type are never simplistically assumed to work in other contexts.

Understanding Effectiveness in Sub-regional/Supra-local Governance: Institutional Dynamics for Strategic Territorial Governance in Between Path Dependence and Regional Diversification

Chiara Farné Fratini, University of Florence, United Kingdom

Filippo Randelli, University of Florence, Italy

Patrizia Romei, University of Florence, Italy

Francesco Dini, University of Florence, Italy

This paper is concerned with the effectiveness of territorial governance within Italian sub-regional/supra-local entities, which have been defined by Eurostat as Nuts 3 regions and whose administrative role and boundaries have, despite numerous pressures for structural reorganization, been characterized by a disruptive path dependency. Missing an effective national strategy for territorial governance, Italian regions and sub-regional organizations have engaged into diversifying strategic and collaborative activities to respond to both local and European pressures for sustainable

development and economic growth. It is widely agreed among scholars that institutional context and regional diversifications are strongly interrelated, where institutions, are broadly defined as the basic (cultural, cognitive, normative and regulative) building blocks of social and political order. Therefore, the strategic governance of territorial capital is understood as a process of institutional creation, maintenance and/or disruption, which can contribute with new opportunities and/or barriers for territorial prosperity. This paper aims at unfolding the role played by institutional dynamics and regional diversification on the effectiveness of territorial governance comparing three cases of strategic sub-regional governance, selected to represent regional diversifications characterizing respectively the North, the Centre and the South of Italy. Our ambition is to contribute with policy recommendations and with ad hoc strategic advices for improving the effectiveness of territorial governance for sustainable growth in Italy therefore contributing with novel insights on what the Territorial Agenda of the European Union 2020 defines as place-based approach to policy making and on multi-level governance for inclusive and sustainable transformations in European Nuts 3 regions.

Mobilities in Rural Coastal Regions: Dynamics of Resilience in Northern Cyclades (Greece) in Times of Crisis

Loukia - Maria Fratsea, Harokopio University, Greece

Apostolos G. Papadopoulos, Harokopio University, Greece

Rural areas should not be any more considered as isolated locales, but they should be rather approached as dynamic places which are continuously reconfigured and reconnected with other areas (both rural and urban). Rural residents are not a stable category containing only permanent population, as increasingly non-permanent population groups end up living in rural areas while, at the same time, they pose a number of challenges for the particular places of their settlement. Rural mobilities combined with economic, social and environmental factors and policies play an important role in determining the attractiveness of rural regions.

The recent economic crisis intensified by austerity measures imposed onto the country has significantly affected Greek rural regions. However, in this harsh economic environment some rural regions presented higher adaptive capacity and were more resilient. In those areas, a number of resilient practices were developed by permanent and non-permanent population groups to ensure sustainable local development.

The paper analyzes the various mobilities in two rural coastal areas in Northern Cyclades in view of their local economic development. The analysis is based on statistical data from the last population census of 2011 and field work data collected in two-time periods (2014 and 2017). In total, 450 questionnaires were distributed in the two areas, while 40 qualitative interviews were carried out. The aim of the paper is to discuss the dynamics of resilience in two rural coastal areas in connection with the mobilities of various population groups which increase rural attractiveness.

Co-working spaces – A new Working Environment for Urban Entrepreneurs and Start-ups that Creates a Social and Business Climate

Amnon Frenkel, Faculty of Architecture and Town Planning, Technion - Israel Institute of Technology, Israel

In the last few years, new forms of workspaces have begun to appear; known as “Coworking Spaces” – a hybrid of independent work life within a traditional work environment. A work environment that provides, on the one hand, a personal and defined workspace amongst a community of people, while, on the other hand, provides the possibility to work independently and benefit from the freedom it entails. These new working places create potential catalysts of growth and creativity in the urban space.

This study focused on one of the largest coworking spaces in Tel Aviv, Mind-Space, which has about 850 coworkers working in small 250 companies start-ups and as self-employees. An online questionnaire was distributed among the entrepreneurs working in Mind-Space. In addition, observations were conducted, and open interviews were held with managers, entrepreneurs, and employees. The findings shed light on entrepreneurship ecosystem the characteristics of the urban entrepreneurs, the reason for selecting coworking space as their preferred place and their lifestyle characteristic. The results indicated that there is a link between the choice of workplace and the choice of residence. The three most important factors residence considerations are: neighborhood quality, proximity to workplace, and proximity to the center of culture, entertainment and leisure. These city entrepreneurs often do not distinguish between leisure hours and work hours, and therefore choose to live in the center, which is considered a thriving center of entertainment, culture, and leisure, and choose a workplace nearby that will fit into their preferred lifestyles.

Europeanisation of National and Sub-national Metropolitan Policies The Appearance of City-Regional Issues in the European Multi-Scalar Polity

Carola Fricke, Human Geography, Faculty for the Environment and Natural Resources, University of Freiburg, Germany

This paper addresses the appearance of metropolitan regions in the European policy arena by reflecting on the changing relationship between European Union (EU) policies and metropolitan regions from a multi-scalar perspective. Starting point for the analysis are two interdependent processes that contribute to the Europeanisation of metropolitan policies: Metropolitan policies on the national and sub-national scale recurrently refer to Europe and to EU policies in various ways. Meanwhile, metropolitan regions appear as political actors in the European arena and as implicit issues in EU policies. Thereby, the paper understands the revival and upcoming of metropolitan issues at three scales of policy making as a multi-scalar process, which - in a 'world of flows' - is characterized by the mobility of policy knowledge and concepts, not only between places, but also between scales. The analysis particularly focuses on the links between policy arenas based on the exemplary study of the European orientation of two metropolitan regions' policies and two national policies, France and Germany. Therefore, the paper identifies horizontal channels of Europeanisation, such as networks and inter-urban competition, and vertical channels, such as EU funding and representational offices in Brussels. Overall, the paper contributes to understanding the Europeanisation of metropolitan policies beyond convergences or top-down and bottom-up models and identifies instead a circular and interdependent process of policy change in a multi-scalar setting.

Knowledge Persistence in Regional Networks

Michael Fritsch, Friedrich-Schiller-University Jena, Germany

Moritz Zoellner, Friedrich Schiller University Jena, Germany

Networks of inventors and innovators (patent applicants) are often characterized by high levels of actor-turnover. The consequences of this high level of actor-turnover or 'fluidity' for the workability of the respective Regional Innovation System (RIS) are largely unexplored.

We investigate knowledge persistence in inventor and innovator networks in nine German planning regions. We try to assess how much of the knowledge of actors that disappear from an inventor network may still be available because it has been passed on to other members during their cooperation. For this purpose we identify those actors that have cooperated with a discontinuing inventor and ask if these co-inventors are included in the network in the subsequent period. If co-inventors of a discontinued actor are still contained in the network we assume that the knowledge of the discontinued actor is still available.

We analyze the role of network characteristics for knowledge continuity across regions as well as the effect of knowledge continuity on the performance of the respective RIS.

The Functional Urban Hierarchy in Germany and Switzerland: A Comparison of 2009 and 2018

Nadine Anna Fritz, Technical University of Munich, Germany

Michael Bentlage, Technical University of Munich, Germany

Stefan Lüthi, Lucerne University of Applied Sciences and Arts, Switzerland

Silke Zöllner, Lucerne University of Applied Sciences and Arts, Switzerland

Alain Thierstein, Technical University of Munich, Germany

The functional urban hierarchy has been the subject of various studies in the past few decades. In 1986, Friedman was one of the first to popularize the term urban hierarchy, a concept that serves to define key cities in a worldwide network. In this paper, we analyse and map the changing functional urban hierarchy in Germany and Switzerland between 2009 and 2018. Using the interlocking network model established by Peter Taylor, we analyse the changing intra-firm networks of over 900 knowledge-intensive firms (advanced producer services and high-tech firms) with at least one location in Germany or Switzerland. This data on interlocking firm networks stems from a joint research project between TUM and HSLU. In addition, we combine this data on the spatial behaviour of firms with data on employment, population and accessibility and a series of qualitative interviews. This data combination offers a new approach to the do-jobs-follow-people-or-do-people-follow-jobs debate. The time period studied covers the financial crisis of 2008/2009. This external shock may function as a catalyst for structural change towards and within the knowledge economy in both countries. We therefore expect knowledge-intensive firms and their changing location strategies to affect the functional urban hierarchy in both countries. With regard to spatio-temporal patterns of the functional urban hierarchy, we propose the following hypotheses: 1. The functional urban hierarchy has become steeper in general. 2. Regions evolve unevenly across space. In respect of these hypotheses, we expect the following results: 1. Firms increasingly concentrate in metropolitan areas. 2. Firms reorganising their location strategy mainly focus on the Asia-Pacific-region.

Using The City as an Innovation Playground: Getting Corporations into the Game

Anita Fuezi, Limitless S.a r.l., Luxembourg

Dariusz Sikora, Limitless S.a r.l., Luxembourg

Lidia Gryszkiewicz, Limitless S.a r.l., Luxembourg

Today the way we work has fundamentally changed. The new workspace where people wish to work is collaborative, mindful, ageless and intuitive. As such, work is rather perceived as an activity where collaboration plays a key part. When people collaborate, they work 15% faster and 75% better on average, and feel 60% more innovative and 56% more satisfied (SIGNAL, 2017). Collaboration and innovation are high on the agenda for corporates when it comes to finding the most appropriate contemporary workspace solution. In the past years, we have been witnessing a booming trend in the number of coworking spaces. To date, research talks about 13,800 coworking spaces with 1.2 million members worldwide (Deskmag, 2018). Coworking spaces are shared spaces for mutual support, efficiency, and potentially serendipitous interaction where typical inhabitants are entrepreneurs, freelancers and start-ups. Nevertheless, also more and more corporates are starting to integrate coworking into their business strategy. What drives them towards coworking is enhancing collaboration, increasing productivity and creativity, attracting the best talent, and optimising space utilization. One example of how corporates can benefit from the coworking culture is temporarily moving a team to a coworking space for a fully facilitated 'bootcamp' to inject creativity and innovation into a concrete department or project. The present article provides three brief empirical illustrations on how corporates can partner with coworking spaces with the aim of increasing employee and team innovation, and potentially contribute to urban innovation.

Network Structure of Local Trading Company and Regional Economy in Japan

Haruhisa Fujimot, Japan

The current regional economy in Japan has the following problems; (1) the population structure change (population onus and population outflow from the regional area), (2) the stagnation of public investment (fiscal constraints of national and local governments), (3) the industrial hollowing out of local manufacturing industry (overseas development seeking low labor costs and production costs, collapse of subcontracted structure in rural areas). (4) the concentration of business and investment in metropolitan areas in the nonmanufacturing industry (wholesale / retail etc.), and as a result, (5) the problem that the virtuous circle of the regional economy cannot be achieved.

In order to solve these problems, the Japanese government enforced the Act on the Promotion of Regional Investment for Future in 2017. In this policy, a local trading company is paid attention to connect regional resources for driving a regional economy. In other words, the local trading company is expected to build business networks with local and regional companies. To gain money from outside, a local trading company purchases local materials from local industries and sells them to market outside. However, this role of a local trading company in driving a regional economy has not been illustrated.

In this paper, we analyze the current activity of local trading company based on field survey to clarify its function to regional economy, focusing on the differences between local trading companies and existing economic entities. We examine network structure of a local trading company from the viewpoint of connectedness with local industries.

How to Get Great Employees? Make Sure They Can Enjoy Their Leisure Time

Luisa Gagliardi, Switzerland

Teresa Schlueter, SERC - LSE, United Kingdom

This paper analyzes the relevance of non-pecuniary incentives that affect the leisure time sphere of the individual. It investigates conceptually and empirically the role of preferences for quality of place—intended as the unique set of amenities that qualifies a place and makes it attractive—as a key motive for the location decision of skilled workers and discusses the implications for firms that aim to attract and retain human resources. Using records for more than 360,000 employees in private firms and a sharp research design to control for the competing hypothesis that individuals primarily reward the quantity and quality of jobs, it shows that quality-of-place considerations matter for the location decision of skilled workers, as they are more likely to sort into places that offer livable environments and opportunities for leisure and entertainment.

Application of the Big-data Approach to Create a Country-wide, GIS-based, Monitoring System of Functional Zones and Urban Compactness Based on Land Use/Land Cover Analysis in Poland

Agnieszka Gajda, National Institute for Spatial Policy and Housing, Poland

Lukasz Pancewicz, Gdansk University of Technology, Poland

One of the aims of Polish National Urban Policy as well as the Pact of Amsterdam is aiming for an efficient land use, especially, the protection of the non-urbanized, arable land. One of the policy directives, selected to achieve this aim, is planning and building a compact city.

The presented research project was conducted to support the policy of ‘urban compactness’ with objective, GIS-data based information of actual functions of the area. The approach would allow for utilization of geospatial representation and state-level harmonization of data, necessary for a monitoring system. Such approach would help to avoid drawbacks of existing methods of land use/land cover analyses: reliance on statistical, non-spatial data, lack of detailed spatial representation on local level, lack of coherence, lack of common methodology of doing planning surveys.

In the project we used a large, national-wide datasets of the land and building register (pol. Ewidencja Gruntów i Budynków) and the residents registration data (PESEL database), to build GIS datasets. The data allowed to test the ‘compactness ratio’ of the cities, highlight the gradation of land uses of the 66 regional and subregional cities and towns and 3 large metropolitan areas. We used New Urbanism “transect model” as a reference, to distinguish various degrees of functional use gradation, ranging from non-urbanized and rural to high-density residential. Such model allowed for mostly automated analysis of data, with ArcGIS software and Python scripting. The “transect model” allowed us to give a referential values to allow benchmarking of the cities compactness.

The Role of Medium-sized Enterprises in Urban Development: Statistical Research of Entrepreneurial Ecosystems

Gergő Gajzágó, Széchenyi István University Doctoral School of Regional- and Economic Sciences, Hungary

The role of medium-sized enterprises is underestimated and often conflated with small-sized enterprises within the group of SMEs. Surprisingly few articles among publications about SMEs write on the theme of medium-sized enterprises. Our ongoing research at HAS CERS Institute for Regional Studies titled “The role of medium-sized enterprises in regional industrial competitiveness” focuses on this area. In this research, the potential of existing, as well as potential domestic medium-sized enterprises has been analysed in the field of manufacturing.

In this study, I will review the methodological opportunities to examine the impact of medium-sized enterprises on local competitiveness and development, and also what kind of methods and data are available. A practical examination of a Hungarian medium-sized industrial town’s entrepreneurial ecosystem will be shown, in which we can consider the local impact of the medium-sized companies. This comprehensive analysis shows relevant differences between the impact of large, medium and small-sized enterprises on the development of a local economy.

Urban Planning and Policy Styles for the Sustainable Transformation of Cities. A Comparative Study of Oslo and Hannover

Daniel Galland, Norwegian University of Life Sciences (NMBU), Norway
Frank Othengrafen, Leibniz Universität Hannover, Germany

The urban environment, as a diverse socio-cultural and political context, provides the ground to shape innovations for the sustainable transformation of cities. However, the ongoing debate about sustainability transitions and its pathways towards an implementation of sustainable living conditions lacks a crucial perspective: the spatial dimension about how cities and city-regions have to facilitate, prepare, promote or implement a more sustainable future. This 'spatial blindness' increases factual challenges on the local level, seen both as a spatio-physical space where (new) technologies, settlements, buildings or infrastructures have to be planned, tested and constructed, as well as socio-cultural and political environments where different actors, institutions and political arenas implement sustainability in practice.

The sustainable transformation of cities involves specific policy styles, including institutional arrangements, new forms of urban governance, political agendas, power constellations, actors, change dynamics and many other aspects. These policy styles differ between European cities, indicating that the diversity of urban planning systems and policies that influence sustainable transformations and development practices is not only a function of the plurality of legal-administrative arrangements but is influenced by an array of internal and external driving forces such as planning cultures, political cultures, social models and governance traditions.

To explain the role of urban policy styles for the sustainable transformation of cities, this paper first focuses on a series of conceptual considerations aimed at developing a comparative research framework geared towards understanding recent reorientations associated with sustainability transitions of cities from a 'policy style' perspective. On this basis, we then move forth to explore how policy styles and forms of governing in Oslo, Hannover and Hamburg differ.

Governance Capacity and Strategic Coupling: State Policy and the Rise of the Chongqing Laptop Cluster

Boyang Gao, Central University of Finance & Economics, China

Michael Dunford, Chinese Academy of Sciences; University of Sussex, United Kingdom

Glen Norcliffe, York University, Canada

Weidong Liu, Chinese Academy of Sciences, China

Many local states adopt policies designed to make their localities nodes in global production networks (GPNs). A compelling example is the post-2008 establishment of Chongqing's laptop manufacturing cluster. The rise of Chongqing involved the decoupling of parts of a GPN in coastal China and recoupling and expansion in Chongqing. The aim of this paper is to deepen the concept of strategic (re)coupling through an analysis of the articulation of the laptop GPN with Chongqing paying particular attention to governance capacity and the enabling capacity of Chongqing Municipal Government (CMG): the capabilities, strategic goals, financial commitments and actions of CMG that enabled it to take advantage of its political rank and the financial resources at its disposition to diversify successfully its regional economy. CMG enabled the progressive transfer of a large part of a GPN by coupling the ambitions of lead companies and OEMs with its own strategic goals, investing in economic infrastructure, labour market organization, social overhead capital and preferential policies including measures to support chain logistics in and after the transfer. The financial implications for CMG of this strategy are also explored.

Changing Urban Subcenters with Transport Infrastructure in Bogotá

Miguel Andrés Garzón-Ramírez, Universidad de los Andes, Colombia

The growth of Latin-American cities is related with lack of infrastructure, informal housing and inequality. This represent several changes in markets like housing and transport that are difficult to measure due the lack of data of informal urban economic activities. In this paper, I study the relationship between urban growth of Bogotá, Colombia, and the use of several modes of transport. I measure urban growth through the identification of residential subcenters in the last 20 years with mobility survey and cadastral data. This reflects the expansion of urban agglomerations inside the same urban spatial structure. New subcenters emerge over time. This can be related or not with infrastructure, but it is related with a dominant use of a mode of transport. In that way, how people move around the city and the use of modes of transport can tell us how the city is growing. For instance, if a new subcenter emerges far from transport infrastructure it is possible to infer that the people living there does not have economic interaction with the core urban structure and this is highly correlated with poor social conditions. In conclusion, I show that the urban expansion of Bogotá is not transport infrastructure driven, but infrastructure can further the density of subcenters, this could explain part of the people's residential location decision.

One Aspect of Smart City Developments: Digital Competences, E-government Potentials. The State and Perspectives of Hungary

László Gere, PAIGEO - Pallas Athene Innovation and Geopolitical Foundation, Hungary

Smart city solutions are increasingly important for the 21st-century city management. The urban population is growing constantly, and it is more and more concentrated in big cities. The economic performance and significance of the cities is growing accordingly, together with the competition between urban entities.

The operation of the cities needs new kind of solutions: there is an increased demand for real-time, targeted, cost-effective, sustainable and environment-friendly solutions for the ever-emerging challenges. The technological revolution could enable these solutions.

My presentation focuses on the human capital side of smart cities: although the technological conditions already exist in many cases, there is sometimes lack of skills to use and exploit the opportunities (or to measure the potential risks and threats). It is a crucial part of smart developments, because there is a strong correlation between digital competitiveness and economic competitiveness.

In the second part of the presentation, I will present the Hungarian case in details. In global, European and Central European comparison I will show the state of the Hungarian digital competitiveness and analyse the components of the digital economy and society. Within digital competences, my research focuses mainly on e-government readiness and development in Hungary. As a conclusion, I try to examine which are the main factors of digital competences to develop, in order to enhance the economic and governmental performance of the country.

Multiple Equilibria in Institutional and Spatial Dual-Sector Poverty Traps

Herman Geyer, Stellenbosch University, South Africa

Multiple equilibria in agriculture is, in addition to market structures, also the product of institutional processes resulting in bimodal growth trajectories. This paper demonstrates how institutional poverty traps, resulting in the persistence of low-level output at initial capitalisation levels, and further demonstrates how bimodality can be mutually beneficial in a dual sector economy, evident in the persistence of regional subsistence agricultural regimes. Furthermore, the paper presents an argument for spatial bimodality as a product of the combination of institutional and market structures, disregarding the need for a hypothesis based solely on discrete geographical variables.

A Qualitative Study of Sociocultural Factors that Limit Entrepreneurship in Aspirant Technology Cluster Regions

Brett Anitra Gilbert, United States

Considerable research exists to understand the underpinnings of geographic cluster regions (Gilbert, 2017; Hervas-Oliver, Gonzalez & Caja, 2015). Much of this research has focused on the infrastructure factors that support the formation or function of clusters. While conventional wisdom might suggest that the absence of infrastructure factors limits emergence of clusters within a region, some regions do have much of the infrastructure to support a cluster, or its officials have invested into building this capacity. But as of yet, these regions lack significant levels of entrepreneurial activity that would be needed to stimulate the region (Feldman & Florida, 2003). This research seeks to understand what

limits emergence of technology clusters within regions. Technology clusters are the focus of this research due to global interest in fostering these regions (Ketels et al., 2006; van der Linde, 2003). The research design uses qualitative methodology to conduct a comparative analysis of three city case studies from three developing countries where officials have been making investments into supporting a technology cluster. Therefore, this study, seeks to explicate sociocultural conditions that may suppress emergence of these regions. The manuscript begins with a review of what technology regions are and the conditions under which they operate. It then presents the three case study cities -Johannesburg, South Africa; Rio de Janeiro, Brazil; and Kolkata, India - the factors that are suppressing emergence in each city, and the research contributions.

Heterogeneous EU Regions' Performance in the Upgrading for the Digital Age

Petros Gkotsis, EC-JRC, Spain

Emanuele Pugliese, European Commission, Joint Research Centre, Seville (Spain), Spain

Antonio Vezzani, European Commission, Joint Research Centre, Seville (Spain), Spain

The development and widespread diffusion of digital technologies is changing the way the society and the economies work, offering new opportunities for regions to upgrade their industrial base. However, despite the European Commission (2017) stressed the importance of exploiting the possibilities offered by the digital transformation to improve competitiveness, little is still known about the factors facilitating a transition towards the digital economy at regional level.

In this paper, we use patent data from the European patent office to assess the capabilities of EU regions to develop digital technologies and the extent to which the digital revolution transforms economic sectors. In particular, the penetration of digital technologies in the development of innovative products is proxied by the number of co-occurrences of digital-related codes with other codes within patent documents.

In the first part of the empirical application, we assess the heterogeneous performances of EU regions in the development and penetration in traditional sectors of digital technologies. In the second part, we investigate to what extent specific characteristics of the regional knowledge base (e.g. related vs. unrelated variety and international collaborations) and other structural characteristics (e.g. investments in education, presence of R&D intensive multinationals and proximity to top performing regions) contribute to the transition toward the digital economy.

Our results provide new evidence on the most promising factors to be leveraged to favour this specific type of transformation. By doing so, we both contribute to the evolutionary economic geography literature and to the innovation and industrial competitiveness literatures. Policy implications are written accordingly.

Spatial Effects of Digital Transformation: An Analysis on the Example of an Automotive R&D Network

Jonas Glaesser, Technical University of Munich, Germany

Alain Thierstein, Technical University of Munich, Germany

The automotive sector changes from a mechanical engineering industry to a more tech-intensive area. Hence, not only Silicon Valley-based tech-companies try to develop autonomous vehicles, but also traditional car manufacturers need to expand their field of competence by adding more knowledge

from formerly separated businesses. This leads to a dynamic in firms' knowledge networks triggered by the search for new technological capabilities. That raises the question whether new industries follow the old economies or a reorganization of localized value chains is needed in order to exploit agglomeration and network advantages. This paper tries to observe this process spatially to give guidance to what extend firms' abilities to innovate and reposition themselves depend on spatial reorientation. The production of knowledge becomes more diverse especially when technological changes confront an established network. A review of the existing body of literature about conceptual reflections on spatial innovation patterns, such as Territorial Innovation Models, Regional Innovation Systems, long wave approaches et cetera, will examine the conditions under which space, knowledge and innovation interact to provide theoretical orientation. In order to explore whether geographical shifts are emerging, the paper refers to extra-firm supplier connections. Therefore, a longitudinal ego-network analysis is being applied on a German car manufacturer's development network for a period from 2013 to 2017. In this time, major technological changes within the development process have been observed. The question to be answered – "How does technological disruption change the spatial configuration of R&D networks?" – is linked to the hypothesis that technological maturity and location are interconnected in a way that the more complex technology becomes, the more urban their context of origin will be. Under pressure of technological change, it is assumed that R&D networks open up to further industries, new locations, and other firms. This process of opening of the established R&D network is expected to be found in this spatial analysis.

The Hamburg Gaming Industry from a Multi-scalar Institutional Perspective

Huiwen Gong, Kiel University, Germany, Germany

Robert Hassink, Department of Geography, Kiel University, Germany

Recently, while place-based institutions and institutional structures have attracted the interest of economic geographers, the issue of individual agency and how it is shaped by and shaping institutions at multiple spatial scales, has not been taken up sufficiently empirically. This article, focusing on the Hamburg games industry, takes issue with it. It explores two aspects, namely, how multi-scalar institutions are (or have been) influencing the development of the gaming industry in Hamburg (a top-down structural perspective), and second, how local firms and entrepreneurs influence local, federal and EU institutions (a bottom-up agency perspective). It showcases that institutions at different levels, while in general coherent in supporting the development of the local gaming industry, differ concerning their interests and priorities at different periods of time. Furthermore, due to the diverse capabilities and resource endowments of firms, they try to alter the existing institutional arrangements in diverse ways. Our research exhibits the significance of multi-scalar intermediary organizations such as industrial associations, lobby bodies, cluster/network organizations, etc., in making changes to existing institutional architectures. In correspondence with Grillitsch and Sotarauta's (2018) recent proposition of the necessity to move from structure to agency and back in studying regional growth paths, as well as Boschma's (2017) launch for a research agenda in regional diversification that highlights contextual institutions, and the role of economic and institutional agents in a multiscalar perspective, this paper clearly shows that place-based economic development can only be fully understood by deeply analyzing top-down structural and bottom-up agency as two complementary perspectives.

Reconciling Multiple and Differentiated Spatialities: Linking Disadvantaged People to Training and Employment Opportunities in the UK

Tony Gore, Centre for Regional Economic & Social Research - CRESR, United Kingdom

Richard Crisp, Sheffield Hallam University, United Kingdom

Aidan While, University of Sheffield, United Kingdom

One feature of the current politics of austerity in the UK has been a drive to extract 'social' benefits from public sector investments and decision-making. One example of this leverage has been the use of large construction projects and their subsequent operation to generate employment and training opportunities for disadvantaged residents living near to the development sites. This process involves a wide range of governmental, private and voluntary sector organisations, as well as the target demographic group. Each of these groups brings their own varied and dynamic spatialities into the equation, posing key coordination and reconciliation challenges if appropriate candidates are to be integrated successfully into job and apprenticeship openings. Based on primary research into schemes providing access to construction and 'end user' opportunities in Greater Manchester and West Yorkshire, this paper deploys the key components of spatiality to explore the multiple and differentiated spatial framings at work, and the ways in which these have been manifested in the design and implementation of these 'access to jobs' initiatives. At the same time the analysis traces emerging ways in which the tensions have been mediated and reconciled, usually by different means of 'soft' power and involving actors beyond official government bodies. In the context of evolving decentralisation processes in the UK, these findings appear to herald an era in which all protagonists are experiencing potentially disruptive reorientations from imposing their own spatiality on others to simultaneous recognition of the differentiated spatial frameworks of those with whom they must collaborate.

A New Measure for the New Rural Economy: Affinity Propagation as the Next Step to Identify Regional Trends.

Marcello Graziano, Central Michigan University, United States

Benjamin Heumann, Central Michigan University, United States

Maurizio Fiaschetti, SOAS-University of London, United Kingdom

The heterogeneity and uniqueness of several rural places in the European Union (EU) has been at the center of the renovated interest of the New Rural Economy (NRE). Researchers have been investigating new ways to define and to partition the EU space for understanding the social-economic changes affecting rural (and urban) regions, often utilizing either indexes or threshold-based measures. Our work borrows from recent developments in statistics, utilizing affinity propagation (AP) to identify the determinant factors driving rural-rural and rural-urban regions of the EU, without setting pre-determined thresholds. Further, we identify 'exemplar' within each identified cluster (or group of regions). In our work, we use the drivers identified by the work of Copus in his work Territorial Cohesion in Rural Europe. We further enrich his dataset including spatial and land cover/land use variables, thus allowing the AP model to identify differences driven by the natural and human-natural landscapes. Building upon the seminal works of Dijkstra and the Eudora Project, our work expands our current set of tools for defining regional differences, introducing a threshold-less, data-driven model (AP), and capable of identifying exemplars, and to identify the main drivers characterizing each new cluster or regional typology.

Investigating Spatial Contiguity Effects in Sustainable Commuting Transport Modes' Choice: An Application to a Multi-located Italian University

Daniele Grechi, Università Degli Studi Dell'Insubria, Italy

Elena Maggi, Università Degli Studi Dell'Insubria, Italy

Daniele Crotti, Università Degli Studi Dell'Insubria, Italy

Commuting modes among cities still largely rely upon motorized mobility, in particular by using private vehicles. In order to make sustainable daily travels effectively spread out, yet workers and students moving back and forth to congested locations must collectively perceive alternative means, including trains, buses and sharing facilities, as feasible and well-integrated in urban transports systems. In this paper we investigate how users select commuting modes considering this choice is not only affected by social characteristics and transports' conditions (e.g., number and quality of public transport, bike and car sharing/pooling availability) but also by choices of users moving from neighbouring areas. In order to test whether this spatial autocorrelation might be seen as destination-proof, by processing travel choices taken from the University of Insubria 2017 Mobility Survey (including students, professors and other university workforce), we use about 2,800 observations related to two local university sites in Lombardy (Varese and Como). A nested logit model of commuters' choice accounting for contiguity-based autocorrelations is estimated to test similarities in travel choices of neighbouring users when choosing over different destinations. This empirical application could help policymakers to evaluate either how sustainable means of transport alternative to motorized private vehicles are ingrained in collective choices or the quality of public transport information services, such as the availability of integrated payment systems.

The Impact of Public Policy on Capital Flows for Growth-Oriented Enterprise

Geoff Gregson, Northern Alberta Institute of Technology (NAIT), Canada

This paper seeks to determine how policy influences the flow of risk capital for growth-oriented enterprise. Access to risk capital is an ongoing policy issue in many OECD countries, and particularly for innovative and R&D-intensive enterprises, whose intangible assets may not qualify them for traditional financing instruments. The paper examines the case of Canada, which represents a rich policy environment to examine federal, regional and sector-specific programs that provide risk capital. The paper draws on data from federal, regional and provincial surveys and documents, interview data from policy makers and individuals representing public and private sector funding sources and data from relevant international comparators. Findings reveal that variations in regional government priorities, local economic conditions, and community capacities constrain adequate flow of risk capital. Enterprise 'scale-up' issues also affect the flow of risk capital; the result of small and fragmented local markets, shortages of experienced business talent, lack of 'at-scale' sources of growth capital, and an aversion to risk on the part of some of Canada's established companies. Capital flow constraints appear more pronounced in peripheral areas and exacerbated by low levels of international business or export activity. While a significant increase in government venture capital (GVC) has occurred in the past decade, GVC is challenged in competing with larger foreign VC funds targeting later-stage deals and in redeploying risk capital away from traditional sectors to emerging technology sectors. Findings provide support for a national investor tax credit and more streamlined financial regulations to improve the flow of risk capital to growth-oriented enterprises.

Urban Growth and Sustainable Socio-economic Development in Africa

Gianni Guastella, Fondazione Eni Enrico Mattei, Italy

Silvia Beghelli, Italy

Stefano Pareglio, Fondazione Eni Enrico Mattei, Italy

Since the Nineties, African countries have been at the centre of an ongoing debate over their sustainable economic growth. This paper adds to the discussion investigating whether and how socio-geographic factors drive the economic change. Most importantly, we disentangle the social costs of this growth to understand whether, at the same time, urban growth in Africa leads to inequalities. Therefore, the empirical analysis of this paper follows two steps. A first step observe the economic effects, which is measured as the country GDP, of rural expansion, which is measured as the change of the country urban land use over the years. While adopting the same explanatory variables of the previous stage, the second step analyses their impact on social inequality. To measure it we build a 'social growth' indicator exploiting the Afrobarometer data, which consists of seven waves (from 1999 to 2018) of surveys on democracy, governance and society and covers almost all African countries. The results of this paper have crucial policy implications and shed some light on the parallel effects of urban expansion on both economic growth and social perception of inequalities.

Resilience of Informal Car Share (ICS): A Case Study Within Quito's Peripheral Communities

Vanessa Guerra M, Virginia Tech, United States

Tripp Shealy, Virginia Tech, United States

As Latin American cities deal with the effects of population growth and insufficient infrastructure provision, Informal Car Share (ICS)—meaning private vehicles that provide transportation for a fare and that are neither taxed nor monitored by any type of government—, have become more common. Although these practices contribute significantly to global development and economic growth, they are often stigmatized as urban mistakes and little is known about them. ICS operates without cities or governments understanding either the characteristics of the systems on which they operate or the value that they provide to cities. In this paper, we use systems theory perspective to understand ICS, because ICS is a type of system. We look not only into the system's effectiveness and performance, but also into the system's ability to adapt to impacts from external factors. By adopting systems theory perspective, we develop a holistic multiple-case study to measure the characteristics of the system that contribute to the city resilience. We focus in two communities located in the periphery of the City of Quito. Measuring ICS is the first step to understanding the value they provide to cities. In addition, capturing how this informal system functions and operates, especially during times of disruptive events caused by the impacts of climate change and civil arrest, may help inform new processes and operation procedures in the formal transportation system.

Towards an Innovative Commons Policy

Tina Haisch, University of Applied Sciences, Switzerland

Hugues Jeannerat, Université de Neuchâtel, Switzerland

Since the 1990s, approaches such as the triple helix, Porter's cluster concept and the export-base model dominate the scientific debate and policies on fostering innovation in a territorial perspective. Further research on regional innovation systems have put more emphasis on a relational and

institutional perspectives, but only partially capture the risen complexity of societal challenges such as sustainability, financialization, climate change, digitalization and the spatial gap between value generation and value extraction in and for regional economies. These considerations call existent approaches into question.

As a starting point, this paper analyses the evolution of various Swiss economic policies and shows how these policies went through an “innovatisation” process characterized by a progressive shift from a public provision-based approach to a private competitive-based approach for using, generating and managing economic resources. Some important limits of this innovatisation process will then be underlined.

On the basis of six prospective workshops and numerous participative discussions with experts and stakeholders of innovation in Switzerland and abroad, the concept of an “innovative commons” policy is proposed to lead new reflections on a possible future innovation policy. Inspired by the concept of “creative commons”, by open innovation theories, and the economics of common pool resources, the innovative commons policy promotes innovation labels, social experiments and pilot projects within and across regional contexts.

Knowledge and Confidence in the Győr Automotive Industrial District

Melinda Hajdu-Smahó, Széchenyi István University, Hungary

Companies pick up knowledge necessary to their innovation activity partially from its surroundings through the collective learning process. However, utilization of possibilities residing in collective learning is not an automatic process, but it needs firms’ capacities. Knowledge, especially technological knowledge becomes more and more specific, complex and tacit. In order to understand and utilize it, companies need to build up special receiving competencies, i.e. absorptive capacity.

The success of knowledge creation, knowledge flow and knowledge application is essentially influenced by the lack or existence of a soft factor called confidence. According to my hypothesis, creation and existence of knowledge production capacities as well as knowledge infrastructure are not sufficient for the development of a region; in order to generate and maintain knowledge based process, advancement in knowledge culture (inside of this a high level of confidence) are necessary as well.

My presentation gives a theoretical overview of knowledge-based process of industrial districts emphasising the role of confidence in these process. Out of general theoretical considerations I examine the role of knowledge and confidence especially in the vehicle (automotive) industrial districts. Theoretical concepts are supplemented by the results of a citizen survey (3032 people) and a company survey (240 firms) carried out in the Győr Automotive District.

Local Food Networks and Regional Development: Governance, Instruments and Evolution

Henrik Halkier, Aalborg University, Denmark

Laura James, Aalborg University, Denmark

Local food networks have become a widespread phenomenon in recent decades, in and beyond Europe and North America. Driven by consumer concerns about food safety, environmental concerns about food miles, and distrust of global agri-business, networks have emerged as attempts to bridge

the gap between consumers and producers of local food. Producers that are often trying to capitalize on local origins, and artisanal/organic methods of production. A small but growing literature has analyzed local food networks, especially from the perspective of political discourse (anti-capitalist or not) and the qualities of the food invoked as selling point. In recent years attempts have been made to move beyond case stories of individual networks in order to reach a more comprehensive view of local food networks, especially the relationship to conventional agro-business, their relationship to regional and inter/national governance, and, not least, the different activities engaged in by networks and how they develop over time (e.g. Tregear, 2011; Goodman et al., 2011). The aim of this paper is to analyze the interplay between governance structures, stakeholder configuration and economic resources in local food network in five Danish regions in order to 1) identify differences and similarities between the networks, and 2) discuss how these characteristics may be related to the development of the networks, successful or otherwise. The paper concludes that networks with diverse profiles in terms of activities and revenue sources are more likely to succeed in continuing to make a substantial contribution to their members and the development of their region.

National Centre Cities: A Chinese Urban Policy Puzzle

Chris Hamnett, King's College London, United Kingdom

Yang Jing, UESTC, China

Amy Liu, UESTC, China

The National Centre Cities (NCC) is an important new strategy proposed by the Chinese government for urban development. The establishment of NCC in 2010 with an initial group of 5 cities and its subsequent extension to 9 cities raises an interesting question of what the NCC is for. What are they designed to do, what is their function? It is argued that in the absence of any clear official policy statement about the function and purpose of the NCC it is a policy puzzle which needs to be explained. Looking at the designation of NCC it seems that the cities chosen are among the biggest and most important cities in China but with regional spread. The policy is not just about population or economics but also about regional geography and politics. It is argued that analysis of official documents suggests they are part of an urban and regional growth pole policy for the economic modernization of China. The paper also attempts to analyze the selection of cities designated at NCC by analyzing the characteristics of the 20 most important Chinese cities in terms of their population, GDP, average income, economic structure etc. Economic importance, regional balance and political level of city can be put forward to explain the reasons behind the designation of the selected NCC's.

Tracking Embodied Carbon Transfer Flows of Belt and Road Initiative Area

Mengyao Han, Institute of Geographic Sciences and Natural Resources Research, CAS, China

In consideration of the connectivity between regions, carbon transfers and carbon leakage are playing increasingly essential roles in processes of global carbon reduction. Since the "Belt and Road Initiative" was proposed as a major national strategy for China to expand its opening up, it has received widespread controversy on its environmental impacts. With the dynamically global supply chain, the analysis of multi-regional and multi-scale interrelations and interactions has become the new focus of regional development research. In this context, this work conducts the first attempt to analyze the embodied carbon transfer flows focused on the Belt and Road Initiative (BRI) from the embodied perspective. As a whole, the embodied carbon transfers are basically from the BRI areas to the other

countries. Given the fact that most of the emissions are directly or indirectly influenced by developed countries' consumption, analyzing the embodied carbon emission sources along the BRI regions is particularly important. Overall, most of the countries along BRI are net exporters of embodied carbon, with the proportion of other regions' consumption occupying around 30%. However, the gap between direct and indirect carbon intensities of the BRI regions are significantly higher than most of the other regions. In the light of the increasingly serious climate crisis, the corresponding embodied transfer research along BRI countries provide a new perspective for confronting global climate change at the global scale, which can help build a relatively fair and reasonable carbon emission responsibility framework and achieve global sustainable development in context of macro regional connectivity.

Labour Trajectories of Career Mobility and Underemployment

Emelie Hane-Weijman, Umeå University, Geography and Economic History, Sweden

While re-employment possibilities for redundant workers have been a much-debated topic in economic geography, the characteristics of these new employments connected to the diverse labour market trajectories of returning to work in an economic landscape is a less explored field. By following manufacturing workers made redundant in plant closures or larger cutbacks in 2003, this paper highlights patterns of career mobilities and underemployment by linking these outcomes to the redundancy itself, as well as past working experiences and the actual trajectories of returning to work. The aim is to situate the worker in a spatial and industrial context and to analyze how different mobilities and frictions, geographical and industrial, shape the career of redundant workers and the evolution of regions.

Industrial Regions in Transition – Discussing Regional Development and Identity Along the Notion of Industrial Culture

Joern Harfst, University of Graz, Austria

Against the background of the financial crisis since 2007, debates of 'reshoring' and 'reindustrialisation' have gathered heightened attention in the European Union, also on the policy-making level. Nevertheless, these discussions often ignore the vested reality that many regions across Europe are still 'industrial' in their core and that industries remain important value-creators, especially in small and medium-sized towns outside agglomeration areas.

This paper will highlight and discuss the situation along case-study regions, focussing on non-agglomeration, (post-) industrialised regions in Central Europe. The analysis will debate framework conditions and development strategies on the local and regional policy level, also drawing on the specific factor of 'Industrial Culture', as a social element of place and its role in regional development.

The cases presented in this paper will focus on challenges in the current development of such regions and their industries, give an insight on persistent development factors such as industrial culture, as well as discuss some lessons learned from locally-driven development approaches. As a result the author will argue that any serious 're-industrialisation' strategy on European level would need a more place-based focus, taking into account specific opportunities and challenges in already industrialised regions.

Perspectives on the Changing Geographies of Regions and Territories: Towards Consolidated Regional Geographies

John Harrison, Loughborough University, United Kingdom

Anssi Paasi, University of Oulu, Finland

Martin Jones, Staffordshire University, United Kingdom

Region and territory have been major keywords of geographical thinking, methodology and research practice since the institutionalization of geography as an academic discipline at the end of the 19th century. But what is a region? How are they constructed? How do regions relate to territory? Are regions and territories still relevant in today's modern world characterized by all kinds of flows and networks? How are regions and territories affected and shaped by social forces? What does it mean to study the geographies of regions and territories? What does the future hold for these spatial categories? These are just some of the key questions, which have not only shaped the long intellectual history of studying regions and territories, they are as relevant today as they have ever been. In this chapter we chart the increased utility of the region and territory in different social, political and cultural realms. We contend that contemporary geographies of regions and territories are marked by distinct regional worlds, diverse regional words, and decentred regional futures. Taking stock of the current state of debates on the theory and empirical dimensions of regions and territories, we make the case for a new phase of consolidated regional geographies.

Co-evolution in Contemporary Economic Geography: Towards a Theoretical Framework

Robert Hassink, University of Kiel, Germany

Huiwen Gong, Kiel University, Germany

Although co-evolution is a key concept in contemporary economic geography because of its relevance for understanding institutional change and for achieving deep contextualization and sound policy recommendations, it has not been taken up in recent empirical work largely. This is partly due to the lacking of a comprehensive theoretical framework. In this paper, we therefore develop such a framework in which we stress mainly two key issues, namely the multi-scalarity of industries and institutions and the nature of change. Potential combinations of changes and their impacts on co-evolution are provided. The paper sets a research agenda within which more theoretically informed research on co-evolution can be conducted in the future.

Real Regional Incomes in the UK

David Hearne, Birmingham City University, United Kingdom

Alex De Ruyter, Birmingham City University, United Kingdom

This paper argues that regional disparities in the UK are exaggerated. We show that official figures overstate differences in regional output, productivity and income. This effect comes about because official regional statistics in the UK are compiled on a nominal basis – i.e. they do not take into account differences in regional price levels. We develop measures of relative regional prices to show that the impact is substantial: regional differences in household income are almost halved after taking into account inter-regional price differences.

As a result, academics need to critically reappraise our approach to regional disparities. However, far from reducing the scope for further regional research, these results suggest that an accelerated

research agenda is needed. Since data on regional prices are scarce in many countries, policymakers need to consider these methodological issues when designing regional assistance and redistribution measures. In the UK context, this analysis has significant ramifications for the Government's "Northern Powerhouse" and "Industrial Strategy".

This is in addition to the conceptual issues raised in the literature, which render regional GVA per capita a problematic measurement of regional economic performance. Finally, there is a strong research agenda in understanding the international context of our results - is the UK typical and how do disparities in real household incomes compare to other spatially concentrated states (such as France or Japan)?

Hydropower – A Key to Sustainable Regional Development in the Swiss Alps

Werner Hediger, HTW Chur, Switzerland

Marc Herter, HTW Chur, Switzerland

Historically, hydropower has been a specific industry location factor of mountain regions. Cheap and abundant labour and hydropower in combination with process innovation enabled the development of industry plants in the late 19th and early 20th century. But, the globalisation of markets and changes in relative factor prices undermined the competitiveness of those typically energy-intensive industries and induced a dis-industrialisation in the respective regions.

Simultaneously, the era of nuclear power enabled a new business model for hydropower in the Alps, based on electricity trade and the intertemporal arbitrage between excess supply and excess demand. In Switzerland, the owners of the electricity companies, mainly the lowland cantons, benefited from higher profits and the mountain cantons from higher water fees. The latter generated additional financial resources to build-up local infrastructure in these regions.

Currently, the low energy prices and curtail the profitability of hydropower, while the renewal and expansion of hydropower is a key to the Swiss Energy Strategy 2050. This prompted a political debate about reducing water fees and granting subsidies to hydropower plants, without taking into account the regional impacts of such changes. To fill into this gap, we investigate the direct impacts of the water fee payments on public finances in the Swiss cantons and on municipal level in Grisons. In addition, we examine the related effects on the local economies and discuss our findings from a political-economic, regional policy and sustainable development perspective.

The Regional Implications of Automation in Economic Processes

Dylan Henderson, Cardiff University, United Kingdom

Calvin Jones, Cardiff University, United Kingdom

There has been extensive debate about the automation of productive and distribution activities on the level of human employment. This has been driven by the rapid introduction of robots, algorithmic problem solving and artificial intelligence across different sectors of the economy. While previous waves of technological development and machine incursion have, in aggregate tended to create as many or more jobs as they destroy, concerns have been raised about ability of machines to undertake a much wider range of manual and white collar jobs. Discussion of these developments, while wide ranging, has tended to give far less attention to the impact of automation processes and their speed of implementation across space. With the above in mind, we develop an approach to measuring the

economic vulnerability of different places to automation based on an index of automation vulnerability for NUTS2 regions in the EU. This incorporates factors identified in the literature as important drivers of (or that benefit from) automation processes, including occupational and industrial structures, prior economic resilience, levels of capital ownership, and prevalence of machine-complementary activities. We then examine our ranking of vulnerability to comment on whether this analysis suggests future rounds of automation will accelerate or mitigate existing processes of uneven development.

Regional Labour Flows Between Manufacturing and Business Services

Martin Henning, University of Gothenburg, Sweden

During the last decades, structural change in much of Western Europe has largely been concentrated around two major trends: decline of manufacturing and growth of business services. At the same time there has been major regional divergence, characterized by growth of already dominating city regions, and incremental decline of peripheral economies. We have yet to understand if and how these processes – structural change and regional divergence – are intertwined. In this paper, we use Statistics Sweden’s full-population geo-coded register data for Swedish workers and their labour market moves in the period 2010-2014 to analyze regional switching patterns of employees between manufacturing, general business services and knowledge-intensive business services. Our findings suggest that in general, labour switching between manufacturing and services has important bidirectional features, even as manufacturing generally declines. There is not a staff exodus from manufacturing to services, but rather an exchange suggesting large skill interdependencies. However, there are strong geographical and sub-sectoral dimensions to this, emphasizing a reinforcement of spatial division of labour patterns. In trend terms, the decline of manufacturing is rather similar in all regional types. The metropolitan regions have however a much higher employee switching probability from manufacturing to KIBS than other regions, while this pattern is reversed for general business services. The major challenge for less dense or peripheral regions is therefore not necessarily the decline of manufacturing, but rather that the transition into high value added and rapidly growing knowledge intensive business services is insufficient to make up for the employment loss in manufacturing.

Key Components of Strategic Spatial Plan-making and –Implementation in European Urban Regions: The SPLaMI Framework

Anna M. Hersperger, , Switzerland

Simona R Grădinaru, University of Bucharest, Romania

Eduardo Oliveira, WSL, Switzerland

Sofia Pagliarin, University of Bamberg, Germany

Gaëtan Palka, WSL, Switzerland

Strategic spatial planning is increasingly practiced in urban regions throughout the world to develop a coordinated vision for guiding medium- to long-term territorial dynamics. The ultimate goal of these activities is to promote smart, sustainable and competitive cities. However, from a theoretical and conceptual point of view, strategic spatial planning is hard to grasp as it is highly context-dependent, multi-dimensional and embedded in socio-political and institutional complexity. The purpose of this study is to disentangle the strategic spatial planning process while focusing on its two phases, i.e. plan-

making and plan-implementation. Grounded in an empirical, case-based analysis of 21 European urban regions, we generalize the key components of strategic spatial planning and their relationships to formulate the SPLaMI conceptual framework. The comparative study reveals that strategic spatial planning is not a simple process of multi-scalar cooperation, but it involves various actors that interact in different governance arrangements. Planning process and outcomes are conditioned by legislation and funding mechanisms and shaped and framed within complex power configurations. The study further supports theoretical propositions that “the plan” holds a central position in strategic spatial planning and that a combination of development strategies and strategic urban projects is a key characteristic of strategic spatial planning in most of the studied urban regions. The empirically based framework appears to be a flexible tool to also accommodate critical views towards strategic spatial planning, and is expected to contribute to expanding and organizing existing knowledge, to support theory-building and reflect current practices in European urban regions.

Internal Migration in Australia: The Influence of Labour Market and Life Style Factors

John Hicks, Charles Sturt University, Australia

Kishor Sharma, Charles Darwin University, Australia

Spatial divergence of labour market outcomes is well established in the literature. Debate, however, continues to thrive regarding the interpretation of these divergences. On the one hand, it is argued, the data is captured at different points in the transitional phase between common equilibria which would eventually be achieved in each of the regions in the absence of further shocks. On the other, however, it is argued that the equilibria differ spatially and that regionally specific policy is required to remedy the labour market disadvantage of less fortunate regions. Migration flows may, potentially, be regarded as an important factor in the labour market adjustment mechanism which moves all regions toward the same labour market outcome. However, impediments to these flows could result in intractable differences between regions that require policy intervention to resolve. Working with panel data on gross region-to-region migration flows we examine these issues in the Australian case. Our findings suggest that while labour market factors have an impact on determining where migrants settle, they seem to play a less important role in determining the decision to migrate.

Liangjiang New Area in Chongqing City as Territorial Strategy: State-owned Enterprises and Fiscal Regime in Urban China

Miguel Hidalgo Martinez, Xi'an Jiaotong-Liverpool University, China

In January, 2017 at the World Economic Forum, Xi Jinping, President of the People's Republic of China, fiercely defended globalization, stating that: ‘(...) we should adapt to and guide globalization (...) the global economy is the big ocean you cannot escape from (...) and China had learned how to swim’. After almost four decades of economic reform, China has become not only the main emerging economy, but a front-line leading economic player. The central government of China has implemented different territorial strategies to open its economy and attract mobile foreign capital, being the ‘Special Economic Zones’ the first of them in the 1980s. The opening of Pudong Shanghai, as the first ‘New Area’ in 1992, was the first step of the second generation of territorial strategies towards further economic opening. This paper argues that despite the arrival of foreign investments and a strident ‘opening up’ rhetoric, ‘New Areas’ are not ‘territorial exceptions’ where low taxation and deregulation attract mobile capital. On the contrary, these territories constitute strategies through which the

Chinese central government subsidizes large state-owned enterprises and collects high tax revenues, strengthening its grip of the economy. This paper assesses the case of Liangjiang New Area in the city of Chongqing, in China's hinterland. Through the opening of Liangjiang in 2010, the central government has provided land, access to transcontinental infrastructure and subsidies to Chang'an Automobile Corporation, a large state-owned enterprise. At the same time, the central government has been collecting increasing tax revenues from the buoyant capital investments within Liangjiang.

Geodemographics and the Functional Regionalisation of Commuting: A Framework Applied to England and Wales

Stephen Hincks, University of Sheffield, United Kingdom

This paper outlines an approach for the derivation of functional regions based on a novel flow-based classification of commuting for England and Wales. In doing so, it applies an approach to the analysis of commuting in which origin-destination flow-data, collected as part of the 2011 census of England and Wales is segmented into groups based on shared similarities across multiple demographic and socioeconomic attributes. k-Means clustering was applied to 49 flow-based commuter variables for 513,892 interactions that captured 18.4million of the 26.5million workers recorded as part of the 2011 census of England and Wales. The final classification resulted in an upper-tier of nine 'Supergroups' which were subsequently partitioned to derive a lower-tier of 40 'Groups'. The Supergroup classification was subsequently subject to functional regionalisation with the aim of deriving new geodemographic-based commuting areas for England and Wales. Finally, consideration is given to some of the applications of the approach in policy and practice.

The Democratic Foundations of the Just City: Urban Planning Politics in three European Cities

Charlotte Jayne Hoole, University of Birmingham, United Kingdom

Peter Lee, University of Birmingham, United Kingdom

Eric Chu, University of Birmingham, United Kingdom

Roman Zwicky, University of Zurich, Switzerland

Oliver Dlabac, University of Zurich, Switzerland

This research investigates the roles of leadership, stakeholder cooperation and democratic scrutiny in different institutional and regulatory settings for pursuing urban planning policies that arguably contribute more or less to the ideal of the Just City. By investigating the role of political leadership and the conditioning role of the national institutional and regulatory context, this study aims to better understand the scope for urban political leaders to enforce urban planning policies that are in line with the ideal of the Just City. Through comparative case studies in three European cities (Birmingham, Lyon, and Zurich), the project investigates municipal planning politics in relation to the Just City since the early 1980s. In the first stage of the project, comparative measures are used to assess Just City outcomes in each of the three cities over time. This is followed by document analysis and interviewing to gain an in-depth understanding of institutional patterns and policymaking, interpreting local policy efforts in light of the comparative assessment and linking political processes of urban planning back to the institutional and regulatory context.

The Vision and Mission of Hungarian Medium-sized Enterprises

Reka Horeczki, MTA KRTK, Hungary

In the company structure of Hungary mainly small and medium enterprises represent themselves, fulfilling an important role in the economic life of the country. Although medium-sized enterprises are valued in the prevailing concepts of regional competitiveness (regional clusters, industrial districts, regional innovation systems etc.), and they play a crucial role in various industrial regions' high resilience under the current crisis, their development has not been adequately studied. The focus of research has been either on the higher, or lower size category of industry (large, mainly transnational enterprises vs. small enterprises, typically in their early development phase), and mainly lacking a territorial perspective.

Our empirical research was mainly based on in-depth qualitative interviews with the senior managers or owners of medium-sized enterprises in Hungary, supplemented by a smaller control group of policy experts (leaders of chambers of trade and industry). These interviews were focused on the situation, competitive strategies and current challenges of domestic medium-sized enterprises; as well as policies which help or hinder their development. Enterprises have been selected from three Hungarian regions: a peripheral, under-industrialised region characterised by deep deindustrialisation processes (Southern Transdanubia, particularly its spatially deconcentrated machine industry); a region with the strong presence of FDI and developed enterprise networks (Western Transdanubia, particularly the city of Győr); and a region which has recently undergone a positive exogenous shock via large-scale FDI inflows (Southern Great Plains, particularly the cities Kecskemét and Dunaújváros).

Based on the conducted interviews, I intend to present the vision, mission and development possibilities of medium-sized companies.

Defining New Urban Agendas for City-districts from a Multilevel Perspective. Lessons Learned from Three Districts in Berlin

Georg Hubmann, CHORA Conscious City, Germany

Cristian Matti, Copernicus Institute for Sustainable Development - Utrecht University & EIT climate KIC, Belgium

Districts are heterogeneous in typology, socio-economic structure, and administrative organisation while they are aiming for regional visibility through development strategies of the urban system in which they are embedded. In doing so, each district is aimed at creating agency to develop their respective urban agenda, however, supra-local and multilevel mechanisms and commitments influence and impact their development. How do city-districts create agency to develop their respective urban agenda and can districts be a vehicle for regional policies and governance?

This paper takes a systematic look at three districts in Berlin (Moabit, Schöneeweide and Buch) in order to analyse their initial situations, development paths, and their degree of contribution to city-wide policy goals. It will focus on the respective initiatives of the districts and also elaborate on the specific governance context of Berlin being both a state and a city. The analysis continues to make understandable the impact of the districts on a city-wide strategy called "Zukunftsorte" that addresses a regional policy to strengthen places with knowledge based network structures and interrelations between economy and science. The paper is based on research projects that facilitated integrated district development plans in the three districts in 2016 and 2017.

The research identifies a multi-criteria catalogue for the creation of local agency including a hierarchical prioritisation that relates to different external impacts on each district. The success of city-districts shaping regional policies is heavily dependent on the prevalent governance structure and centrally coordinated resources in order to align dispersed district actions.

Brexit and Territorial Politics in the UK: The Rescaling of Fisheries Policy

Christopher Huggins, University of the West of Scotland, United Kingdom

John Connolly, University of the West of Scotland, United Kingdom

Craig McAngus, University of Aberdeen, United Kingdom

Arno van der Zwet, University of the West of Scotland, United Kingdom

Brexit presents significant challenges to territorial politics in the United Kingdom. While the repatriation of policy competences from Brussels potentially empowers the administrations in Scotland, Wales and Northern Ireland in policy areas where they have hitherto only played an implementation role, the need for effective policy co-ordination across the UK may see decision-making and political authority in some areas re-centralized in Westminster and Whitehall - a move that is likely to be resisted by the three regions. Post-Brexit, therefore, the UK faces a challenge of balancing the need for effective governance with realities of territorial politics.

While multi-level governance literature often highlights the role of European integration to support devolution and empower the regional level, Brexit presents an opportunity to examine the impact of de-integration on territorial politics. This paper employs the concept of rescaling and draws empirical evidence from interviews with actors in the UK government and the devolved administrations to critically survey ongoing multi-level politics in the UK as it withdraws from the European Union. This is achieved by examining the case of fisheries policy. While this is a devolved competence, it also overlaps with other policy areas, such as international trade and international negotiation, which are reserved powers of the UK government. This, combined with differences in the nature of the fishing industry across the UK's regions, raises the potential for intergovernmental conflict, both between the UK's constituent territories and in their relationship with the UK central government.

Impacts of the “Belt and Road” Initiative on China’s Border Areas’ Development

Liu Hui, Institute of Geographic Sciences and Natural Resources Research, CAS, China

The implementation of the “Belt and Road” Initiative makes China’s border regions become the front for inland opening and international cooperation, which would have great impacts on the border areas’ development. Based on the comprehensive discussion about the mechanism of the construction of the “Belt and Road” on the development of the border area, this paper selected 137 counties (cities) along the border of China as the basic unit, and analyzed the overall impact and regional differentiation of the “Belt and Road”. Results shows: ①The construction of the “Belt and Road” mainly through improving the geo-political environment and location conditions of the border area to attract industry and population agglomeration, thereby enhance the development vitality of the border areas. ② The construction of the “Belt and Road” has significant impacts on the border cities through which six international economic corridors passed, which would promote further polarization on the development of border area. ③There are obvious regional differences in the impacts of the construction of the “Belt and Road” on the border areas. It promoted rapid development in the border areas of Xinjiang, Yunnan and Guangxi, but limited effect on the

development of the Northeast and Tibet border regions in recent years. ④The development of border counties (cities) is influenced not only by national policy, such as the “Belt & Road” Initiative, but also closely related with the macroeconomic development conditions of provinces that they belong to and neighboring countries.

Location Matters: How Firm Level Determinants and Regional Externalities Shape Firm Performance During Macroeconomic Stability and Instability

Christian Hundt, Germany

Linus Holtermann, Ruhr-University Bochum, Germany

Jonas Steeger, University of Hamburg, Germany

Johannes Bersch, Centre for European Economic Research (ZEW), Germany

Purpose – The purpose of our study is to examine the economic performance of firms depending on the macro-to-micro-transition of economic resources from regions to firms. We assume that this transition depends a) on the quantity and quality of agglomeration economies in the respective region, b) on the firm’s capability to make use of them, and c) on time-related changes in the macroeconomic environment.

Methodology – We employ a hierarchical mixed model that allows to model data measured on different levels at the same time – in particularly data of firms nested within regions – thus taking complex spatial dependency structures into account.

Central findings – The empirical results validate the existence of a macro-to-micro-transition by means of significant cross-level interaction effects between agglomeration economies and the combinative capabilities of the receiving firms. Furthermore, the results indicate that the firm-related impact of agglomeration economies strongly depends on the macroeconomic cycle. In periods of macroeconomic stability, firms benefit most from MAR externalities, while the greatest benefit in periods of instability is generated by externalities stemming from related variety.

Originality/value – Our study contributes to the existing literature by showing that the economic performance of firms crucially depends on a working macro-to-micro transition of external resources, which presupposes sufficient agglomeration economies and adequate combinative capabilities. Another key driver of the macro-to-micro transition is the firms’ aptitude to continuously adapt their internalization strategies to macroeconomic cycles, since different macroeconomic environments require different economic resources thru different regional externalities.

A Measure of the Spillover Effects among Companies of the same Nationality in Location Choice for FDIs

Seok-Joon Hwang, Kyungpook National University, Korea, Republic of

Xiaomin Li, Kyungpook National University, Korea, Republic of

In our research, we suggest the way to identify the spillover effects through the location choice of Japanese FDIs into Korea. The way of measure is based on the part of dart board approach suggested by Ellison and Glaeser (1997). Even though they insist that it is difficult to identify directly the spillover effect from the overall agglomeration effects, especially natural advantage effects, we suggest that there is a way to measure the relative spillover effects in the case of the location choice of foreign direct investments.

First, we propose a simple way for the identification of the spillover effects based on the theory suggested by Ellison and Glaeser (1997). Second we adopt our suggested idea to the calculation of the relative spillover effects of Japanese FDIs with firms of same nationality and the one with host-country, Korean, firms. This will allow us to measure the spillover effects in relative way, which is separate from the natural advantage effects on the location choice.

Can FDI Improve Host Regions' Technical Vocational Education and Training Systems in Emerging Economies? – Empirical Evidence from Southeast Asia

Eduardo Ibarra-Olivo, London School of Economics, United Kingdom

Multinational Enterprise (MNEs) can significantly enlarge and improve host regions' human capital base. By introducing skill upgrading activities for suppliers and by conducting internal training programs for their own employees who may eventually move to local firms where they apply their acquired technical knowledge, MNEs may ensure a rising supply of well-skilled future graduates. However, many emerging economies that have undergone an industrial take-off phase, due to foreign direct investment (FDI) flowing into labor-intensive manufacturing sectors, eventually experience a slowdown of economic growth rates and become stuck in the middle-income trap. One reason behind it might be the fact that governments often prefer investing in higher education institutions rather than in Technical Vocational and Education Training (TVET). This could result in national education systems failing to keep up with the changing skill demand, consequence of rapid industrial development.

In recent years, qualitative case studies have demonstrated that MNEs may boost regional development by improving through upgrading host regions' education systems in collaboration with development agencies and local universities, thereby ensuring a rising supply of well-skilled future graduates. Quantitative evidence on this relationship is thin and mainly focused on tertiary education systems rather than TVET. We intend to fill this research gap by employing a panel data dataset of more than 100 provinces from Indonesia, the Philippines, and Vietnam from 2007 to 2016. The aim is to explore whether greenfield foreign investments can generate broader regional impacts by rising numbers of graduates in host regions' TVET systems.

Counter-Urbanization, Entrepreneurship and Sustainable Rural Development in Developing Countries: The Nigerian Example

Oladayo Ibrahim, Lagos State Polytechnic, Nigeria

Toba James Oyeibanji, Lagos State Polytechnic, Nigeria

The potential of counter-urbanization on rural development in developing countries has not enlisted a deserved discourse in the literature. Whereas, the complex consequences of counter-urbanization, present challenges to policy makers who seek to alleviate poverty, improve rural areas conditions and reduce spatial income inequalities, the development trajectory of rural areas hinges on the number and quality of human resources and endogenous capital, which underpin sustainable development. Realizing the potentials of counter-urbanization therefore, requires more concerted efforts to plan and manage rural development with counter-urbanization and closely related factors of entrepreneurship as the main factors. This also means that local development initiative must use the resources they have (local knowledge, land, skills and traditions, primary production, natural environmental beauty, and social networks), turning or configuring these resources into development

resources to unlock their internal development capacity in a sustainable manner. This requires a new and reformed rural development policy to comprehensively address deficiencies of the local development system, poor human resources, the lack of legitimate local institutions, weakness of trust and entrepreneurship, as well as making all these issues be part of rural development policy.

The Role of Population Absorptive Capacity in Environmentally Sustainable Spatial Planning at the Local Level

Piotr Idczak, Poznan University of Economics, Poland

Karol Mrozik, Poznan University of Life Sciences, Poland

The spatial planning in communes should be done in accordance with the principle of sustainable development. In areas under the pressure of excessive suburbanization, process of spatial planning often takes a spontaneous nature and results in decisions providing the oversupply of the land for investments in relation to the rational needs. As a consequence, it can lead to an excessive and unjustified human interference in the natural environment. The study provides an evidence on the spatial planning and management conducted by the three rural communes located within the framework of the metropolitan areas of the city of Poznan. The findings of this study indicate that achievement of the spatial planning seem to be not fully reasonable. The areas planned for housing function significantly exceed the demand dictated by the projected population increase. It means that the spatial planning does not truly reflect the principle of sustainable development. This was done with the use of demographic indicators applied for spatial management evaluation. Our research stressed the importance of population projections in the environmentally sustainable spatial planning at local level. The study is supported by Polish National Science Centre (2013/09/D/HS4/01858) core funds.

Identifying Inter-firm Trading Structure in Local Economy: How do Local Businesses Influence the Local Economy?

Yoshifumi Ikejima, Yokohama National University, Japan

These days, Government of Japan has been introducing local enterprise support policies against local economic decline. These policies are designed to understand local economy based on big data for corporate behaviors, and to make effective measures by those evidences. Evidenced-based policy making is taking root in a major political concept in developed countries. For example, the Act on the Promotion of Regional Investment for Future was launched in 2017, and this act aims to strongly support approximately 2,000 medium-sized regional businesses. These firms were selected by some indexes like sales, transaction relationships, and employment or so. Especially, data for transaction relationships between corporations showed how many transactions within local area were conducted or how much money transferred from a region to other region depending on firm locations. However, whether these firms derived from so-called big data can actually contribute on driving local economies or not has not been verified so far a prior to the policy implementation.

This paper tries to classify corporate behaviors about its transactional direction based on the inter-firm trading data, and to analyze local economic structure. From the data for the number of transactions and transaction amounts in a local area, firms were classified into four categories: global-link type, receptor type, connector type, and local-service type. Taking consideration into corporate behavior focusing on where to pass orders and from where to get orders can indicate money flow

around an area, and this inter-firm trading structure in local economy would be useful insight for economic development for regions.

Urban Regeneration of Small and Medium-sized Cities in Romania

Oana Ramona Ilovan, Babes-Bolyai University, Romania

In the context of post-socialist shrinking cities, we present and discuss the peculiarities of collaborative practices in the framework of place leadership in small and medium-sized cities in Romania. We focused on city regeneration actions and on place making, choosing a series of case studies from all regions of Romania.

We explored the factors enabling the participatory practices of the inhabitants, alongside the state administration or despite it. Findings showed that bottom up initiatives (determining economic performance, cultural integration, and socio-economic resilience) tended to be more prone to success than state initiatives.

In addition, the historical and cultural context after 1989, and especially after 2007 (Romania's accession to the EU), enabled inhabitants' participation in urban development, their initiatives and innovative approaches. These were visible especially for the generations after the 1980s, related to a significant shift in attitude and education after the fall of Communism.

Moreover, within a necessary general process of raising people's awareness about their participation in urban regeneration and to development in general, we answered the question about the sustainability of the urban regeneration actions (in small and medium-sized cities) of either inhabitants and of public or private institutions. Findings showed that many of the analysed actions and practices had short term or medium term impact and that their sustainability was conditioned by the role of the public government at the local level.

Local Development, Complexity and Fertility: Insights from Italy

Niccolò Innocenti, University of Florence, Italy

Luciana Lazzeretti, University of Florence, Italy

Daniele Vignoli, University of Florence, Italy

The trend towards declining fertility represents a timely and pivotal concern in the high-middle income countries (Bryant, 2007; Dribe et al., 2017). Nonetheless, the relation between local economic development and fertility represents an understudied field. This issue is particularly relevant for a country like Italy, characterized by persistently very low fertility levels and extraordinary socio-economic regional differentials.

While previous studies focused on the relation among income or wellbeing and the total fertility, this work relies on a new indicator of the economy of Italian provinces for the period 2006-2015 and of their perspective of future development – i.e. the economic complexity (EC). The notion of EC stems from a recent strand of research, firstly developed by Hidalgo and Hausmann (2009), which sustains a view of economic growth and development that emphasize the complexity of a country's economy. The idea is that an area with higher economic complexity will perform better in terms of future growth (Gross Value Added – GVA, employment, innovations). In this study, we posit that EC might also represent a potent driver of fertility because it embodies several dimensions often considered key

factors associated to fertility change in a local context, such as the accumulation of human capital or women's emancipation (Lehr, 2003).

The Key Actors of Knowledge Production Function in Turkey: The Role of Universities as Knowledge Producer

Selen Isik Maden, Suleyman Demirel University, United Kingdom

Aykut Sezgin, Süleyman Demirel University, Turkey

Ayşegül Baykul, Süleyman Demirel University, Turkey

Sevim Unutulmaz, Süleyman Demirel University, Turkey

Murat Ali Dulupçu, Süleyman Demirel University, Turkey

By taking the projects which are carried out in the universities in Turkey and are funded by the Scientific and Technological Research Council (TÜBİTAK) as an output, the paper tries to estimate the knowledge production function of Turkey. The knowledge production function was first introduced by Griliches in 1979. Traditionally, the production function has been utilized in empirical studies under micro-level theory of firm. However, the advance of knowledge economy together with the development in information technologies has entailed the redefinition of the sources of knowledge production. The multi-locality of knowledge and the inter-actor pipeline transportation structure of it render the concept attractive in the regional level. In this context the studies on the knowledge production function are aggregated in the universities that may be identified as knowledge hubs. In Turkey, the principle institution that contributes to knowledge production and innovation is the universities.

In the study, an OLS analysis is made with cross-section data by utilizing the datum of state universities operating in Turkey at the NUTS III level. The dependant variable of the knowledge production function that is developed by using Cobb-Douglas production function is the annual research and development fund transferred to universities by TÜBİTAK for the projects. Other variables in the analysis are the annual R&D expenditures of universities, the number of academic staff, number of postgraduate students and the existence of Technology Transfer Office and/or Technopolis. According to the analysis results there is a positive and significant relationship between R&D fund, and postgraduate students and technology transfer offices/technopolis. However, the relationship between R&D expenditures and the R&D funds transferred to the universities is found to be statistically insignificant. While R&D funds and academic staff are assessed together a negative and insignificant relationship is found, but in the models in which academic staff is decomposed the results differ.

Territorial Politics and Development Policy of Border Regions in Indonesia

Doddy Iskandar, Universitas Gadjah Mada, Indonesia

This paper evaluates regional development policy as an instrument to address regional disparity and wealth inequality through various strategies against the backdrop of local autonomy and decentralization in Indonesia. Attention is given on how such approach is capable in stimulating development in border regions, long marginalized in the decision-making and development processes. The notion of participation and representation in the current practice of decision-making and resource re-allocation in the border region were hardly considered, as border itself was rarely considered the product of democracy. As a result, border regions experienced exclusions from economic choices and

protections. This lead to regional shortcomings in addressing contemporary challenges and development problems.

Drawing from the case of 22 lagging border regions in Indonesia, this paper posits that lower productivity and development achievement were the result of stakeholders' different perspectives and take on border region. The result was the inability of the regional economy to grow even as government at various level increased their development expenditure and implemented various development programs and projects. Lack of collective agreement among different level of governments lead to flawed governance mode which resulted in poor development achievement measured via the following indicators: poverty level, unemployment rate and human development index. Moreover, despite the argument that decentralization will lead to greater autonomy in managing region and effective local fiscal policy, higher government development expenditure does not immediately correlate with higher development achievement. Implications are drawn in redefining the role of state and politics in addressing inequality in border regions.

Asymmetry of Cross-Border Areas - Dimensions and Consequences

Andrzej Jakubowski, Maria Curie Skłodowska University, UMCS, Poland

Cross-border areas are shaped by a set of conditions of diverse nature, which determine their inner dichotomy. In a situation where these inequalities are particularly significant, we can talk about the phenomenon of the asymmetry. It can occur on many levels and may be reflected, among others in the diversified level of development, the level of prices, the different situation on the labour market, etc. (economic dimension), diversified level of human and social capital (social dimension), or in varied competences of local and regional authorities functioning on both sides of the state border (institutional dimension). Asymmetry is a multidimensional phenomenon affecting many spheres of socio-economic life. Inequalities between border areas become both a source of opportunities, as well as challenges and threats for socio-economic systems of areas located on both sides of the state border, while its consequences in various spheres can be both beneficial and unfavourable.

The main aim of the paper is to characterise the asymmetry of cross-border areas on the example of cross-border areas located on the Polish borders (Polish-German, Polish-Czech, Polish-Slovak, Polish-Ukrainian, Polish-Belarusian, Polish-Lithuanian and Polish-Russian borders) in different dimensions as well as to determine its impact on the development of regions located on both sides of the state border and the cross-border cooperation between them.

Renewing the Innovation Referential through a "Smart City" Model of Valuation

Hugues Jeannerat, University of Neuchâtel, Switzerland

Ariane Huguenin, University of Neuchâtel, Switzerland

Olivier Crevoisier, University of Neuchâtel, Switzerland

This contribution first proposes a reading of past innovation and regional studies to stress the evermore prominent place given to innovation in research and policy discourses and practices. It then shows how this referential of innovation currently structures research debates on competitiveness, digitalization and sustainability. In many ways, the term of "smart city" is emblematic of this innovation referential. New policy concept providing the building blocks of a new generation of territorial development research and policy? Or global narrative serving the continuity of a

technology-based approach to regional competitiveness in the digital age? To address these questions, it will be argued that recent smart city policies and initiatives can pave the ground to a renewed conception of innovation policy making. However, to do so, these must be interpreted in a valuation approach that considers cities not only as places of innovative solutions but also as places of problem setting at a national and international scale.

Defensive Institution-Building and Changing Social and Political Boundaries: Local Agricultural Regimes and Agricultural Reform in Japan

Hanno Jentsch, German Institute for Japanese Studies Tokyo, Japan

This paper introduces the concept of “local agricultural regimes” to analyze the process of renegotiating Japan’s agricultural support and protection regime. In postwar Japan, an extensive agricultural support and protection regime created and sustained an agricultural production structure dominated by small-scale, part-time household farms. Deeply embedded in the countries’ postwar political economy, the regime served as an instrument to provide social security in the structurally weak, but electorally over-represented peripheries. As the linchpin between farmers and the state, the organization of agricultural cooperatives (Nokyo) acted as a powerful interest group, the executive arm of state policies, and a major beneficiary of the agricultural support and protection.

Against the background of a prolonged structural crisis of the farm sector, agricultural policies have been moving toward scale-enlargement, professionalization, and the opening of the farm sector for corporations since the mid-1990s. However, the support and protection regime has not broken down. Based on interviews and participatory observation, this paper argues that amidst a gradual, inconsistent reform process, the process of institutional change in the agricultural sector is shaped in local agricultural regimes, the heterogeneous interfaces between state policies and local social network ties and norms. In each local agricultural regime, local actors (including e.g. the local branches of the cooperative organization) construct distinct interpretations of the national reform process. However, municipal and cooperative mergers have been disrupting the social and political boundaries of many local agricultural regimes, thus rendering “defensive” local responses to structural reform and deregulation more difficult.

Smart Urban Governance: A Contextualized Approach

Huaxiong Jiang, Utrecht University, The Netherlands

Stan Geertman, Utrecht University, The Netherlands

Patrick Witte, Utrecht University, The Netherlands

The impetus of smart city initiative spreads worldwide which requires new approaches to realize the governance of smart city. However, traditional urban governance (UG) focuses either on problem orientation or process orientation, yet no effective ways are used to integrate these two governance paradigms, let alone to govern the recent priority of smart city development. To deal with mismatch, we introduce a transformative ‘smart governance of urban space’, or in other words, smart urban governance (SUG), as a new leading-paradigm of governance in the era of smart city. We argue that technology have huge potentials in the transition from urban governance to smart urban governance (in short UG/SUG transition) to realize the governance of smart city. To arrive at this argument, a conceptual framework is proposed to explain the facilitating role of technology (mainly information- and communication technology (ICT)) in this UG/SUG transition from an institutional perspective of

view. Then, a case study has been conducted in Amsterdam to show how the crucial factors that influence the potential ICT roles of information, knowledge and instruments have contributed to the institutional transition in Amsterdam's governance practice. We find that the content of governance issues, characteristics of users and governance process, and specific functionalities and organization of ICTs themselves are the decisive elements for ICT-enabled potentials of UG/SUG transition. We conclude that despite technology intelligence builds a bridge between governance problem and process in the accomplishment "smart governance of urban space", it never means a technology-determinism. In fact, the interactive dynamics between space, institution and technology, viz., the consideration of socio-spatial context, will determine the successfulness of UG/SUG transition.

Regionalising Spatial Justice: The Role of the Well-being of Future Generations Act in Wales

Rhys Jones, Aberystwyth University, United Kingdom

Michael Woods, Aberystwyth University, United Kingdom

Bryonny Goodwin-Hawkins, Aberystwyth University, United Kingdom

The idea of spatial justice has been used by various academics in recent years to conceptualise spatial inequalities and to identify the most appropriate and effective practical mechanisms that can be used to address them. While the term has been predominantly used at an urban scale to date, there are some early signs of its growing application as a way of understanding regional challenges and deficits in territorial governance. In this paper, we draw on research conducted as part of a Horizon 2020 research project in order to examine how ideas of spatial justice have been applied in relation to Wales' Well-being of Future Generations Act (2015). The Well-being Act has sought to encourage different stakeholders in Wales to define a long-term future for the region/territory, which is characterised by well-being, justice and sustainable forms of development. We use the implementation of the Act in Wales as a way of highlighting broader conceptual and policy implications concerning the application of ideas of spatial justice at a regional/territorial scale. In particular, we illustrate: 1) some of the tensions associated with introducing a discourse of spatial justice into regional/territorial forms of governance; 2) the difficulties in reconciling more regional visions of spatial justice with European Union policies seeking to promote territorial cohesion and social solidarity. We conclude by reaffirming the potential benefits of using ideas of spatial justice but also note the conceptual and practical challenges associated with its application at a regional scale within Europe.

Local Public Finance and Well-being

Dylan Jong, University of Groningen, The Netherlands

Philip McCann, University of Sheffield, United Kingdom

Viktor Venhorst, University of Groningen, The Netherlands

This paper uses data from the Fiscally Standardized Cities database of the Lincoln Institute of Land Policy to examine the effect local governmental organizations have on local well-being. It is argued that one of the advantages of a decentralized governmental system is that it leads to policy innovation due to policy competition (Tiebout, 1956; Martínez-Vázquez and McNab, 2003). Local governments are competing to attract people and businesses to move to their cities by providing the best amenities they can. Following the work of Faggian et al. (2012), the 'voting with your feet' approach of Tiebout (1956) is used to determine the revealed preferences and infer well-being from these preferences.

Relating competition among local governments to the arguments of ‘voting with your feet’ and the inferred well-being, the argument is that as local governments increase the amenities of their cities, they will attract people to move there in order to increase their well-being by enjoying these higher amenities. The question therefore becomes: how can local governments increase their amenities and thus local well-being? In this paper, local governmental expenditures and revenues are used to determine local governmental activities and are therefore used to measure the effect of local public finance on local well-being through revealed preferences. The revealed preferences are measured by population growth and housing prices. The relationships will be analyzed using Generalized Method of Moments and Pooled Mean Group estimations.

Apprentice Scheme in ICT Industry: A Key Instrument of Vocational Training to Align the Needs of Private Sector with Educational Programs in Albania

Jolta Kacani, Polytechnic University of Catalonia, Spain
Erka Caro, University of Tirana, Albania

The ICT industry is a key factor in developing countries for economic growth and development as it promotes innovation and brings high added value services in the market. Considering the fast growth and embedment in each sector it is expected that ICT related skills are highly needed in each occupation while the private sector suffers from unskilled labor. The gap between the needs of the ICT industry and skills of the labor force is a direct result of the inadequate training programs offered in the educational system in Albania but also of an unequally distributed needs and opportunities in the regional labor markets. In the framework of enhancing the quality of professional training, a solution was developed that would be of benefit to all parties, the apprentice scheme a long-term professional practice in the company, which lasts the whole period of the vocational and education training. Based on a case study methodology we analyze the application of apprentice scheme built following a project based learning approach in two vocational education institutions in Albania and in 11 ICT company leaders that technically and financially supported this scheme. Our hypothesis is that upon completion of the apprentice scheme the graduates during which they have been exposed to various projects and positions in companies are able not only to become full time employees in the ICT industry but to also gradually fill in the gap existing in the labor market in Albania.

Key words: ICT industry, apprenticeship schema, Vocational Education, Skills

Enhancing Labor Specialization to Facilitate Placement in Foreign Enterprises Operating in ICT Industry: The Case of Albania

Jolta Kacani, Polytechnic University of Catalonia, Spain
Erka Caro, University of Tirana, Albania

Within the last five years, the labor market in Albania has experienced internal migration of the labor force from small towns into major cities. Internal labor migration has resulted from the increase in the demand for a qualified labor force especially in foreign enterprises operating in ICT industry. Key issues arise in the Albanian labor market as the increase in the labor supply resulting from internal migration lacks the skills required for employment in the ICT industry. Faced with this discrepancy of the Albanian labor market, this paper tries to identify the instruments of labor specialization that would generate labor skills needed to meet the demanded quality of labor. Following a case study methodology, we analyzed the skills required in four Italian ICT enterprises operating in Albania not

provided by the labor force. We identified that provision of a specialized vocational training based on apprenticeship in distance schemes prior to starting a job in the ICT industry facilitates employment in foreign enterprises operating in Albania. After employment, on the job training leading to transmission of additional technical knowledge from foreign enterprises operating in a developing country like Albania significantly improves the quality of the labor force in the country. These two instruments facilitate not only labor market migration but also generate a positive migration of knowledge and skills in the country.

From Migrant Labour to Migrant Students – A South African Conundrum

Michael Kahn, University of the Western Cape, South Africa

Thandi Gamedze, University of the Western Cape, South Africa

Joshua Oghenetega, University of the Western Cape, South Africa

The mobility of the highly skilled (MOTHS) covers topics such as progression, emigration, and the career path of those with tertiary qualifications. Studies on the MOTHS phenomenon tend to be concentrated in the 'North'.

This paper considers the case of South Africa, with its long history of unskilled labour migration. The onset of constitutional democracy in 1994 saw the resumption of inward student migration, to the extent that the country is now the university hub of Sub-Saharan Africa.

Skills shortages plague her economy, so one might assume that the large numbers of foreign students might spur active immigration policy. On the contrary, government policy limits potential brain gain from Africa by denying work permits to foreign graduates. This raises the question: where do the foreign (African) graduates go upon completion of their studies?

A tracer study modelled on the Careers of Doctoral Holders project is being employed to investigate this. The success of the project turns on the availability of complete and accurate data. This is a tall order as no central database exists. Accordingly a variety of sources is being used, including alumni, bibliographic, dissertation, project databases augmented with social media. Preliminary findings suggest that the majority of African PhD graduates not only graduate in the minimum time, but do in fact return home. A tentative explanation for this is that these graduates are mid-career professionals who return to their families and work stations at home. This is an example of brain circulation at its best.

Territorial Governance and City-regions: Lessons Learned from the 'Piecemeal' approach in England

Tamás Kaiser, National University of Public Service, Hungary, Hungary

Answers to challenges in a changing environment and a new, "placed based" development paradigm highlights the need to work with a more flexible sense of geography, developing institutional reforms in delivering public services.

The emerging city regions in England can be regarded as a prime test of what the need for optimal territorial scope and enhanced coordination needs.

The aim of this paper is to examine the emerging new forms of territorial governance in the light of the 'piecemeal' approach of reforms launched by the post 2010 Conservative-Liberal government.

We argue that the creation of city-regions is an organic part of the new territorial paradigm, an important element of which is an integrated and functional approach that intersects public administrative borders. Since 2010, the uniformed regional model has been replaced by primarily ad hoc, informal and flexible approaches. The Cameron cabinet placed the same cities and wider areas (essentially the functional city regions) at the centre of English devolution, but wished to implement them in varying forms and with different mechanisms (City Deals, Combined Authorities, Devolution Deals), encouraging solutions tailored to local requirements and opportunities, retaining the fundamental characteristics of the 'asymmetrical devolution'. However, in terms of regional governance, the relationship between the new and old regional configurations has seen the creation of a much-debated, malleable framework which, during the process of Brexit could generate new, further interpretations, narratives and practical solutions.

The Effect of the European Debt Crisis on Foreign Direct Investment: Case of Turkey

Mustafa Kartal, Selcuk University, Turkey

European Union (EU) member countries are among the most important commercial and financial partners of Turkey. Thus, a crisis that will break out in Europe will be able to seriously affect Turkish economy via especially foreign investment inflow and export. In this study, in the light of quarterly data (2008Q1-2017Q2), the effect of European debt crisis on foreign direct investment was analyzed specific to Turkey by using ARDL model. It is understood that the external debt variable has a negative effect on foreign direct investments, whereas the deposit interest rate variable does not have any effect. According to analysis results, a 1% increase in net external debt of the euro area member countries will lead to 5.74% drop in Turkey's foreign direct investments. At the same model, if Turkey's national income increases 1%, then foreign direct investment increases by %3.02. In addition, the coefficient of dummy variable found negative and significant.

Conceptualizing Territorial Impact Assessment – Combining Measures for Hard and Soft Spaces

Jiannis Kaucic, University of Vienna, Austria

In relation to discussions on the 'added value' and 'territorial impact' of European Cohesion Policy and recent development of models and tools for 'territorial impact assessment' of policy proposals, the paper discusses different existing approaches and proposes an extended conceptual framework for ex-post 'territorial impact assessment', integrating quantitative and qualitative perspectives.

It is argued that in addition to existing quantitative top-down modelling approaches focused on the impacts in bounded territories, there is a need for more qualitative bottom up assessments, which are able to address interactions between territories and people. These assessments should also conceptualize 'functional geographies', which integrate social, economic and environmental functionality into 'territorial impact'. Despite different conceptualization efforts, researchers highlight the lack of an operational definition of the 'multi-dimensional concept' of territorial cohesion (Davoudi, 2005; Faludi, 2005; Medeiros, 2011).

In this context, the paper discusses the components territorial quality, efficiency and identity and argues for the integration of functional geographies in territorial impact assessment, using quantitative and qualitative methodologies and indicators to measure territorial impact of spatial

policy. Here, the taking up of the notions of transnational learning and ‘discursive integration’ (Böhme, 2002), as well as methodological approaches like social network analysis could prove helpful.

Based on this, the paper proposes an improved methodology that can be applied to evaluate the ex-post impact of different spatial strategies on territorial development of regions.

Leaves in the Wind? The Effect of Local Policies on the Economic Structure of Small and Medium-sized Towns in Metropolitan Regions

David Kaufmann, University of Bern, Switzerland

Meili Rahel, University of Bern, Switzerland

Metropolitan regions are the relevant competing units in interurban competition. Metropolitan regions consist of networks of cities and towns. Small and medium-sized towns (SMSTs) contribute to the economic performance and success of the whole metropolitan region. However, the variety of factors that influence the economic development of SMSTs is understudied and the role of local policies in this economic development is especially unclear. This article studies SMSTs inside the metropolitan region of Zurich (Switzerland). With a multiple case study design that relies on a pairwise comparison, we explain what kinds of local policies SMSTs formulate and what influence local policies have on the development of the economic structure of these towns. We find that mainly local land-use policies has the potential to influence SMSTs economic structure. However, their influence is limited, and SMSTs can only manage the economic growth in a reactive way. The economic structure of SMSTs is mainly explained by a mix of factors that are exogenous to local policy-making. SMSTs located close to the core of the metropolitan region develop towards a knowledge-intensive economy, whereas SMSTs remote from the core of the metropolitan region develop towards residential towns. Transportation and land-use policies of higher-tier political entities, such as cantons or the federal government, can furthermore fuel these growth dynamics. These findings suggest that when SMSTs do not want to become “leaves in the wind”, they are well advised to invest in a professionalized land-use planning and in the coordination of land-use planning with their neighbors.

Urban Vision – Between Contest and Collective Enterprises – Case of Indian Cities

Purushottam Kesar, Manipal University, India

Cities, metropolitan regions and development agencies employ visioning strategies in form of set of statements, policy objectives or goals to carve direction of urban futures. These appear as a set of statements, policy objectives or goals inscribed in planning and strategy documents, e.g., Mumbai-2034 or Delhi-2041, Helsinki Vision -2050 and so on. Visions are increasingly now being used with the rise of ‘entrepreneurial parastatals, particularly in India The text i.e. statements or use of words have a powerful impact in shaping the institutional response, particularly in framing practices and routines. The present research seeks insights into the adequacy of such deliberative arenas (agency and discursive space) that structures visions to prepare their cities and regions for urban futures.

In the research, I argue that vision making is akin to ‘dispositif’ where existing practices, institutional systems, actor roles and policy belief systems influence the direction in spatialization of visions in urban constellations. More appropriately the ‘trialectics’ of ‘actor-agency–structure’ play a key role in formulation of visions. Mumbai Urban Vision-2034 is empirically analyzed using discourse analytic frameworks with focus on actor practices and discursive tensions.

The outcomes of the empirical analysis suggest that utterances and strategic practices employed by the actors are key in opening or closing of the discursive tension space to deliberate spatialization of urban visions. A vision then characteristically becomes a contest of interpretations an arena for discursive struggles. The paper concludes by providing insights into discursive space and establishing a need for innovative policy response so as to reduce ambivalence in the discursive arena.

Perception of Economic Factors in Social Acceptance Debates of Wind Energy Systems

Çağdaş Kılıç, Ankara University Institute of Social Sciences, Geography, Turkey

Mutlu Yılmaz, Ankara University, Department of Geography, Turkey

Ramazan Sari, Middle East Technical University, Department of Business Administration, Turkey

As a general opinion, wind energy is regarded as one of the cleanest types of energies. However, there are important discussions about the social acceptance of wind energy in regions where wind plants are installed. Seeing energy facilities as a regional development tool in the local regions is one of them. As such, the aim of this paper is to investigate whether wind facilities are perceived as a means of development and how it affects social acceptance of wind energy systems. In this direction, Izmir's Çesme district, where Turkey's first commercial wind farm was founded 20 years ago, is chosen as a research site. This region is one of the Turkey's most important touristic center. The primary data was obtained by using semi-structured interviews with key stakeholders and questionnaire with residents in Çesme's twenty-five neighborhoods. In total, 25 semi-structured interviews and 400 questionnaires were applied. The economic effects of wind facilities have been investigated through employment creation, investment provision, effects on real estates and existing economic activities. Our analysis shows that, despite strong consensus on benefits at the national level, in the local level the vast majority of participants do not believe that there are any economic benefits of wind energy systems to their region. Almost half of the participants claims that the wind farms are harmful to the economic activities carried out in the region such as tourism, livestock, agriculture. Finally, we identify economic factors influencing the level of social acceptance and successfulness achieved in energy projects.

Metropolitan Governance Matters: The Sluggish Economic Performance of Metropolitan Regions in South Korea

Sung-Bae Kim, Soongsil University, Korea, Republic of

A peculiar scene in Korean territorial development pattern is the sluggish economic performance of major metropolitan regions. Particularly, the ratios of per capita GRDP in these regions to national average are mostly below 1; even in some cases, the ratio amounts to just 0.62 in the case of Daegu. Given the inherent advantages of urban area, this pattern is rather unusual.

This study attempts to identify empirically the cause for this unusual territorial pattern. We hypothesize that the sluggish economic performances are mainly caused by the metropolitan governance structure in which central government has a great authority to control the pattern.

We first discuss a theoretical framework on the relationship between regional growth and metropolitan governance. We then develop an econometric model for estimation using panel data analysis. The data includes GRDP and other socio-economic variables for metropolitan regions (16 regions) from 1980 up to the present. To estimate the impact of metropolitan governance, we develop a metropolitan governance index which reflex the two sides of governance: self-rule and shared rule.

While the former measures the extent of authority exercised by metropolitan government in its own territory, the latter measures the authority exercised by the central government in those regions for the implementation of national spatial development goal. We estimate the model using dynamic panel analysis technique such as GMM.

We expect that this study contributes not only to identify the major cause for territorial development pattern, but also provide recommendations to rescaling of metropolitan governance in Korea.

Universities' Role in Regional Innovation Systems with Differing Concentration of SMEs

Anna-Maria Kindt, TU Dresden, Germany

Matthias Geissler, TU Dresden, Germany

Kilian Bühling, TU Dresden, Germany

Due to existing conditions regional innovation systems function differently. These conditions include the structure of the regional economy. An extreme case are regions which are dominated by small and medium-sized enterprises which lack adequate innovative performance. These have to be linked to knowledge providers from inside and outside the regional network to overcome this hurdle (Tödtling & Trippel, 2005). The geographical proximity of different actors is taken as an opportunity to build trust and exchange tacit knowledge through personal contact (Cooke et al., 1997). One possibility is the cooperation in research and development (R&D) which is known to foster innovation (Czarnitzki & Hottenrott, 2009). Networks can then evolve and fuel innovative activity and performance of a region (Graf & Henning, 2009). SMEs are said to profit from connections within their region to overcome their limited resources in financial and human capital (Beise & Stahl, 1999).

We investigate different regional networks which differ in their concentration of SMEs. The four regions investigated differ in their concentration of SMEs but show a significant research landscape. The comparison includes: Aachen, Braunschweig, Dresden and Karlsruhe. The focus are the universities in all of those regions and their position in the regional network with special focus on SMEs. The basis of our analysis is a dataset of subsidized R&D cooperations (Foerderkatalog). Ties within and outside the regional network are investigated and conclusions are drawn on which role plays a university in an innovation network with or without large companies regarding the linking of SMEs.

Inter-governmental Transfers, Political Alignment and Pork-barrelling: A Panel Analysis of Distributive Politics in Greece

Tasos Kitsos, University of Birmingham, United Kingdom

Antonios Proestakis, Joint Research Centre, European Commission, Belgium

Electoral politics and clientelism are not new notions. Yet, the, often suspected, pork barrelling activity has been difficult to identify until recently. A relatively recent trend involves studies utilising publicly available data on resource allocation and electoral results and being able to econometrically derive evidence of political considerations in the allocation of resources.

This paper examines the role of political partisanship and the electoral cycle in the allocation of funding from the central to local government in Greece between 2003 and 2010. A panel dataset which combines data from the Greek local and national elections and municipalities' budgets for the period 2003-2010 is used to run a fixed-effects model specification. In this way, it is possible to test

whether the political alignment between the local and national government as well as the stage of the political business cycle impact on the allocation of government grants to municipalities.

The findings suggest that municipalities which are politically aligned to the national government receive more grants in the run-up to national elections. This is evidence of pork barrelling and the political business cycle considerations in the allocation of resources. The results call for greater fiscal decentralisation in order to reduce the dependency relationship between the local and national government levels and eradicate the use of intergovernmental transfers for political gain.

The Impact of Awareness for Innovation and R&D Resources on Innovation Success of Turkish MNEs, Developed Countries MNEs and Local Turkish Firms in Istanbul

Timo Kleiner, Leibniz Universität Hannover, Germany

Ingo Liefner, Leibniz Universität Hannover, Germany

In the aftermath of sustained growth and increasing numbers of foreign direct investments from developed country multinational enterprises (DC MNEs), many successful emerging countries find themselves in a period of economic stagnation, often referred to as the middle-income trap. To overcome this situation, large investments in research and development (R&D) are essential to enhance the value-added of firms and regional economies in order to raise productivity and foster innovation. However, such a technological upgrading strategy is a difficult and multifaceted undertaking as it requires not only political support but also considerable investment in technology and organization at firm level. In order to achieve innovation and successfully introducing them into sales markets, companies need to be aware on how to accomplish their innovation strategies and make use of different internal as well as external R&D resources. However, it is still unclear how MNEs and local Turkish firms in the metropolitan area of Istanbul respond to such upgrading pressures. Hence, it is theoretically and empirically relevant to understand the variety of innovation strategies and usage of internal and external assets among such increasingly technology-oriented firms. In this study, we focus on the impact of awareness for innovation and R&D resources on the innovation success of Turkish MNEs, DC MNEs and Local Turkish firms in the emerging market context of Turkey. Based on a quantitative analysis of survey data from R&D intensive companies, we observed several commonalities and differences for each variable category and between company types.

Southeast Asia in the New World Order – US-China Rivalry and the Case of the Philippines

Péter Klemensits, PAIGEO - Pallas Athene Innovation and Geopolitical Foundation, Hungary

In the emerging new world order Southeast Asia's stance becomes very important in parallel with the intensification of the US-China rivalry. The Southeast Asian countries have to adapt to this new situation and their gravitation towards China is visible. For this political shift the Philippines about-face can be seen as a perfect example. During the second half of the 20th century, the Philippines was an indispensable US ally, but the inauguration of President Duterte in June 2016, heralded great changes for the country and the shifting towards China and Russia then the emerging of a more balanced foreign policy became clear.

This presentation will start off with a review of President Duterte's policy and his assumption of office in general. Then it will summarize the Philippines position in the US led international hierarchy after the end of World War II. The presentation will then discuss in detail the fundamental changes in the

country's foreign relations as a consequence of Duterte's new "independent" foreign policy. The ambivalent relationship with the Obama and the Trump administrations, then the main aspects of the "turning to China" policy.

I will argue that in parallel with the changing balance of power, the ASEAN countries will try to choose the most advantageous form of relationship with China and the US, and Duterte's foreign policy shift can be seen as a perfect example of this process. At present we do not assess exactly what will be the results of Duterte's "independent" foreign policy, but it is beyond dispute, that the country's position in the international hierarchy has changed already.

Birds of a Feather Stick together? The Impact of Gender Segregated Occupations on the Acquisition Grade of the Underrepresented Sex - The Case of Dalarna

Anna Klerby, Dalarna University, Sweden

Peter Möller, Region Dalarna, Sweden

Daniel Brandt, Dalarna University, Sweden

The gendered division of labour is still present on the Swedish labour market. Only 16 per cent of employed women and 15 per cent of employed men are working in occupations with an even representation of the sexes (i.e. with a representation of each sex of at least 40 per cent). Qualitative research indicates that the work environment at work places dominated by either sex, are characterized by gendered norms, such as jargon, preconceptions of parenthood etc. that may make the underrepresented sex become excluded.

In this study we examine whether there are statistical evidence supporting the qualitative findings. We use a statistical material based on Swedish regional data on education and occupation. A matching indicator between education and relevant occupations has been created by the Swedish Association of Local Authorities and Regions joint with Statistics Sweden. The main question is whether there is a statistical correlation between the share of men/women in an educational group and the acquisition grade for relevant occupations. E.g. the female share among educated veterinaries is 74 per cent. Out of the female veterinaries 87 per cent work as veterinaries, and out of the group of male veterinaries 79 per cent work as vets. Could the lower rate of acquisition grade among men be due to the female majority among veterinaries?

Some initial results indicate that the matching acquisition grade is gendered and statistically significant. This type of discrimination is very costly both to the individual and to society.

Expenditure Assignments in Russia: Challenges and Policy Options

Vladimir Klimanov, Institute for Public Finance Reform, Russia

Russia is a federal state with a three-level government structure. The responsibility assignments between the powers in Russia are based on Articles 71-73 of the Constitution adopted in 1993. In the past two decades, there have been significant changes in the distribution of responsibilities, which were characterized by alternating phases of centralization and decentralization policies. The basic laws were adopted in 2003 and entered into force in 2005. Since that time, substantial amendments have been made and the number of sub-national and local responsibilities was increased: from 41 to 110 ones for regions and from about 20 to about 50 ones for municipalities. As a result, that led to the budgetary imbalance on sub-national level.

Such division of powers dictates a complicated system of intergovernmental grants. Each year the number of all types of grants was more 100. According to the data of the Russian Treasury, in the data set for 10 years (2006-2015) 1,230 unique names of dotations, subsidies and subventions were submitted. 44 per cent of total sum of all intergovernmental fiscal transfers to regional budgets for last ten years were allocated to national economy issues, including roads and support of agriculture. 12 per cent were provided in housing and social policy. Nearly 8 per cent were invested in health care.

Such system of expenditure assignments and intergovernmental grants presents the need for change. It could be solved with differentiated regional policy options.

Socio-economic Disparities between Rural Regions as Function of their Peripheral Location

Krzysztof Kluza, Warsaw School of Economics, Poland

In 2015, 27% of Europe's population lived in rural areas according to the United Nation's report. In the case of Central European EU members, this ratio was significantly higher – for the last ten years it has remained at 40%. In principle, inhabitants of rural areas are subject to several pressures such as depopulation, income gap and infrastructure scarcities. The EU supports the convergence process between urban and rural areas with the use of cohesion policies. Their impact is widely studied in the research literature and the results deliver several controversies about the positive, neutral or even negative impact of the EU policies on the regional convergence process. Recent findings show that the appropriate design of the regional policies requires more precision than NUTS 2 selection of objects and instruments.

In this paper, we carry out an analysis of rural areas in Poland on the LAU2 (NUTS 5) level, encompassing 2,808 local government (LG) entities in Poland. The crisis also had an adverse impact on the LGs from a demographic and social perspective. Undertaken research based on demographic, wellbeing and infrastructure indicators with the use of logit models revealed significant heterogeneities among rural boroughs. The rural boroughs more distant to large cities are subject to adverse development and demographic pressures. As described in this paper, the strong differentiation between rural boroughs indicates the need for a reconsideration of the criteria for regional cohesion policies. Namely, more context-dependent regional policy instruments should be designed instead of the currently prevailing approach.

Skill Shortage within Regional Industry Clusters

Tobias Koenig, Institute for Applied Economic Research, Tübingen, Germany

Andreas Koch, Institute for Applied Economic Research, Germany

Regional and industry-specific scenarios of skill shortages are foreseeable in many regions and extensively discussed within the scientific literature. However, the recent economic and geographical literature on regional clusters and the associated effects is largely missing the aspect of skill shortage within regional industry clusters. Among others, the focus is on mobility of employees, creation and sharing of knowledge and career paths within clusters. The present article analyzes the availability of skilled workers under the specific conditions of a regional industry cluster using the example of the district of Tuttlingen in Baden-Württemberg, Germany. Tuttlingen is characterized by its historically grown concentrations of industrial sectors, especially in the fields of medical engineering and automotive suppliers. The challenges of the regions firms are the very specific needs for skilled

workers, some of which are even highly specialized within their industry. Moreover, global technological and regulatory changes hamper the forecast of potential quantitative and qualitative demands of skilled labor. The paper at hand examines the extent to which companies in regional industry clusters face specific conditions for the recruitment of professionals, how these conditions evolve and which specific advantages and disadvantages arise for the companies and the region. Methodologically, the article is based on the results of 30 expert interviews and an own standardized firm survey.

Knowledge Spaces – The Evolution of the Inventor-Firm-Location Nexus

Dieter Kogler, University College Dublin, Ireland

The spatial footprint of an entity is usually determined by its headquarter location as well as the location of its branch offices and subsidiaries. To date, the inventive or technical knowledge footprint of entities determined by the location (residency) of its associated inventors has not been considered systematically. Insights into the inventor-firm location nexus will provide the opportunity to explore how patterns of collaborations, citations, re-combination and technological development change when firms move over space. Findings of the proposed investigation will enhance existing and develop new theories concerning the location strategies of firms and provide important insights for regional economic policies that aim to achieve technology upgrading by attracting talent. Multiple location and knowledge attributes of inventors and firms significantly adds complexity to the original knowledge space methodology (Kogler et al., 2013; 2017).

Agglomeration Economy and City Development in Post-soviet Russia

Evgeniya Kolomak, Institute of Economics And Industrial Engineering, Russia

The paper presents empirical estimations concerning the factors contributing to urban growth during the post-soviet period. The introduced market institutions strengthen the influence of the agglomeration economy. Agglomeration-related factors are market accessibility and market size, localization of demand and variety of supply, and diversification and density of economic activity. We run regressions where the indicator of economic activity and the dependent variable is city population, the independent variables are population density, market potential, the Herfindahl-Hirschman index, wage level and provision of educational and healthcare infrastructure.

Several of the independent variables can create the problem of endogeneity. The instruments are lagged values of the independent variables. We run a series of cross-section and panel regressions for and compare the results of the least squares estimator with the IV estimator. A Huber-White sandwich estimator of variance is used to adjust standard errors for different variances within the regions. The results of the OLS and IV-estimates do not differ essentially, and we can consider them as rather stable and robust.

The estimations show that agglomeration economy influenced the evolution of Russian cities. The market forces, including localization, diversification, market size, transport and social infrastructure, participated in shaping the urban structure in the post-soviet period in Russia.

Introducing EU-wide Platforms to Produce, Share and Visualize Urban and Regional Data

Mert Kompil, European Commission - Joint Research Centre, Italy

Carlo Lavallo, Joint Research Centre, Italy

Nicola Pontarollo, Joint Research Centre, Italy

Carolina Serpieri, Joint Research Centre, Italy

High quality data and data-driven approaches are crucial to inform policy makers better while improving well-being of citizens and solving their problems. Demographic, socio-economic and cultural factors that affect natural and built environment and everyday life of citizens are uneven across space. Therefore, it is precious to have place-based information on those factors and to be informed on cities and regions with different development strategies, patterns and profiles to achieve a better regional policy. Based on those requirements, the European Commission has recently developed several online tools / platforms in various thematic fields to facilitate access to data, its visuals and analyses. Among them, three of those platforms are particularly important for urban and regional level information, which make a large amount of novel data publicly available. The aim of this conference proceeding is to introduce these platforms (being) developed mainly by the LUISA Territorial Modelling Platform (<https://ec.europa.eu/jrc/en/luisa>) as a part of activities under the Knowledge Centre for Territorial Policies (<https://ec.europa.eu/jrc/en/territorial-policies>) and discuss how to improve and integrate them efficiently in the future: I) Urban Data Platform (<http://urban.jrc.ec.europa.eu>), II) Territorial Dashboard (<http://urban.jrc.ec.europa.eu/t-board/index.html>), III) The Platform for Urban and Territorial Development Strategies (under development).

The Baby-boomer Consumer and Retirement Village Accommodation: The Influence of Age and Lifestyle on Choice

Foula Kopanidis, RMIT University, Australia

Linda Robinson, RMIT University, Australia

Mike Reid, RMIT University, Australia

The ageing of Australia's population is a well-documented trend with many industrialised nations, such as the United States of America, New Zealand, Italy, Japan, France and Canada, observing similar patterns. As baby boomers are increasingly becoming the major consumers for retirement villages over the next three decades, understanding how baby boomers' will influence this housing market is paramount.

Foreseeing the distribution of Australia's older population, the aging characteristics, and understanding the choices baby boomers face is critical for this industry in planning how to effectively respond to the specific needs and expectations of this growing segment. A major concern is a 'mismatch' occurring between the housing stock and the particular housing requirements of older people. Yet there is paucity of research related to the decision process of retirees who desire to move to a retirement village and the particular attributes and facilities that will cater for a quality lifestyle.

In this article, we investigate the assumption that there is utility in dividing the baby boomer cohort on the basis of chronological age groupings or life stage to explore the lifestyle factors of the baby boomers and evaluate what retirement village choice attributes are important to them. We also consider how demographics in addition to stage of life cycle, may affect these attributes. Such information would assist in developing effective housing policies and programs through redirecting

resources and priorities to ensure the industry meets the challenges of an evolving ageing community through promoting specific well being and lifestyle preferences.

The Determinants of Inequalities in Local Public Spending on Culture. An Analysis for Polish Rural Municipalities

Agnieszka Kopańska, University of Warsaw, Faculty of Economi Sciences, Poland

Decentralization enhances allocative and costs efficiency of public finance. But on the other hand, it reveals and deepens local inequalities. One of the decentralized public tasks in Poland is culture. Local governments are important creators of local cultural life, they decide about 70% of public spending for culture. They are responsible for organization and financing of public cultural entities- libraries, houses of culture etc. The local spending on culture steadily grows in last years. But there is important variation among municipalities in this spending. The aim of my study is to analyze determinants of this variation. Public spending for culture is especially important in less developed or peripheral regions, where citizens do not have access to private cultural institutions. That is why in my study I focus on rural municipalities- 1565 units. Using econometric panel data analysis I study their spending in years 2000-2014. To find the determinants of this variation I use well established in the fiscal federalism studies median voter demand framework. The novelty of my study is that to understand the variation in the level of spending for the culture I established fiscal autonomy indicators. I found that limits in autonomy, and especially expenditure autonomy are an important determinant of analyzed spending. I found also that local government spending is explained by the socioeconomic characteristic of the municipality but this positive effect is much stronger in more autonomous municipalities. It means, that allocative efficiency is restricted by limits of local governments autonomy.

Export-import Dependency of the V4 Countries

Attila Korompai, Corvinus University of Budapest, Hungary

There were radical changes in the foreign trade orientation of the V4 countries after 1990. This resulted in changes of the economic dependency of these countries influencing their growth potential. The direction of dependency is from the east to the EU, particularly to EU15. The key question of the study is: How this new direction of dependency contributed to the growth of individual V4 countries and to the growth of the V4 group together, and what kind of feedback is onto the growth of the EU15 group?

Methodologically a trade dependence index is calculated. Based on this the interdependency relations are analysed. It is proved that the V4 group represents a growth generating area within the EU. At the same time the changing tendencies of trading partners and their impact on the growth rate differences between V4 and EU15 countries are evaluated from the aspect of realising the objectives of the EU Cohesion Policy.

Cultural Diversity and Knowledge in Explaining Entrepreneurial Outcomes in European Cities

Julia Korosteleva, UCL, United Kingdom

David Audretsch, Indiana University, United States

Maksim Belitski, Henley Business School, Reading University, United Kingdom

This study establishes and empirically explores the relationship between knowledge, cultural diversity and entrepreneurial dynamics across European cities in 2008-2010. We employ a multilevel analysis, spanning industries in the context of European cities, and, using the seemingly unrelated regression equations (SURE) model combined with both the OLS and Tobit approach, we simultaneously evaluate the effect of cultural diversity, embeddedness of firms in knowledge intensive environment, and the interplay between them on three entrepreneurial outcomes, namely, entrepreneurial entry, survival and high- growth-employment start-up rates. We demonstrate that the mechanism of knowledge spillover entrepreneurship, is contextual and contend, that cultural diversity and knowledge have differential impact on entrepreneurial outcomes across cities and countries. Cities with high cultural diversity provide more opportunities for entrepreneurship in sectors where technology and knowledge play more important role. Higher cultural diversity in cities is likely to increase enterprise survival and sustainability through exploring new knowledge and introducing it to the market. Higher survival ratio may create pre-conditions for insourcing, rather than outsourcing jobs, in particular in knowledge intense sectors with positive implications for high growth. Alone with knowledge embedded into industry, cultural diversity is embodied into people and cities creating more efficient local entrepreneurial ecosystem conducive to start-ups' entry, survival and growth. While in technology-based sectors we observe a decline in employment, in cities where cultural diversity is moderately high, this effect is counteracted by an increase in demand for skillful labour that is found to be more concentrated in culturally diverse contexts.

What to do when the Robots come? Labour Market Strategies of Employees in Jobs Affected by Automatization

Sierdjan Koster, University of Groningen, The Netherlands

Ongoing automatization processes may render a fair share of existing jobs redundant. Frey and Osborne (2017) predict that 47% of all American jobs are vulnerable to automatization, while Arntz et al. (2016) arrive at a more conservative estimate of 9% job loss in OECD-countries. Regardless the exact magnitude, a significant group of employees is affected by automatization.

This begs the question to what extent employees affected invest in their labour market position to possibly improve it. Also, there may be regional regimes in the exposure to automatization and in the opportunities to cope with its challenges. The regional dimension is particularly salient given increased decentralization of welfare policies. Using information from the European Labour Force Survey, this study addresses both issues.

The tentative results show that employees in jobs vulnerable to automatization invest relatively little in human capital. Also, they are likely to have recently changed jobs, often arriving in a sector more vulnerable to automatization than their previous sector of employment. Finally, they are unlikely to migrate which limits labour market opportunities. These effects are all robust to a set of relevant variables that control for group composition. Overall, the results suggest that polarization driven by automatization is not just visible in income but also in underlying mechanisms, i.e. investments in the labour market career. The preliminary results from the regional analysis show a North-West versus

South-East divide with affected employees in the North and West of Europe investing more in their labour market careers.

The Role of Competing Visions in the Development of Energy Policy: Sustainability Compromised?'

Anastasia Koulouri, Abertay University, United Kingdom

Nikolai Mouraviev, Abertay University, United Kingdom

Recognising the need for sustainable development through energy security and economic diversification, the government of Kazakhstan has been making systematic efforts to increase the use of renewable sources. This paper aims to investigate the impact of competing visions of the country's energy future on the development of the renewable energy sector in Kazakhstan through the lens of the theories of paradigm and paradigm shift. The paper investigates the manifestations of this conflict and provides assessment of its root cause. The paper argues that competing visions impede an emergent policy paradigm that would focus on renewables, which might compromise the country's sustainable development.

Manifestations of competing visions include the path dependence of the oil industry and its dominance; the haphazard development of policy and the legal and regulatory frameworks; the lack of financing mechanisms and other impediments to investment; and the lack of institutionalisation initiatives. Assessment of these indicates the lack of the necessary support mechanisms for the development of the non-extractive sectors of the economy. As a result, diversification of the economy is impeded and the decoupling of budget formation from oil revenues is not happening.

As reliance on oil and oil revenue continues, in the long term the nation's energy security and economic durability are jeopardised. The paper contributes to knowledge by enhancing the understanding of energy policy dynamics and providing insights into ways to ensure the country's sustainable development.

Is a Basic School Important for a Local Development in Small Rural Villages? Case Study of the Stredocesky Region in the Czech Republic

Jana Kourilova, University Of Economics Prague, Czech Republic

Generally, it is assumed that the existence of schools plays an important role for a development of communities in rural areas. Although new forms of education are increasingly being promoted through the use of modern technology, the school remains an important element of the child socialization. At schools, children learn mutual communication and cooperation; they create a relation to the local community or region and a sense of identification with it. However, the school maintenance is difficult in the case of smaller municipalities in the Czech Republic, especially with regard to the financial cost that municipalities have to spend.

The paper focuses on the evaluation of the importance of the primary schools existence in relation to the development of municipalities in rural areas of the Stredocesky Region in the Czech Republic. This region is specific by its position, as it surrounds the capital city of Prague. The region is internally differentiated with significant development differences, which are related mainly to the location of the municipality and its accessibility to Prague.

In order to evaluate the importance of the school existence in relation to the development possibilities of the municipality, a questionnaire survey was carried out. Respondents of the survey were all mayors of municipalities up to 800 inhabitants in the Stredocesky Region. The questionnaires were adjusted according to whether or not a primary school was located in the village.

The survey results are not surprising. The school has great importance for the mayors of municipalities with a school. They try to maintain a school and perceive it as a principal development element of a municipality. In their opinion the school is a centre of community life, contributing to the maintenance and development of social and cultural activities. For mayors of municipalities without a school, the school existence is not a basic condition for their municipality development. This service is provided by the neighbouring municipalities or the nearest town where people commute for work and thus they can take their children to schools. Although some of these mayors recognize the importance of a school for community development, the cost of setting up and maintaining a school (financial, material and human) is too high for their municipalities.

Acknowledgements: This work was funded by the Czech Science Foundation (GACR) under the project of the title 'Theoretical and Methodological Perspectives of the EU's Neoproductivist Rural Development Policy'; grant number 17-12372S.

Types of Financial Distances – Theories and Evidence

Sandor Zsolt Kovacs, Hungarian Academy of Sciences, University of Pécs, Hungary

The dual banking system – for example the Central and Eastern European countries' banking sector – which can be characterized by the foreign banks' dominance with less and small market weight of domestically owned local small banks, shows less lending propensity towards the SME sector and peripheral and rural areas. Dual banking system strengthens the process of financial exclusion, i.e. the exclusion of certain social groups (social exclusion) or areas (rural peripheries, small settlements, urban districts) from financial services.

In these structures, the geographical diffusion of banking structures and instruments increased the operational (geographical) proximity between banks and borrowers, so the financial exclusion can decrease, but the concentration of bank decisional centres widened the functional distance between banks and local communities. Functional distance is a complex indicator of differences (physical distance, economic and social), which are between the headquarters and branches of banking institutions.

Therefore, the main goal of this study is the examination of functional distance of the different types of the banks in Hungary. Our geographical focus is a multilevel approach, because we examined the county, regional and county levels of differences between the foreign and domestic commercial banks, and the cooperative savings banks. Our findings show, that the financial exclusion is a real problem and the differences of financial distances of the analysed institutions are measurable in Hungary.

Regional Trends, Patterns and Inequalities Among Medium-sized Firms of the Hungarian Manufacturing Sector

Szilard Kovacs, Jozsef Eotvos College, Hungary

Balázs Páger, Hungarian Academy of Sciences, Hungary

Recent studies in entrepreneurship, small business and territorial competitiveness reveal the increasing importance of medium-sized manufacturing enterprises, which represent an autonomous segment within the SME sector. Their significant role within regional economic development could be explained by the success of German family enterprises (Mittelstand firms) as well as Italian medium-sized firms that have emerged from industrial clusters in the Northern Italian regions.

However, both developed and post-socialist economies are finding the development of medium-sized enterprises to be a challenging task, posing several obstacles. As a result of FDI-inflows in the last two decades after the transition, a dual system has been evolved within the Hungarian manufacturing sector. A couple of sectorial and territorial differences could be observed among the two parts of this dual system, especially in efficiency and impact on the regional economy.

This paper presents the results of a statistical survey on existing and emerging medium-sized enterprises in Hungarian manufacturing. We have focused on three main factors: growth rate, ownership and the age of medium-sized firms. Using a dataset on Hungarian enterprises between 2000 and 2015, it is found that the medium-sized enterprise segment has undergone shrinkage instead of expansion, although promising specialisation patterns are also apparent in selected regions, and even less successful regions have their competitive enterprises.

Do Small Industrial Towns Perform Worse in Socio-economic Well-being Indicators? A Case Study of Slovenia

Jani Kozina, ZRC SAZU, Slovenia

David Bole, ZRC SAZU, Slovenia

Jernej Tiran, ZRC SAZU, Slovenia

Small industrial towns are seen as those that have troubles 'hooking up' to modern global capitalism and are thus prone to stagnation and/or decline. In Europe, urban decline is particularly noticeable in mining towns, and those where the steel and textile industries are located. Subsequently, urban decline is associated with presence of industry or the 'productive' economic profile. This notion is even more pronounced in the post-socialist context, where towns faced rapid economic transformation from fordist to post-fordist economy. Judging from these processes small industrial towns are perceived as gritty places of urban shrinkage. The aim of this research is to challenge a common association of small industrial towns with general socio-economic decline. We believe that smaller industrial towns have advantages in contrast to similar sized towns with service economy and that industrial character of economic base is not necessarily reflected in lower socio-economic well-being. Based on the collection of 34 variables explaining employment, economic performance, demographic trajectories, living environment, and voting behaviour, we statistically examined degree of differences between small industrial towns and those small towns that have shifted towards consumption or service orientated economic activities in Slovenia. The main result is that associating small industrial towns with poor socio-economic well-being is over-simplistic. Despite the negative connotations of industrialism in Europe, Slovenian industrial towns are not plagued by negative socio-economic well-

being indicators, such as demographic shrinkage, unemployment, lack of innovations or economic investments.

Land Scarcity and Polycentric Urban Spatial Structure - An Underexplored Field

Angelika Krehl, Leibniz Institute of Ecological Urban and Regional Development (IOER), Germany

Land is neither endless nor increasable but scarce. While open land is indispensable for environmental sustainability, available land for building is important for economic development. Thus, land is subject to use conflicts and market processes – two issues that are reflected in a region's urban spatial structure.

It is assured knowledge today that the urban spatial structure of regions in economically advanced countries is often polycentric, caused by opposing agglomeration and deconcentration forces. Whereas these forces address the socioeconomic side of polycentricity (i.e., PURs), little attention has been devoted to the environmental side. Specifically, the emergence of urban (sub-)centers has been studied and own work has unfolded related conceptual and methodological challenges, but the relationship between these (sub-)centers and associated land concerns lacks attention.

Against the background that polycentricity is perceived desirable, it is crucial to understand the impact of fostering polycentricity on land availability – and potentially vice versa (i.e., land availability as a prerequisite for successful polycentricity). Thus, this contribution addresses two questions: (1) how do polycentricity and land scarcity affect each other? (2) How does land availability contribute to the economic growth of a PUR both as a whole and regarding its (sub-)centers?

Own methodological and empirical groundwork provides the starting point to answering these questions. Combining spatially fine-grained socioeconomic and land use data facilitates new insights into these relationships. Additionally, it is expected to identify further research avenues at the intersection of polycentricity, economic development and environmental issues.

Migration Experience as a Source of Human Capital among Young, Mobile Adults

Zaiga Krisjane, University Of Latvia, Latvia

Elina Apsite-Berina, University of Latvia, Latvia

Maris Berzins, University of Latvia, Latvia

Guido Sechi, University of Latvia, Latvia

Janis Krumins, University of Latvia, Latvia

Considerable share of migration flows within Europe are shaped by young mobile population. This group of migrants has not been well empirically investigated in terms of return and circular migration patterns. The circumstances in which migration occurs affects migratory patterns, strategies and relate to of age specific lifestyle and quality of life issues. The classical migration literature reveals that migrant strategies depends on whether the migrants and returnees have accumulated or depleted their human, financial and social capital during their migration experience. Using data from the large panel survey, we aim to investigate which characteristics, motivations and expectations or feelings of discontent explains the adaptation strategies. Through country specific comparative study, we adopt the mixed method approach in analysing patterns of migration strategies of young Europeans. The results reveal the importance of individual characteristics and migration trajectories of youth.

The Evolution of Regional Disparities in Europe, 1990-Present

Iryna Kristensen, Nordregio (Nordic Centre for Spatial development), Sweden

Shinan Wang, Nordregio - International Research Institute for Regional Development and Planning, Sweden

Timothy Heleniak, Nordregio - International Research Institute for Regional Development and Planning, Sweden

The seventh cohesion report of the European Commission examines economic, social and territorial cohesion. As mentioned in the report the goal of reducing development disparities among European regions has a long history. Initially, the focus of regional disparity policies was set on unemployment, industrial reconversion and agricultural modernisation. However, this focus was broadened to include disparities in innovation, educational levels, environmental quality, and poverty and social exclusion. From its inception, cohesion policy has laid a particular focus on less developed regions and territorial cooperation. The gaps in per capita income had narrowed considerably until the 2008 recession, when the poorer regions lost ground, then widened again in the aftermath of the financial crisis. According to recent studies, the gap in per capita income has started to gradually decrease once again. Given that, this paper aims to test this 'hypothesis' empirically by extending the focus to include the social dimension of regional disparities.

This paper is one of several outputs of an EU Horizon 2020 research project titled RELOCAL 'Resituating the local in cohesion and territorial development' (<https://relocal.eu/>), specifically linking with one work package which examines and maps patterns of regional inequality and change over time. As part of the work package, approximately fifty key socio-economic indicators are collected at the NUTS3 or NUTS2 level for 12 large countries in Europe which encompass 70 percent of the population. A smaller set of indicators are collected for the remaining countries. Several different measures of regional disparity have been computed from these data in order to measure their evolution over time. Disparities are examined among all European regions, among countries, and among regions within countries. Regional disparities are analysed in terms of indicators of GDP and income, employment and unemployment, employment structure, health, education, infrastructure, demographic structure, poverty, crime, and investment. The links between initial geographic and economic conditions of regions and social outcomes are also brought into the research field.

Profession: Mayor. The Scale and Effects of Multi-term Mayoralty on Local Political Scenes in Europe

Joanna Krukowska, University of Warsaw, Poland

Pawel Swianiewicz, University of Warsaw, Poland

According to some researchers, a multi-term local political leader is expected to be less innovative and less opened for reform and changes i.a. concerning local administration structures. At the same time he (or she) may be more experienced and efficient in dealing with local government day-to-day tasks (i.a. Putnam 1976). Other authors suggest that a multi-term mayor may gradually dominate the decision-making process.

Furthermore, multi-term mayoralty is not without influence on the electoral competition. During the campaign, we observe a so-called incumbency effect, e.g. the mayor has an easier access to the local media, he can also use his position in local administration to promote himself as a candidate.

Therefore, local socio-political environment dominated by one leader may not be able to generate rivals who could threaten his central position. Consequently, voters are less motivated to participate in the election. Thus, such a long-term mandate may be at the same weakened by a low electoral turnout. Taking into account all abovementioned threats, several countries in Europe have introduced specific term limits for top local offices. This is specially the case of Italy, Poland and Portugal. However in most other countries there is no such a regulation: mayors' term limit is even not an issue of national political debate.

Therefore, the set of research questions concern the effects of multi-term mayoralty on local political scenes:

- 1) Are multi-term mayors gradually dominating local political scenes?
- 2) Are they really less opened for innovation and reforms?
- 3) Does leadership style evolve over the years spent in office?

These questions are to be answered through the quantitative analysis of the results of the international POLLEADER survey, a comparative study of local political leaders from municipalities with more than 10 000 inhabitants conducted in 29 European countries in 2015.

Global Value Chains in Transition Economies: Integration Paths in Central and Eastern Europe

Pijus Krūminas, Visionary Analytics, Lithuania

Egidijus Rybakovas, Visionary Analytics/Kaunas University of Technology, Lithuania

Agnė Paliokaitė, Visionary Analytics, Lithuania

There is emerging literature on global value chains (GVCs) and their economic effects in general (Morrison, Pietrobelli, and Rabellotti, 2008; Gereffi, 2014) and in developing countries (Kowalski, Gonzalez, Ragoussis, & Ugarte, 2015). This includes research on positions of economic sectors of countries (World Bank, 2017; Taglioni & Winkler, 2016). However, research on Central and Eastern Europe (CEE) is limited in analysing the post-transitional developments in the region (Cieślík, 2014; Iossifov, 2014).

Two gaps remain. First, how successful are transition economies in integrating into the global market? Second, what is the sectoral structure of GVC integration in transition economies? Examining these questions in the CEE region helps improve understanding of economic restructuring and impact of globalisation in transition economies and developing countries. Such knowledge may help identify globalisation strategies for developing countries. Study of CEE provides deeper insights into GVC integration for countries aiming to increase participation and upgrade.

The paper focuses on two issues. First, we discuss the challenges related to measuring global trade in value added and involvement in global value chains at sectoral level (cf. Wang, Wei, Yu & Zhu, 2017; World Bank, 2017; Taglioni & Winkler, 2016). Second, we discuss and map the involvement of CEE countries in GVCs in different sectors, covering the region in 1995-2014 and based on WIOD data. The used approach is based on inter-country input-output analysis (cf. Amador & Cabral, 2014; Wang, Wei, Yu & Zhu, 2014).

This research was funded by a grant (No. S-MIP-17-116) from the Research Council of Lithuania.

Diversifying Population Development: Evidence from the Riga Urban Agglomeration

Janis Krumins, University Of Latvia, Latvia

Suburbanization has been an important process in transforming the metropolitan regions in Central and East European countries over the past two decades. Suburban settlements are in the process of quick change and the most obvious manifestation of those changes are expressed in socio-spatial restructuring. Internal migration is recognized as a key force influencing geographic patterns of residential suburbanization. Previous research reveals that a close relationship exists between socio-spatial stratification and migration patterns but despite the widespread nature of suburbanization in the post-socialist countries, this relationship has been insufficiently studied. The aim of the current study is to examine the characteristics of the long-term inhabitants and suburban in-migrants in the Riga metropolitan area. Thus, the research contributes to an understanding of post-socialist suburbanization by clarifying the population subgroups behind the shift to the suburbs. The analysis is based on individual level data the 2011 census round in order to determine differentiation in socio-demographic composition of residents. Despite some inconsistencies, these statistics are the most reliable available data on composition of population in the post-socialist countries. Using multivariate methods, this study analyzes characteristics of population subgroups with and without recent migration experience. The study finds some evidence of differential mobility behavior and involvement in the development of suburbanization with regard to individual socio-demographic characteristics and geographic features.

Spatial Patterns of Population Growth and Decline in Urban, Suburban and Rural Areas in Poland

Sławomir Kurek, Pedagogical University Of Cracow, Poland

In Poland in 1990s profound demographic changes took place associated with transition to free market economy. Fertility recorded a considerable decline to levels below replacement and migration from rural to urban areas recorded a significant drop. On the other hand, the process of suburbanisation developed with increased mobility to urban fringes. As a result, in terms of population distribution, the following trends have been observed: concentration of population within metropolitan areas, redistribution of population within metropolitan areas (from the core to outer zones) as well as depopulation in rural and peripheral areas. The main drivers of observed population trends were not only economic transformations resulted in changes in labour and housing market but also changes associated with second demographic transition (the spread of new value orientations, the rise of cohabitation and postponing births). The consequence of such population tendencies was acceleration of demographic ageing.

The aim of the paper is to identify population growth and decline areas and constructing a time-space typology of observed population change with particular focus on urban, suburban and rural areas. Another task of the research will be the specification of reasons of spatial population development including the role of natural increase and migration. The descriptive statistics as well as methods of spatial autocorrelation will be used.

Blockchain between practice and hype: the urban scope of radical technology diffusion

Arnoud Lagendijk, Radboud University Nijmegen, The Netherlands

Bas Hillebrand, Radboud University, The Netherlands

Eva Kalmar, TU Delft, The Netherlands

Ingrid van Marion, TU Delft, The Netherlands

Maarten van der Sanden, TU Delft, The Netherlands

Blockchain promises to deliver a more reliable and ‘smart’ means to detail and record transactions between socio-economic agents, thus making those transactions more secure and efficient. In economies with transaction costs taking up (much) more than half of total costs (and counting), this means nothing less than revolution. Blockchain, accordingly, currently meets much interest and concern. This has a twofold result: the proliferation of pilots applying the technology in all kinds of domains (finance, insurance, property transactions, trade), as well as ‘high level’ policy and media debates about the technology’s alleged scope and impact. This paper will explore Blockchain’s proliferation across Dutch regions, using Innovation Biography, network and framing analysis. The analysis shows that there is a considerable gap between practice and policy/media discourse, which however cannot be simply reduced to hype. While projections certainly tend to be hyperbolic, the actual proliferation of practices benefit substantially from general interest, and are even fine-tuned by broader debates both in policy and media circuits. There is also a tendency, nevertheless, to narrow the overall scope and silence certain more negative aspects. The jury is still out on the extent to which Blockchain will really present a radical technology with the potential to overhaul urban economies.

Developing an Inter-regional Innovation System: What Makes it Work

Mandy Lalrindiki, Waterford Institute Of Technology, Ireland

Valerie Brett, Waterford Institute of Technology, Ireland

Bill O’Gorman, Waterford Institute of Technology, Ireland

The systematic interaction between knowledge producer and knowledge exploitation sub-systems in regional innovation systems stresses the advantage of geographical proximity as a proximate group of interconnected firms can produce competitive advantage based on the exploitation of unique resources and competencies, which have to be reproduced and developed through continuous innovation (Porter, 1990 and 2000). However, this perception of spatial proximity as a competitive advantage raises the question of the possibility of collaborating at a distance. In order to address this question, this paper studies collaboration among regions that do not share contiguous borders. This paper explores how inter-regional innovation systems (iRIS) are developed and establishes how the sub-systems in an inter-regional institutional framework interact with each other on an inter-regional level.

The research employed a longitudinal study spanning two years of a collaboration process involving fifteen different Triple Helix institutions from four different European regions. Furthermore, the survey findings were followed up by interviews with 17 key informants to establish a deeper and in-depth understanding of what makes an iRIS work.

The preliminary findings indicate that the collaborative group (CG) was working from the beginning despite the fact that the perceptions of regional and organisation/institution representatives differs. The CG continued to collaborate effectively at a distance, despite their differences, throughout their collaborative process. Even though literature suggests that geographical proximity is advantageous as

it reduces coordination costs and transfer of tacit knowledge is possible, the findings to date suggest that inter-regional institutions involved in the CG established an interaction and collaboration that worked successfully and effectively over geographical distances and across non-continuous boundaries.

Small Towns Development Trajectories in a Polycentric Agglomeration Resulting from Clustering with the Use of Kohonen Neural Network

Viola Larionova, Ural Federal University, Russia

Tatiana Bystrova, Ural Federal University, Russia

Evgeny Sinitsyn, Ural Federal University, Russia

Although the issue of involving urban residents in the process of making strategic decisions is crucial, it is necessary to admit that the everyday experience of common urban dwellers is insufficient when entering a polycentric agglomeration and choosing a promising long-term trajectory. However, small towns and metropolitan areas badly need reasoned solutions resulting from the needs of particular citizens and society as a whole.

Using Ekaterinburg polycentric agglomeration (Russia) as an example, the paper describes the possibility of clustering small towns therein on the basis of Kohonen Self-Organizing Networks. Clustering is made involving statistical data on the socio-economic development of urban districts considering general needs of business, education, science, and socio-cultural spheres.

Following the representatives of the synergistic approach, the authors understand agglomeration as a multilevel multicomponent dynamic system having a historically determined network nature of population displacement in the Urals. Each of its elements (a small town) can claim to take a certain place in various areas of agglomeration sustainment (manufacturing, education, or culture), and to become a second-level centre providing its neighbours with services and products.

Choosing a promising trajectory both for the town and for the whole agglomeration is related to the current process of passing a bifurcation point characterized by instability and uncertainty of development. The role of administrations is significant when choosing a small town development trajectory, as they are able to reconsider both current development strategies in different social and economic spheres, and positioning standards for the town governed by them.

Network Brokers in the Periphery: A Study on Business Networking and Knowledge Sharing in Rural-peripheral Regions

Birgit Leick, Østfold University College, Norway

Susanne Gretzinger, University of Southern Denmark, Denmark

Mads Bruun Ingstrup, University of Southern Denmark, Denmark

Research on rural-peripheral regions stresses that such environments face multiple challenges in a globalised world, which, from a policy perspective, should be addressed to enhance regional competitiveness (Danson and De Souza 2012; North and Smallbone 2000a). These challenges are often associated with a prevalence of small and medium-sized enterprises operating in niche-focused or traditional sectors (De Noronha Vaz et al. 2006; Copus et al. 2008). As a result, rural-peripheral regions are lagging in terms of entrepreneurship and innovation output (Labrianidis 2006; Stathopoulou et al. 2004; Ritsäla 1999; Tödtling and Trippl 2005; Danson and De Souza 2012). In addition, from a European

perspective, firms and industries located in such regions face additional demographic challenges such as population ageing, emigration of youth, and population decline (Leick 2017; Leibert and Golinski 2016).

In the wake of these manifold business-related challenges (McAdam et al. 2014), researchers such as Huggins and Johnston (2009), Virkkala (2007), and Copus and Skuras (2006) suggest that business networking is a cornerstone of firms' innovativeness in rural-peripheral regions. Thus, inter-firm business networks and collaborative arrangements between firms can be a means of overcoming firm-specific resource scarcities (Chetty and Wilson 2003), particularly with regard to knowledge (Valkokari and Helander 2007). According to Tregear and Cooper (2016) business networks are indeed considered as a strategy to cope with locational disadvantages or limitations. Nevertheless, in reality several reasons exist why firms do not take part in and make use of such locally-embedded business networks (Leick 2013). One of these reasons is a lack of direct interaction between firms as potentially matching collaborative partners and, as a result, a lack of common goals and trust among firms located in the same region.

To overcome this and related challenges, research on business networks points at brokers due to their capacity to connect local communities of business-owners and entrepreneurs, public-policy representatives and civic actors, sometimes across scales, both inside the region and beyond (Heinze et al. 2016; Manning and Roessler 2014). In line with Belso-Martinez et al. (2015) and Tregear and Cooper (2016), we argue that such network brokers can stimulate enterprise development, local development and competitiveness in rural-peripheral regions through facilitating business networking (Ingstrup 2013; Ingstrup and Damgaard 2013; Burdack et al. 2013). However, the literature is scarce on outlining how network brokers actually perform brokering functions that aim to support business networking in a way that local challenges for business communities can be met; except for in traditional agricultural sectors (McKitterick et al. 2016; Batterink et al. 2010). In the present paper, we will therefore not focus on the position of network brokers with regard to business networking (Lee 2010; Fritsch and Kauffeld-Monz 2010) but, instead, shed light on their activities with regard to their core networking strategies and the effects on knowledge sharing. Moreover, we will critically discuss the governance implications of network brokers in the periphery, which are associated to the integration or lack of integration of such actors with established local and regional governance infrastructures.

Following from this, the paper addresses this research question: How do network brokers foster business networking and knowledge sharing in rural-peripheral regions? By answering this question, we seek to contribute to the literature on brokers by, first, shedding light on the micro-level mechanisms of such "change agents" in rural-peripheral regions, and, second, by highlighting the potential capabilities and contributions as well as limitations of brokers in this context. This contribution is reached through a case study of brokers in three rural-peripheral regions in Germany. All of the regions are facing demographic change such as population ageing, emigration of youth, and as a result, population decline.

Second Home Suburbanisation in Russia: Regional and Intra-regional Aspects

Mikhail Levchenko, Russia

The paper focuses on garden partnerships of urbanites which is the most widespread type of second home settlement in Russia. Approximately, one third of the national population has their own dacha (a typical seasonal second home), in some regions they form quite dense settlement structures in

suburbs and boost seasonal mobility. However, there are differences in spatial structures of such seasonal settlements in different regions and areas. The paper illustrates multifaceted seasonal suburbanisation patterns in the Moscow area, the St. Petersburg area, resort areas of the Russian South and areas with comparatively low number of second homes. Furthermore, it identifies main factors affecting the number of second homes in a municipal district and determine the structure of dacha settlement in a region. As a garden partnership is not only the settlement type, but a legal form, it covered by official statistics, in particular by agricultural censuses. The final issue of the paper is the analysis of changes in spatial structures of garden partnerships in regions of Russia which is based on census data comparability study for the 2006/2016 agricultural censuses.

Urban Intensification in Switzerland, Insights from Institutional Economic Theory

Melanie Lienhard, Lucerne University of Applied Sciences and Arts, Switzerland

After many years of strong urban sprawl, the 2014 revision of the Swiss land-use planning law now requires demonstrable urban intensification efforts from Swiss municipalities. Urban intensification being defined as the broader strategy of utilising already accessible land reserves within the existing settlement perimeter, including brownfield land, previously unused land reserves inside the settlement perimeter, as well as higher density uses of already built-up areas. This change indirectly requires that planning efforts should result from cooperative, stakeholder-inclusive processes, instead of visions created purely by professionals. While this bears the advantage of having more broadly supported planning efforts, it also creates difficulties, which are mostly associated with the fact that stakeholders possess uneven levels of planning knowledge. The article reflects the efforts towards implementing urban intensification in Swiss municipalities by looking at how the situations encountered in a number of case-study municipalities, can be related back to institutional economic theory, such as adverse selection and moral hazard, high transaction costs and the Coase theorem and externalities and the free-rider problem. It reflects upon the question what implications these information efficiency problems have for the implementation of urban intensification projects, and for the actors involved in them.

Small Cities in Non-Core Areas in Russia: General Overview, Cases of Regrowth and Reasons of Resilience

Leonid Limonov, ICSEER Leontief Centre, Russia

Marina Nesena, ANO ICSEER "Leontief Center", NRU HSE – St Petersburg, Russia

In Soviet period new towns were mostly created in the North and in the East (Urals, Siberia, the Far East) of the country. Comparing existing distribution of cities by size of population by the Zipf's law shows that in Russia there are too many small towns (and big cities are not big enough)! Total number of towns with population less than 100 thousands is 909 out of total number 1 113 while number of cities with population between 100 and 250 thousands is 98. In post-Soviet era we see a persistent net migration of people from the East and the North to the Centre and some regions of the South of Russia, though rates of migration now are several times lower than in 1990s. Also we see migration from towns to the cities, especially to major metropolitan areas (first of all – Moscow and St Petersburg). Towns in Russia are mainly shrinking. Nevertheless there is a cohort of about 100 resilient towns in non-core areas. The towns can be found in different locations of Russia mainly in the European part. Talking about their redevelopment we have to consider strategies in both fields –

industrial redevelopment and post-industrial development. Resilience of towns has wide range of focuses: applied science (naukogrady), demanded mining, demanded industries, transport and logistic services at national borders, tourist attractions such as cultural heritage, thermal springs, resorts etc. as well as there are growing towns in ethnical republics which are affected by urbanization processes. We are going to consider several cases: Obninsk (Kaluga region), Yelabuga (Republic of Tatarstan), Uzhno-Sakhalinsk (Sakhalin region), Pskov (Pskov region), Velikiy Novgorod (Novgorod region), Novoshachtinsk (Rostov region), Tobolsk (Tumen region), Belokurikha (Altay krai). Some maps to show the general picture and data on cases to illustrate "post-industrial" geographies, major trends and issues will be provided.

To explain the institutional contexts in these places and communities the brief analysis of existing system of self-government in Russia and inter-government relations will be done as well as cursory analysis of data from the European Social Survey. It is important to understand this framework to evaluate the role of local policies in local development. Also development priorities and worldviews, laying behind them, will be discussed using local strategic plans, visions and other long-term planning documents. As a rule, resilience is not explicitly defined in these documents, but may be indirectly interpreted through analysis of defining there existing potentials and development priorities.

From institutional perspective resilience in small towns of Russia may be engaged through participatory planning, including discussion of existing potential and development priorities, performance oriented budgeting, formation of mid-term public investment program (in cooperation with federal and regional levels, e.g. through applying to be included into federal or regional targeted programs), development of public-private partnerships. At great extent the regrowth of Russian cities depends on the federal policy and inclusion of cities and regions in federal programs.

Governance Rescaling and the Role of Meta-governance: Changes and Challenges for Metropolitan Spatial Planning

Valeria Lingua, University of Florence, Italy

This paper considers the role of meta-governance in governance rescaling processes occurring in South-West Europe in the last decade.

Using the interactive perspective for developing an analysis of ongoing processes of institutional rescaling in France and Italy, the contribution focuses on the connected changes in planning systems and instruments. Governments expectation for local planning authorities to join or to jointly engage on spatial planning across local boundaries open up for a set of option from voluntarist to compulsory cooperation in spatial planning, with different interpretation into the two countries.

In this context, the definition of integrative territorial strategies at the metropolitan level will be observed, drawing evidence from examples of metropolitan contexts in the two countries: the evolving redefinition of territorial scales in both France and Italy suggests that the conventional, hierarchical 'cascade-shaped' planning system organization is superseded but challenges arise for strategic and spatial planning in metropolitan areas.

The findings highlight the role and importance of both 'hands-on' and 'hands-off' meta-governance – in other words, high-level steering by central government – in enhancing metropolitan identities, strategic planning and sectoral integration. This has significant implications for the ongoing debate on planning in both countries. The findings enhance further reflection on the possible role of meta-governance in metropolitan integrated strategy-making.

Dynamics of Interdependent Trade Networks

Michael Lischka, University of Bremen, Germany

Mossig Ivo, University of Bremen, Germany

The project investigates development processes of transnational interdependencies regarding globalisation discourses in economic geography. Interdependencies are understood as multidimensional linkages between national states affecting different intra- and international economies and policy-fields. The increasingly blurred boundaries of economic and foreign policy suggest economic relationships of effective power and political significance. The economic connections between states thus fundamentally determine government's scope of actions in foreign policy. We argue that these types of connections elementary influence globalisation processes. Tracing the dynamics of these interlinkages promises a better understanding of globalisation.

Literature understands interdependencies as powerful mutual links between states. Through the synthesis of economic geographical and political science approaches, a precise definition and conceptualisation of the term interdependence have been elaborated. This allows the measurement of interlinkages between states that meet the necessary requirements of interdependence. In order to record interdependent linkages, cross-national interdependencies are defined and discussed as networks based on flows. We use social network analysis to explore dynamics of trade related interdependence between states in the timespan 1995-2017 on a global scale. Via this long term observation, we point out breaks and redirections of the grown pathways and ties, which are supposed politically significant.

The Macroeconomic Consequences of Regional Fiscal Decentralisation

Katerina Lisenkova, University of Strathclyde, United Kingdom

Alastair Greig, University of Strathclyde, United Kingdom

Peter McGregor, University of Strathclyde, United Kingdom

Kim Swales, University of Strathclyde, United Kingdom

There is considerable momentum in the UK, Europe and across the world towards greater decentralisation of fiscal powers. The devolution of powers over public spending is typically motivated in terms of the efficiency gains emphasised by the fiscal federalism literature. The devolution of tax powers is often advocated on the basis of improved accountability and the enhanced incentive that such powers provide to Sub Central Governments (SCGs) to pursue growth-promoting policies. In this paper we explore the sensitivity of regional economies to the nature and extent of fiscal decentralisation. At one end of the spectrum – one which broadly characterises many UK regions - SCGs' expenditures are governed by a block grant system, with very limited (if any) devolution of taxes. At the other end is full fiscal autonomy – control over public spending and universal autonomous taxes. And there are several options in between.

The OECD makes a distinction among “strict tax sharing”, “soft tax sharing” and “autonomous taxes” (Blöchliger and Nettley, 2015). Under strict tax sharing tax revenues accrued by the SCG meet an “individual proportionality” criterion (Blöchliger and Petzold, 2009); the revenue generated to the SCG from a tax is strictly related to the amount of revenue generated on its territory. Soft tax sharing refers to instances, like the Australian General Sales Tax (the equivalent of value added tax), where revenues

are collected centrally and redistributed across the Australian states based on need. The rates and revenues associated with autonomous taxes are controlled by the SCG.

In this paper we use an intertemporal computable general equilibrium (CGE) model of a SCG region to explore the macroeconomic consequences of a range of regional fiscal frameworks that capture, in a stylised manner, key aspects of actual regional fiscal frameworks. In particular, we assess the argument that greater regional fiscal autonomy improves SCGs' incentives to pursue growth-enhancing policies.

The Structure and Evolution of Trade Relations between Countries Along the Belt and Road

Zhigao Liu, Institute of Geographic Sciences & Natural Resources Research, China

Trade facilitation is one of the five main agendas of the Belt and Road Initiative (BRI). Social network analysis has helped understand the complexity of trade networks, but existing studies tend to overlook the fact that not all bilateral trade relations are equally important to a country. To fill this gap in the literature, this paper focuses on the top 2 trade relations networks to illuminate the structure and evolution of B&R trade relations, the relative positions of different countries, and changes in the composition of trade communities (e.g., the community leaders) and the changing patterns of trade between them. We find rich dynamics over time both inter- and intra-communities. The overall international trade networks of B&R countries experienced a leadership change from Russia to China on one hand, some temporary communities experienced emergence, disappearance (e.g. the Kuwait and Thailand-led communities) or reemergence (e.g. Poland- led community), and community memberships was generally consistent on the other hand. Since the future impacts of China's BRI will depend on the degree of integration of the connected regions, some countries with stable and high centrality indices (e.g. Russia, Singapore, Serbia, Greece, Turkey, Iran, Poland, Hungary and Romania) could be selected by China as strategic regional partners, and countries with a strategically important geographical position but weak trade links (e.g. Myanmar, Pakistan, and Belarus) should be prioritized.

Discursive Construction of the Belt and Road Initiative: From Neoliberal to Inclusive Globalization

Weidong Liu, Institute of Geographic Sciences & Natural Resources Research, China

Michael Dunford, Chinese Academy of Sciences, China

Boyang Gao, Central University of Finance and Economics, China

There is an increasing international consensus that the Belt and Road Initiative (BRI) affords a platform for more and more countries to explore new international economic governance mechanisms and new development paths. In the meantime, neoliberal globalization has arrived at a crossroads, while anti-globalization voices are louder, and anti-globalization practices more frequent since the 2008 global financial crisis, challenging the future of globalization at the scale of the world as a whole. Against this background, political elites and scholars increasingly see the BRI as a possible alternative and new globalization path and, in particular, as a path towards inclusive globalization. Based on a brief review of the process and mechanisms of global economic global expansion, and a critique of neoliberal globalization, this paper tries to use the vision and actions proposed by the BRI to develop the concept of inclusive globalization. The paper suggests that inclusive globalization involves at least the following dimensions: a better and more powerful role of state as a mediator to ensure social justice and stability; correcting the duration mismatch in financial markets and provision of more patient capital to finance infrastructure development, productive activities and real services in

economically less-developed countries and regions; encouraging countries to choose and experiment with development paths that best fit their national conditions and values; enabling all stakeholders to participate equally in globalization; and protecting cultural diversity while promoting economic globalization.

Industry Cluster Policy and Practice: Evidence from U.S. States

John Lombard, School of Public Service, Old Dominion University, United States

Over the last two decades or so economic development policy has emerged from a top down partnership between state and local governments to a more inclusive and collaborative policy environment involving the public, private, and non profit sectors. These economic development collaborations are evident in state level economic development policy and practice as industry clusters or cluster development. Moreover, at the federal government level, the U.S. Economic Development Administration has mandated the development of regional cluster identification through the Comprehensive Economic Development Strategy (CEDS) funding initiative. Despite the ongoing academic criticism of industry cluster policy and more recent questions about the effectiveness of this policy strategy, this research seeks to understand better the nature and scope of U.S. state-level cluster policy formalized through legislative initiatives. The paper proceeds with a review of the literature on industry cluster policy with particular focus on how researchers have operationalized the cluster policy concept. A comparison of state cluster policies since the 1990s attempts to discern the overlapping and sometimes contradicting efforts of legislative enactment of economic development initiatives through the lens of regional governance.

Emerging Suburbs in Post-Soviet Countries: The Role of Privatization of Land in Urban Planning, the Case of Sokilnyky, Lviv, Ukraine

Roman Lozynskyi, Ukraine

In the context of post-socialist shrinking cities, we present and discuss the peculiarities of collaborative practices in the framework of place leadership in small and medium-sized cities in Romania. We focused on city regeneration actions and on place making, choosing a series of case studies from all regions of Romania.

We explored the factors enabling the participatory practices of the inhabitants, alongside the state administration or despite it. Findings showed that bottom up initiatives (determining economic performance, cultural integration, and socio-economic resilience) tended to be more prone to success than state initiatives.

In addition, the historical and cultural context after 1989, and especially after 2007 (Romania's accession to the EU), enabled inhabitants' participation in urban development, their initiatives and innovative approaches. These were visible especially for the generations after the 1980s, related to a significant shift in attitude and education after the fall of Communism.

Moreover, within a necessary general process of raising people's awareness about their participation in urban regeneration and to development in general, we answered the question about the sustainability of the urban regeneration actions (in small and medium-sized cities) of either inhabitants and of public or private institutions. Findings showed that many of the analysed actions

and practices had short term or medium term impact and that their sustainability was conditioned by the role of the public government at the local level.

Political Economy of City Regionalism: Class Interest as “General Interest” in the Adoption of City Regionalist Accumulation Strategy in Finland

Juho Luukkonen, University of Helsinki, Finland

Heikki Sirviö, University of Oulu, Finland

In this study, we examine city-regionalism as a state’s selective territorial strategy through which central government seeks to strengthen the state’s position in the global economic competition. We conceptualize city-regionalism as an economic geographical imaginary which relies on a particular kind of economic reasoning as well as on the politics of depoliticisation, not least in terms of the purported national “general interest”. In this paper we seek to conduct a classical exercise in political economy by asking, in whose benefit this state’s territorial strategy is formulated. Our initial suggestion is that this policy serves the general notion of economic growth as advertised, but in a particular way which serves above all the interests of certain fractions of capital investing in Helsinki and also to two or three other more significant city-regions. Our first task is to identify these beneficiaries. Our other question is, how this policy can be introduced as general interest, and why quite many people are ready to accept this formulation, even if at the same time it is clear that it does not serve the interests of lesser city regions, let alone more peripheral rural areas.

Medium-sized Manufacturing Enterprises in Peripheral Economies: Insights from the Hungarian “Mittelstand”

Gabor Lux, Hungarian Academy of Sciences, CERS Institute for Regional Studies, Hungary

In recent years, both theory and policy have expressed an interest in the regional development role of medium-sized domestic manufacturing firms. Drawing from lessons found in the “Mittelstand”, a stratum of mid-sized, often family-owned firms in German-speaking countries with a distinct development model and geographic identity, the applicability and adaptability (viability) of the concept has been scrutinised across Europe and beyond.

This contribution seeks to investigate the development role and challenges of medium-sized manufacturing firms in a peripheral, FDI-dominated economy. Hungary’s economic transformation has been underpinned by a strong reliance on foreign investment, a path resulting in a distinct variety of capitalism identified as a “dependent market economy”. The weakness of domestic entrepreneurship has received relatively little scrutiny in either theory or development practice, and even less attention has been levied on the mid-sized firms which have emerged and found success even in peripheral contexts.

Four industrial regions in Hungary were investigated: a successful gateway region strongly integrated into international production networks; a de-industrialising peripheral region whose firms nevertheless show the greatest similarity to the German Mittelstand model; a mid-sized town diversifying from previously predominant steelmaking traditions; and a re-industrialising region experiencing a boom of external investments along with a traditional, growing endogenous SME sector. Building on statistical analysis and structured interviews with entrepreneurs and local development experts, the author aims to identify how entrepreneurship develops under different

regional contexts, and how variable degrees of a peripheral status impact the strategies, innovative behaviour and development role of local entrepreneurs.

Nordic View on the Role of Public Actors in Smart Specialisation Process

Antti Mäenpää, University of Vaasa, Finland

Smart specialisation strategies (S3) are spreading all over Europe, as regions aim to finish their strategies and implement them into practice. This process for finding the local strengths is called entrepreneurial discovery process (EDP) (Foray 2015) and we have already seen good cases concerning the implementation of S3 (Mäenpää & Teräs, forthcoming). However, the role of public actors in the process has not been perhaps clarified enough.

From theoretical context the role of the public actors is interesting in smart specialisation setting. One of the central theories behind S3 is triple helix theory (by Etzkowitz & Leydesdorff 2000), which highlights the cooperation of different regional actors (public organisations, companies and universities) but especially advocates for universities as innovation agents, as their research links the region to global research networks and thus forms a “beacon” for knowledge transformation. In EDP this triple helix cooperation transforms into inclusive and evidence-based specialisation for the region.

However, at the same time, EDP itself promotes the role of companies for spotting the global markets. Whereas universities and companies practically need to innovate in order to exist, public actors have been previously unaffected by major innovation incentives (Lundström & Mäenpää 2017) and are not necessary accustomed to innovation activities. S3 has changed this on a European level and now public actors have to enter the spotlight. The aim is to discover (by examining Nordic cases) what this new role means for public actors and how could they utilize their new role for regional gain.

Simulation of Dynamics of Urban Retailers’ Freight Provision through an Agent-Based Model: The Case of Turin

Elena Maggi, Università degli Studi dell'Insubria, Italy

Elena Vallino, University of Turin, Italy

Elena Beretta, Polytechnic of Turin, Italy

The paper provides an empirical analysis of urban freight transport in the city center of Turin through the use of Agent-based Modelling. The aim is to explore to what extent the policies fostered by Turin’s municipality within the European project NOVELOG (New Cooperative Business Models and Guidance for Sustainable City Logistics) could trigger more ecological behaviors in retailers during the provision’s process. The model is based on the idea that ecological behavior depends both on economic and social features, such as imitative component and service’s quality perceived and individual environmental sensitivity. The agents are informed through real data provided by the City of Turin. Different kinds of scenarios are provided, in order to simulate the provision’s process in current situation, without policies and in presence of alternative policies. Price-based policy simulates the effect of an hypothetical monetary incentive, while motivation policy would exploit the strong network effect in order to spread across all the agents. The results show that the policies improve the timing of the diffusion of virtuous behaviors, reducing the total production of pollutant emissions. The effects of high monetary incentives or the combination of price and motivation policy are strong.

FDI & Sector Interdependence in Switzerland: A Spatial Econometric Analysis

Federica Maggi, Istituto di Ricerche Economiche (USI), Switzerland

Foreign direct investment (FDI) has become increasingly important in the last 15 years and worldwide FDIs are growing at a significant rate. The aim of this analysis is to understand if the presence of FDI in a specific sector attracts FDI in close industries, allowing them to benefit from agglomeration economy. Presence of similar industry on the same area is, in fact, an opportunity for firms to get advantage from knowledge spillovers, higher collaboration, economy of scale and also a good solution for lowering transportation costs.

In particular, we consider if there is a spatial relationship in Switzerland, an open economy in the middle of Europe, which is supposed to be an attractive area for FDIs, especially the horizontal ones. Previous research (Blonigen et al, 2004; Coughlin et al, 2000) focused their attention on spatial interconnections and they found out a positive correlation to a country and the FDI that neighboring countries receive. In this paper, instead, we take a general look at the potential interdependence of FDI across different sectors in a developed country.

Using a spatial econometric approach, we estimate the strength of any sectoral relationship between FDIs in Switzerland, starting from 2000 until 2015. Input-output relations are used to define the spatial matrix, computing the economic distance that characterizes interactions between sectors; specifically, the estimated spatial coefficient characterizes the correlation between FDI in one sector and FDI in a close industry.

Regional Resilience and Policy: What is it First? Insights from the Basque Country

Eduarne Magro, Orkestra, Spain

Mikel Navarro, Orkestra and Deusto Business School, Spain

Jesus Maria Valdaliso, UPV/EHU, Spain

Regional resilience is one of the most studied issues in the regional economic geography and it is defined as the ability of regions to both accommodate to shocks and develop new growth paths. However, resilience cannot be treated as unidimensional concept as it is made up of individuals, organizations, industries, networks and institutions (Boschma, 2015).

Following the concepts of adaptation and adaptability introduced in the literature by Boschma (2015) we could distinguish between two types of policy responses to a shock such as an economic crisis that shapes regional resilience. Therefore, we could argue that policy is a consequence but also a cause of regional resilience.

Additionally, the role of agency and people is a key part of regional resilience (Grillitsch and Sotarauta 2018; Boschma, 2015; Martin et al., 2016) Policy entrepreneurs (Kingdon, 1995; Wohlgemuth, 2002) constitute one of the most important actors to focus on.

This paper contributes to shed light to one of the unresolved issues for regional resilience (Boschma, 2015), which is the role of institutions, policy and agency in the development of new paths. The paper analyses the Basque case, an old industrial region that has been able to resist, recover and renew after different economic crisis. We take a historical approach by analysing policy responses and agency during three economic crises (1980-1983; 1991-1993; and 2008-2013) with a greater emphasis on the last one, showing the trade-off between adaptation and adaptability and its consequences upon the growth path taken afterwards.

Sectoral, Technological and National Systems of Environmental Innovation: The Case of the Finnish Marine Scrubber Systems Industry

Teemu Makkonen, University of Tampere, Finland

Tommi Inkinen, University of Turku, Finland

The maturing literature on innovation has recognized the processes of sectoral, technological and national systems of innovation as helpful frameworks to analyze environmental innovation – a field whose importance continues to grow amidst contemporary regulatory pressures, for example, on maritime industry and shipping. This paper intertwines these key innovation concepts and applies them to classify and systematize an environmental product innovation: marine scrubber systems. The paper also addresses the linkage between innovation policy and environmental regulation and presents an overall framework to visualize and systematize conceptual connections to further develop and manage these complex systems of environmental innovation inducement. The paper applies technological and legal materials depicting the context of maritime scrubber systems – that is, cleaning units fitted into exhaust pipes of ships to reduce emissions – as technological responses to more rigid environmental regulation by addressing the functional patterns of maritime scrubber systems and their implications for market potential and change. The results underline the importance of environmental regulations as the driver of the development of technological innovation systems centered on environmental innovation. That is, environmental regulations led to the development of marine scrubber systems (MSSs). However, it is also important to notice that 1) existing technology was needed to constitute the technological regime of MSSs, 2) market demand from early experimenters helped to tackle initial technical problems and that 3) EU and national governments have supported the implementation of MSSs.

Written in Destiny: Background Factors and Career Paths A Sequence Analysis Approach

Paolo Malfitano, Università della Svizzera Italiana, Switzerland

Previous literature suggests that background characteristics influence labour market outcomes. Moreover, some authors empirically proved the existence of parental role models and their importance for children's attitudes. The transition to adulthood and the process of family formation represent other crucial aspects for an individuals' career choice. Given the above, this research aims to explain to what extent individual characteristics and background factors influence working-age individuals' career trajectories. Previous studies use traditional techniques, mainly focusing on individual's labour market outcome as a specific (single or repeatable) event, ignoring the dynamics of working paths. In this paper, optimal matching and sequence analyses are applied. These techniques allow considering a unitary and holistic perspective on life-cycle events. Through the application of standard clustering algorithms, five distinctive career paths are identified: fragmented wage-employment, unemployment, wage-employment, transition from unemployment to wage-employment and self-employment. These clusters are used as the dependent variable in a multinomial logit model. The data are taken from a longitudinal study of Swiss individuals from 25 to 65 years old between 2003 and 2016. Covariates are measured at birth, age 15 and in 1999. Preliminary results show that in addition to individual characteristics, also immigrant status, parental education, social class and entrepreneurial attitude are able to explain the deviation from a stable career in wage-employment. From a policy makers' perspective, this research could be a useful tool for an early intervention, in order to prevent fragmented work trajectories characterised by long unemployment spells or chronic unemployment.

Tracing the Everyday Realities of Precarious Migrants in Dirty, Dangerous and Difficult Jobs in Britain

Constantine Manolchev, University of Exeter, United Kingdom

Steffen Boehm, University of Exeter, United Kingdom

Cahit Agar, University of Exeter, United Kingdom

Siddhartha Dabhi, University of Exeter, United Kingdom

Despite the uniformity of a closely-regulated labour market terrain and a comprehensive immigration-legislative framework, the experiences of migrants in Britain are rich in nuance, punctuated both by irregularity and normality. This presents the need for studying migrant work not only at the nexus of illegal and forced labour but at the level of the ordinary, unremarkable and mundane.

Adopting an inductive, Grounded Theory methodology we uncover the co-existence of choice and struggles for survival, exploitation and exploiting, instrumentality and opportunism in the everyday realities of migrant workers in the UK. Specifically, we consider the terrain of entry-level work carried-out by Eastern European and Asian migrants who find themselves in dirty, dangerous and difficult jobs requiring minimum, or no previous experience, qualifications and language skills.

Our main contribution is to demonstrate the inherent and messy complexity of migrant experience at the everyday intersection of life and work. We do so by moving beyond conventional Marxian structuralism, yet without adopting Foucault's subversive subjectivity. Instead, we anchor our discussion in Lefebvrian middle-ground to show how the merging of life and work can reclaim everyday existence in its non-fragmented totality.

The Geography of Political Ideologies in Switzerland

Daniele Mantegazzi, Università della Svizzera italiana, Switzerland

The economic literature predicts a positive impact of social capital on regional economic development. Additionally, the political science literature highlights how different political institutions and ideologies generate different types of social capital, confined within their geographical area. The spatial dimension of this in-group social capital is particularly important, as it incentivizes people to relocate among institutions according to their political preferences. This paper contributes to the existing literature by combining these streams of research and proposing a new definition of spatial cohesion, based on the geographical concentration of political ideologies. The aim of this research is to empirically identify whether there is any spatial concentration of political ideologies and, following the social capital argument, verify whether this concentration is correlated with welfare. The analysis focuses on Switzerland, which represents a very interesting case because it has strong institutions, is a federal republic with highly decentralized political power and, at the same time, practices a semi-direct democracy. In particular, this paper analyzes the results at the municipal level concerning 312 federal referenda between 1981 and 2017. This study identifies three main dimensions representing the Swiss political ideology space and expressing the following political beliefs: left vs. right, liberal vs. conservative and ecological vs. technocratic. Additionally, on each of these three dimensions, this paper empirically assesses the existence of spatial concentrations of Swiss municipalities sharing the same political ideology. Finally, this research finds significant differences in the welfare of Swiss municipalities, depending on their belonging to a political ideology cluster.

China-Africa Cooperation in the Fight against HIV/AIDS: Can China help the Struggling Economies of Africa by Combating the Virus?

Fanni Maráci, Pallas Athéné Innovation and Geopolitical Foundation, Hungary

Even though HIV/AIDS continues to pose a challenge to many countries in the world, the African continent is still the most affected by the virus with 70% of the total 37 million infected individuals living in these states. While there are regional differences, the issue leads to high death rates and low life expectancy all over the continent, not only causing significant suffering on a human level but also holding back their economic development by reducing their work force and putting enormous strain on their medical infrastructure.

To combat the virus, Africa needs both financial aid and help with developing its prevention strategies and providing medical supplies and knowledge. While China is not a traditional member of the international development cooperation community, it has none the less been providing aid in the continent and in recent years it has started to work on HIV/AIDS related programs with the help of people like Peng Liyuan – wife of Xi Jinping, drawing attention to the issue.

This paper examines the existing forms of cooperation, the actual steps taken in fighting the virus and the ways this assistance coming from the Chinese differs from what Western nations can provide – for instance the use of Traditional Chinese Medicine in addition to conventional treatment measures.

Looking at the achievements of the current programs, it aims to assess the ways the effectiveness of China's help can be improved in the future.

Tourism, Population Dynamics and Social Infrastructure in Croatian Major Coastal Cities

Sven Marcelic, University of Zadar, Croatia

Since the beginning of 2010s there has been a rapid growth of private accommodation in the major cities of Croatian region of Dalmatia. This process is starting to reshape the functional logic of the cities, pushing population from the centres to the periphery, while most of the social sector remains in the central area.

The aim of this paper is to demonstrate how the process of physical expansion of the cities in the last 100 years is slowing down, but there is a significant reshaping of their inner functional logic. Process of growth was uniform: from relatively small centralized cities to large expansion during socialist times to depopulation of centres because of tourism.

The dynamic of change in three Dalmatian cities, Split, Zadar and Dubrovnik, will be presented. First, a historical overview of spatial development will be demonstrated. Secondly, electoral register and census data will be used to show the population movement within these cities. Thirdly, registered private accommodation registered since 2010 at booking.com website will be analysed using GIS for spatiotemporal analysis and mapping and overlapped with the previous two sets of data.

The hypothesis of the paper is that although there is a shift in population because of tourism, this shift was not followed by public services, which results in a threefold outcome. First type of city area involves depopulating centre with majority of public services and increase in tourism. Second type (semi-periphery) is the area of increase in both population and tourism, but services tend to become more privatized. Third type (periphery) does not include significant share of tourism and has the lowest rate of any services, private or public, although it has a population growth.

In conclusion, tourism does not develop all parts of these cities equally and the parts that were already excluded from services and economic flows (periphery) tend to be excluded from tourist activity as well.

Commuting Patterns and Urban Form: Evidence from Poland

Szymon Marcinczak, University of Lodz, United Kingdom

Bartosz Bartosiewicz, University of Lodz, Poland

Commuting patterns depend on a number of factors, including various socioeconomic features of individuals and households as well as characteristics of urban form. This paper revolves around the latter group of contributory factors and explores the effect of urban spatial structure (built environment) on commuting patterns in Poland. We summarize commuting patterns by means of the distance-decay gradient of commuting flows for each supra-local labor market in Poland. High negative values of this parameter indicate that distance impedes the flow of commuters; small negative values indicate that distance tends to be a weak obstacle to interaction. We address the following question: what is the effect of supra-local labor market spatial structure on commuting? We describe supra-local labor markets by the area and shape of the region, the level of urbanization, the degree of functional polycentricity, the evenness in the distribution of jobs and housing and the road network. Our research relies on statistical information on municipalities (gminas), and on the municipality-to-municipality commuting flow data (2011) from the Polish Statistical Office. The results of our work support the notion that more polycentric and more urbanized local labor markets appear to have a higher proportion of short distance commutes. But unlike many previous studies, we do not find any significant relationship between the job housing balance and commuting patterns. More intriguingly, we find that the supply of road infrastructure is associated with a steeper distance-decay gradient (shorter commutes).

Trends in the Provision of Basic Goods in Remote Areas – The Luxury of Tomorrow?

Naja Marot, University of Ljubljana, Slovenia

Barbara Kostanjšek, University of Ljubljana, Slovenia

Remote European areas are facing demographic and economic challenges including the decrease in the provision of services of general interest; schools, post offices, banks, doctors and shops are closing down leaving the remaining population even less reasons to stay in the area. Basic goods, once provided by the local grocery shops spread evenly around the countryside, today they are found only in nearest towns. Post and bank services are also no longer available, but moved like most of the population to the nearest towns or on the internet. This is also due to the fact that these services in comparison to the other SGI sectors like education or health are not regulated and minimum standards of accessibility are not set (or are set only in very rare examples, like in Switzerland), hence they are fully subject to the market (and mostly the big supermarket chains). In these changed market-led conditions, analysis has been performed to reveal to what extent the basic provision's network has changed in the selected rural area in Slovenia and what are the current needs of the population. In addition to that, alternatives for shopping and provision of goods were discussed and their usability for the population was evaluated. This serves as the basis from which the new regional model of provision of basic goods was prepared. This model builds and integrates as well the empty service buildings once used for the shops and office and now left to decay.

An Investigation of Public Services Delivery Capacity in Italy within Economically Integrated Regions and Meso-scale Administrative Subdivision

Federico Martellozzo, University of Florence, United Kingdom

Chiara Fratini, University of Florence, Italy

Filippo Randelli, University of Florence, Italy

Patrizia Romei, University of Florence, Italy

Francesco Dini, University of Florence, Italy

In Italy, the re-definition of a territorial meso-administrative level in between Municipalities (local – NUTS4) and Regions (regional - NUTS2) to adequately – and yet efficient - handle meso-scale (larger-than-local and smaller-than-regional) issues has been a long-debated problem. However, the negotiation process produced unclear results. This is a common problem to many Countries in Europe. On the contrary, economic dynamics are in many cases free to cross political because they respond to functional principia leading to different territorial subdivision. This is the case of local labour systems (LLS) and industrial districts (ID), which often show stronger cohesion and social capital, characterized by an interconnected economy, hence these may delineates more homogenous areas which can also result being more efficient for what concerns public services delivery).

Building on this hypothesis this research exploits the “Progetto Fabbisogni Standard” database of the Ministry of Finance and SOSE (Standard Needs) which evaluates the capability of municipalities of satisfying population’s needs for a set of given public services according to the service’s level provided and the its cost. In this regard the paper aims at investigating (1) whether a correlation exists between the degree of economic integration/specialization (e.g. LLS, IDs) and the level of public services delivered in these territories. 2) it aims at describing the geographical and social-economic profile of the municipalities belonging to IDs with higher performance (i.e. competitive both for economic and public services provision performances). Findings give useful insights about the appropriateness of the administrative meso-scale lattice and how it could be improved.

EU Integration and the Impact on Regional-sector Specialisation, Concentration and Agglomeration

Ron Martin, University of Cambridge, United Kingdom

Ben Gardiner, University of Cambridge and Cambridge Econometrics, United Kingdom

A recurring issue in the European Union project concerns the implications of increasing integration on the geography of economic activity across the regions of the European economic space: does increasing integration lead to a more geographically dispersed and even distribution of economic activity, or to the progressive concentration and specialisation of activity in particular regions? This paper seeks to shed light on this issue, and reports some preliminary findings as part of a project for DG JRC-Seville, involving the collection and construction of a detailed region-sector database that will allow the relevant empirical analysis to be undertaken. The paper begins by reviewing the process of EU integration over the past three decades, and how this can be measured at sector level across countries, while also reviewing the theoretical underpinnings for the implications of increased integration for the spatial distribution of economic activity. It then moves on to consider different measures of geographical concentration, regional specialisation and spatial agglomeration, and then, using these measures, examines what has happened to the economic geography of the European Union over the past 15 years of integration.

Mobility and Entrepreneurship: Finding Value in Geographic Diversity

Mikhail Martynovich, Lund University, Sweden

Contemporary entrepreneurial research has experienced the shift from examining various characteristics of (nascent) entrepreneurs to investigating career pathways that lead to entrepreneurship. The proposed paper develops the analytical framework which complements this career perspective on entrepreneurship with the economic geography perspective on spatial mobility as a knowledge accumulation mechanism. The particular aim of the paper is to conceptualize the role of career trajectories of individuals in regulating their propensity for entrepreneurship as well as the performance and societal impact of firms that they initiate.

It is claimed that individuals draw on the experience and knowledge established in different firms and places over their entire career; and these condition the organization of activities that individuals initiate with their businesses. Broad spatial biographies expose individuals to learning opportunities across a variety of geographic settings, improves their ability to communicate effectively across various knowledge domains, and reduces limitations associated with bounded rationality. This provides individuals with learning opportunities that are not accessible through other forms of mobility – such as occupational progression or switching jobs across firms within the same location. In that respect, learning through geographical mobility may have a positive impact on individuals' ability to recognize and exploit entrepreneurial opportunities – that may not be recognized locally – in different regional markets. It is, therefore, hypothesized that a broad history of spatial relocation positively affects individuals' propensity for entrepreneurship as well as post-entry performance and societal impact of their firms.

Córdoba, the Argentinian Silicon Valley? Common Narratives, Institutional Experiments, and Mutual Adjustments to Develop a Regional Innovation System Outside Buenos Aires

Andres Matta, Universidad Nacional de Córdoba, Argentina

Sergio Montero, Universidad de los Andes, Colombia

In recent years, the information and communications technology (ICT) industry in Córdoba, Argentina, moved from representing only 2.4% of industrial employment in the 1990s to 8.6% in 2016. In this in-depth case study, we analyze the opportunities and difficulties in public-private articulation not achieved through a single or paradigmatic organization but with considerable institutional experimentation to thrust a development and innovation policy that emphasizes the role of local and regional actors, institutions, and governance dynamics. We identify and analyze three key dimensions in this evolutionary process. First is the creation of a common narrative and a set of related advocacy strategies through which local SMEs aim to influence the public agenda, creating a window of opportunity for the development of an alternative policy. Second, we analyze the importance of institutional experimentation or the creation of new organizations to articulate this common narrative and transform it into a deliberate and consensual strategy. Third, we examine how this co-evolution process involved a "mutual shaping" by providing structural and functional modifications within each of the agents of the triple helix of Córdoba. Finally, we explore the fragility of this process by explaining some of the main limitations to become a more successful regional innovation system. The Córdoba case illustrates not only how a Latin American city is trying to reinvent its regional economy, it is also an example of the transition from an economic development strategy based on the idea of "industrial complex" to a local economic development (LED) approach.

Philip McCann, University of Sheffield, United Kingdom

Chloe Billing, City-REDI Institute, University of Birmingham, United Kingdom

Raquel Ortega-Argiles, City-REDI Institute, University of Birmingham, United Kingdom

A very powerful Leave narrative at the time of the UK Referendum of 26th June 2016 was the idea that the 'metropolitan elites' of London were the major beneficiaries of the EU membership, while the majority of the population did not benefit from EU membership. Yet, this argument is empirically wrong. The UK regions which voted Leave tended to be more dependent on EU Markets for their prosperity than those regions which voted Remain (Los et al. 2017). Moreover, if we expand this analysis and consider all of the Brexit trade-related risk exposure of each UK region - including all UK-EU global value-chains connected to third countries - we still see that this same broad pattern is evident (Chen et al. 2018). The regions which voted Leave tend to be more exposed to Brexit trade-related risks than the regions which voted Remain. In contrast, the wealthier Remain-voting regions of the UK in and around the London economy as well as in Scotland, are both less dependent on EU markets for their prosperity and are also less exposed to wider Brexit trade-related risks, than the economically weaker Leave-voting regions. Moreover, many Leave-voting regions have also been major beneficiaries EU Cohesion Policy and these funding streams will be lost post-Brexit. As such, while all parts of the UK economy are likely to be adversely affected by Brexit, the adverse effects are likely to be much harsher in those economically weaker regions with a more limited ability to adjust to the shocks.

In political economy terms there is therefore both a political and functional imperative to reconsider the whole post-Brexit framework of UK regional and urban policy in the UK, and to identify what could/should/would replace EU Cohesion Policy. This ought to be a time when the UK devolution agenda is stepped up, yet the reality is currently very different. The main reason is that coordinating government activities in such a complex and uncertain environment as Brexit naturally leads the UK national government to try to centralise and control all government activities and initiatives as far as possible. This tendency is all the stronger in an already highly centralised state such as the UK because there are few, if any, countervailing institutions, especially in England. The problem is that these centralising Brexit-related governance pressures go against the devolving and decentralizing devolution agenda also being encouraged by government. In addition, the ending of EU Cohesion Policy within the UK means that the whole future of UK regional and urban policy is up for discussion.

There are new policy initiatives being promoted, which are linked to the Industrial Strategy. However, the driving force for these initiatives is still very much central government. UK combined authorities at the level of City-Regions are in many ways still too new to have either a clear voice or a well worked out vision and mission regarding their post-Brexit roles in national debates. This is reflected in a collective lack of vision as to what ought to replace EU Cohesion Policy and the role of City-Regions in its delivery. Similarly, many Local Enterprise Partnerships (LEPs) have neither the capacity nor capability to contribute to these matters. This lack of clarity is critical because City-Regions also ought to be the natural constituency articulating a post-EU Cohesion Policy vision for UK regional and urban policy (in the same way as agricultural lobbies are aiming to articulate a post CAP future), whereas in reality few, if any, such activities are taking place. A major advantage of EU Cohesion Policy was that it explicitly targeted weaker regions with long-term investment commitments that were largely independent of the short-term political cycles of whichever national government which happened to be in power at any one time or of the lobbying power of particular industrial sectors. In contrast, the

re-domestication of regional and urban policy runs the risk of the immediate term re-politicisation of the policy, as the successive government will have an incentive to abolish what went on before. Indeed, in a highly centralized and top-down governance system such as the UK the temptation to do this is very strong. This will, therefore, make the taking of long-term decisions and the establishment of long-term policy commitments – which are essential for any possibility of regional rebalancing – much more difficult. Worldwide evidence suggests that such a re-politicisation of policy goes precisely against good practice in regional and urban policy, and therefore the whole policy needs to be fundamentally re-thought. At present, however, such discussions on these issues are very limited.

Our paper will examine the preparedness of different sub-national government arenas to the challenges raised by Brexit and will discuss the types of actions and initiatives that are currently being undertaken. We will also discuss the options for a new post-Brexit model of regional and urban policy, and consider the potential relationships between policy actions and governance. Our analysis will also consider how regional and urban policy might interface and interact with industrial policy, and examine some of the options for how new meso-level institutions could facilitate these interactions.

The Making of Successful Inland Ports in the United States

Erin McLaughlin, University of New Orleans, United States

The creation of—and desire to create—‘inland ports’ in the United States has grown in the last 20-25 years. The paper, and corresponding presentation, explores what exactly an inland port is, including its various categories and types; as well as the history of inland port development, benefits to various stakeholders, and what makes for a successful inland port. A brief outlook on the optimistic future of inland ports is also explored. Published in 2001, *The Identification and Classification of Inland Ports* by Sara Jean Leitner and Robert Harrison (conducted for the Texas Department of Transportation in Cooperation with the U.S. Department of Transportation Federal Highway Administration) gives much consideration to the definition, which is described as: “The formal definition of an inland port, used in this work, is a site located away from traditional land, air, and coastal borders containing a set of transportation assets (normally multimodal) and with the ability to allow international trade to be processed and altered by value-added services at the site as goods move through the supply chain.” This subject is of particular interest regarding location and relocation of economic activities because the creation of inland ports moves traditional intermodal freight activities away from traditional seaport locations to inland areas—many of which have a significant desire and need for employment opportunities and economic development.

Growth or Cohesion? An Analysis of Shifting Labour Market Dynamics between and within EU Regions

Leaza McSorley, Glasgow Caledonian University, United Kingdom

This paper examines the recent improving fortunes of the EU economy and contrasts this against data on quality of life, well-being and social cohesion as experienced across and within different regions of EU.

The bounce-back in EU economic growth has contributed to falling unemployment rates and an improved employment rate of 71.1%. However, structural shifts in the labour market have meant that the post-crisis recovery has not been inclusive for all demographic groups (European Commission

2017) or regions. Female labour market participation and the proportion of older workers remaining in the labour market have increased. Whereas, the labour market participation rates of young people are migrants remain below 2008 levels. The youth NEET labour market is strongly gendered with variances between male youth unemployment and female inactivity rates. Additionally, under-employment remains a problems with around 50 million people reporting that they are working fewer hours than the would like (Eurofound 2017). Despite falling unemployment 118 million EU citizens' remain at risk of poverty and social exclusion (European Commission 2017). Young people have now replaced the elderly as the group most at risk of relative poverty (OECD 2016). Though this trend began in the 1980s it accelerated during and post crisis.

This analysis uses data from the EU Labour Force Survey in conjunction with the European Quality of Life Surveys and OECD Regional Well-being data to compare and contrast the impact of shifting labour market dynamics within Europe's regions. Providing a more detailed picture of the post crisis recovery beyond the headline macroeconomic indicators and highlighting future risks and opportunities from these shifting labour market dynamics.

The paper concludes by drawing policy implications for delivering on both Europe 2020 and European Social Pillar targets

EU Funds and the Development of Transnational Industrial Policy on Europe's Eastern Periphery

Gergo Medve-Balint, Center for Social Sciences, Hungary

Vera Scepanovic, University of Leiden, The Netherlands

While several scholars claim that industrial policy in East Central Europe (ECE) has been reduced to the promotion of foreign investors through various investment incentives, in this paper we show that the European Union (EU) has attenuated the cross-country competition for capital and allowed ECE to pursue a more diversified industrial policy that also benefits small and medium enterprises not only the large (mostly foreign) players. We argue that the EU does this via a combination of competition and cohesion policies that constitute the backbone of a new, transnational industrial policy. While European competition policy regulations limit the members' discretion in disbursing public funds as aid to enterprises, the cohesion policy provides additional resources to fund more and more varied investment projects. However, we also demonstrate that the outcome of this transnational industrial policy depends on the capacities of the domestic state. By comparing the state policy towards the automotive industry in Poland and Romania, and the way the EU funds have been used to promote industry development, we show that without a dense network of institutions assisting the small players the distribution mechanisms for channelling funding may be biased towards the strongest enterprises. In Poland, the efforts to create complementary institutions and to target EU funds towards small and medium enterprises have resulted in a more balanced distribution of resources, while in Romania the weak domestic state capacity produces a high concentration of funds in the form of rents for the most powerful firms.

Diverse Diversities – Open Innovation in Small Towns and Rural Regions

Rahel Meili, University of Bern, Switzerland

Richard Shearmur, McGill University, Canada

Innovation is not a closed process: it is now well recognized that open innovation is the key to high firm performance. One consequence of the acceptance of this idea has been to reinforce the belief that dense – usually urbanised – regions are the most conducive to innovation: it has been argued that the geographical co-location of many potential information sources fosters exchange of knowledge and information that can be rapid, intense and deep. However, notwithstanding the apparent convergence of innovation and economic geographic theories, there has for a long time been evidence that diversity and multiple sources of information can also have their limits. For instance, research in the management literature reveals that there exists an optimum level of diversity, and that too many external partners can reduce innovativeness (Laursen & Salter, 2006). Furthermore, sociologists observe that there is a tendency towards network homophily (McPherson et al. 2001). These observations and results mean that any straightforward connection between urban density and interaction diversity should be questioned. In this paper we examine whether smaller towns and remote regions are in fact as homogenous as the discourse on urban diversity would have us believe. We argue that economic geographers have put forward a one-dimensional view of diversity – places are either diverse or not. We explore this by performing an in-depth examination of seven successful high-tech firms in five small towns in the eastern part of Switzerland. We examine whether, and how, these firms can operate in a diverse environment whilst being located in apparently homogeneous contexts. We are especially interested in how firms stimulate diversity and overcome the lack of it.

Theoretical Arguments and Empirical Evidence in Russian Strategic Planning

Larisa Melnikova, Novosibirsk State University/ Institute of Economics&Ind.Engineering, SB RAS, Russia

The current debates on the future directions of spatial development of Russia use some popular theoretical arguments and empirical evidence. They give ground for the spatial concentration of economic activities and hence encourage the growth of large urban agglomerations.

Being initially built on strict theoretical concepts under many simplified premises, these arguments now are represented as very obvious facts. They are tested on real statistical data and treated rather tendentiously. Nevertheless, statistical evidence does not prove unambiguously the following promoted theses:

- “higher effectiveness of large agglomerations”;
- “cities as drivers of national growth”;
- “the levelling of interregional inequality in the course of national growth” that equal to “inevitable unevenness of spatial growth”;

Our observations on labour productivity in Russian cities did not reveal that higher effectiveness is specific for larger agglomerations. The most urbanized areas did not demonstrate higher labour productivity. Similarly, industrial growth and decline are dispersed over large and small cities. The comparative analysis of interregional inequality approved its lower levels in richer countries, but the dynamic analysis demonstrated its increase, while Russian evidence can be treated ambiguously.

Theoretical concepts are promoted into regional thinking by references to reputations, to the experience of other countries and by other rhetorical devices though statistical evidence does not prove unambiguously many of them. New federal laws on regional policy are based on the ideology of spatial concentration, which reflects attempts to optimize budget expenditures in light of the stagnation of national economic growth.

The Emergence of Relatedness: Exploring Offshore Oil and Gas as well as Offshore Wind Energy in Esbjerg/Denmark

Max-Peter Menzel, Alpen-Adria Universität Klagenfurt, Germany

Mads Bruun Ingstrup, University of Southern Denmark, Denmark

We investigate the emergence of relatedness in the offshore oil and gas industry and the offshore wind energy industry in Esbjerg. We conceptualize the emergence of relatedness between two industries based on firm level search processes which starts from local search (which ignores the other industry), and transforms via explorative search (when first connections to the other industry form) into altered local search (which regularly includes the other industry). Using a case study approach, we show that a technological discontinuity changed organizational search processes and network dynamics network dynamics were responsible for first connections between the two industries. Organizational search processes were altered on a broad level, when interactions and relations between the two industries were institutionalized. This emergence of relatedness also had a distinct geography. First connections were made outside Esbjerg and offshore wind energy firms when Esbjerg was not a center of the offshore wind energy industry. Offshore wind energy firms moved to Esbjerg, after proliferation of relations and geographical co-location of the two industries followed the emergence of relatedness and not the other way around.

An Empirical Investigation Among FDI, Terrorism and Other Determinant Factors in Developing Economies

Theodore Metaxas, University of Thessaly, Greece

Polyxeni Kechagia, University of Thessaly, Greece

Multinational enterprises and foreign investors take into consideration several financial, political, institutional, environmental and social factors when investing their capitals in developing and less developed countries. On the other side, the recipient countries make significant efforts in order to absorb more foreign capitals through improving the domestic political and economic environment. Nevertheless, developing countries that present political instability, domestic and international conflicts encounter severe difficulties in attracting foreign capitals. The present paper sheds light on international and domestic terrorist attacks as deterrent factors of foreign direct investment. The purpose of the study is to empirically examine the interaction between foreign direct investment inflows and terrorism in 20 developing countries during the period 1998-2014, as well as the determinant location factors of foreign direct investment in the recipient countries, using a panel data analysis. The main contribution of the study is the empirical investigation and presentation of an econometric model that investigates the impact of terrorism and other potential factors on the foreign direct investment inflows. In addition, the present research extends to both domestic and foreign terrorist attacks, including therefore injuries and fatalities, as well as all types of attack. Furthermore, the study is not limited geographically, but developing countries of different geographical regions are

included. The research concludes that terrorism has a negative impact on the foreign direct investment inflows. In addition, it is argued that certain specific characteristics of the recipient countries are determinant factors for foreign investors. The study concludes with a series of suggestions for policymakers.

"It's Volunteering, if it's Good for you". About the Potentials and Limits of Pensioners' Civic Engagement for Service Provision

Tobias Mettenberger, Thünen Institute of Rural Studies, Germany

In many rural regions in Germany functioning basic service provision is challenged by population decline and limited public budgets. Against that background researchers as well as policy makers evoke the potential of civic engagement for supporting public authorities. Such rhetoric of mobilization especially targets 'young elderly' pensioners, with their alleged professional experiences and time resources. Based on two regional case studies in eastern and western Germany, I aim to critically reflect those assumptions, specifying the potentials and limits of public service provision supplemented by senior volunteers. My sample consists of elderly people, which took part in courses on civic engagement and active retirement, offered by adult education centres, as well as regional key actors in the field of pensioners' volunteering. My results show a wide range of motivations and forms of local participation. Whilst multiple engaged key players need relief, 'contact-seekers' just search the company of others instead of further engagement for the common good. Most respondents are strictly prioritising, how they want to invest their time resources and which forms of volunteering fit to their personal needs and wishes. Hence, they are very aware of not being exploited for filling gaps in public service provisions. Furthermore my data illustrates the dilemma that essential regional challenges concerning public infrastructures, social cohesion and collective mentalities hinder civic engagement, which could probably lead to improvements in exactly those fields. I conclude, that pensioners' volunteering for basic service provision is ridden with prerequisites and requiring revised instruments of political support.

Changing Governance and Adaptation Strategies in Waste Management: A Case Study of Pécs

Cecília Mezei, MTA KRTK, Hungary

Viktor Varjú, MTA KRTK Institute for Regional Studies, Hungary

According to community based economic development researches, while the local capability based approaches are widely spread in the European planning and development practice (see S3 strategies, EU2020 etc.), in Hungary the subsidy driven local and regional development remains the dominant trend. Several times the local resources remain unused in Hungarian towns and villages, and from outside or from above driven developments lead to path dependency at the settlements.

In the place based bottom up development concept local governments need a local resource based approach for the good strategic planning processes, for which they require exact local information about the groups, quality and amount of local resources. But which are the local resources? Nowadays the waste is one of the newly discovered and more widely spread local, regional resource, that could make connections towards Circular Economy. Due to the Europeanisation trends, the subsidies, the multinational companies and the good knowledge transfer in the waste sector, the Hungarian waste management system became "European" in the last few years. However, the change of the

governance structure resulted in challenges for local governments and waste management companies too.

The paper focuses on the “possibility” of Circular Economy concept in Hungary by analysing the change, reaction and adaptation strategies of the waste management practices of Pécs. The main challenges of the sector are the centralization process of the Hungarian waste management and local governmental systems, the average environmental attitudes of stakeholders, and the lack of participative planning and cooperation practice at local and regional level.

Does Geographical Proximity Matter for Business and Technological Knowledge Flows between SMEs? The Case of Polish IT Service Companies

Grzegorz Micek, Jagiellonian University, Poland

In classical geographical thought, the distance has played the crucial role. Since the mid-1990s, the significant role of geographical proximity for local and regional development, interorganizational interactions and knowledge flows has been strongly questioned. However, it's been argued there is still a space for geographically close relations in creating and enhancing interactions in a specific organizational and institutional context. The paper aims to identify determinants of the role of spatial proximity in stimulating business and technological knowledge flows between small and medium companies offering IT services in Poland. In order to conduct such research, the operational aim to identify the most important channels of knowledge flows must have been fulfilled.

This regression analysis (80 independent variables) was carried out based on CATI research conducted in 215 enterprises operating in IT service sector. Firstly, the most important knowledge flow channels were identified: market relations and hiring specialists. Secondly, the judgement of the role of geographical proximity (perceived proximity) play for knowledge flows clearly shows that its role is rather neglected. The rare context of its larger role takes place only in the case of younger companies. Social proximity to partners in the capitol city matters. Institutional proximity measures explain perceived proximity well – the larger institutional proximity, the better perception of the influence of spatial closeness on knowledge flows.

From Abstract Theories to Tangible Actions: How Sustainability Practitioners Interpret and Apply Academic Buzzwords

Ola Aleksandra Michalec, The University of the West of England, United Kingdom

Enda Hayes, The University of the West of England, United Kingdom

James Longhurst, The University of the West of England, United Kingdom

Over the past decades, academics have produced numerous theories, which explain, categorise and provide solutions to the climate change issues. The problem is well evidenced, and embedded in the international agreements. Still, there is a significant gap between the available theory and the practice applied on a local scale. There is a disagreement on the discourses surrounding climate change: their political agenda, capacity for shared understanding and feasibility to apply in the local policies. This paper discusses the experiences from the local policy co-design in Bristol, UK using popular, yet highly contested academic concepts of “Water-Energy-Food Nexus” and “Urban Climate Justice”. The researcher invited practioners from the public, private and community sectors to participate in the focus groups asking about the recent successes, challenges, priorities, and dilemmas related to water,

energy and food in Bristol. The data were analysed using a mix of discourse and thematic analyses, in order to draw the meaningful patterns as well as critically review the potential for cross-sectoral learning and collaboration. Following on from the initial engagement, the participants had an opportunity to involve in the research deeper: share further datasets and documents, decide on the priorities for the further stage and co-author research outputs. The project results in a set of detailed and practical co-produced policies, ready to present to the local authority, in particular municipally-owned energy and waste companies.

On Transparency, Trust and Communicating New Technologies: A Case of Metering in Bristol, UK

Ola Aleksandra Michalec, The University of the West of England, United Kingdom

Water and energy meters are being installed in the UK on a large scale, likely to feature in the vast majority of the households over the next decade. They are often claimed to improve resource efficiency, reduce bills and give power to their users. However, their effectiveness is often contested as it is contingent on the existing tariffs and the users' interactions with the technology. The arguments used to promote metering can influence the uptake of technology. However, the challenge is not simple, as the inaccurate and misleading claims could worsen the perceptions of trust and transparency within the energy and water sectors. This presentation reports on the findings from a study involving discourse analysis of promotional materials and focus groups with water and energy professionals involved in metering interventions in Bristol, UK. The researchers interviewed a range of practitioners across the sectors, e.g. local water company, municipally-owned energy company, water researcher group, local council and the community energy network. The comparison of focus group data with the promotional materials revealed that although water and energy professionals commonly discuss the concepts of "smartness" and "fairness" of meters, these ideas are not presented in the customer messaging. The results offer improvements to the customer messaging, so they contribute to the transparent and trustful relationship between the citizens and utility providers. Finally, the presentation offers a conceptual contribution to the "smart city" and "urban justice" scholarship.

How Large are Road Traffic Externalities in the City? The Highway Tunneling in Maastricht, the Netherlands

Thomas Michielsen, CPB Netherlands Bureau for Economic Policy Analysis, The Netherlands

Joep Tijm, CPB Netherlands Bureau for Economic Policy Analysis, The Netherlands

Raoul van Maarseveen, Uppsala University, Sweden

Peter, CPB Netherlands Bureau for Economic Policy Analysis, The Netherlands

Traditionally, the most important aim of infrastructure has been the reduction of travel time. However, liveability and efficient use of space are becoming increasingly important aspects of new infrastructure developments, especially in urban areas. We analyse the value that housing consumers attach to improvements in liveability as a result of such infrastructure investments. We look at the moving of the A2 highway in Maastricht, a medium sized town in the Netherlands, from above the surface into a tunnel underneath the city. Similar highway relocations have recently taken place or are being planned in other cities such as Antwerp, Dallas, Denver, Hamburg, Madrid and Seattle.

Our main contribution is twofold. First, our case study allows a clean identification of liveability improvements because travel time only decreases for ongoing traffic, so that the travel reduction benefits do not vary much within the project city, whereas the liveability benefits are concentrated

near the new tunnel. Second, we add to a nascent literature on the effects of infrastructure relocation projects in urban areas, which are becoming increasingly important.

To measure the improvements in liveability, we perform a hedonic pricing analysis on house prices in the project municipality. We compare the trend in house prices near the relocated highway segment to the price trend in other parts of the municipality, controlling for house characteristics. We find that each halving of the distance to the now-tunneled highway segment is associated with a price increase of 3.5%, as a result of the decrease in traffic externalities.

Entrepreneurial Ecosystems and Entrepreneurial Universities: Developing Capacity and Capabilities for Opportunity Development and Implementation

Jay Mitra, University of Essex, United Kingdom

Su-Hyun Berg, Independent Business Consultant, Germany

While ecosystem studies have proliferated insufficient attention has been paid to the idea of different ecosystems that need sustaining at both the macro level of the environment and at the micro level of the organization. Following Miller and Acs (2017) we employ Frederick Jackson Turner's "Frontier Thesis of the United States" (Turner, 2008) to construct a framework for understanding the capacity of the university campus as an entrepreneurial ecosystem. By capacity we refer to the assets, resources, the culture of freedom of thought and expression, and the diversity of people and methods that nurture an entrepreneurial university. We draw on the capabilities approach of Amartya Sen (1989; 1984), to augment Turner's thesis and identify a capability set of internal institutional stakeholders with which to make use of the capacity of the institution. Capabilities constitute the means and process of achievement of aspirations and objectives of students and staff in these institutions. We examine whether this mix of capacity and capabilities helps the entrepreneurial university to implement stakeholder engagement and economic, social, cultural and personal value creation in a regional ecosystem. (Stam, 2015; Isenberg, 2014; Audretsch and Thurik, 2000)

We examine two distinctive and research intensive universities, University of Essex in the UK and Hanyang University in South Korea to address two key conceptual challenges: a) understanding the higher education campus as an entrepreneurial campus ecosystem within which entrepreneurial activities, find their role; and b) taking entrepreneurship to mean more than new business creation, in very different contexts.

Diaspora Brain Circulation and Transnational Entrepreneurship: The Black African SME Diaspora's approach to Internationalisation in the United Kingdom

Jay Mitra, University of Essex, United Kingdom

Busayo Ajayi, Forum for Sustainable New Ventures, United Kingdom

We explore the usefulness of the concept of cross-border networking as a legitimate tool for transnational entrepreneurship. Our focus is on the role that different diaspora communities play in using the dual habitus of their countries of origin and their migratory destination in developing networked-based entrepreneurial initiatives.

Robust international, diaspora business networks are established as a function of three criteria: dispersion, a homeland orientation and boundary maintenance (Brubaker, 2005) and these networks enable innovative ideas, new technologies and best practices to enrich their twin habitus (Bourdieu,

1977; 1990). We build on the idea of the resulting conceptual shift from “brain drain” to “brain circulation” (Filatotchev et al., 2009; Saxenian, 2005) to investigate how these concepts shape and drive new forms of international entrepreneurship. We use resource-based and contingency theories (Barney, 1991; Peng, 2001; Manolova, et al 2002; Lautanen, 2000; Hutchinson, Quinn, & Alexander, 2006;) to explain networking capabilities and financial performances of African Diaspora SMEs in the UK. We test three hypotheses through a survey of 650 African businesses in the UK. We use factor analysis to check the dimensionality of the constructs before subjecting them to the path analysis mode of structural equation modelling.

The results reveal a significant positive relationship between manager’s networking experience and satisfaction in new geographical markets, market positioning and profitability, and between the three objective indicators of network performance: network capacity, network intensity, and growth. Our study provides nuanced insights for policy making supporting both internationalization of UK businesses and supporting economic migration.

Conceptualizing the Third Phase of Knowledge-based Economization: The Rise of a Start-up City/State

Sami Moisio, University of Helsinki, Finland

This paper examines the latest phase in the process of knowledge-based economization. This phase is characterized by the production of new entrepreneurial political-economic subjects, new political spaces and institutional capacities that are broadly understood to contribute to both political and economic success of a nation-state at the contemporary capitalist conjuncture. I first discuss the gradual rise of the start-up economy as a “hegemony project” that, in spite of its somewhat modest size as an actually existing economy, has a tremendous discursive power as a future-oriented geopolitical imaginary. Secondly, I scrutinize the relationship of the “statist” start-up economy imaginary to the spatially selective start-up policies – which highlight the strategic role of super-creative and globally connected urban spaces – in the Finnish context. The final part of the paper discusses the recent developments in knowledge-intensive capitalism which bring together the state and city in intriguing tapestries.

Between the Future and the Past. Interdisciplinary Connections among Regional and Historical Studies

Marijn Molema, Fryske Akademy, The Netherlands

John Tomaney, UCL, United Kingdom

While searching for answers to regional economic challenges, most politicians as well as entrepreneurs and experts are forward looking. But in the assesment of appropriate policy options, the past can be of crucial importance too. History reveals path dependencies in a regions’ economy and learns about the success or failure of policy instruments which were implemented before. Regional policy impact in the immediate post-war era was easy to quantify, since the basis of success was the amount of industrial workers. In the last forty years, however, the impact of regional policies is much harder to define. Endogenous growth theories determines hetereogenous strategies, which correlates to specific regional circumstances. This paper asks the question, what the study of history may contribute to current regional policy making. It embarks on previous and future research on the

Northern Netherlands, and aims at the exploration of interdisciplinary connections between regional and historical studies.

Is the Reallocation of the Workforce Leading to a Changing Gender Division in the Labour Market? -The Case of Dalarna

Peter Möller, Region Dalarna, Sweden

Daniel Brandt, Dalarna University, Sweden

Anna Klerby, Dalarna University, Sweden

Reallocation of employees between different sectors of the economy has been a focus for much research since the 1970's. Periods of stable allocation of the workforce in specific sectors often seem to be followed by turbulent times of fast reallocation of employees between different industries.

The aim with this article is to understand the dynamics behind the reallocation of the labor force and its effect on the composition of the workforce, with a special attention paid to the implication on gender and ethnic balance. The study is focusing on the region of Dalarna which is located in central Sweden. The paper deals with effects of the decrease of the industrial sector in the region and the consecutive growth of other sectors.

By analyzing the flow of individuals between industrial sectors between 2007 and 2016 it was possible to calculate a turbulence index, showing periods with accelerating reallocation and phases of lower levels of flows. Secondly it was possible to assess how these changes have affected the gender and ethnic composition within the sectors. This was done by calculating the changes of the intra-industry sex- and ethnicity ratio over time.

This study is based on longitudinal data collected by SCB (Statistics Sweden). It contains socioeconomic data on all individuals who lived in the region of Dalarna between 2007 and 2016.

Fragile Governance and Local Economic Development: Theory and Evidence from Latin American Peripheral Regions

Sergio Montero, Universidad de los Andes, Colombia

Karen Chapple, University of California, Berkeley, United States

Much of our understanding of local economic development is based on large urban agglomerations as nodes of innovation and competitive advantage that connect territories to global value chains. This framework not only over-represents the urban and regional dynamics of cities of the global North, it also fails to characterize well the challenges of smaller cities and peripheral regions in both the North and the South, which are following different development trajectories and modes of insertion to the global economy while still subject to the forces of globalization, financialization and planetary urbanization that affect large urban agglomerations. Drawing from debates around governance and peripheries in the Anglophone and Spanish-speaking worlds, we propose an alternative way of looking at local economic development based on the idea of fragile governance and a set of three related variables: 1) associations and networks; 2) learning processes; and 3) leadership and conflict management. We explore these variables in six Latin American regions: three sparsely populated rural regions (Arauco, Chile; Lurín, Peru; and Isla de Mompox, Colombia) and three intermediate cities (Córdoba, Argentina; Linhares, Brazil; and Quetzaltenango, Guatemala). Together, they illustrate not only the challenges and fragility of governance in small and intermediate cities in Latin America, but

also the variety of governance approaches these cities and regions are innovating and implementing to achieve a more resilient and territorial vision of local economic development.

How Territorial Competitiveness Influences Firms: Evidence from Territorial Capital in the North and South of Italy

Valentina Morretta, University of Milan, Italy

Leandro Sepulveda Ramirez, Middlesex University, United Kingdom

Stephen Syrett, Middlesex University, United Kingdom

This paper investigates how the unique mix of tangible and intangible local resources accumulated across different territories, namely territorial capital, become a source of competitive advantage for firms. The analysis is based on 26 semi-structured interviews conducted with firm owner-managers operating in the North and South of Italy and it is informed by theories on both regional competitiveness and strategic management. More specifically, this paper extends the principles of the Resource Based View Theory of the firm to territories showing how territorial resources influence firms directly and/or indirectly becoming a source of cost and differentiation advantage. The analysis also show that switching the attention from individual resources to the co-existence and mix of these resources, it is possible to identify territorial characteristics that are unique, rare and not easily found in any other place that may represent a source of sustainable competitive advantage for firms. The concept of territorial capital also lays the foundation for innovative ways to identify causes of persistent territorial disparities and recognize unexploited potential of local development.

The Crisis and Regional Unemployment in Europe: Resilience and the Role of Technological Capital

Andrea Morrison, Utrecht University, The Netherlands

Riccardo Cappelli, Università di Torino, Italy

Fabio Montobbio, Università Cattolica del Sacro Cuore, Italy

It is well recognized that technological capital has a pivotal role in explaining economic growth of regions (Fagerberg, 1994). However, relatively scarce are research papers addressing the role of technological capital on economic fluctuations like the recent economic crisis. We try to fill this gap in the literature through descriptive and econometric analysis for 248 regions of 26 countries (i.e. the EU27 countries excluding Slovenia).

Unemployment data are used to measure the degree of regional resilience to economic crisis, i.e. the depth of reaction of a region's economy to a shock (Martin and Sunley, 2015). On the other side, we use EPO patent data to measure the magnitude and qualitative characteristics of the technological capital of a region. The results of our analyses show that the most performing regions (i.e. regions with the lowest increase in the unemployment rates) are located mainly in Germany and Poland, while the most severely hit regions are located mainly in Greece, Ireland, Italy, Spain and Baltic states. Besides this strong country effect, it emerges that the performance of regions during the crisis is affected by the initial level of unemployment. There are regions with a highest (lowest) initial level of unemployment and a highest (lowest) performance during the crisis period. More interestingly, it emerges that is not the technological capital per se to matter but its characteristic to be resistance at technological crises.

Governance for Regional Growth: Public-private Partnerships for Business Clusters and Regional Value Chains

Nikolai Mouraviev, University of Abertay Dundee, United Kingdom

While public-private partnerships (PPPs) are becoming increasingly popular as a method of delivery of public services, the reasons for their deployment vary widely. In industrialised nations, the value-for-money approach prevails. In contrast, many developing nations (e.g. China, Russia) are unable to ensure greater value for money because the government costs (i.e. support to PPPs) often exceed the cost of in-house service delivery by the public sector. The paper aims to examine the reasons behind PPP deployment in selected developing countries and attempts to identify PPPs' broader value to society as a major driver of PPP implementation. While the push for PPPs normally is driven by the national governments, based on the adoption of the nation-wide legal and regulatory frameworks, the responsibility for deployment is shifted to the regions. Case studies of partnerships in China, Kazakhstan and Russia show that a PPP is typically able to form a cluster of entrepreneurship, which includes suppliers and knowledge agents, both local and regional. This business cluster may be conceptualised as a regional value chain that provides employment and income and boosts regional economic development. Further, PPPs' external linkages (to suppliers and knowledge firms) reduce the danger of PPPs' 'over-embeddedness' in a local economy, and create additional value. This permits to draw a preliminary conclusion that in developing countries PPP deployment could be conceptually justified by the clusters of entrepreneurship and business networks that partnerships form for a long term due to the nature of their infrastructure projects.

The Role of International Financial Institutions in Delivering EU Financial Instruments. The EBRD Case

Olga Mrinska, European Bank for Reconstruction and Development, United Kingdom

By supporting private and public-sector clients to become more competitive, resilient, well-governed, and profitable, the International Financial Institutions (IFIs) play an important role in enhancing economic development. Traditionally providers of loans and equity finance, they are gradually developing portfolios of blended financial instruments (FIs), driven by the priorities of their shareholders/key donors.

The EBRD, founded in 1991 after the fall of the Berlin Wall, is one of the few IFIs operating in EU countries. It has a mandate to support countries as they transition towards a fully functional open-market economy. Although the private sector makes up to 80% of the Bank's portfolio, it has a significant number of public sector clients. Many of these are state-owned enterprises and public utilities from the 12 EU member states that joined since 2004, the biggest recipients of European Structural and Financial Instruments (ESFI).

Using evidence from EBRD operational evaluations and special studies, this paper discusses the relevance, effectiveness, efficiency and sustainability of financial instruments co-funded by the EBRD and by ESFI. It describes that various components of FIs have been funded, managed and evaluated by different actors, and argues that a better understanding is required of their combined impact. This could be achieved in part by bringing together existing analysis. This in turn could inform the design of the next generation of EU financial instruments, potentially including private sector components, with the aim of developing instruments that are more effective, additional, and sustainable.

Spatial Diversification of the Implementation Costs of the Updated National Water and Environmental Program in Polish Functional Urban Areas

Karol Mrozik, Poznan University of Life Sciences, Poland

Piotr Idczak, Poznan University of Economics and Business, Poland

The study provides a comparative analysis of the structure of costs linked to implementation of the updated national water and environmental program. The paper proposes two indicators: implementation costs of measures planned in the updated national water and environmental program per capita or per square kilometer, and also confirms their applicability. The use of those indicators allowed to compare different types of spatial units (settlement – functional urban areas and hydrographic – river basins). In the study all (also 26) polish functional urban areas (FUAs), where Integrated Territorial Investments (ITI) are implemented, were analyzed.

ITI is a new tool introduced in the Common Provision Regulation (CPR) for use during the European Structural and Investment Funds (ESIF) programming period. Its aim is to make it

easier to run territorial strategies that need funding from different sources. ITI also promotes a more local or 'place-based' form of policy making.

One of expected results of objectives under the integrated actions, which would be co-financed from three funds (the European Regional Development Fund - ERDF, the European Agricultural Fund for Rural Development - EAFRD and the European Maritime and Fisheries Fund - EMFF) is decreasing in subregional disparities in water and sewage infrastructure.

The results suggest that in the case of metropolitan areas the highest average costs were found in Wrocław City Functional Area, although the planned total costs were the highest in Poznań City Functional Area.

This study is supported by Polish National Science Centre (2013/09/D/HS4/01858) core funds.

The German Polycentric Urban Regions: Conceptual, Empirical and International Comparative Perspectives

Angelika Muenther, ILS - Research Institute for Regional and Urban development, Germany

Polycentricity is both a promising and "fuzzy" or "stretched" concept in spatial research. It is 'promising' as it is claimed to be a basic planning strategy for growing urban regions. At the same time, it is 'fuzzy' as it addresses a multitude of different but strongly related perspectives (morphological vs. functional, analytical vs. normative, static vs. dynamic) and spatial scales (from intra-urban to macro-regional). Against that background, the aims of the paper are threefold. First, the paper presents a new approach to systemize the basic notions or dimensions of polycentricity on a regional scale using a comprehensive review of the state of the art in urban and regional research. Second, the paper sheds light on the driving forces behind the polycentric restructuring of urban regions. In doing so, key findings of several own (working-)papers that address the challenge of PURs not having one dominant metropolitan core are revisited and newly combined. Empirical examples are presented based on findings for Rhine-Ruhr and Rhine-Main, two German inter-urban PURs, whose development paths involve a centripetal process of metropolisation of the knowledge economy and a centrifugal process leading to a regionalisation of cities. Third, the paper briefly introduces the Competence Field Metropolitan Research within the University Alliance Ruhr. This regional research network forms the

broader frame for our research on the transformation of the polycentric Ruhr metropolitan region from an interdisciplinary and international comparative perspective.

Spatial Retrofits How to Develop Business Sites for the Knowledge Economy in Metropolitan Regions: A Conceptual Paper

Christiane Müller, Technical University of Munich, Germany

Michael Bentlage, Technical University of Munich, Germany

Alain Thierstein, Technical University of Munich, Germany

The discussion about Amazon's search for a second North American headquarter (HQ2) shows the close relation between economic and location development. Due to increasing significance of knowledge for economic development, municipalities are forced to provide economic qualities for their locations such as a highly skilled workforce, reliable access to transportation, urban amenities and spatial proximity in order to attract companies. This goes far beyond zoning and providing areas, but involves tasks such as rental management, marketing concepts and maintenance of such real estates and public spaces.

Thus, handling of sites is controversial. In cities and metro areas land becomes rare and expensive. In areas with low density land-use becomes ever more spread out with growing industrial and business parks. In times where work and work environments become increasingly digitized, in particular flexible with part-time arrangements and teleworking, also the use of sites should become more flexible and companies with high space requirements need to show more responsibility towards their sites.

This paper examines how municipalities and knowledge-intensive companies in the Munich Metropolitan Region can develop sites together, so that both sides create added values and a high-performing regional economy. At first we analyse the spatial structure of knowledge-intensive companies' locations by investigating the land-use patterns and the building footprint. We then ascertain the interaction with the urban environment. Secondly conceptualize how municipalities shall provide for local and regional location qualities to add value to their sites. This includes a discussion on how existing business locations can open up for the public in order to gain qualities for both the population and the workforce.

Polish Experiences with the JESSICA Initiative

Ida Musialkowska, Poznan University of Economics and Business, Poland

Piotr Idczak, Poznan University of Economics and Business, Poland

One of the consequences of the development processes in the EU are growing disparities in the cities and urban areas. The negative results of the processes affect the citizens, especially those who inhabit potentially marginalised areas of the cities, the level of economic activity and may cause the degradation of the space itself. Disparities may be treated as the result of market failure, therefore intervention is required. Intervention is often a part of the regeneration that is based on three dimensions: spatial, social and economic one. In order to address the problem the European Commission decided to introduce the JESSICA initiative as a part of the Cohesion Policy in the years 2007-2013. JESSICA is the revolving financial instrument focused on the sustainable development of the cities and eleven member states decided to experiment with the newly proposed solution. One of them was Poland that was the first country to sign the agreement. Five Polish regions, namely:

pomorskie, mazowieckie, śląskie, wielkopolskie and zachodniopomorskie, included the JESSICA resources into their operational programmes. The article aims at answering the following research questions:

1. Do the JESSICA interventions respond to the assumptions of the model (theoretical) approach to regeneration?
2. What are the dominant results of the JESSICA projects?
3. To what extent the spatial dimension and place-based approach was present in the Polish projects that were implemented in Poland in the years 2007-2013?

The methods are based on the positivist paradigm where causal relations between the public interventions (projects) and their effects are examined. A realistic approach used in the evaluation techniques and own expert-based assessment of all the projects are applied.

The study is supported by the National Science Centre, Poland (2015/19/D/HS5/01561).

Speeding up the Transition of Cities? Exploring Systemic Changes in the Smart Cities of Vienna, Amsterdam and Santander

Jörg Musiolik, ZHAW Zurich University of Applied Sciences, Switzerland

Vicente Carabias Hütter, ZHAW Zurich University of Applied Sciences, Switzerland

Bettina Furrer, ZHAW Zurich University of Applied Sciences, Switzerland

Cities are established socio-technical systems which are currently undergoing transition as a consequence of digitalization and the energy and mobility transition. In this situation, smart city concepts may offer a new way to govern the transition processes in a more coherent and systemic manner. There are different interpretations of these concepts, and smart city initiatives often start with pilot projects based on their specific preconditions and distinct paths. The literature is missing an analysis of implementation strategies, and a better understanding of how, and to what extent, smart city initiatives contribute to the transition of cities. Our initial research question is:

- What are the typical implementation strategies of smart cities, and to what extent do they lead to systemic changes?

This paper has selected for comparison three widespread strategies found in smart cities: an extended climate strategy, an innovation platform strategy, and an ICT technology strategy. Based on a literature review we selected Amsterdam, Vienna, and Santander and chose to combine literature- and desktop research with interviews for a comprehensive case study approach. In order to analyze the systemic changes at city level we draw on innovation system concepts. We analyze the leading actor groups and their interlinkages, the formal and informal institutions which guide and constrain their actions, and finally the technology infrastructures which have been developed (e.g. sensor systems, an ICT platform).

Our results show that in the case of Vienna, the leading actors are the administration and the public utility. The steering office of the initiative is part of the established city planning department with support by means of a service unit, and has the lead in drafting project proposals, strategy development, and monitoring. All actors are guided by a framework strategy, a planning document which aims to complement the established sectoral strategies. Any department could initiate and finance a project in a decentralized manner, mainly in the areas of energy, mobility, and housing (an

extended climate strategy). A monitoring process is used to screen the activities and to adapt the framework strategy if necessary.

In Amsterdam, an initial phase saw eight different organizations with complementary competences form an innovation network to identify urban challenges and develop joint solutions in pilot projects. The second phase involved opening up the innovation network to further partners, and the initiative took the character of an innovation platform. The steering office is jointly financed and it mainly acts as a network broker and project facilitator. As a result, Amsterdam is very strong in project development and has been called a “project factory”.

In the case of Santander, the local government worked closely together with a technology provider (ICT technology strategy). A steering office was introduced within the administration and endowed with relatively new competences. Its main tasks are the assessment of the technological maturity of municipal services, the development of technological solutions in pilot projects, and the rollout of new technologies in different municipal services. Different planning documents such as a strategic plan have also been developed, but the innovation activities are mainly guided by an informal procedure of conducting pilot projects, assessing the results, and an upscaling process by means of public tenders and the innovation of a procurement process of municipal services. 20,000 sensors and other devices have been implemented, and various municipal services digitalized and interconnected within an ICT platform to aggregate and use the data in a new management approach for the city.

To conclude, while the extended climate strategy is characterized by the cooperation of established actors and slight changes in their roles and competences under some new guiding institutions, the innovation platform strategy may lead to the entry of new actors with complementary competences and a higher degree of innovativeness. The ICT strategy may be strong in introducing new actors and systemic changes through rigorous technology implementation. Vienna and Amsterdam proceed in an incremental, long-lasting transition process in which change to the socio-technical system is achieved by an accumulation of small changes, whereas in the case of Santander the process is more radical as the massive testing of technologies is complemented by innovation of administrative processes and an effective upscaling of project results, in addition to the change of the management practice of the city.

Sitting on the Ruins? The Impact of the Russo-Ukrainian War on the Donbas Economy and the Role of Ukrainian Internally Displaced People

Vlad Mykhnenko, University of Oxford, United Kingdom

This paper will provide a geographical political economy perspective on the impact of the ongoing Russo-Ukrainian armed conflict on the economy of Ukraine’s war-ravaged eastern regions. Firstly, the paper sets the scene by highlighting the significant role the Donbas economy had played nationally prior to 2014. Secondly, the paper briefly outlines the chronology of the military conflict, before assessing its devastating impact in the Donbas on the local economy, treating separately the economic consequences of the ongoing war for the government-controlled and non-government-controlled areas in Donetsk and Luhansk oblasts respectively. In particular, this paper emphasises the detrimental influence of the war on the region’s overall demographic, industrial output, employment, and income trajectories. Finally, this study further discusses the potential for re-building the region in the future, following the eventual cessation of hostilities.

Immigrant Mobility Cultures? Status of Transport Modes, Related Attitudes and Experiences among Turkish Immigrants in Germany

Robert Nadler, ILS - Research Institute for Regional and Urban development, Germany

Janina Welsch, ILS - Research Institute for Regional and Urban Development, Germany

In the conceptual frame of a new mobilities paradigm, a broad variety of empirical phenomena, ranging from permanent migration to everyday transport, can be considered. However, individual phenomena are poorly linked to each other in terms of analysis and interpretation of data. Our paper will bridge this gap by looking at the attitudes towards, experiences with as well as status of different transport modes of a typical immigrant group in Germany, as such linking migration and transport studies. Using the empirical case of Turkish immigrants and their descendants in Germany, we will ask, whether this group displays specific mobility related attitudes and experiences, which favour certain modes of transport over others and whether we can identify patterns of an immigrant mobility culture. Methodologically, this paper draws on a set of 32 qualitative interviews in the city of Dortmund. Turkish immigrants form one of the largest and long established ethnic groups in Germany. Thus, an analysis of their mobility allows for a deeper insight into immigrant mobility in Germany. Results are used to derive hypotheses regarding a potential immigration-based change in mobility patterns in Germany, where international immigration continuously changes the composition of the population during the last decades.

Fighting Peripheralization - The way Towards Balanced Metropolitan Governance

Júlia A. Nagy, Babeş-Bolyai University, Romania

József Benedek, Babeş-Bolyai University, Romania

In order to achieve their development goals and territorial cohesion, metropolitan areas strongly rely on their governance capacity to support economic development, social cohesion and to enhance livability by ensuring a good quality of life in a sustainable manner.

In the light of such endeavors cities make determined efforts to deal with the continuous changes and to strengthen resilience in their metropolitan areas. To do so, the use of diverse policy instruments and an integrative territorial approach of metropolitan governance, proves to be crucial. Therefore, the question the papers addresses is to what extent does integrative governance eliminate the peripheralization of the rural actors of the metropolitan area?

The applicability and efficiency of an integrated governance approach is analyzed through the case of Cluj Metropolitan Area. The investigation is based on interviews with decision makers, territorial planners and academics from the urban core and its surrounding rural authorities. Additionally, the objectives defined by policies at different territorial levels are set against the accomplished developments in the peripheral rural areas and the urban core. The results show, that in order to act in an integrative manner and avoid peripheralization of the surrounding areas, there is a need for a common metropolitan vision, partnership development and an institutional framework on a metropolitan scale.

Adaptation in Cultural Industry under Conservation Pressure: A Case Study of Two Chinese Embroidery Clusters

Kyung-Min Nam, The University of Hong Kong, Hong Kong

Xin Li, City University of Hong Kong, Hong Kong, China

Hui Jiang, World Resource Institute China, China

A challenge often encountered in promoting the cultural industry is a tension between “culture” and “industry”—two seemingly conflicting dimensions. On the one hand, culture deposits some tangible or intangible traditional assets to be protected or conserved, and excessive commercialization may undermine its central value; on the other hand, industry involves commercialization, and adaptability to a changing market environment is essential to sustaining competitiveness. In this study, we explore how this tension—protection vs. adaptation—can be successfully dealt with, taking the Chinese embroidery sector as an example.

The diverging performance of two leading centers of Chinese embroidery production suggests that local adaptive and networking capabilities are essential in creating a new path out of the tension, and these capabilities are largely determined by local openness/flexibility, entrepreneurship, and linkage capacity. In Changsha, cultural conservatism prevails, and the local embroidery sector largely maintains traditional product styles and target customers, sticking to the historic path. It is in question, however, whether such a strong bias toward the high-culture segment of the industry is good for cultural heritage protection in the long run, given that the industry at standstill has faced increasing challenges in sustaining a solid local pool of skilled labor. In contrast, Suzhou’s local embroidery sector has actively responded to the changing market environment, through increased product segmentation and customization as well as intra/cross-industry collaboration. Such a flexible, scale-up strategy has helped the industry attract local talent and meet the market demand, while maintaining space for high-end artistic products.

Learning by Interacting: Experiences from the Smart-Mr Project

Janez Nared, ZRC SAZU, Slovenia

This article presents experiences with the participatory process in the Interreg Europe SMART-MR project, which connects eight European metropolitan regions: the Ljubljana Urban Region (Slovenia), Oslo and Akershus (Norway), the Gothenburg Region (Sweden), the Helsinki Region (Finland), Budapest (Hungary), the Metropolitan City of Capital Rome (Italy), the Porto Metropolitan Area (Portugal), and the Barcelona Metropolitan Area (Spain). By holding joint workshops for experts in the field, the regions exchange their knowledge of transportation and transit-oriented development, and they present good practices that could be transferred from one region to another. The observations show the impact that foreign experts can have on planning in the region hosting the workshop and gains for all the experts participating, who learn one from another and transfer the experiences into their own regions.

A Cross-section Spatial Analysis of English Regional House Prices

Ilir Nase, TU Delft, The Netherlands

This paper analyses the formation of regional house prices by using cross-sectional data from the 2011 UK Census. The theoretical underpinnings of this study are based on a supply-demand model of

regional house price formation with spatial spillovers as outlined in Baltagi, Fingleton and Priotte (2014). I use the 2011 English local authority travel flow matrix as the backbone of the analysis in both demand-side variable design and in specifying the spatial weight matrix. A key difference with the study of Baltagi et al. (2014) is the concerted analysis of the commute distance relationship between local authorities to provide robust evidence on the purely spatial specification of the weight matrix including the cut-off distance. This approach overcomes the non-symmetry problem deriving from the utilisation of a weight matrix based on travel flow counts. In addition to the key demand-supply variables, this study expands the model to include economic, social and market performance proxies which result in an overall increased model performance. The preliminary results indicate expected outcome of demand variables namely a positive impact of income within commuting distance on house prices. Additional outcomes point towards an expected negative impact of crime rates on prices, increased higher prices associated with more urbanized areas and expected (inverse) relationship of market activity and house prices. Further expansion of the current study should focus on the possibility of spatial panel analysis based on data availability.

Can Women Empowerment Explain Cross-country Differences in Inequality? A Global Perspective

Amjad Naveed, Aarhus University, Denmark

Cong Wang, Bond University, Australia

This paper investigates the relationship between women empowerment and income inequality. In particular, we examine whether empowering women in terms of raising their political, social and economic power reduce income inequality. Furthermore, this paper also sheds light on the effects of women empowerment on income inequality in different economies characterized by income. Using data for 134 countries from 1945 to 2015, we estimate a panel data model with treatment for endogeneity, controlling for savings rate, arable land rate and age-dependency ratio. Our results indicate that women empowerment in all three aspects (social, political and economic) plays an important role in reducing income inequality. This effect is more prominent in lower-middle and upper-middle income countries and is robust to different measures of inequality and an alternative estimation technique that takes care of endogeneity.

Vulnerability to the Consequences of Brexit. Evidence from the Two European Countries' Regions' Trade

Jarosław Nazarczuk, University of Warmia and Mazury in Olsztyn , Poland

Stanislaw Uminski, Institute for Development / University of Gdansk, Poland

Laura Marquez-Ramos, The University of Adelaide, Australia

BREXIT will cause serious consequences (for countries, their regions and policymakers), stemming from uncertainty regarding its final shape and implications. Given the different character and intensity of regions' trade interconnections with the British economy, we aim at identification of Polish and Spanish NUTS-2 regions' vulnerability to BREXIT.

Contrary to the majority analyses, we do not utilise the estimated values of trade from the Input-Output databases, but instead use trade data obtained from statistical systems of Poland and Spain (both 4-digit), coupled with QoG EU Regional Data (Charron et al., 2016).

We refer to the concept of countries' lumpiness in terms of exporting activity, and we treat regions as small open economies. Anchored in regional resilience theoretical and empirical approaches, we aim at: (i) depicting the intensity of trade links with the British economy, (ii) identifying basic structural characteristics of trade relations (incl. exports concentration ratios, intensity of intra-industry trade and high-tech products share), (iii) showing similarities between Polish and Spanish regions, as regards the Brexit vulnerability, in the sphere of regional exports.

The utilisation of 4digit trade data, enables grasping the regional product specialisations mostly affected by the BREXIT consequences and the degree to which is common in different nations.

We believe that the implications stemming from the research are to a high extent universal, due to a two country perspective. By proposing a method of determining the foreseen consequences, we anticipate other studies to emerge. Given the availability of real trade data, we compare the obtained results with other studies using simulated data thereof.

Re-Engaging with Place: New Zealand's New Regional Growth Programme and the Challenges of Evolving Policy, Governance and Strategy Formulation.

Etienne Nel, University of Otago & University of Johannesburg, New Zealand

In line with recent OECD thinking and the writings of Barca on place-based development, the notion of place and regional development is re-establishing itself on the development agenda in Australasia. This paper explores how state and regional authorities are responding to the government's recently introduced Regional Growth Programme in New Zealand. This programme, while at one level aligning itself with new thinking on the role of place in development, is simultaneously creating local challenges in terms of the nature and legitimacy of emerging governance arrangements and the efficacy of local strategy formulation and implementation. While marking a clear break from past spatially-neutral approaches, new approaches may, at the end of the day, only serve to entrench spatial disparities and uneven geographical development. This is shown through a comparative overview and analysis of emerging policy, governance arrangements, strategy formulation and applied interventions.

Developmental Sub-regionalism in European Strategy for Danube Region (EUSDR) for Multi-level Policy

Soavapa Ngampramaun, Ramkhamhaeng University, Thailand

According to European Strategy for Danube Region (EUSDR) is based on 3 no's rule of macro strategy that are no new institution, no new funding and no regulation, EUSDR is just only strategy and informal platform for cooperation of participating of member states (14 states who share Danube river) on their own feasibility and political mandate on the EU programs. Developmental sub-regionalism was synthesized based on neoliberal institutionalism that needs to minimize institutionalization in order to maximize welfare gains and not as an awareness of regional identity. So, developmental sub-regionalism tends to be characterized by a low level of institutionalization but may be involved in multi-lateral sub-regional cooperation that can be national governments or other state bodies as non-central governments, non-state actors (businesses and civil society organizations) and international institutions across a wide range of issues. Developmental sub-regionalism was employ to investigate how EUSDR worked under cross border cooperation in form of collaboration of sub-region across borders (does not need to be shared) intended to yield common goals, benefits' can be given from

above (top-down), but can also evolve from a local or regional level (bottom-up). It seems that in order to make EUSDR work functionally it aims to assign the network and responsibilities to different administrative levels of actors within the sub- region as a result, EU commission mandates the projects, government and involved ministries work on policy making, a local actor like municipal administration and civil society in community are organizing EUSDR implementation.

The Hungarian SME Sector-related Industry 4.0 Ecosystem

Gábor András Nick, Széchenyi István University, Hungary

Nowadays, the series of innovations in ICT and cyber-physical systems, as well as the introduction of new methods in the production process affect all economic players, with a significant influence on regional competitiveness. Industry4.0 has accordingly become a big topic to be discussed and implemented. The ideas can be recognized in industrial and digitalization policies pursued by individual countries, and the priority assigned by governmental strategy.

In the future, smart factories will be producing smart products for the global market. Deeper horizontal and vertical integration is needed along every point of the value chain, especially in a case of SMEs. SMEs are still operating in a given specific geographical environment, and the performance of these production units is dependent on the circumstances offered by the society and region they belong to. The importance of triple helix-style collaboration is becoming essential in innovation-driven global competition.

For measuring the readiness of countries and enterprises there are many comparative Industry4.0 evaluation methods, but they do not take into account the effects of the regional environment. The author aims to present a research based on the questionnaire of the Hungarian Industry4.0 National Technology Platform, which is assessing the readiness of the Industry4.0 related ecosystems to implement the necessary changes in the forthcoming decades.

The main questions to be addressed in my presentation are the followings:

- What are the typical characteristics of an Industry4.0 -oriented enterprise?
- What are the main competitiveness factors affecting the geographical distribution of the most advanced Industry4.0-ready SMEs?

Access to Non-work Activities: What is the Impact of Daily Labour Mobility?

Michał Niedzielski, Institute of Geography And Spatial Organization, Polish Academy of Sciences, Poland

Accessibility is well studied in the literature capturing multiple locations, personal activity patterns and constraints. One of the key developments in accessibility analysis has been the incorporation of mobility patterns. For a long time now, space-time accessibility measures have explicitly considered individual mobility, while traditional place-based accessibility measures have recently been including mobility patterns in accessibility analyses of non-work opportunities. However, the contribution of accessibility realized relative to various locations in people's daily activity patterns is typically hidden focusing on the presentation of overall accessibility results. Knowing how much a places' accessibility contributes to a person's overall accessibility is important in light of social exclusion and equity concerns. The general question then becomes; how much does each location contribute to the overall

accessibility of a person or a place? How much and where does a person or a place gain or lose accessibility when traveling from one place to another? This paper uses commuting patterns to investigate the impact of home and work locations on accessibility to non-work opportunities and presents an empirical analysis of “place-based” locationally disaggregated accessibility. The second goal is to explore how these mobility impacts on non-work accessibility vary by activity duration and transport mode. The empirical analysis uses 2015-2017 data for the Warsaw, Poland metropolitan area and compares home-based and work-based accessibility to explore the impact of mobility on the relative gains and losses in non-work opportunity accessibility for different lengths of activity duration (e.g. 20, 30, 40 minutes) and for car-based and public-transport-based mobility.

Territorial Association: Public or Private A Provincial Comparative Analysis of Bogota's Metropolitan Area Governance

Jose Nino Amezquita, Regional Center for Productivity and Innovation of Boyaca, Colombia
Carlos Jimenez, La Sabana University, Colombia

Bogota inter-municipal dynamics and civil cooperation have had different achievements in recent years. Thus, Asocentro and Asoccidente, two important associative experiences,

have managed to consolidate as the two most important leaders in the provinces of the Metropolitan Area with different results and different impacts. This comparative

perspective analyzes the potentialities and limitations of provincial. Therefore, the question of the effectiveness of these initiatives acquires a central importance; given the existence of municipalities shared by both associations and the need to promote public-private partnerships within a full economic growth area. The objective of the research is to establish the levels of provincial leadership, regional vision, social capital and local governance, which both associations have managed to build in their provinces.

The study finds that the strong interdependence relationships of the big city with its environment, even before its physical merger, is shaping a broader socio-spatial unit, which often involves different political-administrative entities. Thus, dormitory cities have been gaining a life of their own; diversifying their economic base and competing with

the Capital District in the attraction of migrants and businesses.

The governance of the MA's indicates the relevance of the local autonomy and its efficiency. At the same time, initiatives on competitiveness and growth coalitions identify new forms of public-private government as central providers of infrastructure for urban growth and territorial development.

This comparative analysis is part of a much broader problem which is metropolization as a socio-spatial phenomenon of growth that demands consolidation and coordination of Bogotá with its surroundings.

Financial Instruments now and after 2020

Gyorgyi Nyikos, National University of Public Service, Belgium

The use of EU financial instruments (FIs) has become increasingly popular in the 2014-2020 programming period. FIs are viewed as more effective than grants for financially viable projects due

to their revolving nature and obligation to repay by final recipients. At the national level research has been carried out on the lessons learned from the ESIF FIs implemented in Hungary and where appropriate a comparison has been made with other EU Member States. Further, the experiences with EFSI have been investigated and its actual and potential effectiveness has been analysed.

The results show that while several FIs have been successfully launched and, several difficulties have arisen during their practical implementation. These concerned both centrally implemented instruments and those under shared management. In particular it has been questioned whether instruments such as EFSI really targeted areas where there is an investment gap and blending different sources also proved difficult due to the divergence in regulation. At the national level, compliance with the rigid ESIF rules and regulation in the areas of state aid and public procurement was also challenging.

It is important to address these issues adequately in the post-2020 programming period to ensure smooth implementation. Plans to establish a Single Rule Book for FIs is welcome, although it is important that the common rules are oriented towards the more flexible approach relevant to centralised FIs rather than the more rigid cohesion policy rules. The flexible approach should be extended to the FIs managed by EU Member States.

Improving Regional Resilience and the Negative Impact of Natural Disasters on the Regional Economy

Kenji Ogai, Hokkai Gakuen University, Japan

These days, frequent natural disasters have been making a big impact on corporate activities and the regional economy. For example, in the Great East Japan Earthquake that occurred in 2011, not only the supply chain of Japan's leading automobile industry and precision machinery manufacturing industry but also other industries constituting the regional economy suffered serious damage. Its impact has spread through the inter-industry relationship to the regional economy, the domestic economy, and even worldwide. And it took a lot of time for economic recovery. In the event of a disaster, it is necessary for policy maker to clarify concrete situation of the damage to realize prompt economic recovery. Also, it is required to improve regional resilience from the perspective of pre-reconstruction that minimizes the damage by disasters.

This paper covers the case of Japan in Hokkaido-Tokachi area. Tokachi is the largest agricultural area in Japan. This area was hit by repeated typhoons in 2016, and local industries such as agriculture, food processing industry, logistics and retailing directly and indirectly suffered damage. Its negative impact from natural disasters was analyzed by the result of field survey for local SMEs and agricultural producers, which are core industries in Tokachi. Consequently, this paper would present policy implications to raise local resilience for economic recovery.

Natural Disasters and Recovery Processes in Italy. Do Communities Shape Resilience?

Stefania Oliva, Italy

Luciana Lazzeretti, University of Florence, Italy

Martina Bianchi, University of Florence, Italy

Over the last few years, the relationship between natural disasters and the performance of economic systems has become a cutting-edge topic (Noy 2009). Therefore, the interest in understanding the

determinants and the output of the post-disasters' recovery processes has emerged as a priority of academia and political debate. However, the topic remains mostly under-researched because of data constraints and the inclination to prefer short-term analysis of the operations of recovery (Okuyama 2014). Based on such considerations, the paper aims to understand the determinants of economic resilience in response to a natural disaster. It investigates the role of institutions and communities in overcoming shocks, such as an environmental catastrophe. Doing so, the research wants to understand dimension of social, economic and environmental resilience.

The theoretical part, combining literature of economic resilience and the studies of effects of natural disasters on growth, discusses the determinants of economic resilience in response to disasters. Based on such theoretical framework and proposing two case studies, the paper explores the role of communities in recovery processes. Through in-depth interviews with experts, institutions and academics and the collection of reports, documents and secondary data, the analysis discusses the cases of two major Italian earthquakes, the Abruzzo earthquake of 2009 and the Emilia-Romagna earthquake of 2012. It identifies areas stricken by the earthquakes, actors involved in the recovery and determinants of resilience. As suggested by Yamamura (2008) a strong community and a high vocation of the territories help to create a sustainable post-shock recovery and favour economic resilience.

The Role of Strategic Plans in Reducing Land Degradation in European Urban Regions

Eduardo Oliveira, Swiss Federal Institute for Forest, Snow and Landscape Research, Switzerland

Anna Hersperger, Swiss Federal Institute for Forest, Snow and Landscape Research WSL, Switzerland

Urbanization plays a key role in economic, environmental and social sustainability. Among the many emerging critical and future threats posed to the sustainability of ecosystems in urban regions are water scarcity, the loss of biological diversity and land degradation. Land degradation is becoming a serious environmental issue threatening fertile agricultural soils and other natural resources. One of the most dramatic land degradation driving forces is caused by the spread of impervious surfaces due to economic activities such as housing and infrastructure development. Measures to halt and reverse land degradation require both strong environmental policies and effective spatial planning mechanisms. Strategic spatial plans, in this regard, have increasingly been used in many urban regions worldwide as a means to guide development and achieve sustainable land-use patterns. It is realistic, therefore, to expect that strategic plans can counteract the outlined undesired land degradation effects. In this paper, we conduct a content analysis of strategic plans currently in force in 20 European urban regions. The focus is on measures describing the role of strategic spatial plans in land degradation reduction. Results show that the majority of the plans assessed do not propose specific measures intended to reduce land degradation. Only in a few cases measures such as brownfield redevelopment and the protection of fertile soils for food production are proposed. The paper concludes by sketching various recommendations intended to support further strategic spatial plan-making processes that can grapple with issues of the unintended consequences and co-determinants of today's scale and speed of urbanization.

Cities and the 'New' Local Integration Governance: Stories about something New, something Borrowed, and something Old in Göteborg

Daniela Olmunger, City of Gothenburg, Sweden

Patrik Zapata, School of Public Administration, University of Gothenburg, Sweden

Maria José Zapata Campos, School of Business, Economics and law, University of Gothenburg, Sweden

Disruptive or triggering events, such as the so-called refugee crisis in 2015, a result of the arrival of thousands of refugees to Sweden and the following closure of borders by the end of the same year, have prompted a myriad of actors in Swedish cities to start experiments addressing the 'labour integration' challenge, that diverge from established practices in the public sector. During transition periods windows of opportunity open up for 'peripheral' actors, (e.g. civil society organisations, or municipal projects lead by middle range officers) to become institutional entrepreneurs to bring about far-reaching changes going beyond specific cases in the integration policy field.

This paper explores the changing role of the public sector in the organising of the integration of refugees and immigrants on the labour market, and particularly the re-territorialisation of integration policies and the development of new roles in local governments to facilitate labour integration through collaborative governance practices.

The paper is geographically situated at Västra Hisingen, one of Göteborg's city boroughs, where a large number of immigrants live and where a number of innovative public initiatives in collaboration with NGOs, business organizations, corporations and universities, are taking place. Our findings show how these innovative practices challenge the classical hierarchical separation of competences between city departments, prompting to create new internal and external networks to support knowledge development and policy advocacy in an emergent field. We also examine how the process of institutional entrepreneurship observed can be better described as a collective process, as it refers to layers of the administration, and a combination of individual actions, initiated by city officers, non-governmental officers, managers and politicians. In the paper, we also explore the efforts of the city borough management in integrating practices borrowed from other sectors (e.g. business incubators, or problem-oriented corporative meetings) with the, old, traditional public sector policies, leading to something new: innovative practices in the integration policies governance.

Theoretically, the paper is inspired by sociological institutional theory, and concepts of institutional entrepreneurship, to explore the institutional effects of these innovations for broader, longer-term, field-level changes, within the city borough and beyond.

The Lodging Industry and Location Patterns: The Case of Urban Hotels in Ankara

Ezgi Orhan, Cankaya University, Turkey

Hotels as urban landmarks have been the visual representatives of confidence for progress, achievement, and permanence since Industrial Revolution. Hence, location is one of the most significant decisions for hotel establishments. As a strategic investment and management decision, hotels make location choices on individual basis with differentiations in their preferences. This study aims to examine variations among hotels regarding their location choices through an empirical study in Ankara, Turkey. In doing so, data from 77 hotels in Ankara were gathered via a questionnaire to inquire their location choices. Findings suggest that hotels with differentiated characteristics show variations in making their location choices which affect the urban spatial structure in turn. The analysis

provides a basis to discuss the spatial pattern of lodging industry and an insight to decision-makers, particularly local governments, in developing a policy framework for hotel investors' needs, demands and site-specific problems that affect their spatial location. Also, this study represents empirically an assessment for the geographical locations of hotels which shed light to new entrepreneurs in lodging sector.

Illicit Financial Flows in Low-and Middle-income Countries: A Hindrance to Human Development

Bienvenido Ortega, Universidad de Málaga, Spain

Jesús Sanjuán, Universidad de Málaga. Andalucía TECH., Spain

Antonio Casquero, Universidad de Málaga. Andalucía TECH., Spain

Illicit financial flows (IFFs) are cross-border transfers of funds that are illegally earned, transferred, or utilised. Although it is widely recognised that these flows drain the scarce public resources available to finance the provision of public services and investments, there are few contributions on the effects of IFFs on human development. In this context, the main aim of this paper is to analyse empirically the relationship between IFFs and human development. This study used annual data for 56 low- and middle-income countries for the period 2002-2013 (provided by the UN's Human Development Index (HDI), the World Bank, Transparency International, and Global Financial Integrity) and employed econometric methods to quantify the impact of the relative size of IFFs on the HDI. The main result was that the total effect of an annual 10 percentage point increase in the ratio of IFFs to total trade would imply a 5.7 point decrease in HDI level as a long run effect. Although apparently small, this estimated long run effect is near to the annual average increase observed in the HDI over the period for the entire sample of countries. Thus, research findings suggest the urgent need to reduce IFFs as part of development policy in these countries.

Connectivity and Spatial Patterns: Dynamics in the Machinery Industry in Switzerland

Kathrin Ottiger, Lucerne University of Applied Sciences and Arts, Switzerland

Swiss machinery firms are ranked as one of the world leading providers of technologically advanced products. They create added value in different economic sectors. As a knowledge-intensive industry, machinery firms depend on a pool of specialists in the field as well as complex infrastructure and value chains allowing highly innovative products. With its heavy dependence on exports and the ongoing structural challenges, it is necessary for the industry to think about knowledge transfer continuously. As for high-tech companies, this often involves a wide intra-firm network and extra-firm cooperation. New ways of spatial connection and changing patterns of firm networks, partly due to the appreciation of the exchange rate, are being observed in previous studies. The main objective of this paper is to examine the dynamics of spatial restructuring in the high-tech sector for machinery firms in Switzerland, their intra-firm connectivities and networks within Switzerland but also to other locations worldwide. Hereby the following questions are of interest: How did spatial patterns in the Swiss machinery industry change from 2012 to 2018 and what are the driving factors for these dynamics in connectivity? How do machinery firms address challenges connected with globalization and digital transformation by their location strategies? In the context of this paper, the analyses supported by visualizations help us to obtain deeper insights into the dynamics of a valuable industry of the Swiss knowledge economy.

The Role of Regional Entrepreneurship Ecosystem in the Presence of Productive Firms in the CEE Regions

Balazs Pager, HAS Centre for Economic and Regional Studies, Hungary

The regional entrepreneurship ecosystem consists of a set of interconnected actors, organizations, institutions and processes. Entrepreneurial activity serves as an output of this ecosystem, and provides the background for individuals to create opportunities for innovation. In this way, value creation serves as a final outcome of the ecosystem. However productive, high growth entrepreneurial activities also vary across regions, as the regional conditions of individual and institutional factors within entrepreneurship ecosystems are different.

This paper addresses the question whether the quality of the regional entrepreneurial ecosystem has impact on the presence of productive firms. Data were collected from the regional dataset of Global Entrepreneurship Monitor on 2007–2014. In this case, the a modified rate of high-growth oriented firms serves as a measure for productive entrepreneurship, as the high-growth orientation has been characterized not only by the number of newly created workplaces, but also innovation-orientation, technology use and export-orientation. The quality of the regional entrepreneurial ecosystem is determined by different regional socio-economic measures that have also been applied for the calculation of the Regional Entrepreneurship and Development Index. In order to have a more comprehensive picture on these processes in Central and Eastern European (CEE) regions, they have been compared to Northern and Western European and Southern European regions, respectively.

The very first results show that the lack of efficient institutional systems may hinder the presence of high-growth oriented firms in CEE regions, while regions with more efficient institutions may rather provide a supportive environment for high-growth oriented firms.

Knowledge Workers and Workplace Mobility – Death of the Office, or a New Meaning for Employment Location?

Filipa Pajevic, McGill University, Canada

Richard G. Shearmur, McGill University, Canada

With the pervasive use of laptops, tablets, mobile phones, e-mail and communication platforms, and cloud computing, knowledge workers are able to perform their work whenever and wherever. This paper addresses two popular beliefs: one, that all knowledge workers are mobile and flexible, and two, that the office is moribund (Mulcahy 2017). Based on semi-structured in-depth interviews with knowledge workers in Canada's Innovation Corridor we present a typology of mobile workers, highlighting the different factors affecting a worker's ability to move around as they perform work. In addition, we reveal a turning point in conceptualizing employment location as non-traditional places adopt multiple roles and functions, including that of the office. We argue that these are important elements to consider as we design planning policies with the future of work in mind.

Governance Turn in Local Economic Development in Hungary

Ilona Pálné Kovács, Centre for Regional Studies of the Hungarian Academy of Sciences, Hungary

The common conviction of institutionalist researchers and policy makers is that „governance matters”. However it is hard to measure the direct impact of the quality of governance, although there are

several successful attempts using mostly quantitative indices. There are many experiences and evidences also on special agencies and the institutional setting of Local Economic Development (LED) concluding to the general consensus that place-based, open, participative solutions are easier able to contribute to the efficiency of local development interventions.

Less attention is paid to the general governance context of these institutions and actors dealing with local economic development. Hungary is an appropriate case to highlight the importance of the public governance context. The paper introduces the general turn in the governance model of Hungary, and seeks to identify the consequences concerning the arena of LED. The focus will be on the dramatic weakening of local governments as concerns not only the decreasing resources and competences but also the limited space of movement and independency. Based on the former and ongoing empirical researches in CERS HAS, several empirical elements can be presented which show that the ideal model of LED is strongly contradicting to the very centralised and closed nature of governance structure and practice emerged after 2010, however the roots of this statist approach can be found already in the longer history of Hungarian state and society.

Networking Towards Sustainable Tourism: Regional Development between Green Growth and Degrowth Strategies

Sabine Panzer-Krause, University of Hildesheim, Germany

Since the 1980s an immense body of literature has emerged considering entrepreneurial networks crucial for the economic success of businesses. In the light of increasing global challenges like environmental degradation and social injustice, however, calls have become louder for a great transition towards more sustainable modes of living that are not only based on economic performance but are also socio-ecologically compatible. Yet, with regard to entrepreneurial networks that promote sustainable development, there is a lack of understanding of the nature of participating businesses, in which ways they collaborate and what the outcomes are. In contrast to the economic-driven networks literature, my paper uses a network analysis to investigate features of a regional network of tourism enterprises in Ireland that pursues socio-ecological goals alongside the economic goals. Acknowledging the heterogeneity of sustainable entrepreneurs, member businesses are categorized by their ideological orientation towards sustainability ranging from strict green growth to rigid degrowth approaches. Following, the paper identifies advantageous and disadvantageous features for the creation of social capital and innovations in the context of a regional sustainability transition. It argues that, depending on the actors' positioning between green growth and degrowth strategies and their specific prestige within a network, there is a tendency for certain types of cooperation. The paper concludes that business networks can only be of significance regarding a clear shift away from business as usual if degrowth strategists are represented in adequate numbers and have influence in terms of communication and joint activities in the long-term.

Looking at Mixed Migrant Flows through the Lens of Social and Territorial Justice: Presenting Tentative Evidence from Greece

Apostolos Papadopoulos, Harokopio University, Greece

Loukia-Maria Fratsea, Harokopio University, Greece

During the years of economic recession migrants were amongst the most vulnerable groups and usually the hardest hit by the economic crisis in Europe. Rising unemployment rates were often accompanied by increasing anxiety in relation to the availability of labour market opportunities and enlarging concerns about the expanding mixed migrant flows.

Migrant flows towards Europe and Greece have been escalating while an existing 'migration crisis' was recently paired with a 'refugee crisis' leading to mixed concerns regarding the integration prospects and challenges for migrating populations.

Especially during the economic downturn much of discussions and research focuses on enduring territorial inequalities in Europe and increasing social cohesion challenges by taking into consideration the regional level. However, the relations between territorial inequality and mobility as well as between mobility, social cohesion and social/spatial justice remain by and large unexamined.

The paper's objective is to provide a bridge between various facets of mobility with the concepts of territorial inequality and social/spatial justice. The paper elaborates statistical data from various sources and policy documents in order to come up with an assessment of migrants' social and territorial justice. The existing substantial evidence will be critically discussed by using qualitative data collected through interviews with policymakers and stakeholders.

The aim of the paper is to discuss the concepts of social and spatial justice in view of the recent mixed flows towards Europe and to touch upon the challenges at regional level posed in the design and implementation of migration policy in Europe.

Implementing Smart Specialisation in Catch-up Regions: The Importance of Capacity Building

George Papamichail, University of Edinburgh, United Kingdom

Alessandro Rosiello, Innogen Institute and University of Edinburgh, United Kingdom

David Wield, Innogen Institute and Open University and University of Edinburgh, United Kingdom

Smart Specialisation is a key territorial innovation strategy for initiating change and regional diversification within the European Union (EU). However, there is a growing recognition that Smart Specialisation strategies (S3) must shift attention from theory (design) to practice (implementation) (Capello and Kroll, 2016). In this sense, S3 need further empirical investigation to understand under what economic, social and institutional conditions, in a globally connected environment (Mastroeni et al., 2013), they can be effectively executed at regional level to promote structural change and economic renewal and development (Gianelle et al., 2016, McCann et al., 2016). This implementation challenge of S3 is particularly profound in catch-up regions with low innovation capacity and entrepreneurial potential (Foray 2014, Morgan and Nauwelaers 2004). We investigate specific S3 challenges in catch-up regions, and we argue these are due to capacity building inefficiencies at both the micro-level (organisations) and the meso-level (regional institutions). Our focus is on EU regions with prolonged economic recession. We use an analytical case study approach to examine S3 practices in two Greek regions (Crete and Central Macedonia), which have been in fiscal crisis for almost ten consecutive years. Empirical evidence from both regions (longitudinal analysis using fifty interviews

and observational research) is used to explain how capacity building affects policy action in the S3 context. The institutional capacity to decentralise and increase regional autonomy and the networking capability to link cross-sectoral activities, are found as two forms of capacity building with a tangible and direct impact on the implementation of innovation policymaking.

Socio-demographic Change and Urban Governance as Drivers of Land Use in OECD Countries

Stefano Pareglio, Italy

Silvia Beghelli, Italy

Giovanni Guastella, Fondazione Eni Enrico Mattei, Italy

Although the relationship between regional socio-economic factors and land use is a topical issue in the environmental agenda of all developed countries, there are still a few unanswered questions that need to be addressed. This paper contributes to the existing environmental economics literature on how to estimate the local effects of urban governance and socio-demographic characteristics on land use patterns of urban areas in OECD countries. In particular, we exploit data on more than 250 OECD metropolitan areas over the years 2000 to 2014. We adopt different strategies to measure governance: an index of municipal fragmentation weighted by a rural indicator and a polycentricity index. The former is suggested by the OECD to take into account of the differential effects of fragmentation on either rural or urban regions. In fact, while administrative fragmentation is often used as a proxy for urban governance, its role is moderated by the distribution of the population. The latter index, polycentricity, provides an estimate of the interplay between municipalities within a metropolitan area. This study empirically tests the degree to which these two indices, together with a series of local socio-economic factors, explain changes in urban land development over the years and across countries. Moreover, we are able to stratify land use patterns by world regions thus providing a global picture of the regional effects of metropolitan governance and socio-demographic characteristics on land use.

A Preliminary Study on Reshoring in the Region of Veneto in Italy

Diletta Pegoraro, The University of Birmingham, United Kingdom

Lisa De Propriis, The University of Birmingham, United Kingdom

Agnieszka Chidlow, The University of Birmingham, United Kingdom

The last decade has brought several challenges for Europe. The firms have to face a technological development, by changing working skills and types of jobs, and a political populism that is weakening the governments. To reduce the risks associated with populism and seize the opportunities of technological development, European firms are reorganising their production system by leveraging their territorial specifics and bringing back parts of or the entire manufacturing activity from abroad into their home economies. This phenomenon is labelled as reshoring by both academics and firms.

The goal of this study is to explore the phenomenon of reshoring in high-income advanced economies under the point of view of territorial advantages by underpinning theories from economic geography and international business disciplines.

The study will explore how the decision of adopting a manufacturing reshoring strategy is influenced by four variables such as technology intensity, value creation, territorial specifics, and suppliers' governance. These are tested in two European regions: the West Midlands (UK) and Veneto (Italy). To

better understand to what extent a reshoring strategy creates value in the studied regions, analysis will be conducted within the framework of the global value chain (GVC) stressing its bottom-up logic.

In conclusion, this research has the potential to be a useful tool for policymakers to promote ad-hoc industrial policies and for managers to increase the productivity of the firm by investing in its local territories.

Contradictions in EU's Rural Development Policy in the Context of Intensifying Neoproduktivist Pressures

Martin Pelucha, University of Economics in Prague, Czech Republic

Edward Kasabov, Huddersfield Business School, University of Huddersfield, United Kingdom

The paper identifies, investigates and opens a debate about intellectual inconsistencies and contradictions in the implementation of rural development policy by the European Union (EU) due to growing neo-productivist pressures. Such contradictions are often attributable to misunderstanding of the definition of rural development; this has been exacerbated by recent pressures associated with neoproduktivism. The studied contradictions reduce the effectiveness of EU's rural development policy, particularly with regard to its ability to achieve predefined goals related to balanced territorial development and cohesion. The above intellectual and policy challenges necessitate the re-examination of the current position of EU's Rural Development Policy, particularly in light of growing neo-productivist pressures and attendant political-economic agendas as well as the tendency for neoproduktivism to be often misunderstood and less adequately, critically researched. The purpose of this contribution is to, firstly, energise debates of the nature and role of rural development policy within paradigm shifts. Secondly, we advocate a revisit and interrogation of the extant, narrow academic and policy debates centred on "neo-productivist agriculture" and agricultural change. Thirdly, the paper seeks to place centre-stage in academic discourses matters the marginalised matter of implications on rural development policymaking.

Acknowledgements: This work was funded by the Czech Science Foundation (GACR) under the title 'Theoretical and Methodological Perspectives of the EU's Neoproduktivist Rural Development Policy'; Grantová Agentura České Republiky [grant number 17-12372S].

Assessing the Regional Impact of Cohesion Policies through a Territorial Proofing Tool

Leonardo Piccini, IRPET, Italy

Patrizia Lattarulo, IRPET, Italy

The assessment of the territorial impact of European strategies has been a topic of discussion and research for quite some time now. Economic, social and territorial cohesion are central objectives of the ERDF and within the framework of RIS3 each region must focus its efforts and investments on its relative strengths, adapting the policies to its specific regional context. From this arises the need for an ex-ante evaluation of the territorial endowments which are a necessary prerequisite to fully exploit the opportunities presented by the ERDF.

This work aims at building a tool to assess the cohesion potential inherent in the RIS3 strategies developed at the regional level and their capability of fostering inclusive growth within their boundaries. For this purpose, Tuscany is selected as a case study. The theoretical framework is the literature on localization factors.

Since RIS3 strategies are required to identify specific roadmaps to tailor the pathways for regional innovation to the local context, there is a need to verify to what extent these roadmaps can be received by the different territories. The tool performs a “territorial proofing” activity, analyzing and mapping the local characteristics (physical and digital infrastructure endowments, human capital and knowledge, firms composition, demographics) which enable socio-economic contexts to adopt and exploit the different RIS3 strategies, extrapolating the main enabling factors and potential outcomes of the place-based policies. These results are then summarized in a unified framework to evaluate the overall contribution of the strategy to territorial cohesion and suggest possible compensatory measures.

Galicia: The Challenge of Governing an Autonomous Region from the Office

Maria Jose Pineira, University of Santiago de Compostela, Spain

Rubén Camilo Lois González, University of Santiago de Compostela, Spain

Daniel Barreiro Quintans, University of Santiago de Compostela, Spain

For decades, the peripheral character of the Galicia region has contributed to accentuating some of its problems both at the Spanish and European level. Among them, it is worth mentioning the lack of territorial planning, as planning is carried out at the municipal level and plans at a supra-municipal scale are practically non-existent; the increasingly accentuated duality between the coastal provinces (where the main cities and economic activity are located) and those of the interior (afflicted by demographic decline and scarce economic dynamism); the serious aging problem suffered by the population; the emigration of young people in the absence of employment; cuts in the field of research; scarce foreign investment helps establish industry and promote employment; and the lack of basic infrastructure and resources.

In this context, the regional government has promoted multiple Strategic and Zoning Plans in order to alleviate these problems and achieve greater competitiveness and territorial cohesion. These consist in documents which are impeccable in formal content and structure, designed following Top-Down models and are non-binding, but their measures have barely passed the study/diagnosis stage. As a result, we believe it is urgent to move towards a multilevel, more participatory regional governance model, in which the policies that are designed have a supra-local character.

Throughout this article, we will delve into the problems facing the Galician autonomous region, examine the alternatives proposed by the regional government in its various Plans, and assess to what extent its initiatives are being carried out and their degree of effectiveness.

The Role of Intermediary Organizations in the Resilience of the Dutch-Frisian Dairy Cluster, 1960-1990

Ronald Plantinga, Fryske Akademy, The Netherlands

Marijn Molema, Fryske Akademy, The Netherlands

From the late nineteenth century onwards the Dutch region of Fryslân harbored a 'dairy cluster': a concentration of dairy farms, factories (producing butter, cheese and condensed milk), and supporting organizations. Between 1960 and 1990 the Dutch-Frisian Dairy cluster witnessed rapid change. Under the impact of external shocks such as rising wages and increasing competition from European and global markets, the cluster had to adapt in order to remain competitive. It did so by means of

rationalizing the production process. This rationalization process was driven by a mix of different forms of innovation, mainly technological and organizational innovation. The concept of 'cluster resilience' helps us to understand how a cluster adapted to profound changes in its economic environment. Earlier research has pointed to the structure of knowledge networks as a factor affecting cluster resilience. Networks with 'disassortative properties', integrating peripheral actors with actors central in the network, are thought to stimulate adaptability. In addition to this literature, we argue on the basis of the Dutch-Frisian dairy cluster that intermediary organizations were crucial for integrating different actors and contributed to the adaptation process. They did so, on the one hand, by creating networks for exchange of new forms of knowledge which were an input in the rationalization process. On the other hand, by generating support for scale expansion by means of merging companies and reducing the number of farms.

Mobility and Work: Exploring the Relationship between Employers, Employees and Place

Jörg Plöger, ILS - Research Institute for Regional and Urban development, Germany

Robert Nadler, ILS - Research Institute for Regional and Urban Development, Germany

Different forms of 'mobilities' (e.g. commuting, residential mobility and migration, virtual mobility) have become major constituents of societies in a post-modern era. In this context, transnational migration and multilocality have attracted the interest of researchers in post-industrial knowledge economies. Both phenomena refer to the fact that everyday lives increasingly spread out across different places, generating new physical and virtual mobilities between places, but also new forms of place attachment and belonging. Second, a quickly growing body of literature on the changing character of work environments in post-industrial knowledge societies points to phenomena like increasing flexibilisation, deregulation, temporary arrangements and individual entrepreneurialism. These changes in work environments strongly affect the territorial organisation of individual lifeworlds. Transnational migration studies include such work-related aspects as explanatory factor, but research has focussed on lower-skilled migration, filling up labour shortages, as well as presumably footloose elite migration. Therefore, as a shortcoming, the relevance of migration and mobility for middle-class professional groups is overlooked. With this paper we will add new insights into the interplay of mobility and work which go beyond traditional discussions of soft and hard location factors for companies and workers. Drawing on empirical data, based on interviews with employers in knowledge-based sectors and employees in middle-class professions we will highlight the effect of personal networks which help to negotiate mobility and new work environments. In particular we will explore how the specific spatial setting shapes the relationship between employers and employees.

The Impact of Air Transport Connectivity on Research Collaboration

Adam Ploszaj, University of Warsaw, Poland

Xiaoran Yan, Indiana University Bloomington, United States

Katy Börner, Indiana University Bloomington, United States

This paper analyzes the impact of air transport connectivity and accessibility on scientific collaboration. Numerous studies demonstrated that the likelihood of collaboration declines with an increase in the distance between potential collaborators. These works commonly use simple measures of physical distance rather than air flight connectivity and accessibility. This study focuses on the relationship between flight availability and the number of scientific co-publications. Furthermore, we

distinguish two components of flight availability: (1) direct and indirect air connections between airports; (2) distance to the nearest airport from cities and towns where scientific articles are affiliated. Based on empirical analysis employing Zero-inflated Negative Binomial Regression, we provide evidence that greater flight accessibility is associated with more frequent scientific collaboration. More flight connections (connectivity) and proximity of airport (accessibility) increases the number of co-publications. Moreover, direct flights and flights with one transfer are more valuable for intensifying scientific cooperation than travels involving more connecting flights. Further, analysis of organizational subsamples—Arizona State University, Indiana University Bloomington, Indiana University-Purdue University Indianapolis, and University of Michigan—shows that the relationship between transport accessibility and scientific cooperation is not uniform. It is related both to the specifics of the scientific center and the characteristics of the airport serving this center.

The Tendencies of Socio-spatial Transition in Rural Peripheral Areas in Lithuania

Gintare Pociute-Sereikiene, Lithuanian Social Research Centre, Lithuania

Edis Kriaučiūnas, Lithuanian Social Research Centre, Lithuania

The collapse of the Soviet utopian world, where the government sought to plan and control economic and social processes, caused a wave of significant changes in the post-socialist countries. The territorial regrouping of citizens is one of the hard to control changes that started at the end of the 1990s in Lithuania. The huge differences in regional development have revealed that the major cities and their suburbs are spreading, whereas peripheral rural areas are undergoing a great demographic decline.

The presentation identifies the major changes in the settlement system in Lithuania and its effects on peripheral areas. The changes in the settlement system are fundamentally linked to the development of the socioeconomic situation in the country. The main scope of the presentation is an analysis of the potential of residents from peripheral areas to adapt to the rapidly changing socio-economic environment. In the presentation we try to answer the questions ‘what is happening in rural peripheral areas that are losing their inhabitants?’ and ‘what is happening with the people who stay there?’ For the analysis we used data and information gathered during field trips to peripheral rural areas throughout the country between 2013-2014.

This study found that the residents who remained in peripheral areas had several opportunities in rapidly changing environment after Lithuania gained its Independence in 1990. Interviews with local authorities allowed us to define three groups of residents and their potential to adapt to the labour market: those who are active, those who are passive and those who choose social benefits instead of a work salary. The survey results allowed us to predict that the ‘central-peripheral’ spatial structure will be one of the main factors influencing regional development in Lithuania in the near future.

Participants in Participative Processes – Who they are and what do they Think about Participation

Kim Pollermann, Thünen-Institute of Rural Studies, Germany

One well established instrument of regional development policy for rural areas is the LEADER-approach, which was started more than 25 years ago. Today this is funded by the European Agricultural Fund for Rural Development (EAFRD 2014-2020). A main characteristic of this funding instrument is the central role of a Local Action Group (LAG). Thus LEADER is a participative approach

to bring together public, private and civil society organisations. LEADER is also viewed in the context of regional identities to foster a common “sense of place” and the related mobilisation and the commitment of local actors.

Different challenges of participation in the context of LEADER are known from the literature: especially problems like dominance by the public sector or a biased representation in relation to gender, age or education are often reported. Whereby the representation is often discussed, the participants themselves are less often asked. However, different viewpoints from different types of actors could give insights about the functionality and results of this participative approach.

The empirical basis for identifying evident findings are the examinations from the evaluation of Rural Development Programs (RDPs) in four federal states in Germany, with more than 100 LEADER-regions. The main source for the presentation is a survey of LAG-members (more precisely, the decision-making bodies of the LAGs) with more than 2000 respondents, conducted in 2017 and 2018 using written questionnaires.

Presented are views from participants of the LAGs about their commitment, place-attachment and their estimations of the processes and structures of participation.

Simplification v. Control: Managing Performance and Accountability in ESI Funds Management and Delivery

Laura Polverari, European Policies Research Centre, University of Strathclyde, United Kingdom
Martin Ferry, European Policies Research Centre, University of Strathclyde, United Kingdom

Drawing from recent research by the authors for the European Parliament and the IQ-Net network, the paper examines the regulatory framework informing the management, control and audit of EU Cohesion policy for the current period. It assesses the relationship between control and audit systems, on the one hand, and the simplification measures introduced since 2014 to reduce the complexity of implementation, and explores how this relationship impacts on different types of accountability (financial, procedural and performance).

The paper also reviews the treatment of control and simplification in the post-2020 debate before drawing together conclusions and recommendations for ESIF stakeholders to inform the post-2020 debate.

The Regional Renewal Capacity and its Determinants

Nicola Pontarollo, JRC, European Commission, Italy
Carolina Serpieri, Joint Research Centre European Commission, Italy

The strength of 2008 crisis reopened the debate on regions’ ability to deal with negative shock within the European Union (EU). This study provides a conceptual framework for one of the major dimensions of economic resilience, i.e., the renewal capacity, and empirically estimates its main drivers.

According to Martin (2012), renewal is defined in a regional context as the extent to which regional growth paths renovate after a shock. We operationalize this concept for EU regions computing the difference between the slopes of the trends after and before the 2008 crisis, taking the latter as a “what if” reference that did not experience the shock. A positive value represents the ability of

renewing the growth path with a consequent social welfare gain, and a negative value the absence of renewal capacity, i.e., a decline.

We then investigate the variables that determine the renewal capacity using different model specifications. These variables belong to several economic and social categories, as well as national and regional dimensions. The framework allows to disentangle which geographical scales matter more and within each of them the more relevant socio-economic domains.

The hierarchical structure of the data requires to address some econometric issues mainly related to the non-independence of the error terms. To deal with this problem and in order to end up with reliable and robust results, we explore a set of alternative techniques: standard and spatial models with clustered standard errors, country fixed effects, country random effects, and a two steps approach.

Synergy in the Knowledge Base of U.S. Innovation Systems at National, State, and Regional Levels: The Contributions of High-Tech Manufacturing and Knowledge-Intensive Services

Igone Porto Gomez, Deusto University, Spain

Loet Leydesdorff, University of Amsterdam, The Netherlands

Caroline S. Wagner, The Ohio State University, United States

Jordan A Comins, The MITRE Corporation, United States

Using information theory, we propose to measure innovation systemness as synergy among size-classes, zip-codes, and technological classes (NACE-codes) for 8.5 million American firms. The synergy at the national level is decomposed at the level of states and Core-Based Statistical Areas (CBSA) as regions. Thereafter, we zoom in to the state of California and in even more detail to Silicon Valley. Our results do not support the assumption of a national system of innovations in the U.S.A. Innovation systems appear to operate at the level of the states; the CBSA regions are too small, so that systemness spills across their borders. Decomposition of the sample in terms of high-tech manufacturing (HTM), medium-high-tech manufacturing (MHTM), knowledge-intensive services (KIS), and high-tech services (HTKIS) does not change this pattern, but refines it. The East Coast—New Jersey, Boston, and New York—and California are the major players, with Texas a third one in the case of HTKIS. At the regional level, Chicago and industrial centers in the Midwest also contribute synergy. Within California, Los Angeles and its environment contribute synergy in the sectors of manufacturing, the San Francisco area in KIS, and Silicon Valley in both, but with synergy mainly generated by manufacturing. Knowledge-intensive services in Silicon Valley spillover to other regions and even globally.

Fostering a Resilient Regional Economy in the SADC through Regional Integration and Industrialisation

Ockert Rudolf Pretorius, North-West University, South Africa

Johannes Ernst Drewes, North-West University, South Africa

Mariske van Aswegen, North-West University, South Africa

Regional economic resilience in the Southern African Development Community (SADC) can potentially be fostered through the implementation of regional policy based on regional integration and industrialisation. The interface between intra-regional trade in an integrated regional market and processes of industrial production enhances the ability of the regional economy to continuously adapt

to changes in global production value chains and ensure timeous adjustment to external demand volatility. Regional integration policy interventions include trade liberalisation initiatives and efficient spatial linkages to facilitate market integration. Regional industrial policy catalyses the development of supply linkages in an integrated market, enhancing regional competitiveness in global capital flows, while scale economies stimulate industrial productivity and technology spill-overs.

Initiatives towards regional economic resilience is, however, negated by ineffective policy implementation instruments and institutions ill-equipped to drive processes of change in regional production development. This study evaluates the synergy of regional integration and industrialisation in fostering regional economic resilience through enhancing intra-regional trade and regional industrial production capabilities. Case studies of ten regional integration arrangements are investigated to determine the effect of intra-regional trade and industrial production on regional economic resilience during an external economic crisis, namely the 2008 Global Financial Crisis and subsequent recession. Results indicate that intra-regional trade and regional industrialisation accelerate a region's pre-shock growth path recovery. Recommendations include the strengthening of intra-regional trade in the SADC through renewed economic integration initiatives and targeted interventions promoting regional infrastructure linkages, and capacitating regional institutions to develop strategic economic resilience policy interventions based on adjustment and adaptation.

Landing Airports

Mariëlle Prins, Belgium

The past decades air traffic growth has brought us tools to deal with airport related impacts. To speak in the terms of Weaver (1948, p. 536), we have become specialist dealing with airports as problems of simplicity (few variables, clear outcomes), for example when deciding on extra runways. We have built up a vast experience with airport related issues of disorganised complexity (many variables, statistical approach, averages) such as noise zones. However when it comes to understanding the off-airport interface, a space where the global and local interact, most research stops short.

The traditional model seems to leave us with a false equation: the global economic forces (bringing mobility, accessibility and economic wealth) trade off versus local hazards and negative spill-overs. It is fair to argue that it is too simplistic to view the issue as a simple problem of finding adequate accommodation of air traffic within an optimum regulatory framework for local land-use.

I argue that the dynamics in airport areas, particularly in the light of the landside focus of the last two to three decades, have led to spatial complex structures that have their own drivers and characteristics. Similar infrastructure facilities evolved into varied airport areas. Tracking the evolution of these interface areas in a comparable manner has the potential to contribute to a better understanding of the territorial dynamics as well as hinting at future development paths.

High Technology Firm Migration: The Magnetism of Core Regions

Daniel Prokop, Cardiff University, United Kingdom

Firm migration is infrequently studied in economic geography. Much of the problems in researching firm movement patterns are ascribed to the lack of adequate data, posing a particular challenge to understanding the entrepreneurial processes. This paper studies high technology companies (i.e. spinouts) created from university research across 12 UK unitary regions. It aims to present the spatial

complexity of firm's evolution by observing how these companies change their location since their foundation in the context of the regional core and periphery. 28.1% of UK university spinout companies migrated from the region of their parent universities. The highest intensity of firm migration (38.0% of all migrating firms) takes place in the triad of core regions: London, East of England and South East. Furthermore, this triad attracts 67.4% of all migrating spinouts. It is found that the migrant spinouts achieve a greater survival rate (81.0%) compared to the non-migrant spinouts (77.2%). Furthermore, spinout companies that migrate from the peripheral regions to the rest of the UK achieve 8% higher survival rate than firms that stay. Whilst all spinouts achieve higher survival rates when migrating to the core, it constitutes only a small improvement (approximately 3%) for the peripherally-born firms compared to moving to other peripheral regions. However, for the core-born spinouts that move to peripheral regions the survival rate drops by approximately 17%. It is concluded that high technology firms need to carefully consider their relocation efforts, as the effects of core and periphery exert complex effects on their survival outcomes.

The Relationship between Prior Start-Up Experience and Social Ties in Transnational Entrepreneurship

Sarika Pruthi, San Jose State University, United States
Anuradha Basu, San Jose State University, United States

We explore the link between TEs' prior start-up experience and social ties in the founding of transnational ventures (TNVs) in their home country. Many migrant entrepreneurs found ventures back in their home country as transnational entrepreneurs (TEs). TEs may be heterogeneous in their use of social ties in venture founding based on the nature of their prior experience of starting up in host and home countries. They may exploit existing ties or build new ties based on how their prior start-up experience relates to the new business opportunity. The use of social ties may also depend on whether they have previously founded a venture in the home country before migrating to the host country, or upon re-connecting with the home country after first migrating abroad. Understanding the link between prior start-up experience, social ties, and venture founding by TEs is important in view of the growing incidence of internationalization by entrepreneurs from ethnic communities based in developed host countries. Based on 30 in-depth interviews with serial entrepreneurs of Indian origin in the US and their counterpart India heads in their most recent (transnational) ventures, our findings indicate that prior start-up experience in the US influences TEs' ability to identify entrepreneurial opportunities through strong ties with alumni and co-founders at their former ventures. These findings extend the immigrant entrepreneurship literature on the use of social ties in venture creation, and the entrepreneurship literature on the interaction between human and social capital that has mainly focused on the nature of prior start-up experience, respectively, in a single geographic setting.

Revisiting Governance Capacity: Existing Approaches and Potential Synergies to Analyze and Measure Governance Impacts

Marco Pütz, Swiss Federal Research Institute WSL, Switzerland
Mario Reimer, ILS – Research Institute for Regional and Urban Development, Germany

Starting from the simple questions of what regions can actually “do” and how regions are able to coordinate, plan or manage their development, this paper examines governance capacities in the context of spatial development. Although governance capacity is a fundamental concept in the

scholarly debate on spatial development, generally circumscribing “the ability of the institutional relations in a social milieu to operate as a collective actor” (Gonzales/Healey 2005, p. 2056), very few systematic efforts try to operationalize and measure it. By reviewing the scholarly debate on governance capacity and related concepts such as policy capacity, institutional capacity, organizing capacity, adaptive capacity, or transformative capacity, we aim to critically assess the current state of the debate, including emerging trends, dominating narratives, and apparent research gaps. Governance capacity refers to the capabilities, competences, opportunities, power, skills, and resources important to spatial development agency and practice. Capacities can be assessed at the individual, organizational and system level. Taking stock of current understandings of governance in the field of spatial development governance capacity needs to be conceptualized as multi-level phenomenon, cutting across different sectors and policy domains, involving a wide range of stakeholders, and addressing the increasing complexity of decision-making. The paper concludes with a conceptual framework aiming at measuring governance impacts in spatial development endeavors and subsequent propositions for strengthening governance capacity in spatial development including capacity building for individuals, capacity building for regions, and reforms across the governance system as a whole.

Entrepreneurial Dynamics within Entrepreneurial Ecosystems: Path Dependent Process or Market Competition?

Korneliusz Pylak, Lublin University of Technology, Poland

Marcus Dejardin, University of Namur and Université Catholique de Louvain, Belgium

There is growing collected evidence about the effect of new business creation in terms of new jobs, productivity and incomes increase, and unemployment decrease. Therefore, mechanisms of new business creation have attracted scholars' attention for decades, but they are still not fully understood. New business creation appears dependent on both market, barriers to entry, facilities, access to finance, competition, suppliers, and endogenous potential, including human resources. Additionally, more recent contributions have put an emphasis on entrepreneurial ecosystems and their components, with formal and informal institutions including entrepreneurial culture. New results have confirmed that the persistence of entrepreneurial culture translates into high levels of entrepreneurship, indicating cultural path dependency. That being, we also know, first, that entrepreneurial dynamics can hardly be reduced to self-employment or new business creation and, second, that entrepreneurial dynamics can be directly associated with market competition.

Our research addresses this issue. Entrepreneurial dynamics, referring to business creation and closure, might be linked to entrepreneurial culture, i.e. cultural path dependency, and market competition. We analyse Polish counties both in time series (quarterly, 2012-2017) for specific industries, and spatially. We argue that past business creations and closures influence current creations and closures with specific time lag. According to our analytical framework, shorter time lags of creations and closures suggest higher competition in the industry, while longer time lags indicate path dependency of new companies' creation and closure, and greater role of the entrepreneurial culture in the new business dynamics. However, the effects may vary across industries and localisations.

Persistence of Entrepreneurship in Different Historical Context: The Empirical Playground of Poland

Korneliusz Pylak, Lublin University of Technology, Poland

Michael Fritsch, Friedrich Schiller University Jena, Germany

Michael Wyrwich, Friedrich Schiller University Jena, Germany

There is an increasing amount of literature demonstrating the persistence of spatial differences in the rate of entrepreneurial activities (Fritsch & Wyrwich 2017). Recent evidence reveals that historical entrepreneurship levels several decades ago positively affect current start-up activity indicating long-lasting persistence of entrepreneurial culture. This persistence was confirmed in quite different historical and institutional settings including cases that are characterized by disruptive changes of the socio-economic environment including the cases of post-socialist East Germany or the Kaliningrad region. The sources of this persistence are still not well-understood and may vary in different historical and institutional contexts.

We analyze persistence of regional entrepreneurship in Poland, a country that experienced rather diverse historical developments. While the western part of Poland was under German administration until 1945 and then experienced the expulsion of Germans and resettling of Polish citizens (just like in the case of Kaliningrad), the eastern territory was exposed to the rule of different imperial powers during the Polish partitions in the 18–19th century. We investigate whether persistence of entrepreneurship is stronger in the eastern Polish regions where no exchange of the population took place. A stronger effect in areas without significant population movements would suggest that intergenerational transmission of entrepreneurial values is a stronger source of persistence of entrepreneurship than the infrastructural and business environment. The historical context of Poland allows us to test whether different cultural legacies in the eastern regions also leave an imprint on persistence of entrepreneurship.

Spatial-economic Restructuring in Suburban Beijing: The Impact on Rural Migrants and their Living Environment

Miao Qiao, University of Manchester, United Kingdom

Cecilia Wong, The University of Manchester, United Kingdom

Wei Zheng, The University of Manchester, United Kingdom

Large cities under rapid growth often draw on a huge number of rural migrants who are in hopes of finding better life opportunities. Since the reform era in the 1980s, the total population in Beijing, China's capital city, has grown from 9 million in 1980 to 21.7 million in 2016. At the moment, it is estimated that there are about 5 million rural migrants in Beijing. Rural migrants who usually participate in low-payment jobs are concentrated in 'urban villages', an informal housing market created by China's unique system of dual land ownership. In the last decade, spatial-economic restructuring processes in Beijing have a profound impact on rural migrants and their living environment. This paper reviews key policies of spatial development in Beijing and examines their impacts based on empirical studies of three urban villages. This paper argues that urban villages emerge as suitable niche locations for migrant because of its low-cost housing, good transport access, and convenient daily life; however, government-led urban development projects have been pushing rural migrants further out to the urban peripheries and squeezing their living spaces through cracking down informal renting. Drawing upon lessons from the experience of other large cities, this paper also highlights key challenges to large cities in China to deliver its New Urbanisation agenda.

Academic Inventors and the Generation of Green Technologies. A Regional Analysis of Italian Patent Data

Francesco Quattraro, University of Torino, Italy
Alessandra Scandura, University of Torino, Italy

This work investigates the generation of green technologies (GTs) in Italian NUTS 3 regions across time. In particular, we focus on the knowledge generation mechanisms underlying the creation of GTs. We hypothesize that the involvement of inventors from universities bears positive effects on the generation of GTs by increasing the production of green patents, which we measure by the cumulated stock of green patents produced in Italian provinces. In addition, we investigate the role played by local technological variety, particularly when combined with the presence of academic inventors. We estimate fixed effects regression models on a panel dataset of 103 Italian provinces for which we collected patent data and other province-level data for the time span 1996-2007. The results suggest that both academic inventors and technological variety bear positive direct effects on the generation of GTs, whereas they have no effect when combined. Besides, our results show the existence of spillovers from the previous stock of non-green patents for the generation of GTs.

Business Engagement with Local Government: Creating a Social Contract for Business

Martin Quinn, University of Leicester, United Kingdom

This paper outlines some of the emerging results from a research project funded by the Regional Studies Association Early Careers Grant Scheme. Social contact theory is used to examine local government and local economic development initiatives aimed at engaging with Business. The paper explores what local government can do to attract the involvement of local business in their economic development work. Policy makers frequently talk of 'business led policy' and 'business engagement' without putting any flesh on what we mean by engagement, what forms this takes, and, what roles are actually available, and desired, by business in the policy arena. This paper will discuss the successes and failures of business engagements in Leicester and Leicestershire and suggest a reworking of the classic social contact model of John Locke for business engagement in the twenty-first century.

The Organisational Resilience of Regional Higher Educational Institutions and Local Institutional Change. Insights from Kuressaare, Estonia and Seinäjoki, Finland

Garri Raagmaa, University of Tartu, Estonia
Jari Kolehmainen, University of Tampere, Finland
Anne Keerberg, Tallinn University of Technology, Estonia

The paper investigates the organisational resilience of regional higher educational institutions (RHEIs) located in the peripheries of Estonia and Finland and their role in local institutional changes. The paper focusses on two case studies: the Tallinn University of Technology Kuressaare College, Estonia, and the University Consortium of Seinäjoki, Finland. The aim is to explore the resilience of RHEIs as a complex issue. RHEIs as organisations need to be resilient in two respects: they are exposed to changes in the higher education system, and they are impacted by the changes in their location region that is a part of a larger economic and administrative system.

A RHEI as a knowledge-intensive public organisation may contribute actively to the development of their own operational environment, acting as a progressive institutional entrepreneur. But having the

role of a local opinion leader it would theoretically be fairly easy for such an organisation to lock in, assume a defensive position and lose strategic vision of the future. In this paper, we examine 1) whether and under what circumstances are RHEIs sustainable in the long run, and 2) which internal and external factors promote their resilience.

The analysis is based on the following methods and data: 1) desk research of policy documents, statistics and published surveys, 2) data provided by the representatives of RHEIs, 3) semi-structured interviews and 4) action research, being directly involved in the activities of the RHEIs being explored. The paper outlines a theoretical framework describes two comparative cases and discusses the results.

Assessing the Economic and Environmental Efficiency of Dairy Farms Across UK regions

Annum Rafique, Cardiff University, United Kingdom

Max Munday, Cardiff University, United Kingdom

Kent Matthews, Cardiff University, United Kingdom

The paper results from a collaborative project between three Universities examining sustainable intensification in regional dairy production. The project 'Cleaner Cows' is sponsored by Sêr Cymru National Research Network for Low Carbon, Energy and Environment (NRN-LCEE). They fund research focusing on complex issues related to food, energy and water security in the face of environmental, societal and economic constraints on local and global scales. This paper examines both the economic and environmental efficiency of regional dairy farms, and shows how this varies with variables describing farm intensification. The paper initially uses data from the UK Farm Business Survey (FBS) from 2006 to 2015. We use a k-means cluster analysis to develop a typology of farms on a series of input and output variables and also introduce an environmental variable to explore the environmental performance of these farms. These variables allowed a classification of regional dairy farms according to their level of intensification. The paper then shows the results of using a Data Envelope Analysis to assess the relative efficiency of these farms. The relatively more intensive farms were found to be more technically efficient. The inefficiency of dairy farms was largely due to them being technically inefficient rather than being inefficient as a result of the scale of their operations. We explore regional differences in these findings. While relatively more intensive farms are found to be efficient in technical terms, they are found to be far less efficient in terms of environmental outcomes. The implications of these findings for policy towards farms in UK regions are examined.

Volume and Characteristics of the Last Emigrant Wave of Young People from Croatia

Nada Rajic, City of Zagreb, City office for Demography, Croatia

Starting from the available data on the volume and the dynamics of recent migration of the population and the labor force to other EU member countries with a focus on the emigration of Croats, results of the survey conducted about the structural features of the last immigrant wave of Croatian youth are also given.

In Croatia, especially since the entry into the Union, there are significantly dynamized of permanent external migration, predominantly towards more developed Western European countries. Since these trends already have very unfavorable demographic and economic effects in the country of emigration, which demographers and politicians are visibly upset, the focus of this paper is on the "push" factors

of external migration that in Croatia, as well as in all other countries of displacement, should be a tool for creating migration policies with the aim of taking measures to reduce excessive emigration or mitigation negative consequences of emigration at the national level.

Addition, the interdependence between migration and national or regional development is confirmed through a positive correlation between the migration balance and the level of economic development as well as the quality of life on national levels.

This paper represents a contribution to demography and regional economics in Croatia and in the wider region with proposals for concrete migration or immigration policy as an important and current component of the overall population and regional development policy.

The Territorial Embeddedness of Rural Biorefineries: What Socio-economic Issues?

Miravo Rakotovao, University of Technology of Troyes, France

Julie Gobert, University of Technology of Troyes, France

Sabrina Brulot, University of Technology of Troyes, France

Biorefineries are integrated bio-based industries that use a variety of technologies to make products such as chemicals, biofuels, food and feed ingredients, biomaterials (including fibers) and heat and power, aiming at maximizing the added value along the three pillars of sustainability (environment, economy and society). Obviously, these facilities seem to contribute to solve current climate issues, especially the scarcity of fossil fuels and greenhouse gas emissions. However, their location in rural areas leads us to question their economic and social impacts on the production site. Indeed, before producing the expected effects on a global scale, it is obvious that their impacts are primarily felt at the local level. In this perspective, the purpose of this work is to grasp while qualifying and quantifying the territorial embeddedness of that kind of project. First, a description of existing biorefineries is given. Then, a literature review on territorial embeddedness of agro-industrial projects is presented in order to inventory the main socio-economic dimensions arising from it, as well as the key stakeholders involved into the process. Finally, a comparison of two different biorefineries evolving within two different regions is presented with regard to identify the real economic and social fallouts of these facilities at a local scale, specifically, regarding their link to the agricultural world.

Spatial Challenges to Universal Health Care in Finland and Sweden

Daniel Rauhut, University of Eastern Finland, Finland

Christopher J Smith, University of Tampere, Finland

Sparsely populated and on the northern periphery of Europe, the decentralised healthcare systems of Sweden and Finland continue to produce the majority of their services from within the public sector, though this situation is steadily changing. Designed to be largely a-spatial, both systems have struggled with policy problems associated with access and implicit rationing, forcing changes in service structure and delivery. Both are impacted by population ageing and depopulation, particularly in peripheral areas. Demographic pressure and continually rising healthcare costs saw Sweden initiate a healthcare reform in the early 1990s to address costs, management and public perception issues. Finland began a similar process in the mid-2000s. Both processes have stressed a choice and marketisation agenda.

Using accessibility as a point of departure, this paper addresses the issue of how, in the light of ongoing health system reform, spatial challenges to health care provision in Sweden and Finland potentially impact morbidity and mortality outcomes. A multivariate cross-section OLS regression model enables us to control for a subset of explanatory variables and examine the effect of a selected independent variable when estimating the effect on health care provision. Our findings indicate that significant regional disparities, continue to exist in respect of health care accessibility and that the marketisation agenda is unlikely to adequately address the existing gap between different types of territory. In policy terms, new technological service solutions such as e-health may help, but cannot, in isolation, provide easy remedies.

Understanding Differences between Mobility Intentions and Behaviour – The Case of Recent Graduates in the Euregio Meuse-Rhine

Julia Reinold, Maastricht University, The Netherlands

Inge Hooijen, Maastricht University, The Netherlands

This paper follows up on a recent paper on the determinants of mobility intentions of prospective university graduates in the Euregio Meuse-Rhine. It empirically investigates to what extent internal and international migration intentions of prospective graduates predict their actual migration behaviour as well as other factors influencing their mobility decisions especially when transitioning from education to work. Using micro-level survey data from 2015 and 2017, which covers five higher education institutions in the Euregio Meuse-Rhine, we find that mobility intentions indicated by prospective graduates in 2015 are a strong predictor of their actual migration behaviour two years after graduation. About 70 per cent of graduates in our sample have realized their mobility intention. The study furthermore analyses which factors explain the differences between initial mobility intentions and actual mobility behaviour taking into account a variety of hard and soft locational factors, social factors as well as individual characteristics. The quantitative analysis is complemented by in-depth interviews with recent graduates who did not realise their initial mobility intentions to better understand the relationship between migration intentions and behaviour of recent graduates. The results of this paper will give direction to policies regarding attracting and retaining graduates, who are considered a convenient source of human capital in today's knowledge-based economy.

Network Evolution of European Outward Foreign Direct Investments

Giorgio Ricchiuti, Università Di Firenze, Italy

Giulia De Masi, Canadian University, United Arab Emirates

The fragmentation of production and the higher competition that it implies are major features of modern economies. The growth in the number of firms involved in FDI reveals that firms react to globalization by developing internationally oriented strategies.

In order to identify firms' strategies, De Masi et al. (2013) study the network of Italian FDI. They show that, even in the same sector, strategies adopted are heterogeneous: some firms invest abroad using middle-large countries as productive platform to export in neighboring countries through commercial affiliates, other firms are global players. In the same line, we reconstruct the network of the European firms investing abroad in the years 2003 and 2015 separately (De Masi and Ricchiuti, 2018). Using network indexes and examining the projects chosen by investors, we observe a structural change between 2003 and 2015 towards the formation of sub-networks or clusters.

In this paper, we extend the analysis to the entire period (2003-2015), to capture the evolution of the network. We reveal the existence of heterogeneity between and within sectors and/or the presence of common behaviors/strategies between firms. We detect the presence of subnets and main hubs (countries/firms) in the economy. Finally, we qualitatively analyze the main actors to understand whether the choice to develop new projects is correlated to specific features.

Network analysis allows us to unveil information that usually remain hidden. The newly acquired information can help to develop a more targeted industrial policy, which might be able to tackle issues such as long-run firms' growth.

Past Rural Path of Non-core Regions as Support of Productive and Residential Economic Development: The Case of the Region Gruyère (Switzerland)

Delphine Rime, University of Bern, Switzerland

Heike Mayer, University of Bern, Switzerland

Regions are considered non-core when located outside of core regions, that is, outside metropolitan and large urban areas (Lagendijk & Lorentzen, 2007). Up to the 1980s, non-core regions of the Pre-alps in Switzerland used to be mostly concerned by agriculture and were declining. During the last 30 years, the trajectories of those regions have shifted to more successful economic development (increase of the population and of the employment), also in comparison with other parts of the country. How to explain this relative success? On the one hand, the agglomeration of specialized activities would explain such success (Porter, 2000; Boschma & Iammarino, 2009), even in peripheral regions (Andersson, 2000; Mayer, 2011). On the other hand, researchers recently highlighted the importance of the so-called "residential" and "presential" economic activities in the successful development of regions (Davezies, 2009; Talandier et al., 2016). In this paper, we explore both hypotheses for the region of Gruyère, in the Swiss Pre-alps. The description of quantitative growth indicators and the analysis of qualitative data (documents analysis and ten semi-directed interviews) show that both productive and residential activities developed in parallel during the last 30 years and partly interact the one with the other. Moreover, it shows that the past rural identity of the region serves the development of those activities differently. We discover that the current challenge of local authorities consists in the creation of what we call an original "post-industrial" milieu in order to manage and build coherence in such a diversified non-core economy.

Territorial Sustainability in European Regions: Composite Indicators and Imbalance Measures

Paolo Rizzi, Università Cattolica Del Sacro Cuore, Italy

Antonio Dallara, Università Cattolica del Sacro Cuore di Piacenza, Italy

The paper aims to analyze the theoretical and methodological aspects related to the concept of sustainability at territorial level. From a theoretical point of view, the vision of regional sustainability is linked to the ability of a given territory to ensure its inhabitants a lasting development in economic, social and environmental terms. This holistic vision adhering to the needs of citizens has the defect of lacking a sufficiently solid underlying theory. Starting from these theoretical considerations, the paper focuses on the methodological implications deriving from them and in particular on the topic of composite indicators and of the variables' aggregating methods. A sustainability index is calculated starting from 6 elementary variables observed in the European regions. A relevant topic is related to the balance between the three dimensions of the sustainability (economy, society and environment)

and to its possible measurement at the territorial level. A sustainability indicator can in fact derive from homogeneous ranking levels in the three spheres or from means of indicators of each pillar with different positions. Then the paper calculates: a) the imbalance indices between the spheres of the sustainability in the European regions, b) the relationships between the composite sustainability index and the imbalance index. Furthermore, various hypotheses for the calculation of synthetic sustainability indexes that contain the imbalance values between the elementary variables are proposed (Mazziotta-Pareto index, concave average, principal component analysis, geometric mean).

The Future of Tourism Workforce Development in the Kootenay-Rockies, British Columbia, Canada

Danielle Robinson, University of Guelph, Canada

The objective of this research was to understand the future workforce needs for the tourism cluster in the predominately rural Kootenay-Rockies region of British Columbia, Canada. Research consisted of 16 semi-structured interviews representative of four tourism cluster groups: public bodies and government agencies; community/industry organizations; business owners, managers, employees; and education and learning providers. Interviews centred on participants' job role and career trajectory, and participants' understanding of the sector, education/training, technology/innovation and related policy. The interviews provided a database of detailed perspectives allowing the researcher to systematically identify how stakeholders and practitioners conceptualize tourism, the future of the tourism workforce, and how to collaboratively build tourism and its workforce in ways that provide competitive advantage for the region. Broadly, the findings correspond to the challenges and opportunities identified in global, national and other regional markets; however, acute shortages of entry-level labour and affordable housing were exacerbated by the rural and seasonal nature of Kootenay-Rockies' tourism. Alternative labour pools, leveraging technology, improving attraction and retention, and new ways of thinking and collaborating emerged as themes. Recommended considerations for researchers, employers, and communities seeking to gain a better understanding of the tourism labour market in a rapidly changing world are suggested. This research is part of a larger cross-sectoral exploration of workforce development by the Columbia Basin Rural Development Institute/Selkirk College which presents valuable opportunities for comparative analysis and holistic approaches to workforce development in the region.

Opposition to On-shore Wind Power – A Study of Spill-over Effects from Local Failed Projects in Germany and the UK

Johannes Rode, TU Darmstadt, Germany

Marcello Graziano, Central Michigan University, United States

We investigate whether negative externalities from social and regulatory opposition against on-shore wind power in one region spill over to neighboring regions in Germany and the UK. We analyze a panel data set of on-shore wind power farms and opposition on low levels of administration. Using a difference-in-difference approach, we find that social opposition against wind power diffusion in one Local Administrative Unit (LAU) indeed hinders diffusion in all LAUs within the same broader administrative unit (NUTS 3). However, failures due to regulatory opposition do not drive developers away in the UK. Our results suggest a stronger spatial and temporal legacy for stakeholders' driven opposition. Our analysis highlights the importance of support for on-shore projects beyond local boundaries.

The Influence of Tour Operators on the Performance of SME Hotels: A Comparison between Coastal and Inland Areas in Spain

Isidoro Romero, Universidad de Sevilla, Spain

Rafael Cáceres-Carrasco, Universidad de Sevilla, Spain

José Fernández-Serrano, Universidad de Sevilla, Spain

This paper addresses the interaction between spatial characteristics and the patterns of insertion and governance into the Tourism Global Value Chains (TGVC). In particular, the research questions that inspire this study are the following ones: How does the insertion into TGVC influence the management and performance of hotel companies? Is this influence the same in the case of hotels located in inland and coastal areas?

Some prior research suggests that tour operators play a leading role in the tourism industry, being the agents assuming the governance of the TGVC. From this perspective, a number of studies have observed a clear influence of global tour operators on the activity and results of small and medium-sized hotel companies. However, other works have not found such an influence or showed contradictory results regarding the direction of the effects.

Those contradictory results could be due to the impact of the spatial characteristics associated with the location of the company. For the tourism activity in Spain, the distinction between coastal and inland areas is particularly relevant in this respect. This paper aims to contributing to fill a gap in the literature, by mean of analysing the influence of global intermediaries on hotel companies separately in those two types of destinations.

Is Internal Migration Declining in Europe?

Francisco Rowe, University of Liverpool, United Kingdom

Internal migration is an integral component of national development and economic prosperity. It underpins the effective functioning of the labour and housing markets bringing knowledge, skills and labour to locations where needed. Internal migration rates have continuously declined over the last two decades in various countries around the world. Yet this decline remains poorly recognised and understood. This paper seeks to assess the prevalence of migration decline in 27 countries in Europe; establish the start and pace of this contemporary trend; and, understand its underpinning causes. The analyses reveal little evidence of a widespread pattern of internal migration decline, with patterns of oscillation, rise, fall and stability. There is great variability in the timing and pace of decline, but a marked drop is registered during the 2007-8 global financial crisis. Population ageing, coupled with changing economic cycles, appears to explain changes in internal migration trends in most countries.

Restrategising the Ems-Dollart Region: The Accident of the Friesenbrücke

Joost Ruiter, European and Regional Affairs Consultants, The Netherlands

Decisionmaking concerning key infrastructure is always related to political and public debate, especially in border regions. Discussions about large costs and uncertain economic impact of new infrastructure, like canals, rail lines and highways, can open up the possibility to understand deeper lying views and opinions about political and economic structures in a region.

This study is a critical geopolitical analysis of subjective spatial visions on the Wunderline train project in the Ems-Dollart Region (EDR), the border region between the Dutch Provinces of Groningen and Drenthe and the German Bundesland Niedersachsen. The concept of Strategisation of Space – developed by Lobo-Guerrero (2012) – is used as a tool to interpret and reveal the earlier mentioned subjective spatial visions on the Wunderline and the EDR. The study analyses three main strategisations of space which reflect the complexity of the region and give an insight to the geopolitical situation of the EDR.

Drawing on interviews with key stakeholders in the region, the analysis focuses on three particular problems: i) the struggle for regions to remain economically relevant, ii) tensions between central and peripheral areas within regions, and iii) local and regional implications of international trade routes. Drawing on interviews with key stakeholders in the region, the study proves the usefulness of analysing a region through the concept of strategisation of space.

Innovative Learning Creates Know-How to Regional Challenges

Essi Ryymin, Häme University of Applied Sciences, Finland

Laura Vainio, Häme University of Applied Sciences, Finland

The transformation of the working world has an impact on professional biographies at all qualification levels globally and locally at Häme region in Finland. The routine cognitive tasks are automated and digitized in many traditional fields including bio- and circular economy.

The objective of Häme region and well as Häme University of Applied Sciences is to generate new know-how, innovations, economic growth and new jobs from an increase in the bioeconomy business while securing the operating conditions for the nature's ecosystems.

Hence, there is now a growing need for human competences in critical thinking; collaborating and innovating. Besides to state-of-the-art skills and substance in bioeconomy disciplines, university teachers should guide students to apply knowledge to new situations and encourage them for new ways of thinking which include creative approaches to problem-solving and decision-making.

Competent teachers apply transversal skills across content areas and implement innovative learning methods that integrate the competency-based curriculum learning goals to authentic problems by inquiry- and project-based approaches.

One of the challenges of these approaches is to move away from the traditional role of university teacher to work-based learning where the content is ubiquitous. Teachers must act more in mentoring, coaching and facilitating role. Instead of students' weaknesses, skilled teachers concentrate on students' strengths and possibilities, and have a rich toolkit for personalizing and facilitating the PBL- process. Teachers act also as development partners with regional companies and industries balancing student-centered learning processes to their customer insight. Emphasizing working life relevance in higher education offers sustainable path for regional development.

Fields of Creative Power. Mapping the Dynamic Evolution of Cultural Vibrancy in Halland, Sweden

Pier Luigi Sacco, IUAV University of Venice, Italy

Massimo Buscema, Semeion Research Center, Italy

Guido Ferilli, IULM University, Italy

Christer Gustafsson, University of Uppsala, Sweden

We apply a new toolbox of techniques to analyze the cultural geography of the region of Halland in South-West Sweden. We show how the analysis of the implicit space grammar of the distribution of the cultural activities and facilities across the regional territory allows us, on the one side, to extrapolate the complex dynamic evolution of the region's cultural vibrancy, and on the other side, to diagnose the structural causes of the eventual decay of its vibrancy. This methodology can provide the basis of a more systematic approach to evidence-based cultural policy design, and of a more participatory, bottom-up public decision making in the cultural and in other policy spheres.

Spatial Specialization Trend of Knowledge Intensive Business Service's in Turkey

Mehmet Tahsin Sahin, , United Kingdom

Knowledge Intensive Business Services (KIBS) are widely perceived as being important drivers of economic development progress and innovation. KIBS are generally understood as economic power, driving and thriving on knowledge production and therefore, geographical density of KIBS would be expected to be a critical factor in urban area. The paper seeks to introduce the concept of knowledge-intensive business services (KIBS) in the context of professional knowledge and to analyze the roles of KIBS in regional development, especially from the viewpoint of regional specialization. For this purpose, we make use of detailed sector level data and consider Turkey NUTS-2 Regions as a research field. Turkey has got 26 Nuts-2 regions. Knowledge-intensive business services are subordinate to producer services. 10 sub-sectors have been identified according to the description of knowledge-intensive business services and the literature. These 10 sub-sectors (2 digit) will be analyzed according to the number of workplace and employment, giro data which received from Turkey Statistics Institution. The location coefficient technique will be used in this analysis. This analysis is based on 2009 and 2015 years. The results show that the telecommunications sector has been specialization in the poorer regions, while the other KIBS sectors have been specialization in metropolitan cities. Explaining the regional distribution of the KIBS is very important for regional plans and policy makers.

Universities' Third Mission and Structural Funds programmes

Maria Salomaa, University of Lincoln, United Kingdom

Finnish university consortia are collaboration networks that coordinate different activities of several host universities in peripheral areas. Besides providing local access to higher education and being a source of skilled workforce, these consortia play an enhanced role in regional development, the "Third Mission". The consortia have been especially active in taking part in Structural Funds (SF) projects.

Though the SF programmes are central tools in EU Cohesion policy and important instruments of regional R&D funding, there are only few studies on how universities can foster regional development through SF programmes. There are, however, a number of constraints hindering universities' motivation to engage with SF programmes: the projects are considered to be highly bureaucratic and cross-regional collaboration challenging. There is also a lack of resources for self-financing, which

makes the SF instruments less appealing for higher education institutions. Most importantly, the SF projects may be difficult to link with universities' core missions.

This case study is based on semi-structured interviews highlighting how the University Consortium of Pori participates in SF projects and contributes to regional development. The aim is to explore how these projects are embedded in universities' education and research missions. Is the participation merely an opportunistic way to diversify the funding base with "add-ons" to raise university consortia's regional profile? Or is the SF project portfolio strategically planned, entrepreneurial activity that truly benefits the local economy while it is successfully combined with universities traditional missions?

City Leadership and Governance during Economic Change – Evidence from Australia, Europe and US

Alessandro Sancino, Open University Business School, United Kingdom

Sarah Ayres, University of Bristol, United Kingdom

Andrew Beer, University of South Australia, Australia

Cities clearly play a major role in economic development of 21st century. However, the transforming and turbulent nature of current economic context exposes cities continuously to opportunities and threats. This is why the role of leadership in, among and over cities is getting a lot of traction in policy, academic and professional debate. According to many authors (e.g. Ayres, 2014; Bailey et al., 2010; Beer & Clower, 2014; Budd & Sancino, 2016; Gibney et al. 2009; Sotarauta et al., 2012; Rodríguez-Pose, 2013), the human and soft agency of leadership is the 'missing variable' to explain the 'variable performance of different places' and the missing link between collaborative governance and sustainable socio-economic development. This paper explores the role of leaders and leadership of cities in two different scenarios: i) interest of a multinational in locating a new production facility in the city; ii) closure of a major employer in the city. The research applied vignette techniques and two focus groups per Nation were held in Australia, Finland, Germany, Italy, UK and US. Different types of city leaders (political, managerial, business and civic leaders, in total approximately 100 people) participated to our focus groups. Our findings provides important insights for theory, policy and practice about the role of leaders and leadership practices in Western cities during economic change.

Path Renewal and Creation in Specialized Regional Innovation Systems. A Comparative Analysis of Two Textile Districts in Italy and Sweden

Erica Santini, Fondazione per la Ricerca e l'Innovazione, Italy

Marco Bellandi, University of Florence, Italy

Cristina Chaminade, Lund University, Sweden

Monica Plechero, University of Florence, Italy

The innovation system in which the industry is located strongly affects the possibilities of that industry to pursue different types of path development. According to some literature, specialized RIS (SRIS) have a high propensity to path dependency and a limited endogenous capacity of renewal or transformation, due to their low relational variety (Boschma, 2015). Policies supporting relations with extra-regional/extra-local networks might provide actors in SRISs with the knowledge needed to explore new development paths (Isaksen and Trippl, 2016). This points out to the importance of

understanding the interplay between local, regional, national (e.g. NIS: Chaminade et al., 2017), and upper level networks of innovation in the industrial transformation and upgrading of SRIS.

This paper investigates the recent processes of path renewal and creation of two SRIS, the textile districts of Prato in Italy and Borås in Sweden. Prato is a quite complex system, hosting many nuclei of know-how within and around the textile specialization (Bellandi and Santini, 2017), combining in a non-stable way processes of path extension and path renewal. Borås has been the object of successful strategies around shared visions of transformation, aiming at path creation in the industry supported by strong coordination between local, regional and national actors and policies (Isaksen and Jacobsen, 2017). Lacking shared visions and strong multi-level coordination, path renewal in Prato could stabilize through the emersion of a new place leadership (Bailey et al., 2010) bridging strategically original combinations of local nuclei of know-how with extra-local innovation and trade networks.

Gateway Cities for the Oil Industry in the South America: An Analysis Based on Investment Flows and Networks' Gatekeepers

Mariane Santos Françoso, University of Campinas, Brazil

Moritz Breul, University of Cologne, Germany

Celio Hiratuka, University of Campinas, Germany

Javier Revilla Diez, University of Cologne, Germany

The global economy has undergone processes of spatial dispersion and fragmentation since the 1970's, which lead to the formation of global production networks (GPN). In the center of this new organization are the multinational firms, which create their own production networks, integrating different agents in different parts of the world, through their activities' locations, suppliers and services they demand (Crescenzi et al, 2016). Papers that previously analyzed investment patterns found that economic activities beyond borders tend to concentrate in few cities, which play a gateway role for the international and domestic markets (Zhao and Zhang, 2007). This intermediary function of some nodes in networks is dealt with in the social network analysis, which calls them gatekeepers (Graf, 2010). Although some works have already explored the gateway functions of the cities, there are still many aspects to be explored, such as how to measure this "gatewayness", how to identify the scope of it and so on. Based on the fact that the works which explore the gateway functions of cities are scarce and mostly based on case studies (Scholvin et al, 2017; Short et al, 2000), this work seeks to analyse the gateway cities for the oil and gas industry in South America, based on an adaptation of Graf's technological gatekeeper index, and also to categorize the nature of their "gatewayness". To do so, we will analyse brown and greenfield investment flows (M&As and FDIs), between 2007 and 2015, involving South American cities, under the perspective of social networks.

Evaluating the Effect of Business Adoption and use of ICT-Enabled Technologies on Production Efficiency: A Welsh Perspective

Anna Scedrova, Cardiff Business School, United Kingdom

Max Munday, Cardiff Business School, United Kingdom

The Welsh Government has been proactive in seeking to rollout superfast broadband across the region to both households and firms. This exercise has been far from costless. However, the economic evidence in Wales of how firms (in particular) use new services levered by superfast broadband adoption to improve their productivity has been sparse. In the paper we identify variation in the ways

in which small- and medium-sized enterprises (SMEs) take advantage of the superfast broadband resource, and the means through which the use of different ICT-related technologies can be linked to small firm productivity in Wales.

The research uses business survey data (Digital Maturity Survey, 2017) from the multi-year Superfast Broadband Business Exploitation project programme, funded by the ERDF and Welsh Government. We use a stochastic frontier estimation approach to examine business technical efficiency. The analysis then turns to explaining variation in business efficiency. This includes analysis of whether successful use of different ICT-enabled technologies and different digital maturity levels might be important in explaining variations in business efficiencies. The paper then turns to examining how the results from the analysis might link to future policy interventions in the Welsh case.\

Regional Revival and Labor Mobility: Economic Migrants in Bengaluru

Kala Seetharam Sridhar, Institute for Social and Economic Change, India

With globalization and proliferation of the internet, it is generally accepted that capital and labor have become highly footloose across countries. However given the recent protectionist tendencies globally, regions and cities within emerging countries such as India have become pockets of revival, and attract migrants with their learning and earning opportunities. Bengaluru has now become a magnet for migrants. While research on the intra spatial distribution of migrants in Indian cities is limited, in this paper, we study economic migrants (who come in search of a job) in Bengaluru, India, based on our extensive primary surveys in the metropolitan area. We find not only that most migrants locate in the peripheral areas of the city, but also that the relatively recent migrants locate peripherally, lending credence to the hypothesis that they are pushed out of the city centre. Further, we find that the migrants locating in the periphery are on average more educated than their central counterparts, they also have better access to public services, when compared with migrants who locate centrally.

Based on an estimation of what drives migrants to locate centrally vis-a-vis peripherally, we find that high housing rents deter migrants from locating in the periphery, who move to central locations, possibly to locate close to their jobs. Higher income migrants are less likely to locate in the peripheral areas. In order to become pockets of economic revival in an era of global slowdown, by attracting mobile labor, regions have to improve their central cities.

The Development of Synergies between Productive and Residential Territories in Switzerland

Alain Segesseman, University of Applied Sciences Western Switzerland, Switzerland

Bregnard Thierry, University of Applied Sciences Western Switzerland, Switzerland

The development of territories is impacted by the increasing mobility of populations. Indeed, mobility for studies, hobbies, vacations, retirement as well as professional pendularity and multi-residency (second homes) have raised rapidly in recent years. As a result, the effects of this evolution are no longer limited only to production (exports of goods and services), but also more and more to consumption. Two recent approaches, the residential economy and the presential (“in place”) economy (Davezies 2008; Terrier 2009), account for these phenomena and show that the most prosperous regions are not necessarily the most economically productive (Segesseman and Crevoisier 2015; Talandier 2016). Capturing income streams and generating the expense can be just as important to a region as its performance in producing export-oriented goods and services. What is

the current situation of the Swiss regions in relation to these two modes of development? In this context, the comprehension of the spatial articulation of production and consumption within the framework of an integrated “productive and residential system” (PRS) becomes an important issue. Following Davezies and Talandier (2014), this paper has two main objectives: the first is to quantitatively and spatially identify productive systems in Switzerland on one hand and, on the other hand, residential systems in Switzerland. The second objective is the identification of interdependencies between these two systems in order to contribute to the redefinition of spatial planning and spatial impact policies for regional development.

Regional Disparities: the Choice Between Directive and Indicative Instruments of Regulation

Olga Shevchenko, The National Institute for Strategic Studies, Ukraine

Regional disparities need to be regulated in order to prevent the overgrowth of unevenness and use unevenness optimally. The theory of state administration, as well as regulative forms – indicative (the weakest), regulative, indirect and direct (the strongest) could be applied for regional disparities. Strategies of disparities regulation are based on these forms. For example, direct regulation can be applied for social aid and grant appointment. The criterion for effective regulation is the achievement of definite results. And the strategy of disparity regulation is «the strategy of disparity reducing». Indicative regulation can be applied for estimation of goods output. The criterion is the improvement of indices. And the strategy is «the strategy of optimal use of disparities». There are several instruments of disparities regulation: clusters, contracts, territorial and regional economic programs, state and regional strategies, programs of disparities overcoming, investment projects. They all should be included into all types of strategies.

In order to verify possibilities for regulation of disparities it is necessary to create the model and investigate how authorities can influence the disparity with investment and financial instruments. The main resource for influence on disparity is investment; therefore, the model should account estimation of the optimal ratio between investments directed to stimulation of regional economic growth and investments directed to reduction of disparities.

The strategy of disparity regulation has unitary character (in other words, model for disparities regulation cannot be built in separate spheres of activity according to the types of regions) and it is country-wide strategy.

The Role of Tax Havens in Global Industrial Networks: A Social Network Analysis Using Stock Exchange Firm Data

Thomas Sigler, The University of Queensland, Australia

Kirsten Martinus, University of Western Australia, Australia

Ben Derudder, University of Ghent, Belgium

Iacopo Iacopini, Queen Mary University, London, United Kingdom

The role of tax havens in global corporate networks is well known but significantly undertheorised. As the recent ‘Panama Papers’ and ‘Luxleaks’ scandals have revealed, firms seek to minimise liabilities by obfuscating their corporate structures and/or through the creation of ‘offshore’ subsidiaries in which they book profit-making activities. As a result, corporate structures often mimic the geographies of taxation rather than actual production or consumption activities. This debate becomes even more

salient as cryptocurrencies are untethered from jurisdictions, and as the lines between multinational and domestic firms becomes increasingly blurred. Recent scholarly interest in tax havens has led to new questions regarding corporate legislation and sovereignty. Tax havens are often tied to corporate transfer pricing, offshore trading, and/or banking secrecy. This paper investigates the role that tax havens play in global corporate networks by industry and country. Drawing upon data from several hundred thousand firm subsidiaries across 12 of the world's largest stock exchanges, the role of tax havens is inferred through their position in organising corporate operations. The role of individual jurisdictions in particular networks is further elaborated upon, drawing into sharper relief questions of global corporate governance, taxation, and the porosity of the territorial nation-state in its ability to tax firm profits.

The Strategic Positioning of Housing by Local Government to Support Successful Ageing- An Australian Case Study

Sarah Sinclair, RMIT University Melbourne, Australia

Sveta Angelopolous, RMIT University, Australia

Australia is a country of diversity, both physical and cultural. Its demographic make-up is a diverse indigenous population, a British colonial past and extensive immigration from many different countries. This ethnically diverse population is ageing and federal, state and regional governments are planning in various degrees to facilitate services to support healthy active ageing.

Local government generally has a unique position in creating a sustainable environment for older people through strategic planning and managing of transport, health and social care services. A key element of successful ageing is facilitating seniors preferences to stay in their family home and “age in place” within the cultural context of their specific communities

Yet, there is little discussion relating to the “capital” central to the production of desirable living conditions to age in place successfully – i.e. the house or home (and its location). The built asset provides services within the home but its location may also facilitate access to cultural capital (intrinsic to place) and social capital (intrinsic to community engagement).

In this research we examine the existence or absence of strategic planning with respect to housing needs of an ageing population. Mapping the migrant diversity and density of those aged over 65 in Australia using a location quotient and examining the policy statements of the Local government areas with ageing populations, we identify if there is recognition of the social value of good housing design and location in the context of culturally diverse community ageing successfully.

Public Policy, Industrial Strategy and the Low-skills Low-wage Trap – Evidence from Employers in the West Midlands

Paul Sissons, Centre for Business in Society (CBiS), United Kingdom

Anne Green, City-REDI, University of Birmingham, United Kingdom

Amir Qamar, City-REDI, University of Birmingham, United Kingdom

Kevin Broughton, Centre for Business in Society, Coventry University, United Kingdom

The idea that some local areas are characterised by an equilibrium of low skills, low wages and low productivity has made an important contribution to academic and policy debates. However, the factors shaping this position, the implications for local and regional economic development, and the

opportunities to shift this equilibrium are only partially understood. At national level in the UK contemporary concerns with productivity relate to the competitiveness of the economy vis-à-vis major competitors. A further concern has been with wage stagnation following the financial crisis. In response, the UK Government has placed emphasis on new approaches to Industrial Strategy as a way of supporting productivity growth across a range of sectors. This paper contributes to debates about raising productivity and escaping the low-skills low-wage trap through examining employers' decision-making in selected low-wage sectors around investment (including in skills), workforce management and organisation, and the opportunities and constraints they face. It draws on evidence from interviews with employers in the West Midlands region of England. The findings demonstrate a lack of understanding of productivity (especially amongst smaller employers) and a limited appetite for growth and development among some firms (although there is heterogeneity across employers). An important external 'shock' to the low-skills trap has been the increase in the national statutory wage floor which has stimulated some firms to think about improving their productivity. There also appears to be scope for co-investment in skills linked to raising productivity locally and sectorally, building on experience from demand-side programmes.

Implementation of the Smart City Concept within the Cohesion Policy in the Czech Republic: Analysis of Funded Projects in Programming Period 2007-2013

Lenka Smékalová, Tomas Bata University in Zlín, Czech Republic

Filip Kučera, Tomas Bata University in Zlín, Czech Republic

The concept of smart city represents a new challenge for modern cities that develop in accordance with current technological trends, sustainable principles, and open public administration. The cohesion policy is an important investment instrument aimed at the reduction of regional disparities with sustainable development and improvement of life quality in mind. Due to the high degree of urbanization throughout the European Union, the cities are major shareholders in the process of changing the society, influencing regional disparities, and promoting new concepts in sustainable development. The paper analyses the projects of the Cohesion policy implemented by Czech cities in 2007 – 2013, whose contents and objectives correspond with the smart city concept. The analysis of such projects represents an evaluation tool for the degree of implementation of the smart city concept in the Czech Republic and the contribution of Cohesion policy to its implementation. Thus the paper contributes to the analysis of the activities of Czech cities in terms of implementing the smart city principles at various administrative levels, in various areas of interest, according to the size of the cities, and their spatial distribution. The results show that the Czech cities tend to concentrate on the smart technologies, rather than smart people or smart governance and these projects are more likely to be implemented in larger municipalities. This indicates the need to shift the focus of support in the current programming period towards people and governance oriented projects if the smart city concept is to be supported in its full range.

Location Patterns of Advanced Producer Service Firms in Warsaw: A Tale of Agglomeration in the Era of Creativity

Maciej Smetkowski, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

Katarzyna Wojnar, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

Advanced business services (APS) are recognized as one of the pillars of contemporary metropolises development (e.g. Sassen 1991, Castells 1998, Taylor 2007). The significance of this sector extends beyond its share in gross value added (relatively small excluding financial industry), which is connected with their central place in metropolises networks servicing global flows of goods, capital and information (Cf. Taylor et al., 2012). At the same time, the role of creativity and innovation is growing in contemporary economy (e.g. Kratke 2011). This is manifested by development of creative industries that combine on the one hand culture and technology and on the other hand artistic activity and entrepreneurship. These activities include also selected advanced producer services that are depended on creativity of their employees. However, they differ from traditional cultural industries as result of greater utility than symbolic value of their products that leads to higher level of such service commercialization (Cf. Tomczyk, Stachowiak 2015).

In spatial terms one of the consequences of metropolisation processes is the transformation of city spatial structure, including development of secondary business districts (clusters of office space) that leads to increasing polycentricity of metropolitan areas that is noticeable also in Warsaw covered by our empirical analysis. In such a context, it is possible to pose a research question whether location patterns of APS is dependent on the level of their creativity. This allows to formulate the following hypotheses regarding the location patterns of APS firms. The first hypothesis assumes that creative APS companies (i.e. advertising, architecture, software development) will show a greater tendency to locate outside of business districts as opposed to other APS branches (e.g. law, accountancy, consulting). Furthermore, it could be expected, on the one hand, that avoiding of business districts will be more pronounced in relation to districts located further away from the city center. On the other hand, however, one might expect that the greater dispersion of creative APS in urban space will be accompanied by the presence of their clusters outside of such business districts. The aim of the study is to investigate also the factors shaping location behaviour of APS sector based on survey and in-depth interviews with companies managers. This should allow to explain the existing location patterns of different APS in metropolitan areas.

Public Spending Choices, Territorial Inequality and Democratic Engagement in European Regions: What is the Role of a Territorial Cohesion Approach?

Ian Smith, University of the West of England, United Kingdom

Stephen Hall, University of the West of England, United Kingdom

Maria Casado-Diaz, University of the West of England, United Kingdom

Andrew Tallon, University of the West of England, United Kingdom

Territorial cohesion emerges as a fuzzy policy concept to broker the regional development competence(s) of the European Commission with the competences of member-states in relation to spatial planning in the late 2000s (see Duhr et al 2010). As such, territorial cohesion is an [often unused, half]-empty policy signifier albeit one that can be linked to the notion of place-based development (after Dabinett 2011) although we would argue that aspects of a “territorial cohesion

approach” are evident in sub-national policy making contexts across Europe. The Commission itself aims to link regional investment, territorial inequality and more recently the idea of democratic engagement through its Regional Development funding through the concept of ‘territorial cohesion’.

Building on early work on the COHSMO project, this paper offers insight into two aspects of territorial cohesion as a way of ‘doing’ sub-national territorial policy rather than seeing territorial cohesion as a distinguishable policy field. Firstly, the paper fleshes out the ideal-type characteristics of a territorial cohesion approach. Secondly the paper advances some arguments as to the plausible impacts of a territorial cohesion approach on territorial development within Europe with the aim of proposing the kinds of conditions that would be facilitative for the development of territorial-cohesion styles of policy work. Here the paper draws on literatures from regional/urban economics (after Ross and Yinger 1999, Camagni 2017), economic geography (after Di Cataldo and Rodriguez-Pose 2017) and policy analysis (after Faludi 2006). We then illustrate the evaluative framework with reference to examples of policy work in the UK.

Spatial Correlation Coefficient based on Regional Spatial Moving Average

Andrzej Sokołowski, Cracow University of Economics, Poland

Małgorzata Markowska, Wrocław University of Economics, Poland

Marek Sobolewski, Rzeszów University of Technology, Poland

Sabina Denkowska, Cracow University of Economics, Poland

A new spatial correlation coefficient is proposed in the paper. It is based on Regional Spatial Moving Average (RSMA). RSMA is used to smooth statistical data, especially for small geographical areas. The basic weighting system is based on border lengths but additional weights can be introduced using other side variables. The smoothing process is controlled by the smoothing constant which takes values from [0,1] interval. It decides the proportion of current region vs neighbours, in the moving average value. Taking smoothing constant as 0 we somehow predict the value for a given region on the basis of values from its neighbours. Calculating classical product-moment correlation coefficient between actual and predicted values is the main idea of the new proposal for assessing the power and direction of spatial correlation. In the paper this new spatial correlation coefficient is compared to Moran’s I coefficient on some model and simulated examples.

A study on the Spatial Evolution of Border Cities in Yunnan, China

Tao Song, Institute of Geographic Sciences & Natural Resources Research, China

The border towns are of significance for Chinese stability and safety. This paper will clarify the industrial space of border towns in Yunnan Province, China and reveal the evolution of industries in border towns from the perspective of geo-economics.

Smart Specialisation and Place Leadership: Dreaming about Shared Visions, Falling into Policy Traps?

Markku Sotarauta, University of Tampere, School of Management, Finland

The concept of smart specialisation has rapidly acquired a central position in European policy and academic circles. It raises interesting challenges for the regional studies agenda. First, smart

specialisation is not only about policy formulation, implementation and evaluation but also about pooling scattered resources, competencies and powers to serve both shared and individual ambitions; thus, policy formulation and implementation need to be seen in a new light. Second, when smart specialisation is seen as one of the platforms for aligning several actors to boost regional economic development, the need to understand agency in its multiplicity emerges as central. This article argues that to achieve truly transformative smart specialisation strategies, there is a need to investigate in a more in-depth manner the multi-actor strategy processes and new forms of leadership, as well as to invest time and money in advancing related capabilities across European regions.

To be or not to be Cultural Town? Dilemmas of the Cultural Policy of Small Towns in Poland

Stefania Środa-Murawska, Nicolaus Copernicus University, Poland

Leszek Dabrowski, Nicolaus Copernicus University, Poland

Jadwiga Biegańska, Nicolaus Copernicus University, Poland

For several decades many cities have been looking for a remedy for problems resulting from deindustrialisation processes. These cities, by implementing development strategies, invested in a broadly understood culture. Culture is treated as a way to overcome socio-economic problems of cities by introducing new specialized functions, creating new jobs, increasing competitiveness or image change. This applies mainly to the largest cities that have noticed the potential of the city's development in culture.

Small cities perceive the role of culture in a slightly different way. Without such a large budget as large cities, they try to shift their limited resources to the implementation of tasks related directly to the quality of life of residents, and less likely to undertake long-term investments to increase competitiveness (e.g. related to culture). Culture for small towns is a more uncertain investment (than from the perspective of large cities), which is why they are much less likely to invest in this type of activity.

The aim of the study was to show whether small towns in Poland see a chance for their development in the cultural sector. The analysis includes 177 towns in Poland between 20 000 and 100 000 inhabitants. The study was based on strategic documents (urban and cultural policies), interviews with representatives of the city authorities and entrepreneurs supporting cultural events. The study showed that small towns are still looking for their own paths of development. Culture-led development is very diverse and depends on the specificity of each town and local authorities.

The Cross-border Lake Constance Region on the Way to the Future

Simone Strauf, University of St.Gallen, Switzerland

Roland Scherer, University of St.Gallen, Switzerland

Cities and regions are forced to constantly review their activities and analyse whether they are prepared for the future. Without the consideration of future challenges, they risk losing their competitiveness and thereby jeopardizing their economic development. Many of the global development trends do not stop at national borders or at regional boundaries. They work across these borders instead. Hence, the challenges, as well as the resulting opportunities and risks, hardly differ among the four nation states around the Lake Constance. On this basis, it was important for the international Lake Constance region to identify common, cross-border challenges, which is why over

1000 regional stakeholders took part in the regional foresight study "Lake Constance 2030". The study was carried out by four universities from the region between 2014 to 2016. It determined the overarching challenges for the Lake Constance region and derived concrete needs for action. The findings, furthermore, have been incorporated into the strategy of the cross-border Lake Constance region.

The study also showed that a one-time engagement with regional issues about the future is not enough to permanently improve the learning ability and resilience of a region. As a consequence, reflection processes have to be established within regional structures in order to consolidate future topics.

In order to continue this reflection process, the Lake Constance region started the project "DenkRaum Bodensee"; an independent and interdisciplinary scientific think tank. This regional think tank aims to provide impulses, to bring topics to the public agenda and to contribute to the sustainable development of the Lake Constance region by connecting science, business, politics and society across borders. The ultimate goal is to analyse regional knowledge needs, to identify existing knowledge at regional research centres, to disseminate it and to transfer this scientific knowledge into practice. The DenkRaum Bodensee is supported by six universities and research institutes from the Lake Constance region. Furthermore, it works closely with relevant cross-border institutions in the Lake Constance region. The management is performed by the International Lake Constance University IBH and by the University of St.Gallen. The DenkRaum Bodensee is financed from own resources of the involved research institutes and from funding of the INTERREG-V program "Alpenrhein-Bodensee-Hochrhein".

Would you like to become a Rural Broadband Provider?

Dirk Strijker, University of Groningen, The Netherlands

Koen Salemink, University of Groningen, The Netherlands

In the last decade the Netherlands has seen a rise in the number of rural broadband initiatives (75 in 2015, 183 by the end of 2017). In this paper, we study the experiences of citizens who have successfully finished their initiative. These citizens are now running a cooperative rural broadband network, having made the shift from community action group to community business. This paper takes a qualitative approach to examine how the key persons of three rural community broadband networks experience their newly acquired entrepreneurial role, whether they see themselves as entrepreneurs, how their position in the community is affected by it, and what the policy implications could be.

Our insights are based on in-depth interviews with key persons, document analysis, and an historical analysis of press clippings using LexisNexis, supplemented by information from our database of rural broadband initiatives in the Netherlands.

Preliminary results show that the shift from 'community action' to 'running a business' is not that straightforward. Key persons who ran the community initiative are not as much equipped and interested in running the broadband network. Some are self-reflective and state that they are not suitable to be a (telecom) entrepreneur. Successors are not easy to find.

The preliminary findings suggest that rural community broadband networks might not be as durable as was hoped for. The policy implications are that regional and local governments should consider ways to support the management of the rural broadband networks in order to ensure sustained connectivity.

Tax Incentives and FDI Location in Indonesia

I Putu Sudiana, Newcastle University Business School, United Kingdom

Jonathan Jones, Business School, Newcastle University, United Kingdom

Colin Wren, Business School, Newcastle University, United Kingdom

Foreign Direct Investment (FDI) is an important source of economic development. One way to attract this investment is to provide incentives. While incentives are much explored for developed countries, there is little evidence for newly-industrializing countries. This paper explores the effect of these measures for FDI location in Indonesia. This country has seen rapid increases in FDI over recent years, such that by the end of 2017 there are over 36,000 registered foreign-owned companies in Indonesia. Indonesia is a rich environment to examine FDI since almost uniquely among Asian countries it offers a wide range of tax measures, including tax holiday, investment allowances, reduced corporation tax rates, accelerated depreciation and lower taxes related to employment. It also has set up Special Export Zones where tax privileges are present.

This paper reports the results of a very recently-conducted survey of foreign investors in Indonesia. Over 1,000 firms were contacted using a self-completion questionnaire, yielding 224 responses. It was stratified and focused on six sectors (agri-business, mining, heavy metals, light machinery, textiles, food & furniture and services), plus firms located in the Batam Special Export Zone. The survey probes the reasons for FDI location in Indonesia, the role of taxes and the difficulties that the firms face, such as in importing or exporting, as part of global supply chains. Mixed methods are used, so that the results are supplemented by face-to-face interviews with sixteen senior policymakers. It is anticipated that the results will lead to a greater understanding and better policy formulation in Indonesia, as well as informing developments elsewhere.

Boosting Vukovar's Economy through Local and Sectoral Production Systems

Marijana Sumpor, The Institute Of Economics, Zagreb, Croatia

Ljiljana Blažević, Fund for Reconstruction and Development of the Town of Vukovar, Croatia

Irena Đokić, The Institute of Economics Zagreb, Croatia

Local and sectoral production systems can play a significant role in local and regional development and create benefits for an economy as a whole. Sectoral systems of innovation and production include products and agents that carry out market and non-market interactions necessary to create, produce and sell these products. Within this theoretical framework, we question the limitations of local development models in conditions such as war, economic and political crisis. The aim of this research is to develop an analytic and participatory model to identify and understand developmental limitations, potentials and opportunities for specific local development.

In this research we present an analysis of the socio-economic and spatial development potentials of the town Vukovar. It is a border town along the Danube River with an exemplary history of a strong economy determined by foreign direct investments dating back to the early 20th century, a rich natural environment, great geostrategic position and multicultural society. However, the town was completely destroyed during the 1990ties war in Yugoslavia. Today, though physically almost reconstructed, the socio-economic situation in the town and region is unfavourable characterised by low business activity, low skilled work force, large state owned brownfield site, significant social

benefit transfers, and rising depopulation. In this context, simple policy transfer or copying of best practices is inadequate.

This research presents results of an inquiry into existing development potentials of Vukovar and provides policy recommendations for proactive investment possibilities and strengthening of local and sectoral production systems in specific contexts.

Housing Demand by Immigrants

Ozden Sungur, Huron University College Western University, Canada

Home ownership represents an important financial goal as evidenced by its relatively large share in household portfolios.

For immigrants, in addition to accumulating wealth, home ownership serves as a mechanism that facilitates social integration. However, achieving this goal presents its own set of challenges for households who, by virtue of being an immigrant, have little or no credit history, experience relatively higher employment uncertainty and usually face higher interest rates.

The main goal of the study is to analyze demand for housing by immigrants using data from Lombardy region of Italy covering the period 2001-2015. A probit/logit model is employed to estimate the contribution of various demographic factors such as age, education, marital status, household composition, employment, income, immigration tenure and neighborhood characteristics to home ownership decision. Another interesting question that can be analyzed is the effect of global crisis on housing choice. As data by an Istat study reveals, a significant shift in demand happened between 2008 -2009 causing a 24% decrease in home purchases by immigrants. This is in sharp contrast to the 23% increase between 2004-2007 potentially highlighting the effect of the global crisis on the housing market.

Towards Institutionalised Green Economy in Finland

Nina Suvinen, University of Tampere, Finland

Markku Sotarauta, University of Tampere, Finland

This paper focuses on the ways green economy is being institutionalised in Finland. The main emphasis is on (a) those institutional entrepreneurs and institutional navigators who work to institutionalise a new economic path, and (b) the institutional strategies they adopt in these efforts. The empirical analysis shows there are several actors in multi-scalar public-private constellations enabling green businesses to be rooted in wider systems. The empirical analysis also reveals majority of identified institutions are rather enabling the emergence of green economy than restricting it, and that institutional navigation is a main type of agency. This paper is based on 30 interviews with key actors as well as the analysis of secondary data consisting of all the main policy documents.

Dynamics and Trade Patterns of Export Intermediaries. A Case Study of the Polish Regions

Barbara Szejjec-Kolenda, Institute of Geography and Spatial Organization Polish Academy of Sciences, Poland

Globalization processes make that international aspects of company activity are growing in importance, with an increasing number of companies being involved in international exchange. The study involves analysis of indirect exports of intermediaries in foreign trade, which represent the first stage of internationalization of companies' activity – requiring lower institutional, organizational or financial commitment thus more flexible in setting up businesses. It aims to show from a spatial perspective the complexity of problems associated with activity of intermediaries in foreign trade in the period 2007-2015 based on firm-level data, in particular: geographic diversification of exports, product concentration of exports or the dynamics of export activity.

The results show, among others, that: a) export intermediaries are characterized by a high flexibility of its activity, responding to market demand by adjusting the range of products and trade partners; b) the nature and importance of their activities are strongly spatially differentiated (e.g. border areas vs. agglomerations); c) intermediaries are marked by high volatility in terms of entering and stopping of export activity and d) the number of intermediaries in foreign trade is systematically growing.

The study is a result of a research project Regional diversity of intermediaries' activity in foreign trade – competitiveness and role in local economy (2014/13/N/HS4/03413) financed by the National Science Centre (Poland).

The Relevance of Quantity and Quality Entrepreneurship for Regional Performance: The Moderating Role of the Entrepreneurial Ecosystem

László Szerb, University of Pécs, Hungary

Esteban Lafuente, Universitat Politècnica de Catalunya (Barcelona Tech), Spain

Krisztina Horváth, University of Pécs, Hungary

Balázs Páger, Hungarian Academy of Sciences, Hungary

While entrepreneurship has long been believed to be a major determinant of economic outcomes, even latest empirical studies provide mixed and unconvincing evidence about the ultimate relationship between entrepreneurship and various economic performance metrics. According to various empirical studies, results vary according to the selection of performance measure chosen, the definition and the measure of entrepreneurship, the analysed geographic unit, and the modelling strategy. Research on the entrepreneurial ecosystem (EE) portrays the emergence of productive entrepreneurship as a result of interconnected actors and factors within a focal territory. The EE approach differentiates between environmental, ecosystem elements, outcome and output measures. Within the framework of EE, this study analyses how the entrepreneurial ecosystem and different types of entrepreneurship impact regional performance. For measuring EE we use the Regional Entrepreneurship and Development Index (REDI). For measuring entrepreneurial output we deviate from the conceptually problematic Total-early phased entrepreneurial activity (TEA) and developed two other Global Entrepreneurship Monitor (GEM) data based activity ratios. By analysing 121 European Union regions between 2012 and 2014, we find that quantity (Kirznerian) entrepreneurship negatively impacts regional performance, while this effect turns positive in the case of quality (Schumpeterian) entrepreneurship. Also, regions with a healthy entrepreneurial ecosystem have a greater capacity to materialize the effects of high business formation rates, regardless of their

quality (Kirznerian entrepreneurship), while regions with weak entrepreneurial ecosystem may rely on innovative (Schumpeterian) entrepreneurs to compensate the absence of entrepreneurship support policies and increase their economic outcomes.

Can Tokyo Save Japan?

Masaaki Takemura, Meiji University, Japan

This study shows recent population problems in Japan and an analytical framework. Now, Japan has several problems. Many of them are stemmed from decreasing population. Six municipalities of 47 in Japan are growing on population, especially, 13 million municipality Tokyo is prominent. Compound annual growth of population since 1995 to 2015 is .69%, compared to national average -.17. Noteworthy, population inflow into Tokyo exceeds 61,158 persons in 2017. The agenda about population in Japan now can be formed as Tokyo and any city else.

Some of regional studies emphasized on a city, especially a mega city, as an essential resource for growth. The sum total of a nation's top cities comprises the greatest part of its GDP. The mega and large cities of the world have an 80% higher than per capita GDP than that of their host economies. According to this discussion, only Tokyo can save Japan.

However, this paper doubts that. A main reason is that population in Japan is decreasing. Many discussions on mega city prevailing to growth implicitly assume increasing population trend. Furthermore, population aging is amazingly quick and high. The average age in Japan is 46.1 (median in 2014), even UK's is 40.4.

Are there any solutions in Japan? Or, theoretically this problem is formulated as follows. Why Japan (typically, Japanese government and politicians) cannot solve this problem well? This paper will develop an analytical framework to discuss.

Employment Polarization in Regional Labor Markets. Evidence from the Netherlands

Nikolaos Terzidis, University of Groningen, The Netherlands

Raquel Ortega-Argiles, The University of Birmingham, United Kingdom

Voluminous empirical literature since the 1990's documents extensive reallocation of employment in the developed labor markets, due to the interplay between the technological change and the increasing international fragmentation of production. A model example of the above impact is employment polarization (increasing employment at the tails of the occupational distribution and decreasing employment in middle-skill jobs). However the overall effect is highly complex especially in the sub-national level, since regional variations in the economic structure, labor force composition, trade exposure or occupational characteristics shape the direction and the size of the overall effect.

This paper provides a detailed empirical analysis of the labour market effects from technology and trade in Dutch regions and offers multiple methodological contributions to the empirical labour economics literature. At first, we utilize highly reliable mixed-gender employment data (Netherlands Statistics) from 2000 till 2010, accompanied by an extensive set of economic, demographic and social indicators (OECD – CBS Statline) to appropriately account for the versatile regional environment. Secondly, an important innovation is our approximation of international offshoring, based on an own-constructed index from extensive input-output trade data at the regional level. Finally, our gender-

and age-specific analysis provides solid knowledge on the underlying regional conditions that shape labor mobility of specific demographic groups, with important spillover effects on productivity and wages. Therefore, we provide valuable insight to policy makers concerned with regional labor market challenges and in particular the necessity for “more and better jobs” (European Jobs Monitor, 2015).

Territorialization of the Energy Transition in Switzerland: Reconfiguration of Current Production and Distribution Patterns

Thierry Theurillat, Western Switzerland Applied Sciences University (HES-SO), HE-Arc, Neuchâtel, Switzerland

Milena Properzi, University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland

Ariane Huguenin, University of Neuchâtel, Switzerland

This article deals with the energy transition and the local production of renewable electricity in Switzerland. It first develops an institutionalist and territorial analytical framework based on two main stylized models of electricity production. The first model relates to the export base theory where energy locally produced is sold outside the region. This model implies a national and vertical organization where energy is produced by a few producers and distributed through local energy suppliers to consumers. This fordist system characterizes the institutional framework of the value chain of the nuclear and fossil power electricity based on economies of scale that has been implemented world-wide these last 50 years. The second model relates to a colocation of electricity production and consumption, and consequently implies a new fit between the institutional framework and the economic value of local energy. We posit that this postfordist system tends to characterize the production of renewable energy that is politically supported in Switzerland and whose economic profitability is embedded in sociocultural values. Based on a local energy transition case study, the second part of the article highlights the reconfiguration of current production and distribution patterns. It first shows that the evolution of local energy supplier business models is strongly connected with national and local policy financial incentives. Second, it shows that the construction of the value of the local photovoltaic solar market has implied the emergence of a local valuation milieu, made up of the municipality, the local energy company and local R&D institutions.

Enhancing Cultural Aspirations in the City: The Gradual Transformation by Indigenous Economic Innovation

Michelle Thompson-Fawcett, University of Otago & University of Johannesburg, New Zealand

Janice Barry, University of Manitoba, Canada

Alex Kitson, Te Runanga o Ngai Tahu, New Zealand

In our research, we track the evolution of development priorities of a rapidly expanding Indigenous property company based in Christchurch, New Zealand. As a result of land claims and Treaty settlement processes many Indigenous groups are in a position to acquire significant amounts of land in urban areas. The sites commonly enable the development of large Master-planned residential communities or commercial hubs. But these Indigenous developers operate with a difference. Not only do they need to return an economic profit to the Indigenous community, but they also have a clear and growing responsibility to demonstrate cultural values in their design and operations. In the Christchurch context, this has meant that the Indigenous developer has not only had to cultivate a

working relationship with the municipality, but also develop engagement processes with the various subtribes to which it is ultimately responsible, to ensure that cultural values are being enhanced for the long term vitality of local Indigenous culture, in addition to economic returns from the developments. Furthermore, following serious earthquakes from 2010-2011, the City of Christchurch has fostered reconstruction that consciously includes a cultural recovery that is making visible a 'bicultural' identity for the first time in the city. The local Indigenous groups are intimately involved in this about face in the economic and cultural development of the city.

Mobile Career paths? Examining the Swedish Tourism and Hospitality Sectors

Maria Thulemark, Dalarna University CeTLeR, Sweden

Tara Duncan, Dalarna University, Sweden

There is an expectation that one has to be mobile to be successful in the tourism or hospitality sectors. Whilst the literature hints at this and continues to see mobility as due to issues of seasonality, high turnover or low-wages, little is understood about the career paths that people actually take within tourism and hospitality. In this paper, we investigate how career paths are interpreted and conceptualised by hospitality workers themselves. Using interviews with hotel managers and young (former) seasonal workers in Sweden, the paper explores the motivations, choices and reflections of the participant's own careers and work-life experiences. The findings indicate two 'truths' about career paths: the importance of mobility and the importance of internally produced knowledge.

These "truths" exert pressure on individuals to be mobile, to change jobs frequently and to work their way up within the industry. They are also often based on assumptions of a diversified and dense local hospitality labour market. However, outside of large urban areas, these assumptions are often flawed. These "truths" also have wider implications as higher education or skills and competencies from other industry sectors may not be seen as valuable, making the tourism and hospitality sectors insular and stagnant. We conclude by suggesting that individual career paths seem to be their most successful when individuals adjust to these two normative "truths". At the same time, we argue that the tourism and hospitality sectors must proactively engage with external labour influences in order to avoid the risk of their own immobility.

Re-invigorating Regional Capabilities for Balanced Growth: The Opportunities and Limitations of Smart Specialisation

Phil Tomlinson, University of Bath, United Kingdom

Mariachiara Barzotto, University of Essex, United Kingdom

Carlo Corradini, University of Aston, United Kingdom

Felicia Fai, University of Bath, United Kingdom

Sandrine Labory, University of Ferrara, Italy

This paper offers a unique insight into the significant challenges associated with turning the perceived potential of RIS3 into reality for lagging regions across the EU. It does so by first utilising the PATSTAT-CRIOS database to map the evolution of NUTS2 regional technological trajectories across Europe between 1985-2015. Explicitly accounting for the level of knowledge stock available, comparative and decomposition analyses are used to explore differences along both dimensions of relatedness and connectedness in the dynamics of adaptability and adaptation processes between lagging, declining and advanced regions. In particular, the analysis identifies the fastest-growing technological areas,

both at the EU level, but significantly for RIS3, within each region. This will highlight the discrepancy of opportunities between the EU as a whole and its sub-regional levels, as well as between the sub-regional levels themselves. This allows us to extend the SS framework to explore the role of technological based opportunities for smart collaboration at a NUTS2 regional level. Ultimately, this data mapping exercise identifies idiosyncrasies as well as areas of potential opportunity for lagging regions to exploit in the context of RIS3. The paper then considers how ‘place based’ industrial policy and specifically the RIS3 framework might be better tailored to the challenges faced within lagging regions, especially in relation to upgrading (regional) competences/capabilities to enhance innovative potential and facilitate a move onto a higher trajectory. In doing so, the paper highlights the broader role of ‘place based’ industrial policy to deliver balanced regional growth.

Locally Grown Smart Cities: How the Political-institutional Context Influences Glasgow, Utrecht and Curitiba

Zsuzsanna Tomor, Utrecht University, The Netherlands

The worldwide popularity of smart city policies derives from the optimistic premise that the use of smart technologies in participatory urban governance aids to address mounting urban challenges. Although these universal smartification aspirations predict similar activities in diverse urban environments the practice contradicts this forecast: smart city strategies work out very varyingly in distinct local settings. Why and how does this diversity emerge?

The issue of the contextual and spatial influence on smart city processes has been recurrently underlined in individual empirical studies referring to the physical, political, societal, economic and cultural circumstances of a given place. However, the impact of place-based factors in these studies emerges as an interesting “spinoff” of the findings but not as an explicit research focus. This lacking spatial perspective of smart city governance hinders to more systematically explain the diverging manifestations of smart city plans and activities in different urban realities.

This knowledge gap is addressed by the present paper focusing on the impact of spatio-contextual factors on smart city activities in different city environments by asking “How does the territorial-institutional context influence the ways smart city intensions are constructed and implemented in practice?”. This question will be answered by exploratively investigating and comparing three cases from different cities : Glasgow (UK), Curitiba (Brazil) and Utrecht (The Netherlands). The selection of these cities fits this cross-country comparison as they may represent specific contextual institutions (e.g. Western and non-Western; collectivistic and individualistic; welfare state – free market economy) that can shape smart city developments.

The research findings indicate that the politico-institutional context is of significant importance for the resulting smart city practices in the three cities. In particular, the financial (state) resources, the ideological views of the ruling establishment, political leadership and governments’ organizational support appear to be decisive on how smart city plans are actually unfolding in each city. Beyond the theoretical contribution of spatially clarifying smart city processes this article has practical implications for city managers. The results highlight not merely the prerequisite for political willingness but also the need to tailor smart city strategies to the specific urban context to accomplish aspirations of urban improvement.

Residential and Household Preferences of Individuals Residing in Bucharest-Ilfov Metropolitan Area

Cristian Tosa, Technical University of Cluj Napoca, Romania

Hitomi Sato, Nagoya University, Japan

Tomio Miwa, Nagoya University, Japan

Takayuki Morikawa, Nagoya, University, Japan

As an emerging Eastern European country, Romania has exhibited continuous economic growth since the change in the political system in 1989. This has led to that gave rise to increased car ownership and extensive car usage in the country as well as, leading to rapid and uncontrolled land usage and urban sprawl. This study aims to determine individual-specific variables that influence citizens' choice of residential and household characteristics. Data used in the proposed analysis were obtained from by means of an internet survey conducted in the metropolitan area of Bucharest in July, 2016. The retrospective survey collected data on residential history and travel behavior for a representative sample of Bucharest-Ilfov Metropolitan Area, and evaluated the willingness to change in the near future. Hypothetical cases on residential and household characteristics were designed, and a multinomial logit choice model was used to assess the role of demographic and socioeconomic characteristics, in explaining the choice for neighborhood and dwelling features. The proposed approach sheds light on forecasting urban migration patterns in post-communist, transitional societies.

Special Economic Zones as a Policy Tool for Regional Development: Mexico and South Korea Contrasted

Alejandra Berenice Trejo Nieto, El Colegio de México, Mexico

Some literature argues that China's achievement in attracting large amounts of foreign direct investment and becoming one of the top exporting countries in the world hinged on the implementation of its SEZ policy. Countries in Asia, Latin America, Africa and Europe have attempted to emulate the implementation of such model. In the international experience, additional examples of relatively successful SEZs are found in South Korea. Since 2002 this country has developed an explicit policy of Free Economic Zones (FEZs) in previously designated regions. More than three decades after the creation of SEZs in China, Mexico, too, is trying to implement such model. The promotion of local and regional development in the south of the country in order to reduce spatial disparities and stimulate territorial inclusiveness is at the core of the territorial development strategy as there are significant gaps between the north and the south of the country. In addition, SEZs are expected to attend other short-term priorities such as attracting foreign capital, increase exports and create new jobs.

The paper discusses the current implementation of a SEZs policy in Mexico. Based on the understanding of the SEZs policy and performance in South Korea an attempt is made to draw some lessons for the implementation of this policy in Mexico. The objective is to identify opportunities, problems and challenges that policy makers in Mexico might face in designing and implementing SEZs. We argue that SEZs are not an automatic catalyst of growth or balanced regional development as shown by the Asian experience.

Entrepreneurial Activity and Regional Development in Russian

Yulia Tsareva, Russia

Vera Barinova, Russian Presidential Academy of National Economy and Public Administration, Russia

Stepan Zemtsov, Russian Presidential Academy of National Economy and Public Administration, Russia

Economic crisis in 2007 and complicated political situation demonstrated the necessity to encourage SME's activity in Russia. Small and medium enterprises (SMEs) is an important object of public support in Russia and abroad but in Russia the share of small and medium enterprises (SMEs) is about 20% of GDP, while the average in the EU – more than 50% of GDP. Considering this, can entrepreneurship really affect regional development in Russia?

The purpose of this research is to identify the relationship between entrepreneurial activity and regional development in 2000th in Russia. According to an overview of theoretical and empirical researches related to SMEs (Stephens, Partridge, 2011; Van Stel et al, 2005; 2008; Glaeser et al, 2014; Fritsch, Mueller, 2004; 2013; Mueller et al., 2008), we advance a hypothesis that entrepreneurial activity influences regional development in Russia, and manifests a long-term effect. In other words, the more new firms per capita was 5-6 years ago in the region, the higher the level of GDP per capita (and its growth) is now in it. Using multiple regression methods, we conclude that this hypothesis is not rejected.

Exploring Networks for Knowledge Development and Diffusion in Technological Innovation Systems of Renewable Energy Technologies

Maria Tsouri, University of Oslo, Norway

Jens Hanson, University of Oslo, Norway, Norway

Technologies involved in sustainability transitions depend on well-functioning innovation systems in order to mature and diffuse. A key feature of technological evolution and innovation systems is the development of knowledge. Hekkert et al (2007) distinguish between knowledge development and knowledge diffusion as two central processes in Technological Innovation Systems (TIS). R&D projects are a common indicator of knowledge development, and the key function of networks is the sharing of knowledge (Binz et al, 2014).

As there are still gaps in the analysis of national knowledge networks of new technological fields, the aim of this paper is twofold. The first objective is to understand the evolution of the knowledge network of evolving TISs. The second objective is to understand the role of the key influential actors into the national TISs.

Empirically we focus on photovoltaic (PV) technology, which has emerged as a key Renewable Energy Technology, with high diffusion rates, large cost reduction, continuous technological improvements and variety in technological concepts. For studying the knowledge networks in EU-wide networks, we investigate relationships in EU funded collaborative projects from 1998 to 2017, with a particular interest on the Norwegian PV TIS.

Although the Norwegian PV knowledge network appears dominated by international actors and relationships, we observed that the role of Norwegian key agents is substantial for the network resilience through time. Thus, this work contributes to the study of the Norwegian PV knowledge

network evolution for the past twenty years, around its influential actors, stressing out their importance for the TIS development.

The Role of Productive Structure in Economic Resilience of Brazilian Regions and the case of Minas Gerais State

Igor Tupy, Federal University of Minas Gerais, Brazil

Fernanda Silva, Federal University of Ouro Preto, UFOP, Brazil

Pedro Amaral, Federal University of Minas Gerais, UFMG, Brazil

Anderson Cavalcante, Federal University of Minas Gerais, UFMG, Brazil

Brazilian regions had been reached by two major national recessions in less than a decade. Both the Financial Crisis at 2008/09 and the recent Brazilian crisis, 2014-16, imposed, and still do, several challenges to the regional economies in terms of resistance, recovery and adaptation. Exploring data from formal employment at the micro-regional level, this paper analyses how the productive structure of Brazilian regions has shaped their resilience to economic shocks. Regional capacity to resist and recover from such shocks was approached from Resistance and Recovery Indexes. A shift-share analysis was applied to describe the regional adaptive resilience, with focus at the role of industrial mix and regional share effects on the employment variation, accessing respective specialization patterns. Further, we estimated the role of the specialization in some key-sectors at the resistance of regional economies in Brazil to both crises. Additionally, this work explores the specific case of Minas Gerais State, where the highly specialized feature of its industry is crucial to understand its low capacity to resist from such crises as well as to recover from them. Results shows a great heterogeneity in the regional responses to the shocks in Brazil. The current Brazilian crisis, however, has impacted the regional economies in a greater extent than the former one. It was observed that specialization in specific sectors played distinct roles in resilience according the nature of each economic shock and that the specialization/diversification pattern was a key determinant of regional resilience in Brazilian economic downturns.

Economic Links between Russia and China: from Cross-border to Interregional Cooperation

Irina Turgel, Graduate School of Economics and Management, Ural Federal University, Russia

The presentation considers major trends in the cooperation between Russia and China on the regional level. China is one of Russia's main trade partners, which makes it particularly important to enhance the efficiency of this relationship on the national as well as on the regional level. Considering the dynamics of international integration processes, the author analyzes how the role of cross-border and interregional cooperation is changing over time, paying special attention to those regions that are remote from each other.

The author focuses on the case of Sverdlovsk region and Heilongjiang province. The available data demonstrate the diversity of the existing trade and other relations between these industrial regions and enable the author to characterize the institutional framework for this cooperation, its key priorities and problems. A general overview of the current and prospective joint projects is also provided. The author compares economic specialization, systems of settlement, the level of urbanization of Sverdlovsk region and Heilongjiang province and draw a conclusion that the economies of these regions are complementary.

The presentation also points out that it is essential to consider the long-term effects of Eurasian integration projects and to assess the positive and negative impacts of the Belt and Road Initiative on Sverdlovsk region in order to identify priorities for the region's foreign policy.

A Review about Smart Specialisation through Using Three Star Analyses: The Case of Istanbul, Ankara, Izmir

Suat Tuysuz, Erzincan University, Turkey

Mutlu Yilmaz, Ankara University, Turkey

M.Tahsin Sahin, Ankara University, Turkey

The main point of smart specialization is based on determining the regions and sectors which have a competitive advantage and improve their capacity about innovativeness. In this strategy, the benefits to be gained with specialization is to aim to raise knowledge flows. From this point of view, smart specialization (SS) focuses on which sector should be concentrated in which region or which area should be prioritized to gain knowledge spillovers. An important goal of the strategy of SS is to reduce transaction costs about gaining knowledge. So, it aims to reduce transaction costs and maximizing knowledge flows. With this framework, this research aims to reveal the picture of which sectors in Istanbul, Ankara and İzmir metropolitan areas should be prioritized in which sectors the clusters are strong so that which sector will be compatible with the SS strategy. The analyses will be held on three-star analysis. The three-star analysis contains the sectors was based on the size, dominance and the location coefficient. In the analysis, employment data obtained from Social Security Institution was used. The analyzes terms based on 2015. Results showed that manufacturing sub-sectors which are 14, 15, 17, 18, 22, 25, 26, 32 have mature clusters and these sectors appropriate SS to Istanbul; 18, 25, 26, 27, 28, 30 have mature cluster and appropriate for SS to Ankara and 14, 15, 17, 18, 20, 28, 31 have mature cluster and appropriate for SS to İzmir in 2015. The findings provide a guide for which sector to develop in which region, as prescribed by the smart specialization strategy. It is thought that the findings can provide a guide for local and regional policymakers and investors.

Contrasting Regional Innovation and Devolution Schemes across Europe

Ivan Ureta Vaquero, SUPSI - Inno3, Switzerland

Igor Calzada, University of Oxford, United Kingdom

Regional innovation and development can be pursued and boosted by designing and implementing a number of strategies, policies and mechanisms. In the early 2000s, national programmes aiming at promoting innovation and growth were unevenly distributed across Europe. Geographically speaking, they were mostly concentrated and developed in Northern European countries such as Germany, Denmark or Finland. Whereas the vast majority of European countries joined this trend mostly from mid-2000s onward. Some of these national strategies have been also focusing on developing policies geared to impulse regional specialization and clusters. This local and regional approach is justified by the fact of optimizing existing resources, infrastructures, knowledge existing in specific industrial districts or regions. In this sense, the very concept of National Innovation System (NIS) has partially transformed and downscaled, due to the special interest of the policy makers, into Regional Innovation Systems (RIS).

While the efficiency of this policy shift may have generated positive outcomes and some good practices, within the medium and long term these strategies may have also contributed to generate centripetal forces revealed through devolution claims that

generate political struggles between more advanced and innovative city-regions and their respective central governments. More competitive and innovative city-regions may request more competences and strengthen devolution schemes specially in times of economic downturn.

The objective of this paper is twofold and addresses the following research questions: Do higher levels of devolution contribute to boost innovation and competitiveness at regional level? And, do higher performances in innovation and competitiveness accentuate the tensions between regions and central governments in times of economic downturn by claiming deeper devolution schemes? To assess these two questions the paper focuses on comparing the following city-regions: Basque Country, Catalonia, Rogaland, Bolzano, Lombardy, Bayern and Zurich.

Policy Implementation and Institutional Change

Elvira Uyarra, Manchester Business School, United Kingdom

Kieron Flanagan, University of Manchester, United Kingdom

Scholarly insights from evolutionary economic geography, underpinned by concepts of path dependency and industry evolution, have advanced a policy discourse that advocates adaptive, place-based and 'outward looking' interventions. Despite these developments, consideration of policy tends to be confined to the normative question of policy implications (Wohlgemuth 2002), rather than trying to understand the dynamic nature of policy, including the more 'messy' aspects to do with policy-making. This paper aims to go beyond this normative view and look into policy implementation and explore the links between agency, policy change and institutional change. The 'interpretive flexibility' of innovation policy can lead to diverse implementation, unintended effects of actions and learning processes, as well as deliberate strategies to change, circumvent or deviate from existing rules (Streeck and Thelen, 2005). Policy implementation, or rather lack thereof (or noncompliance) is therefore a source of policy and institutional change.

The paper reviews the literature on policy implementation (e.g. May, 2015; Majone and Wildavsky, 1979; Linder and Peters, 1987; Howlett, M, 2014) and seeks to establish connections to evolutionary economic geography and place-based innovation policy. It stresses the need to do away with a strict separation between policy design and execution, and the importance of agency, adaptation and experimentation.

The Resource Wisdom Roadmap as a Tool for Regional Development

Laura Vainio, Häme University of Applied Sciences, Finland

Megatrends give a direction to the discussions; what phenomena are affecting us globally and locally. The countries, regions, cities and individuals should pursue living a more sustainable way, finding new ways to think and more importantly to act. At the regional level, this sustainable way can refer to a different issues depending of the special characteristics of the regions. The needed measures should be addressing the climate change, but taking the special characteristics of the regions into account.

The Finnish Innovation Fund, Sitra carried out a project (2013-2015), were together with the City of Jyväskylä (Finland) they developed an operating model of how a city could become resource wise. Resource wisdom could be defined through three targets: no emissions, no waste and no overconsumption. The operating model was piloted in three cities and Network of Finnish Sustainable Cities and Municipalities was established in 2015 currently having 12 members.

A tool, resource wisdom roadmap, guides this operating model. This roadmap has five topics, which can be identified having impact towards the three targets of resource wisdom. Every city plans its own aims and actions for short and long term including the desired goal for the year 2050. The purpose of this research is to study, how the resource wisdom roadmap as a tool is facilitating the cities in their work towards sustainability. The target group of the study is 11 resource wisdom cities in Finland.

Accounting for the Resilience of the Machine Tool Industry in Spain (c. 1960-2015)

Jesus Valdaliso, University of the Basque Country, Spain

This paper aims at examining the evolution of the machine tool industry in Spain between 1960 and 2015, its international competitiveness and its adaptability to the changes underwent in this industry worldwide: markets, technology and competitors. Drawing on the theoretical literature about the resilience of regions, cities and productive systems, the paper offers an exploratory and multi-level analysis of the three main factors that account for the resilience of this industry in Spain: at the firm level, firm size, flexibility and productive specialization; at the industry level, its absorptive and innovative capacity; and at the regional level, its sustained and increasing geographical concentration in a Spanish region, the Basque Country, with an ecosystem very supportive to human capital formation and innovation.

Organizing Regional Development: The Role of Regional Conditions and Social Relations

Arlette van den Berg, Tilburg University, The Netherlands

In academia, many studies have been carried out on the economic and political effects of regional governance. However, practitioners seem to struggle mostly with ways to organize regional governance arrangements with the aim to design and implement regional development strategies (Torfing & Sørensen, 2014).

From various disciplines, scholars have been contributing to our understanding of barriers and success factors of designing and implementing regional development strategies. In this light Van den Berg et al. (1999) developed the concept of organizing capacity, which is determined by regional conditions such as political and societal support, leadership and a common vision. Others understand this capacity as an outcome of patterns of social relations, i.e. the position, power of and relations between regional stakeholders (e.g. Healey, 1998; Ward, 2010).

Although the interrelationships between regional actors are decisive in building a region's organizing capacity (Herrschel & Newman, 2002), these two views on capacity have been developed in isolation from each other. Therefore, I aim to combine the two approaches. This is done through mapping and analyzing patterns of social relations in two Dutch regions, Hart van Brabant and Drechtsteden, by carrying out desk research and in-depth interviews with regional stakeholders. Both regions are currently in the process of implementing a new regional energy strategy. Through explicitly linking regional conditions with individual and organizational behavior, we will gain a better understanding

of how social dynamics and the (power) positions of individuals and organizations support or limit the building of a regional organizing capacity.

Innovating for Smart Cities: a Firm-centric Perspective on Exploring and Exploiting Smart City Technologies

Daniel Van den Buuse, Amsterdam University of Applied Sciences, The Netherlands

Wieke Schrama, Amsterdam University of Applied Sciences, The Netherlands

Willem van Winden, Amsterdam University of Applied Sciences, The Netherlands

On a global scale, smart cities are increasingly becoming a widespread phenomenon. Many city administrations have initiated local-level collaborations with other urban stakeholders in pilot projects, aimed at developing, testing, and implementing innovative technological solutions to address urban sustainability challenges. The use of technological innovation to enable cities to address a wide range of urban sustainability challenges, in fields such as energy efficiency, urban mobility, and water and waste management, is often identified as an integral part these smart city projects. While firms are increasingly becoming key stakeholders in this respect, the role of these firms in developing and marketing technological solutions for cities has remained underexplored to date. In this respect, insight in how firms develop innovative solutions that enable cities to become ‘smarter’, would be a valuable addition to the existing work on smart cities. This paper focuses two interrelated research questions: how do (multi)national firms develop innovative solutions for smart cities?; And how do firms scale up these solutions and bring them to the market?. It presents an actor-centric analysis which focuses on how firms develop and market technological solutions for smart cities, building on academic literature on organizational ambidexterity and open innovation. Specifically, it examines how these firms conduct exploration activities (i.e. through internal development and/or external collaboration) and exploitation activities (i.e. through roll-out, expansion, and/or replication), as visualized in the figure below. Empirically, our analysis draws on a documentation study combined with semi-structured interviews, with both public and private stakeholders in this realm. The paper aims to contribute to a better understanding of the role of private actors in smart cities, given that private actors (including MNEs, SMEs, and start-ups) are increasingly becoming more important in facilitating cities to become ‘smarter’.

Rescaling Urban Development in the EU? Integrated Place-based Approaches in Cohesion Policy in 2014-20

Arno van der Zwet, University of the West of Scotland, United Kingdom

Carlos Mendez, European Policies Research Centre, University of Strathclyde, United Kingdom

Sylwia Borkowska-Waszak, European Policies Research Centre, University of Strathclyde, United Kingdom

The Cohesion policy regulations for the 2014-20 programme period provide a new framework for supporting integrated territorial development approaches in the European Structural and Investment (ESI) Funds. These approaches are part of a longer term shift and reflect increased awareness of place-based theory in policy aspirations, recognising that an integrated mix of policy interventions is needed to fully exploit development potential of territories and functional areas effectively and efficiently. Besides finding more efficient and targeted ways to implement territorial development policies, such approaches reflect the new commitment to territorial cohesion in the EU Treaty and ambitions to give

local actors greater influence and decision-making powers in local economic development plans. Drawing on evidence from three Member States (Netherlands, Poland and Spain), this paper examines the extent to which these integrated place-based approaches represent a shift in policy governance and implementation and are leading to a genuine rescaling of urban development policies. The three cases will highlight differences in the territorial configuration of urban development strategies, governance and implementation experiences, which are in turn explained by path dependencies, institutional capacities and political expediency. The paper makes an important contribution to the academic literature in terms of conceptualising and empirically operationalising dimensions of integrated place-based approaches. It also contributes to recent policy debates, particularly in relation to the post 2020 Cohesion policy.

Spatial Structure and Productivity in European Regions

Frank Van Oort, Erasmus University Rotterdam, The Netherlands

Wessel Ouwehand, EUR, The Netherlands

Nicola Cortinovis, EUR, The Netherlands

A burgeoning urban literature states that economic externalities are not automatically confined to a single urban core, but can be shared among a collection of nearby and linked cities. Economic empirical analyses of agglomeration and agglomeration externalities in relation to spatial structure is burgeoning, yet varying definitions and diverging research methods hamper conclusive evidence for a pan-European context (Rauhut 2017). This is the more remarkable, as many EU-policy documents stress the polycentric advantages of urban development in Europe. This paper links the multicentric spatial organization of agglomeration to the possibility of the 'sharing' of size between cities resulting in productivity gains (using the Meijers & Burger (2010) US-based framework). Using OLS and 2SLS models explaining total factor productivity (TFP), we show that spatial structure matters differently in direct and indirect ways. Urban size always contributes to higher TFP, while polycentricity is not directly associated with higher TFP in European regions. This deviates from earlier findings for the US. Indirect effects are analyzed using interaction effects between size and polycentricity and size and dispersion. These showed that a balanced morphological distribution of growth of the regional urban population could be less favorable for productivity compared to the case where the distribution is more hierarchical and centered in nature. A network of geographically proximate smaller cities cannot substitute for the urbanization externalities of a single large city – and this is in line with previous research. We end our paper with the implications for European place-based policy initiatives.

Engaging Start-ups in Challenge-based Public Procurement: the Case of Amsterdam's "Start-up in Residence" Policy

Willem van Winden, Amsterdam University of Applied Sciences, The Netherlands

Luis Carvalho, University of Porto, Portugal

A growing number of city administrations develop policies to encourage startups to address urban problems and challenges, as an alternative to working with big tech firms. They hope to improve urban quality of life, and simultaneously promote the local entrepreneurial scene, by opening procurement budgets and experimentation opportunities to startup companies. In this paper, we critically assess the interplay between startups and city administrations for this new type of city-driven innovative public procurement (IPP) or "challenge-based procurement" policy, taking Amsterdam's Startup in

Residence programme as case study. Startup in Residence (SiR) was set up as intermediate structure between the city departments and local start-ups. The programme identifies challenges from the city departments, invites startups to develop solutions, and helps the startups to co-develop the solutions in connection with city departments. Our analytical framework draws from the literature on innovative public procurement and the role of intermediaries. We adopt an in-depth single case study approach; As "cases within the case", we focus on three concrete solutions that were designed by start-ups during the first round of EiR that started in 2015. Empirical material was collected through desk research and interviews. Among other things, we conclude that the programme infuses a spirit of innovation in city departments, but that the economic impact is limited thus far; moreover, the adopted "pressure cooker" incubator model is less aligned to the complexities and time horizons of urban innovations in which many stakeholders are involved.

Transfer of Regional Circular Economy (CE) Solutions and Knowledge: Overcoming the Place-based Barriers

Viktor Varju, Centre for Regional Studies of the Hungarian Academy of Sciences, Hungary
Marcin Dąbrowski, TU Delft, The Netherlands

Transfer of knowledge (e.g. best practices) is a common phenomenon in public policies occurring at all territorial levels, between individuals, organizations and administrative boundaries. Such transfer, however, is challenging and complex due to substantial differences among national and regional contexts, ranging from governance systems, administrative cultures, knowledge in use, technological advancement, patterns of stakeholders' involvement and their interests, objectives and focus of policies, to the less tangible and socio-cultural aspects.

The aim of the H2020-REPAiR project (<http://h2020repair.eu/> Grant No.:688920) is to create integrated, place-based eco-innovative solutions (EIS) aiming at reduction of waste flows. To do so, six peri-urban living laboratories develop EISs, through co-creation with regional stakeholders and with inputs from foreign peers from the said network of laboratories. Identifying the conditions for a successful knowledge transfer and distinguishing between the regional CE practices that are widely transferable across different contexts and practices which are context-dependent and thus hardly transferrable elsewhere is a vital task of REPAiR.

Departing from critiques of the literature on policy transfer and related concepts, this paper explores the process of knowledge transfer between regional contexts and cultures. It investigates how the knowledge brought in from different areas is used in the elaboration of EIS for promoting CE transition, on the other hand, how the solutions elaborated in a particular region can be adapted and transformed to elsewhere. It draws on empirical material from participant observation in a series of peri-urban living lab workshops, focusing mainly on the socio-cultural barriers and aspects of the transfer.

'Smart city' Policies and Practices in Hungary: Resetting Urban Development in the Post-socialist Context?

Krisztina Varro, Utrecht University, The Netherlands

In the past decade, policy debates as well as academic discussions about the future of urban development worldwide have increasingly been framed in terms 'smart urbanism'. Scholarly literature

has emphasized that instead of interpreting smart city initiatives narrowly as a new form of neoliberal spatial governance, one should attend to the situated practices of actors and the political processes in and through which smart cities are being enacted.

To date, however, there has been a striking absence of insights concerning how the imaginary of 'smart city' shapes and connects to post-socialist urban development and experiences in Central and Eastern Europe. This paper wishes to address this gap by applying a geographical political economy lens to the case of Hungary, where the unfolding of the 'smart city' idea is influenced by factors such as lacking traditions of strategic planning, a relatively weak civil society, centralizing tendencies and the inflow of EU funding (as well as the expected decrease thereof), to name but a few. The paper shows that while (some) smart city practices have further entrenched entrepreneurialism, are instrumental to centralization and depoliticize urban policies through a focus on 'quality of life', they (others) have also started to open up possibilities for longer-term, more citizen-centred urban planning approaches and grassroots place-making. On this basis, the paper argues that instead of a straightforward dismissal we need a more nuanced and context-dependent assessment of the transformative potential of smart urbanism.

Learning, Unlearning and Forgetting from Internationalization. The case of the Macerata-Fermo Footwear Industrial Districts

Claudia Vecchiolini, University of Birmingham, United Kingdom

Marco Bellandi, University of Florence, Italy

Lisa De Propris, University of Birmingham, United Kingdom

The internationalization of Industrial Districts (IDs) is affecting the cornerstones of local development, namely the system's industrial composition and institutional structure. In order to identify the effects of internationalization for the evolution of IDs, we focus on the transformations of the local knowledge endowment, informing us about the expansion, decline and renewal of local industries. The purpose of this paper is to analyze how the internationalization of the local supply chain changes the knowledge endowment of IDs by triggering learning, forgetting and unlearning outcomes. Internationalization may either contribute to local learning processes through the absorption of external knowledge, or lead to forgetting outcomes when parts of the local knowledge endowment are lost, for instance through delocalization. The two effects may combine into an unlearning outcome, describing the renewal of the local industrial composition. We explore the issue through a qualitative research based on the Macerata-Fermo footwear IDs. The analysis reveals that the drop of footwear production due to delocalization and international trade barriers have determined widespread forgetting of specialized knowledge. However, while the Fermo IDs seem to be undertaking unlearning processes concentrated within the footwear core, the Macerata IDs are renewing the local knowledge endowment through diagonal synergies across related sectors, for instance between the production of rubber soles and other local industries specialized in plastic molding. The degree of industrial diversification within the two areas, Macerata and Fermo, is thus key to define their development path, favoring unlearning processes towards other industries in response to structural shocks.

Community Well-being and Regional Innovation Systems - Co-evolution or Contest

Caroline Veldhuizen, University of Melbourne, Australia

Lars Coenen, University of Melbourne, Australia

Bruce Wilson, RMIT, Australia

Leo Goedegebuure, LH Martin Institute, Australia

This paper seeks to re-conceptualize the notion of regional innovation systems, and the capacity of associated policy models and approaches - such as smart specialisation - to contribute to regional development consistent with responsible research and innovation aimed at the long-term wellbeing of communities. The argument pursued is that in many instances key 'grand challenges' such as environmental degradation, economic inequality, and social disempowerment and dislocation are often only partially addressed by existing policy models. Fitjar, Benneworth and Asheim (2018) observe that participatory, stakeholder driven processes, such as entrepreneurial discovery, which explicitly focus upon the quadruple helix and broader societal issues, often fail to drive regional economic development based upon innovation that prioritises societal responsibility. While Foray (2017) emphasises the inherent social value of the processes associated with smart specialisation it is proposed that the retrofitting of findings resulting from this deliberation into pre-conceived models of innovation systems, with embedded political and normative perspectives, limits their broader utility.

The argument is based upon consideration of the elements which were identified by Cooke (2001) as the essential components of a regional innovation system: region, innovation, networks, learning and interaction. The contrast between their characterisation within emerging innovation policies such as smart specialisation, and policy-making frameworks which are arguably more explicitly focussed upon the embeddedness of 'economies' within wider societal and environmental systems, is explored. The agricultural sector in the Gippsland Region of Victoria, Australia, in which a smart specialisation strategy is currently being formulated, is used as a vehicle to explore these differences.

Cities in the OECD and beyond. Harmonising Definitions and Compare Performance

Paolo Veneri, OECD, France

There is an increasing awareness of the importance of having reliable data at a detailed geographical level. Among all possible geographies of interest, cities are units where the need of timely and robust statistical information is the highest. Both developed and developing countries are still undergoing an urbanization process and the extent to which cities will be able to provide all conditions for people to develop will be an important determinant of prosperity for current and future generations. In this framework, it is important to monitor, with a comparative perspective, how cities are faring in several aspects that matter for people's lives and for economic development. Particularly important are those aspects related to the well-being of people and the inclusion of all group of population in contributing to (as well as in sharing the benefits of) the process of economic development.

This presentation has a twofold objective. First, explaining the concept of functional urban areas, as defined by the OECD and the EC to map cities in all OECD countries in a consistent way and to present a method to apply this concept globally, including in those places where the availability of data is limited. Second, to show how administrative data can be used to compare spatial inequality within cities in OECD countries. The findings from the forthcoming report "Divided Cities. Understanding

intra-urban inequality” will be presented, with a focus on the patterns of neighbourhood segregation by income and its determinants in the cities of several OECD countries.

Growth of Regional Attractiveness through Passive Portfolio Investment: Immunization of Municipal Bonds

Darko Vukovic, Ural Federal University, Russia

Zhanna Belyaeva, Ural Federal University, Russia

Municipal bonds are one of the most efficient ways to finance investments in the region. If investments do not promise a certain rate of return at an adequate risk, investors will not be interested to include municipal bonds in their portfolio. Unlike the U.S., which issues a large number of municipal bonds and has developed municipal bonds secondary markets, EU members have far less experience with these securities. Municipal bonds can be very attractive to investors especially if they are protected from the interest rate risk. In order to protect these bonds from interest rate risk and make them more attractive, it is necessary to use immunization. When interest rates change, the percentage change in a municipal bond's price is proportional to its duration. Duration matching balances the difference between the accumulated value of the coupon payments of municipal bonds and the sale value of the municipal bond. Immunization refers to strategies that investors use to shield their net worth from interest rate risk. Finally, the local governments can use municipal bonds as a strategy for capital targeting in regions. It does not matter to investors where the funds from sold general-obligation-municipal-bonds will be used, it is only important to be protected from interest rate risk. Bearing this in mind, the Government can encourage the flow of capital into certain regions. The aim of this paper is to analyze the popularity of municipal bonds that affect regional attractiveness. As a method, we will use duration, immunization and convexity.

Entrepreneurship: It takes more than a Village

Kevin Walsh, UCD, Ireland

Recent contributions to entrepreneurial ecosystems literature have identified numerous regional elements that enhance entrepreneurial activities, however there is still limited empirical literature exploring the relationships between these elements, and which elements or combinations of elements matter most. Although regional elements are emphasised in the ecosystems literature, technical and management knowledge of tech entrepreneurs is gained from engagement with a diverse geographic range of organisations, reflecting an age of increasing labour mobility, knowledge flows and improved communication technologies. This paper explores the career histories of over 2000 current Irish tech entrepreneurs to establish which regional and extra-regional resources matter most and why some regions are more entrepreneurial than others. By comparing the career networks of tech entrepreneurs in four regional entrepreneurial ecosystems in Ireland, similarities and differences in the attributes of the network structure are identified and contrasted with geographic attributes such as entrepreneurial density and proximity.

The results suggest that Irish tech entrepreneurship is underpinned by knowledge gained from employment at regional higher education institutes and government investment agencies. Geographic proximity to these knowledge centres supports this network structure, although there is strong evidence of intraregional and extra-regional mobility between multinational tech firms, venture capital firms and entrepreneurial support organisations. This empirical work has important

implications for entrepreneurial ecosystems theory because it shows that some regional resources are consistently more important than others and that although regional knowledge sources are important anchors of the ecosystem, mobility between regions impacts the knowledge base that underpins regional tech entrepreneurship.

Can China Develop City-Clusters without City-Region?

Xuefeng Wang, Newcastle University, United Kingdom

Spatial planning has been adopted by Chinese government as a policy framework for redistributive, uneven, and coordinative regional development strategy over the last seven decades. Following the designation of the so-called Main Functional Areas in the 11th and 12th Five-Year Social Economic Development Plan, the recent focus is on rescaling city-clusters that are planned to be the main space for the New Approach to Urbanisation. This paper reviews the programmes and large investments in infrastructure under the national plans of city-cluster. It found that while investments and programmes are for improving inter-city connections and mobility, less effort is made to facilitate urban-rural inter-connections and mobility. It argues that such an approach to the development of city-clusters may only accelerate urban concentration and zero-sum competition between cities, whilst increase urban-rural inequality. It concludes with a policy recommendation that the development of city-clusters should be based on the development of city-region if it is to develop a more sustainable and justice urbanisation.

The Organizational Model and Border Port Hinterland of the China-Europe Railway Express

Jiaoe Wang, Institute of Geographic Sciences & Natural Resources Research, China

Jingjuan Jiao, School of Economics and Management, Beijing Jiaotong University, China

Li Ma, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China

Facilities connectivity is a priority area for implementing the Belt and Road Initiative (BRI). The “China-Europe Railway Express” (CER Express) is a new transport organizational mode linking China with Europe by fast-track cargo rail and also a major move of facilities connectivity; it has become a signature platform of the BRI for cooperation in transportation. Following an explanation of the strategic significance of and inherent issues in running CER Express, this paper proposes that it is significant to properly recognize the function of CER Express and the limited market potential for China in regards to transport cost for foreign trade. Secondly, this paper points that it is necessary to build a “hub-and-spoke” organizational model, which includes the construction of freight distribution hubs and the standardized organizational model for CER Express. The hub-and-spoke organizational model of CER Express could largely lower the transport costs of CER Express due to the economies of scale. Finally, this paper explores the economic hinterland of Alashankou, Erenhot, and Manzhouli by constructing three scenarios including the high-cost, medium-cost and low-cost scheme and using an analytical methodology that determines distance and economic costs. Finally, the article identifies the transport hubs for CER express including Harbin, Zhengzhou, and Lanzhou among the eight candidates, and puts forward suggestions and policy recommendations to the Chinese government.

The Identification of Global Strategic Shipping Pivots and their Spatial Patterns

Chengjin Wang, Institute of Geographic Sciences & Natural Resources Research, China

Peiran Chen, Institute of Geographic Sciences and Natural Resources Research, CAS, China

Yunhao Chen, Institute of Geographic Sciences and Natural Resources Research, CAS, China

In concert with developments in global trade and energy resource transportation, there has been a marked increase in reliance on overseas shipping. Unimpeded marine transportation has therefore become a key issue which influences national maritime interests including the security of trade and energy resources. A strategic shipping pivot thus performs a vital controlling function for global shipping networks. In this study strategic shipping pivots are defined and subdivided into sea hubs, channels and areas. We then develop a model to identify strategic shipping pivots on a global scale. The results show that, depending on differences in location, function, and type, the concept of strategic shipping pivot permits the identification of both spatial and structural differentiation with respect to strategic hubs, corridors, and seas. Now 44 strategic hubs have formed across the globe. These hubs have become the control centers of local shipping network organization. At the same time, seven strategic corridors containing most shipping routes and transportation capacity connect important sea areas, and permit a high-degree of control over the transport of strategic materials. The strategic seas, the Caribbean, the Mediterranean, Southeast Asia, and the Pacific provide vital import and export pathways, so that the formation of strategic shipping pivots is mainly influenced by factors such as physical geographical conditions, the spatial distribution of social and economic activities, business organization, technical progress, geopolitical patterns and geopolitical disputes. Physical geographical conditions provide the potential foundations for strategic shipping pivots, while the spatial distribution of social and economic activities and communications determine the strategic value of these points. Finally, business organization, technical progress, and geopolitical disputes all function to strengthen the strategic mechanisms and the mutagenicity of strategic shipping pivots.

Skilled Migration and Labour's Geography in Hong Kong ICT Sector

He Wang, City University of Hong Kong, Hong Kong

Di Lu, The CLP Group, Hong Kong, China

Although HK keeps ranked as the most competitive city, and it possesses a large volume of skilled migration, its innovation index, especially in the IT sector remains low. Engaging with two strands of literature: skilled migration and the notion of labour's geography, this article examines the economic geography of innovation in the IT sector. While most research on innovation has been done at the firm level, this paper approaches from industrial structure and workers' agency. Drawing on secondary datasets and semi-structured interviews with government departments, managers of IT companies and IT skilled migrants, this study explores how HK's IT sector is manufactured through the interactions between industrial relations and regulatory systems on the one hand, and the horizontal integration of transnational corporations on the other. It finds that the 'hub' ideology perpetuates in Hong Kong's regulation system, industrial structure and labour culture. For the "hub" ideology, stability and flexibility is the most crucial function for IT sector, which reinforces its competitiveness in its service function, but hinders innovation.

The Impact of Regional Redistribution Policies on Interregional Migration in Germany

Sven Wardenburg, Phillips-Universität Marburg, Germany

Brenner Thomas, Philipps-Universität Marburg, Germany

Fostering equivalent living conditions between regions is one of the central motives in German regional planning strategies and written down in German constitution. Due to this, redistribution policies provide funds or fiscal transfer for structurally lagging regions and firms in these regions. In contrast to this claim population development in Germany is split into prosperous and growing cities and peripheral regions falling short of this development.

Although empirical research examining the economic effects of those policies is very popular, there is little empirical work on consequences to living conditions, public services and social fairness. The focus of the presented paper is on the effect of regional redistribution policies on interregional migration in German regions, which is used as an indicator for regional living conditions and regional development. Especially regional inequalities in the availability of jobs, payment and social infrastructure are push factors causing migration between German regions. The emerging accumulation of human capital reinforces future inequalities and diminishes economic development potentials.

The aim of the paper is to close this gap in empirical research and expand the knowledge about the impact of regional policies on interregional migration by analyzing the effects of different redistribution policies to migration flow in German administrative districts. We extract causal effects on migration balance of different age cohorts by using a vector-autoregressive (VAR) model with fixed effects panel estimations and computing impulse response functions, while controlling for potential endogenous socio-economic variables and spatial spillovers. A panel data set for the 402 German administrative districts is used.

Territorial Cohesion of what and why? Tracing the Meaning and Justifications for Territorial Cohesion and Policies from EU Documentary

Mikko Weckroth, University of Helsinki, Institute of Urban and Regional Studies, Finland

Sami Moisio, University of Helsinki, Finland

Juho Luukkonen, University of Helsinki, Finland

Decades of academic interest on territorial cohesion has left us with little understanding on what the concept at the end stands for. In the EU vocabulary the concept has usually been taken for granted without critically reflecting on its contents and varying political meanings. It is most often used in a descriptive manner but has also been articulated as a normative policy goal referring to situation where there is minimal variance in economic performance between EU regions. This analysis contributes to this literature by tracing both the meaning of the concept as well as justifications for pursuing it from a dataset of public speeches made by the Commissioners for Regional Policy as well as the Cohesion Reports between 2004 and 2017.

Critical reading of these document confirms that the dominant meaning of the concept refers to the difference in economic production (in terms of Gross Domestic Product) between EU regions. However, during the period of investigation in the recent years there is shift from this wording towards more individually focused definition; accessibility to services of general economic interest. The justifications for aiming on territorial cohesion are invariably made on the basis of economic accounting even though some references to idea of solidarity do appear. Within this context of economic accounting and austerity the variance in regional GDP is not considered problematic on its

own but because EU cannot afford the economic burden of “lagging regions”. Additionally, the persistent attempt to label the Cohesion and ERDF funding as investments rather than channel of redistribution or as acts of charity is on display throughout the data. Thereby, within the EU articulation the spatially focused EU funding instruments aim to: “remove structural barriers to growth, mobilize endogenous growth potential” and “unlock the potential for self-sustaining growth and jobs”.

The analysis concludes with critical remarks on both the definition and justification for territorial cohesion in EU vocabulary. Even though repeatedly rejecting the “one size fits all” solutions and vowing on the idea of “place-based development” this discourse consolidates a very narrow understanding on societal wellbeing and development and enforces all regions to one-dimensional economic scale indicating their level of development. Thereby, it is argued that an updated and more plural understanding of territorial cohesion drawing on academic literatures on spatial justice, capabilities and human agency could be formulated. This could help to secure both its effectiveness and as well as legitimacy among the EU member-states, regions and citizens.

Industrial Strategy and the Regions: The UK's Flawed Approach

Peter Wells, Sheffield Hallam University, United Kingdom

Steve Forthergill, Sheffield Hallam University, United Kingdom

Tony Gore, Sheffield Hallam University, United Kingdom

Since the great recession there has been growing international academic and policy interest in industrial policy. Examples include the championing of Industrie 4.0 by the German Federal Government and the interest in smart specialization from institutions such as EC and OECD to regional development agencies.

There are many common features of such approaches, not least the focus on innovation, skills development and infrastructure investment to support new technology based companies. But there are also differences, and as we explore in this paper on the UK, they may follow distinctly national lines and have widely differing effects on the possibility for the development of disadvantaged regions.

After decades when Britain's industrial base has been allowed to wither, the UK government has recently developed a new interest in Industrial Strategy. Much of the emerging strategy is unspectacular but significant new money has been set aside to fund research and development through an Industrial Strategy Challenge Fund.

This paper highlights the particularly narrow range of the sectors targeted by the Fund, mainly at the very highest end of technology, and their uneven distribution across local labour markets. It also notes that in the first instance much of the new funding is likely to end up in R&D laboratories and that these are especially concentrated in some of the most prosperous parts of the UK.

The research concludes that the UK's new Industrial Strategy runs the risk of widening regional divides that in the UK are already disturbingly large. The wider implication, of relevance well beyond the UK, is that ‘industrial strategy’ must be an integral part of regional policy and vice versa. The UK context whilst having the laudable aim of raising the performance of the industrial economy seems not to have been linked up with the impact on places.

Determinants of Patient Choice of Healthcare Providers: Bangkok Case

Muanmas Wichienin, Kasetsart University, Thailand

Patiwat Kalinkao, Kasetsart University, Thailand

Outpatients in Bangkok tend to less prefer the hospitalization of Bangkok Metropolitan Administration (BMA) than the private hospitals or other hospitals even for the officials of BMA itself. This BMA hospitalization is a fundamental service, although opened for anyone but especially granted to their BMA officials. The paper seeks to provide guidelines and help promoting outpatient general medical service. The paper determined the factors that influence the decision to use the service, between the hospitals of the BMA and the others hospital in Bangkok, based on the Binary Logit Model. Data were collected from 390 samples of Revealed Preference (RP) and Stated Preference (SP) samples from BMA officials using SPSS as an analytical tool. The study indicated that the positive factors affecting the hospital model in Bangkok were the demand for the service channels, the age over 20 to 30 years old, the density of patients and medical expenses for common diseases and prices ranged from 150 to 200 Baht/visit. The factors that negatively affected the model were the distance traveled from the residence to the hospital for more than 50 kilometers. The accuracy of the model is 94.8 percent.

Regional Endowment and Strategic Choice: Does the Environment Dictate SMEs' Business Models?

Dominik Wilhelm, Universität Augsburg / Lst. Lehmann, Germany

Erik E. Lehmann, University of Augsburg, Germany

With our study, we investigate the association between small and medium sized enterprises (SMEs) strategic choice in terms of the business model and the regional endowments. Depending on their location, organizations have access to different types of resources and elements like factors of production, spatial and organizational resources and human capital. Being the backbone of Europe's largest economy, Germany's SMEs – the so-called German 'Mittelstand' – and its disproportionate number of unknown niche market leaders (hidden champions) have recently gained more and more attention by international scholars and policy makers. Using a tested method to classify different types of business models, we expect some business models to exist only under certain regional endowments and to find a link between regional endowment patterns and business model patterns. With our research, we contribute to the growing body of business model literature by providing evidence about the linkages. Moreover, our findings contribute to the literature on regional and small business economics.

Governance Entrepreneurs of Regional Development

Yasmine Willi, Swiss Federal Research Institute WSL, Switzerland

Marco Pütz, Swiss Federal Research Institute WSL, Switzerland

Heike Mayer, University of Bern, Institute of Geography, Switzerland

In regional governance literature, actors are commonly divided into two categories: state actors, representing the public domain and politics, and non-state actors, representing the economy and civil society. However, because these categories are based on the functional context and not on personal characteristics of the actors, they fall short in explaining why actors contribute differently to regional development processes. By analysing the design and implementation phase of regional development strategies, we observe that some of the involved actors act as policy entrepreneurs. We understand

them as governance entrepreneurs, because they engage purposefully in regional development processes. Based on the personal characteristics and the different activities pursued by these governance entrepreneurs, we distinguish between two new categories: the realizing and the enabling entrepreneur. Whereas former contributes to regional development processes through a high innovation potential, alertness to opportunities and willingness to invest personal resources, the later contributes through a large network, persistence in negotiation and the capacity to operate across government levels and economic sectors. Data for this research has been collected through 33 expert interviews across six regions in Switzerland.

Regional Revival and Global Markets

Bruce Wilson, European union Centre at RMIT, Australia

Lars Coenen, University of Melbourne, Australia

Leo Goedegebuure, University of Melbourne, Australia

Caroline Veldhuizen, University of Melbourne, Australia

Country regions in Australia (encompassing regional, rural and remote Australia) typically have provided primary commodities for national and international markets. In national policy formation, deliberate choices have been made to reinforce the national economy as one which is derivative, rather than one which invents, invests and innovates: it is dependent and reactive, rather than leading. The derivative nature of the Australian regional economy has led 'country' Australia to be the object of exploitation, rather than a site in which value-added production might be developed for the sake of its communities (Wilson et al 2015).

This framing of regional Australia has been challenged recently by government and community-led initiatives, which include initiatives such as the adoption of the European smart specialisation approach (Foray et al., 2015). In these circumstances, there is interest in repositioning primary producers as knowledgeable entrepreneurs who can take advantage of increasingly globalised knowledge and financial flows to develop multiple opportunities for adding value to their produce. This leads to new thinking about how primary producers might reshape their participation in global value chains.

This paper draws on the contemporary implementation of smart specialisation in an Australian region to explore the interaction between local initiative and global flows. The early evidence indicates that while the local drive to recover value-adding near to the point of production has been central, the prospects for success for new initiatives depend heavily on the growing accessibility of restructured global flows in finance and knowledge. In addition it acknowledges the importance of building legitimacy for collective processes of entrepreneurial discovery through effective institutional translation of smart specialisation policy mobilities (Grillitsch, 2017).

Spatial Industrial Restructuring of City Regions after the Crisis: Employment Growth and Human Capital in Copenhagen 2008-2015

Lars Winther, University of Copenhagen, Denmark

Høgni Kalsø Hansen, Department of Geosciences and Natural Resource Management, University of Copenhagen, Denmark

This paper examines the location and spatial, industrial restructuring of the Copenhagen city region after the crisis in 2008 to understand the internal variety of city regions and their spatial complexity. The economic growth and revitalisation of the city regions in the 1990s and 2000s with the rise of the knowledge economy, including the growth of advanced business services, have produced new location dynamics that have changed the spatial division of labour of city regions. The rise of the knowledge economy lead to an increased focus on labour and human capital and produced a new division of labour in the city regions. This paper examines how the 2008 crisis have restructured the revitalised city region based on an analysis of Copenhagen. We examine the intra urban spatial division of labour by industry, employments growth and human capital to provide evidence of the new uneven economic geographies of city regions that are currently being produced as a result of the spatial restructuring after the crisis.

Intrapreneurship and Absorptive Capacities: The Dynamic Effect of Labor Mobility

Katharine Wirsching, Augsburg University, Germany

David B. Audretsch, Indiana University, Bloomington, United States

Erik E. Lehmann, University of Augsburg, Germany

Matthias Menter, University of Augsburg, Germany

While the literature on entrepreneurship and the associated exploitation of external opportunities is well established, little is known about the management of intrapreneurial capabilities, i.e. absorptive capacities, within a firm as well as its influencing factors. Previous research has focused on labor mobility as a major mechanism in shaping a firm's absorptive capacity, yet has neglected further stimulating factors. Taking a human capital perspective, we consider both the stock and the mobility of labor from both the firm as well as the respective region and control for various contextual parameters. Our results suggest that both firms' labor stock and labor mobility significantly influence respective absorptive capacities, whereby especially the interaction between regional and firm labor mobility seems to enhance firms' absorptive capacities, indicating the dynamic effect of labor mobility, which we designate as a revolving door effect. Hence, firm labor mobility is a necessary, yet not sufficient prerequisite for enhanced intrapreneurship. It also requires efficient and fluid labor markets in order to allow for adequate matches between employees and employers. Our metaphor of the revolving door in the context of efficient labor markets thus describes the dynamism that intrapreneurial capabilities might be augmented in the course of employee fluctuation ("learning-by-diaspora" effect) as well as through recruiting skilled workers ("learning-by-hiring" effect). We further show that the firms' surrounding ecosystem with universities as potential sources of knowledge positively stimulate intrapreneurial capabilities and conclude by outlining an agenda for future research and discuss implications for both firm managers as well as policymakers.

Financial Instruments in EU Cohesion Policy: Patterns, Trends and Issues in Regional Implementation

Fiona Wishlade, European Policies Research Centre, United Kingdom

Rona Michie, European Policies Research Centre, University of Strathclyde, United Kingdom

Oskar Penje, NordRegio, Sweden

Considerable emphasis has been placed on the use of so-called ‘financial instruments’ in EU Cohesion policy in the 2017-13 and 2014-20 programming periods, and commitments to financial instruments have approximately doubled between the two periods. Financial instruments (FIs) – broadly loans, guarantees and equity - are a potential alternative to grants for projects that generate revenue or cost savings, and can now, in principle, be used to address a wide array of policy objectives. However, the geographical dimension of FIs remains rather poorly understood. FIs can be implemented through a variety of governance arrangements with different spatial remits – urban, local, regional, national and at EU-level – some of which partially overlap, but knowledge of the geographical incidence of commitments and investments in projects is rather limited. This is important because financial instruments are claimed to offer advantages over grants in terms of sustainability, project quality and efficiency. These benefits are not in themselves straightforward to quantify, but the absence of information about the regional incidence of spend means that an understanding of the regional gains from FIs is also absent. Looking ahead post-2020, debates about the appropriate level of governance for FI implementation and coordination are already underway. Better analyses of the spatial patterns of commitment and absorption would seem a necessary precursor to such debates.

Positioning Strategies of Swiss Small and Medium-sized Towns in Context: How Tax Competition and Location Shape a Town’s Economic Structure

Stefan Wittwer, KPM Center for Public Management, University of Bern, Switzerland

In line with recent research about the increasing economic and political importance of Small- and Medium-sized Towns (SMSTs) in polycentric urban regions (Dijkstra et al. 2013, Servillo et al. 2017, Meijers and Burger 2017), this study aims at better understanding under which circumstances SMSTs in a polycentric environment attract firms and jobs. For that matter, the locational policy of tax competition (Kaufmann and Arnold 2017) related to the spatial context of SMSTs and the type of firms attracted is examined.

We do so by using newly gathered panel data from 2008 to 2013 for all 152 Swiss SMSTs and spatial lags (measured as proximity to other towns and cities and their respective economic development) to control for the spatial context. Preliminary results indicate that on the one hand, the attraction of knowledge-intensive business services (KIBS) to SMSTs is not only affected by internal characteristics of low tax rates but also by an attractive city-network environment. On the other hand, residential economies are less sensitive to the spatial context and are mainly attracted by SMST-specific characteristics such as lower tax rates. Hence, it is argued that SMSTs in a polycentric environment profit from network effects/positive externalities and that locational policies of SMST should take their spatial context and the type of firms aimed at into account.

Testing Parallel Convergence

Piotr Wójcik, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

The main purpose of the article is to present the concept of parallel convergence and the methods of its empirical verification. In the empirical example the analysis will be carried out to check whether the processes of convergence of GDP per capita and life expectancy at birth at the country and regional level in European Union are interrelated. Life expectancy at birth might be considered as a very general measure of the quality of life (potential alternative to GDP per capita which concentrates purely on economic aspects). On the other side, health is an important component of human capital – the most prominent factor of growth. Therefore, we want to verify whether convergence processes for life expectancy at birth mimic the patterns of income convergence.

Parallel convergence in the simplest terms can be defined as analogous convergence patterns observed for two different phenomena measured for a group of countries or regions. This means an identical (indistinguishable in the statistical sense) dynamics of the distribution of both studied phenomena in the analyzed period. We offer various methods of formal testing of parallel convergence, which relate to several concepts of convergence (sigma, beta, club convergence). Our methodology includes transition matrices and conditional kernel density estimates.

Due to the availability of data on the life expectancy at birth, the study will be conducted at the level of countries and NUTS 2 regions for the period 2004-2015.

From Collective to Corporate: Dynamics of Changing Location Factors and Patterns of Co-working Spaces. The Case of Warsaw.

Katarzyna Wojnar, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

Co working spaces in Warsaw have been popping up in the urban space for almost a decade now. Recent three years have brought a real boom for these type of work places and a transformation of both typology and location factors of co-working spaces.

This paper presents results of a comprehensive co-working study in Warsaw based on desk research, participant observation (mystery client) as well as individual and group interviews studies conducted between 2015 and 2018 in Warsaw. It's an attempt to characterise the international and local dynamics behind types and location patterns of co-working spaces in secondary metropolis like Warsaw. It also focusses on particular phases, professions and motivations of workers choosing this type of work environments in the context of urban policies and real estate market dynamics.

Predicting Local Governments Fiscal Distress using Discriminant Analysis

Agnieszka Wojtasiak-Terech, Wroclaw University of Economics, Poland

The goal of this paper is to develop empirically based model of predicting fiscal distress of municipalities (communes) using discriminant analysis and implement this concept into communes of Lower Silesia region in Poland. Fiscal distress is understood as a failure of the local government to meet its obligations as they come due and to finance the services its constituency requires. There are three methodological issues that surface in the literature on building models of fiscal distress using

discriminant analysis. The first issue is determining the existence of fiscal distress. Conditions of classifying local government as fiscally distressed and not fiscally distressed were adopted on the base of the existing approaches in literature. Indicators which determine fiscal distress were calculated for all communes of Lower Silesia (169 communes) for the time period 2004-2014. The dichotomous dependent variable took the value of one for distressed localities and the value of zero otherwise. The second issue was to identify the causes of financial distress. Selected explanatory variables fall into 3 categories of solvency: budgetary solvency, long-run solvency and service-level solvency. Developed concept allows to divide municipalities into groups of fiscally distressed and healthy ones, reflect the contribution of each variable to the classification of the groups, can be the tool of early warning of fiscal distress for local government and a useful indicator for lenders investors.

An Imagination for Non-urban Regional Development- A Case Study of Cultural Clustering in the East Coast of Taiwan

Jiun-Yi Wu, City, University of London, United Kingdom

As the mainstream researches of cultural and creative clusters tend to look more at cases with urban settings, however, can the results be applied to clusters in non-urban regions? Thus, this research aims to explore a case in the east coast of Taiwan, which traditionally is an indigenous territory, to investigate the situated nature of a cultural clustering. Furthermore, instead of top-down or invasive approach of development, this research also aims to discuss whether cultural clustering can be a rather ideal and organic approach when it comes to development of non-urban regions.

This research then applies qualitative approach, namely face-to-face and online interviews, to respectively have discussion with 15 local artists. The most fundamental but crucial finding is that artists tend to perform closely with local context. They use various local materials to create artworks, and local culture and social issues are a great source of creative inspiration for their artworks as well. Secondly, the clustering of creative talents can be a magnet to attract further creative people into the region. However, as more people pouring in, participants of this research express their preference of organic and slow-paced development which is more cultural, bottom-up and less harmful to local environment. This research also reviews secondary data to investigate the impact of cultural clustering on the development of the region.

Framing 'Industrial Culture'

Andreas Wust, Leibniz Institute for Regional Geography, Germany

The understanding of 'Industrial Culture' has seen waves in interpretation and definition across different time periods and national contexts, e.g. Pirke (2010) on the German 'Industriekultur' related to 'Industrial Heritage' and 'Industrial Archaeology'. However, it could be a valuable means for inspiring regional resources focusing not only of the achievements of the industrial past but also by combining it with present cultural qualities focusing future development (Eaton 2016). (Old) industrialized regions mostly possess a variety of material and non-material attributes and assets, such as mind-set, competences, knowledge, and industrial production (Harfst et al. 2016). 'Industrial Culture' has to be considered as a transdisciplinary, holistic societal concept building on tangible, material and intangible, non-material elements originating from the sphere of industrial production in past, present and future. 'Industrial Culture' could contribute to securing labour force, as many peripheral regions struggle with demographic decline and ageing. There is a need to motivate

especially young people for staying there based on new jobs emerging from digitalization and Industry 4.0. Developing a special corporate social and regional responsibility using cultural methods could increase the binding of workforce to companies and likewise the companies to the regions. In combination with specific local art, 'Industrial Culture' might strengthen the potential of industrial tourism niche. Additionally, peripheral regions often have a range of special resources available that could stimulate creative industries and pioneering spirit. The potentials of 'Industrial Culture' fostering regional development and the region-specific identity will be discussed based on InduCult2.0 project examples.

The Patterns and Models of China's Outwards Investment in Central Asia

Yeerken Wuzhati, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China

Zhiago Liu, Institute of Geographic Sciences and Natural Resources Research, CAS, China

Compared with economic globalization based on neoliberalism, inclusive globalization offers new connotations and historical missions for outwards investment. How the development concept of inclusive globalization is better implemented by outwards investment as an important mean to globalize Chinese capitals and serve The Belt and Road Initiative(BRI), is an important topic to be studied. Central Asia has an important position in the construction of BRI. Therefore, Central Asian region is used as an example here. After the analysis of the spatial patterns, and characteristics and development models of China's outward investment, this paper summarizes the main problems that Chinese investment are confronted with in the Central Asian and put forward the sub-concept of "green and inclusive investment" from the perspective of inclusive globalization, and then suggests new specified directions for Chinese investment in Central Asia. Chinese investment in Central Asian regions should give full play of the states in creating environment and opportunity for outward investment and in coordinating the domestic forces and actors, integrating international and domestic resources, and markets, to seek common developments.

Labour Market Returns to Double-qualification and to Mobility

Gabriele Wydra-Somaggio, Institute for Employment Research, Germany

Anne Otto, Institute for Employment Research, Germany

Prior to enrolment at university, a quarter of all first-year students in Germany's higher education system have already completed a vocational training. After graduation, these students are double-qualified with a vocational and a university degree, i.e. with occupational-specific and generalised human capital, while those students having only a university degree, i.e. having general human capital, are single-qualified. Due to their wide range of human capital, it is expected that double-qualified receive a wage premium. Further, spatial migration that is more likely for more skilled graduates should increase the wage, too. In order to shed more light on the factors which drive the labour market returns, we need to analyse the educational investments and spatial migration behaviour of double- and single-qualified graduates. We scrutinize the impact of double-qualification and mobility behaviour on labour market returns. In our analysis the detailed education information about vocational training as well as university studies variable, regional characteristics of university region and mobility behaviour prior and post studies is included. We resort to a comprehensive micro-level database that combines student records of five German universities with the Integrated Employment

Biographies (IEB) of the Institute for Employment Research (IAB). Our preliminary results show that double-qualified, working in the vocational training occupation field in the first employment get a wage premium. Late and repeat double-qualified migrants earn a lower wage premium than late or repeat single-qualified migrants. Double-qualified graduates, who migrated prior studies and stay in the university region receive a wage premium.

Towards a Multilevel-dimensionality Concept of Transnational Entrepreneurship

Sakura Yamamura, University of Kiel, Germany

Paul Lassalle, University of Strathclyde, United Kingdom

The contextualized view of entrepreneurship, including the importance of external factors (Zahra et al., 2014; Ács et al., 2014) but also their multi-faceted nature in terms of entrepreneurial ecosystems (Isenberg, 2011; Stam, 2015), has been much discussed. Simultaneously, literatures on ethnic minority entrepreneurship also highlight the importance of a multi-level analysis, whereas the meso-level has arisen as crucial (Kloosterman, 2010). Though recognized important, a clear conceptualization of the embeddedness of these multiple factors and levels going beyond the rather intangible notion of mixed embeddedness is still missing. In particular, conceptual debates on transnationalism, which is multidimensional in its nature (Vertovec, 2007), is still rather nascent in entrepreneurship (Drori et al., 2009).

Taking this as a starting point, we propose to reconceptualize the phenomenon of transnational entrepreneurship by proposing an analytical framework which analyses the different factors influencing entrepreneurial activity in different contexts. The concept bases on empirical research on Polish entrepreneurs in Glasgow, who as transnational entrepreneurs successively integrated into the UK/EU labor market, but also drew their opportunities from different levels and contexts of transnationalism.

The proposed model clarifies the components of the entrepreneurial context by analytically subdividing them across dimensions (political, social and economic) and levels (macro, meso, and micro). By systematically organizing the dimensions, and rearranging concrete institutional elements and structures in but also differentiating them vertically into the analytical levels in each field, we provide a framework which better clarifies the multi-dimensionality and multi-leveling of transnational entrepreneurial activities, in particular clarifying the meso-level transnationalities of entrepreneurship.

Effects of Regional and Regulation Policies on China's Provincial OFDI

Tong Yin, United Kingdom

Lisa De Propriis, University of Birmingham, United Kingdom

Liza Jabbour, University of Birmingham, United Kingdom

China's Outward Foreign Direct Investment (OFDI) flows reached 183 billion USD in 2016 (UNCTAD). China became the second largest source of OFDI. It is very interesting to study why China's OFDI has been growing so fast in recent years boosted by several policies such as Open door policy and Go Global policies especially since China launched One Belt One Road policy in 2014.

The literatures on the determinants of OFDI is extensive. However, a small part of it is able to use quantitative method to study the effect of policies. We think that it is very important to analyze the

effect of policies. Firstly, China government played an important role in China's OFDI. Secondly, throughout China's economic reform in the past 40 years, policies were always important tools in China.

Our main contribution is that, to our knowledge, this is the first time that government policies are used in a quantitative analysis of China's OFDI. We use provincial data and quantitative method to analyze the effects of regional and regulation policies on China's provincial OFDI.

We found that China's economy and OFDI-related policies had a joint effects on the total volume of OFDI. The volume of OFDI had a positive relationship with GDP per capita. China's OFDI-related policies would also release OFDI of provinces with relatively higher level of GDP per capita.

Rural Regeneration: Changing Urban-rural Relations in China's Lower Yangtze Delta Region?

Sheng Zhong, Xi'an Jiaotong-Liverpool University, China

Shengxi Xin, China

The research examines recent socioeconomic changes and the "New Urbanization" discourses in the Lower Yangtze River Delta Region (LYRD) in China. Earlier reforms to address urban-rural dualism inherited from the central planning period, however, had not produced more equitable outcomes. While cities expanded and prospered as destinations of global capital and cheap rural migrant labor, villages shrank and declined due to land expropriation, out-migration, economic volatility and environmental degradation. Behind the sharp visual contrast is the hidden transfer of economic, human and environmental resources from rural to urbanized areas. Hence, urban-rural disparity had essentially been reproduced in a new form in this period. In order to address astounding regional disparity and achieve social justice, new round of policy-making aiming at tackling rural problems are launched in recent years, culminating in the New Urbanization Plan at the national, provincial and metropolitan level. Parallel the state rural support initiatives are the growing nostalgic sentiment among affluent urban middle class wishing to experience and consuming the countryside. The changes in both the political and socioeconomic realms have pushed former rural backwaters into the frontline of capital accumulation unparalleled in previous periods. Based on an analysis of a few latest rural development initiatives in LYRD, the paper argues that contemporary rural transformation is led and dominated by urban-based interest and capital in which rural stakeholders can only passively respond to exogenous forces. In the absence of village participative governance system, it is questionable that new opportunities will translate into true rural revival.

Strategic Coupling of Global Technology Leaders in Rural and Urban Regions

Pavla Zizalova, Economics Institute of the Academy of Sciences of the Czech Republic, Czech Republic

Martin Srholec, CERGE-EI, Prague, Czech Republic

The importance of agglomeration economies, co-location and concentration of economic activities can be traced back to Marshall who argued that there is an advantage for firms in the same industry to locate near one another because workers and firms learn from each other. Nevertheless, the agglomeration economies are a relatively large group of often interrelated factors and hence they may affect different actors and organizations differently. Further, it is argued that the agglomeration economies cannot be limited only to urban regions. They can spill over to surrounding areas and rural

areas can benefit from them as well, for instance through commuting. Rural areas are diverse and some can achieve certain (local) agglomeration economies related to specific activities concentrated in the location.

Similarly, GPN approach incorporates a spatial dimension in the network. It does not see the regions as only passive receivers, but introduces (in its own terminology) a “strategic coupling process”, i.e. a combination of intra-, inter-, and extra-regional mechanisms and factors.

The aim of this paper is to analyse how the dimensions of the GPN framework differ in relation to agglomeration economies. More precisely, the aim of the analysis is to test whether the location of a particular type of a firm within a GPN corresponds with the theoretical assumptions related to regional development literature – following the literature on agglomeration economies, one may assume that leaders of the GPN will be particularly attracted by large urban (and metropolitan) areas, whereas firms at lower positions in the GPN will be more often located in rural, non-metropolitan regions.

Mapping the Course of Time: Comparative Visualizations of the Knowledge Economy in Germany and Switzerland

Silke Zöllner, Hochschule Luzern - Wirtschaft, Switzerland

Spatial development in advanced economies is affected by the growing importance of the knowledge economy. Knowledge-intensive firms change global economic activities by spreading their complex value chains across multiple national and international locations. This leads to new patterns of firm networks linking places on various spatial scales. In Germany and Switzerland, we observe new forms of functional differentiation and network development between cities. There exist manifold approaches of visualizing relational data with both a spatial and a temporal dimension. In mapping this data, two central issues are complexity and comprehensibility. Regarding complexity, mapping decisions include whether to present the temporal and spatial dimension(s) simultaneously or separately; whether to retain the original city-firm data structure or to project the data in an intercity network and whether to use static or dynamic maps. Regarding comprehensibility, mapping decisions include how much information a map can bear or where critical thresholds of information loss are. This paper contributes to this discussion by comparing different approaches of mapping German and Swiss intercity firm networks and discussing the respective advantages and limits. The data is collected in a joint research project between TUM and HSLU and provides information on interlocking firm networks of more than 900 knowledge-intensive firms for the years 2009 and 2018. The aim of this paper is to use visualization techniques as a hypothesis generating process in order to obtain more detailed insights into the temporal changes in the German and Swiss knowledge economy. In turn, this knowledge serves as basis for further spatial and statistical analyses.

Silke Zöllner, Hochschule Luzern - Wirtschaft, Switzerland

Stefan Lüthi, Lucerne University of Applied Sciences and Arts, Switzerland

Nadine Anna Fritz, Technical University of Munich, Germany

Michael Bentlage, Technical University of Munich, Germany

Alain Thierstein, Technical University of Munich, Germany

Spatial development in advanced economies is affected by the growing importance of the knowledge economy. Knowledge-intensive firms change global economic activities by spreading their complex value chains across multiple national and international locations. This leads to new patterns of firm networks linking places on various spatial scales. In Germany and Switzerland, we observe new forms of functional differentiation and network development between cities. Whilst the city's and firm's perspective are well researched each separately, little is known about processes at the city-firm nexus and their temporal dynamics in the context of the knowledge economy. The aim of this research is to detect changing functional spatial patterns in the German and Swiss knowledge economy based on intercity firm networks of knowledge-intensive firms. Hereby the following questions are of interest: How did the functional spatial patterns in the knowledge economy change from 2009 to 2018? Which spatio-temporal dynamics are at work and to which extent do they differ between the two countries? Previous longitudinal approaches of intercity firm networks rarely take into account the bipartite city-firm data structure of intercity firm networks. Further, the few studies that do so adopt a supra-local or even global perspective, only presenting results on a European or worldwide scale. This conceptual paper formulates a research framework to retrace how knowledge-intensive firms organize the geographies of their knowledge creation. The data is collected in a joint research project between TUM and HSLU and provides information on interlocking firm networks of more than 900 knowledge-intensive firms.

Index

Acara, 1
Agnoletti, 1
Akhavan, 2
Amaral, 3
Amezquita, 150
Amin, 4
Angelopoulos, 4
Antonietti, 4
Arko, 5
Armondi, 5, 6
Ascani, 6
Ashmore, 7
Assimakopoulos, 8
Avezum, 13
Bailey, 8
Baines, 8
Balsiger, 9
Bartosiewicz, 9
Baruffini, 10
Bastos, 10
Batista e Silva, 11
Batunova, 11
Bauhr, 31
Beatty, 12
Beckers, 12
Beer, 13
Bendarzsevskij, 13
Bentlage, 13
Bentley, 14
Berg, 15
Berruti, 15
Bianchi, 16
Bika, 18
Billing, 16
Binns, 17
Bo, 17
Bosworth, 18
Bragoli, 22
Brydges, 19
Buckley, 19
Bud, 20
Budaeva, 20
Bufetova, 21
Burgalassi, 21
Burlina, 4, 22
Burneika, 22
Bystrova, 23
Cabras, 23
Calegari, 24
Campolina, 25
Campos, 18
Capik, 25
Cappellano, 26
Caraveli, 26
Cardoso, 27
Carvalho, 3, 27
Castaldi, 28
Cavaco, 29, 36
Celinska-Janowicz, 29
Cercleux, 30
Charles, 30
Charron, 31
Chatzigiatrioudakis, 26
Chen, 31
Chlebna, 32
Christoffel, 32
Ciappei, 33
Clement, 30
Clifton, 34
Colnot, 35
Cook, 35
Cortelezzi, 22
Cox, 36
Crevoisier, 37
Czirják, 37
da Cruz Lima, 38
Dabrowska, 38
Dabrowski, 39
Dąbrowski, 39, 40
Dahl Fitjar, 57
Dale-Olsen, 40
Dalziel, 41
Danko, 41
Davies, 30
Davoudi, 42
Day, 42
De Gregorio Hurtado, 43
De Propriis, 33
De Ruyter, 43
De Silva, 4
de Sousa, 44
De Toni, 44
De Vos, 45
Dejardin, 45
Del Sorbo, 46
Di Vita, 5
Diaz Bay, 46
Dijkstra, 47
Dokic, 47
Dotti, 48
Drobniaak, 48
Dunford, 49
Dyba, 49
Egyed, 49
Elkins, 50
Elshater, 50
Eriksson, 51
Erkuş Öztürk, 51
Ersoy, 52
Estrin, 18
Evenhuis, 52
Fabrizi, 24
Færøvik, 53
Faller, 53

Fauzi, 54
 Fedeli, 54
 Feng, 31
 Fernandez Maldonado, 55
 Ferretti, 1
 Feurich, 55
 Figueroa-Armijos, 56
 Filipenko, 57
 Flanagan, 57
 Folch, 3
 Forman, 58
 Fothergill, 12
 Françoso, 179
 Fratesi, 59
 Fratini, 59
 Fratsea, 60
 Frenkel, 61
 Fricke, 61
 Fritsch, 62
 Fritz, 62
 Fuezi, 63
 Fujimot, 63
 Gagliardi, 64
 Gajda, 64
 Gajzágó, 65
 Galland, 65
 Gao, 66
 Garzón-Ramírez, 66
 Gere, 67
 Geyer, 67
 Gilbert, 67
 Giuliani, 28
 Gkotsis, 68
 Glaesser, 68
 Gomez, 164
 Gong, 69
 Gore, 70
 Graziano, 70
 Grechi, 71
 Gregson, 71
 Guastella, 24, 72
 Guerra, 72
 Gunko, 11
 Haisch, 72
 Hajdu-Smahó, 73
 Halkier, 73
 Hamnett, 74
 Han, 74
 Hane-Weijman, 75
 Harfst, 75
 Harrison, 76
 Hassink, 76
 Hearne, 76
 Hediger, 77
 Henderson, 77
 Henning, 78
 Hersperger, 78
 Heurkens, 39

Hicks, 79
 Hidalgo Martinez, 79
 Hincks, 80
 Hoole, 80
 Horeczki, 81
 Hubmann, 81
 Huggins, 82
 Hui, 82
 Hundt, 83
 Hwang, 83
 Iammarino, 6
 Ianos, 30
 Ibarra-Olivo, 84
 Ibrahim, 84
 Idczak, 85
 Ikejima, 85
 Ilovan, 86
 Innocenti, 86
 Iskandar, 87
 Jakubowski, 88
 Jeannerat, 88
 Jentzsch, 89
 Jiang, 89
 Jones, 90
 Jong, 90
 Ju, 17
 Kacani, 91
 Kahn, 92
 Kaiser, 92
 Kartal, 93
 Kaucic, 93
 Kaufmann, 94
 Kesar, 94
 Kılıç, 95
 Kim, 95
 Kindt, 96
 Kitsos, 96
 Kleiner, 97
 Klemensits, 97
 Klerby, 98
 Klimanov, 98
 Kluza, 99
 Koenig, 99
 Kogler, 100
 Kolomak, 100
 Kompil, 101
 Kopanidis, 101
 Kopańska, 102
 Koritchenko, 9
 Korompai, 102
 Korosteleva, 103
 Kostanjšek, 125
 Koster, 103
 Koulouri, 104
 Kourilova, 104
 Kovacs, 105, 106
 Kovács, 155
 Kozina, 106

Krause, 156
Krehl, 107
Krisjane, 107
Kristensen, 108
Krukowska, 108
Krūminas, 109
Krumins, 110
Kurek, 110
Lagendijk, 111
Lalrindiki, 111
Larionova, 112
Lattarulo, 1
Lavalle, 11
Lawton-Smith, 8
Leick, 112
Levchenko, 113
Lienhard, 114
Limonov, 114
Lingua, 115
Lischka, 116
Lisenkova, 116
Liu, 117
Löhr, 32
Lombard, 118
Lozynskiy, 118
Luca Bruno, 18
Luukkonen, 119
Lux, 119
Maden, 87
Mäenpää, 120
Maggi, 120, 121
Magro, 121
Makkonen, 26, 122
Malfitano, 122
Manolchev, 123
Mantegazzi, 123
Maráci, 124
Marcelic, 124
Marcinczak, 125
Marciniczak, 9
Mariotti, 2
Marot, 125
Marseguerra, 22
Martellozzo, 126
Martin, 126
Martinelli, 28
Martynovich, 127
Matta, 127
Mattes, 32
McCann, 128
McLaughlin, 129
McSorley, 129
Medve-Balint, 130
Meili, 131
Melnikova, 131
Menzel, 132
Merciu, 30
Metaxas, 132

Mettenberger, 133
Mezei, 133
Micek, 134
Michalec, 134, 135
Michielsen, 135
Miller, 30
Mitra, 136
Moisio, 137
Molema, 137
Möller, 138
Montero, 138
Morandi, 5
Morretta, 139
Morrison, 139
Mouraviev, 140
Mrinska, 140
Mrozik, 141
Muentert, 141
Müller, 142
Musialkowska, 142
Musiolik, 143
Mykhnenko, 144
Nadler, 145
Nagy, 145
Nam, 146
Nared, 146
Nase, 146
Naveed, 147
Nazarczuk, 147
Nel, 17, 148
Netana, 34
Newbery, 18
Ngampramaun, 148
Nick, 149
Niedzielski, 149
Nyikos, 150
Ogai, 151
Oliva, 151
Oliveira, 152
Olmunger, 153
Orhan, 153
Ortega, 154
Ortega Argiles, 16
Ottiger, 154
Pager, 155
Pajevic, 155
Palestino, 15
Papadopoulos, 157
Papamichail, 157
Paravalos, 26
Pareglio, 158
Pedro Costa, 29, 36
Pegoraro, 158
Pelucha, 159
Piccini, 1, 159
Pickernell, 34
Pineira, 160
Pirani, 25

Pitelis, 8
 Plantinga, 160
 Plöger, 161
 Ploszaj, 161
 Pociute-Sereikiene, 162
 Pollermann, 162
 Polverari, 163
 Pontarollo, 11, 163
 Ponzini, 2
 Pretorius, 164
 Price, 7
 Prins, 165
 Prokop, 165
 Pruthi, 166
 Pugh, 19
 Pütz, 166
 Pylak, 167, 168
 Qiao, 168
 Quatraro, 169
 Quinn, 169
 Raagmaa, 169
 Rafique, 170
 Rajic, 170
 Rakotovao, 171
 Ramirez, 33
 Rauhut, 171
 Rego, 10
 Reinold, 172
 Ricchiuti, 172
 Rime, 173
 Rizzi, 173
 Robinson, 174
 Rocha, 3
 Rode, 174
 Rohe, 32
 Romeo, 8
 Romero, 175
 Rowe, 175
 Ruiter, 175
 Ryymin, 176
 Sacco, 177
 Sahin, 177
 Salomaa, 177
 Sancino, 178
 Santini, 33, 178
 Scedrova, 179
 Scherer, 3
 Segessemann, 180
 Serra, 10
 Shevchenko, 181
 Shutt, 14
 Sigler, 181
 Silveira, 25
 Sinclair, 182
 Sissons, 182
 Smékalová, 183
 Smetkowski, 184
 Smith, 184

Sohn, 26
 Sokołowski, 185
 Song, 185
 Sotarauta, 185
 Sridhar, 180
 Środa-Murawska, 186
 Strauf, 186
 Stricker, 10
 Strijker, 187
 Sudiana, 188
 Sumpor, 188
 Sungur, 189
 Suvinen, 189
 Szejgiec-Kolenda, 190
 Szerb, 190
 Takemura, 191
 Terzidis, 191
 Theurillat, 192
 Thompson-Fawcett, 192
 Thulemark, 193
 Tian, 18
 Timpano, 24
 Tomlinson, 8, 193
 Tomor, 194
 Tosa, 195
 Townsend, 18
 Trejo Nieto, 195
 Tsareva, 196
 Tsouri, 8, 196
 Tupy, 197
 Turgel, 197
 Tuysuz, 198
 Ubarevičienė, 22
 Uyarra, 199
 Vainio, 199
 Valadares, 25
 Valdaliso, 200
 Vale, 27
 van den Berg, 200
 Van den Buuse, 201
 van der Zwet, 201
 Van Oort, 202
 van Winden, 27, 202
 Vaquero, 198
 Varju, 203
 Varro, 203
 Veccioli, 204
 Veldhuizen, 205
 Veneri, 205
 Vissoci, 3
 Vizcaino, 11
 Vukovic, 206
 Waehning, 23
 Walsh, 206
 Wang, 207, 208
 Wardenburg, 209
 Weckroth, 209
 Wells, 210

Wichiensin, 211
Wilhelm, 211
Willi, 211
Wilson, 212
Winther, 213
Wirsching, 213
Wishlade, 214
Wittwer, 214
Wójcik, 215
Wojnar, 215

Wojtasiak-Terech, 215
Wu, 216
Wust, 216
Wuzhati, 217
Wydra-Somaggio, 217
Yamamura, 218
Yin, 218
Zhong, 219
Zizalova, 219
Zöllner, 220, 221