

# Macedonian Decentralization Case

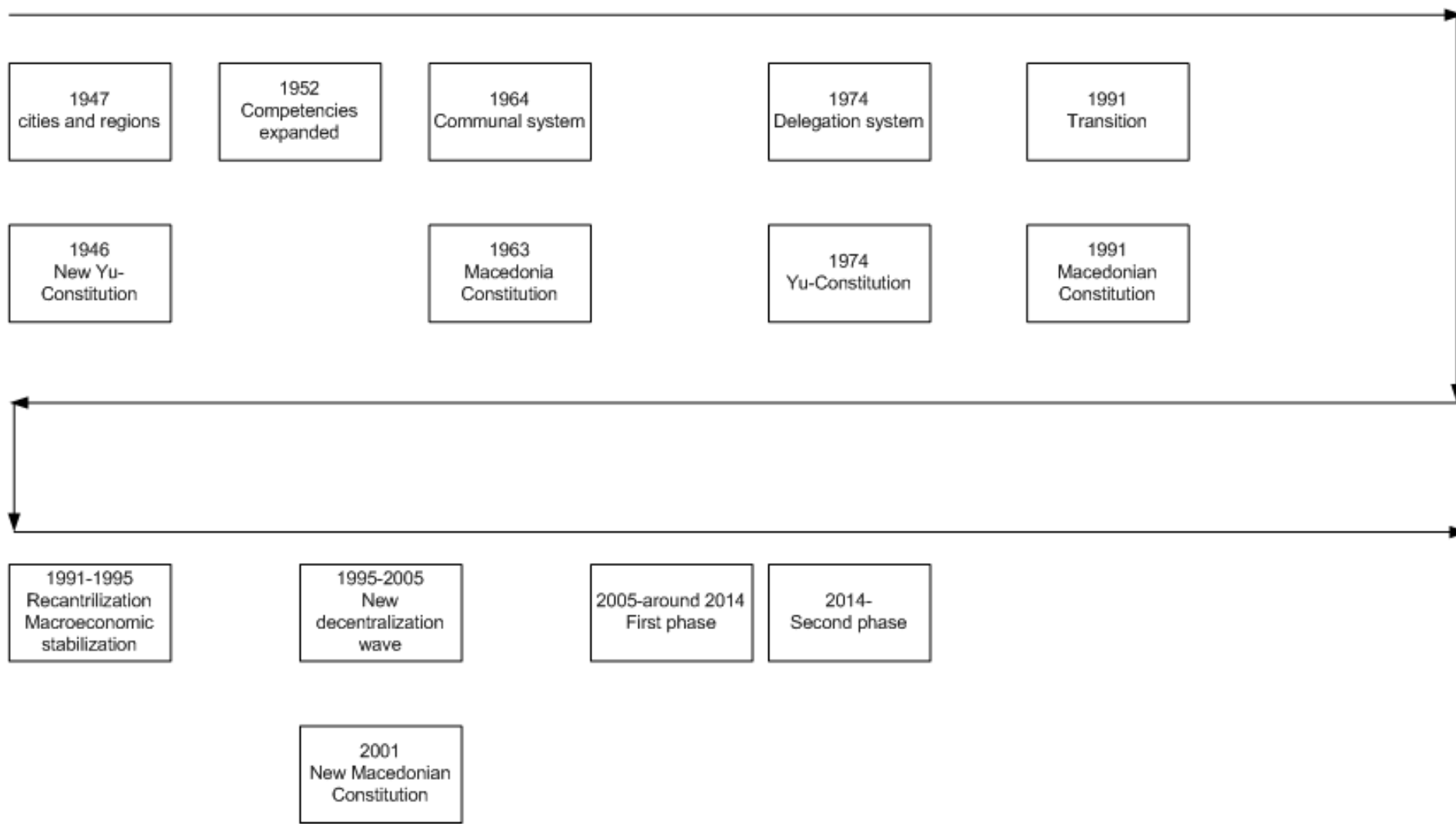
Marjan Nikolov

# Content

- Historical chronology
- Territorial organization
- Competencies
- Revenues
- Local Economic Development-LED
- Some issues

# Historical chronology

# Historical chronology – before and after independence



# Territorial Organisation

# Territorial Organisation

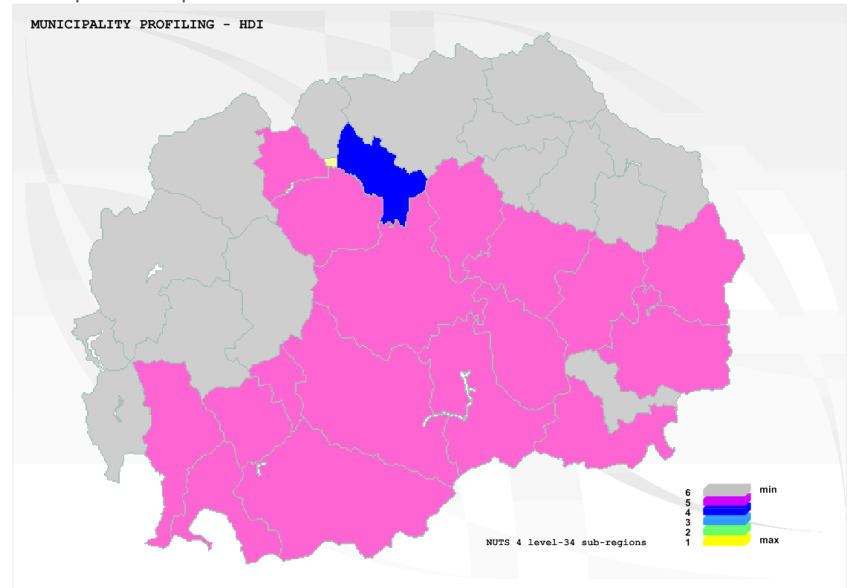
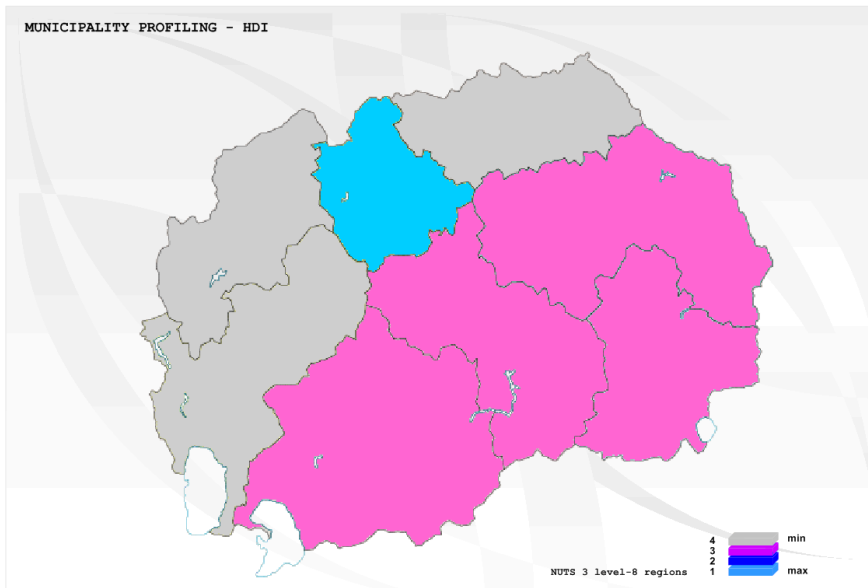
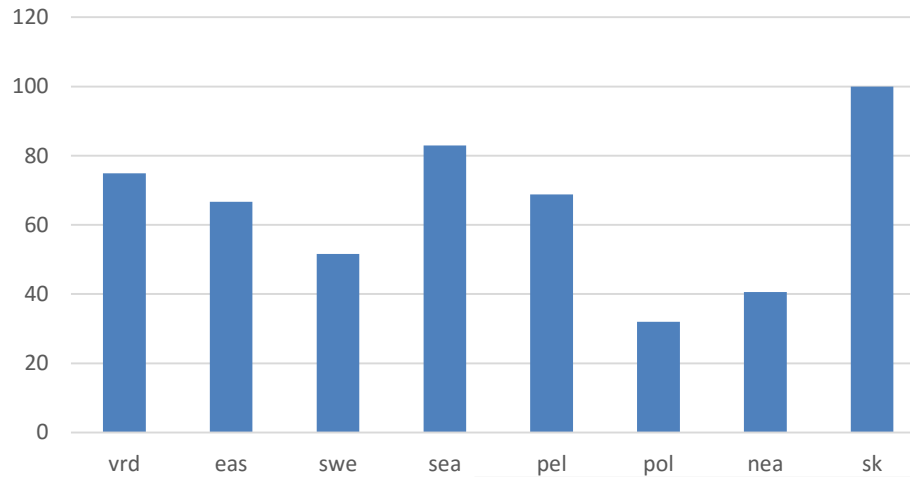
- Law on Territorial Organisation (*Official Gazette of the Republic of Macedonia*, no. 49/96) was adopted in 1996 introducing 123 municipalities
- With the new Law on Territorial Organisation (*Official Gazette of the Republic of Macedonia*, no. 55/04) adopted in 2004, the local governments in Macedonia were restructured into 84 municipalities (15 of which have fewer than 5,000 inhabitants)
- The City of Skopje is a special unit comprising 10 municipalities in accordance with a separate law on the city of Skopje (*Official Gazette of the Republic of Macedonia*, no. 55/04).
- Finally, after 2014 there are 80 municipalities and the City of Skopje as a special unit

# Territorial Organisation

- In Macedonia there are 43 urban and 37 rural municipalities.
- Urban municipalities comprise 1,651,694 inhabitants (82%)
- Rural municipalities comprise 370,853 inhabitants (18%).
- 41% of Macedonian population lives in 62 municipalities (out of 80) with less than 40,000 inhabitants.
- Almost 41% of Macedonian population lives in additional 14 municipalities out of 80 with size between 40,000 and 80,000.
- The City of Skopje comprises 25% of Macedonian population in 10 municipalities with population between 22,000 and 73,000 inhabitants.
- There are 14 municipalities with less than 5,000 inhabitants.

# Territorial Organisation

- Profiling CEA exercise for WB and MinFin at that time:  
NUTS III Variation in MK





# Research findings: comparison DEA-VRS and SFA

<b>Size class</b>	<b>DEA efficiency scores</b>	<b>SFA efficiency scores</b>
<b>All sizes</b>	0.596	0.573
<b>POP &lt; 5,000</b>	0.502	0.585
<b>5,000 ≤ POP &lt; 10,000</b>	0.831	0.585
<b>10,000 ≤ POP &lt; 15,000</b>	0.810	0.720
<b>15,000 ≤ POP &lt; 20,000</b>	0.720	0.614
<b>20,000 ≤ POP &lt; 60,000</b>	0.400	0.551
<b>POP ≥ 60,000</b>	0.218	0.345

# Territorial organization - Research findings

## FIRST STAGE-DEA VRS

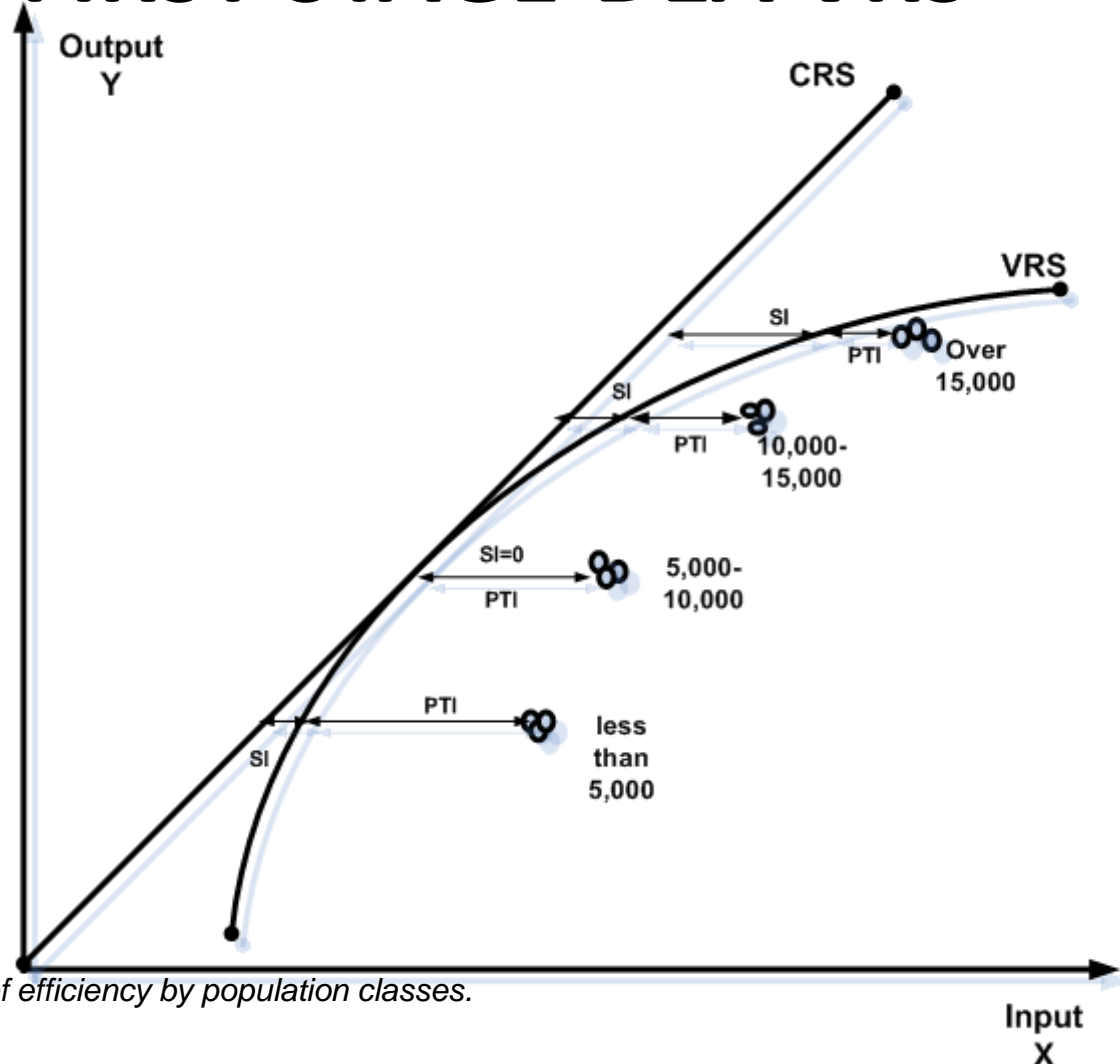
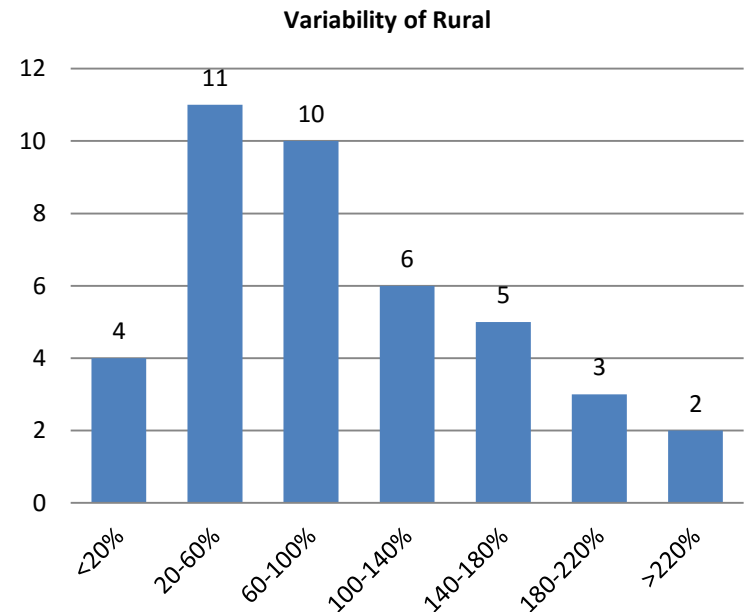
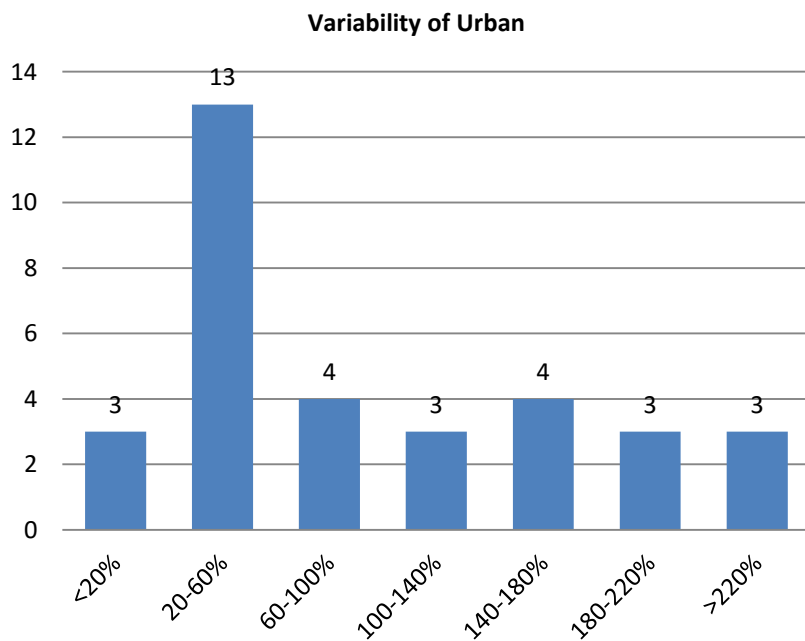


Figure. Breakdown of efficiency by population classes.

# Competencies

# Competencies

- The 2002 Law on Local Self Government (*Official Gazette of the Republic of Macedonia*, no. 05/02) regulates the competencies of the local governments. Symmetry?



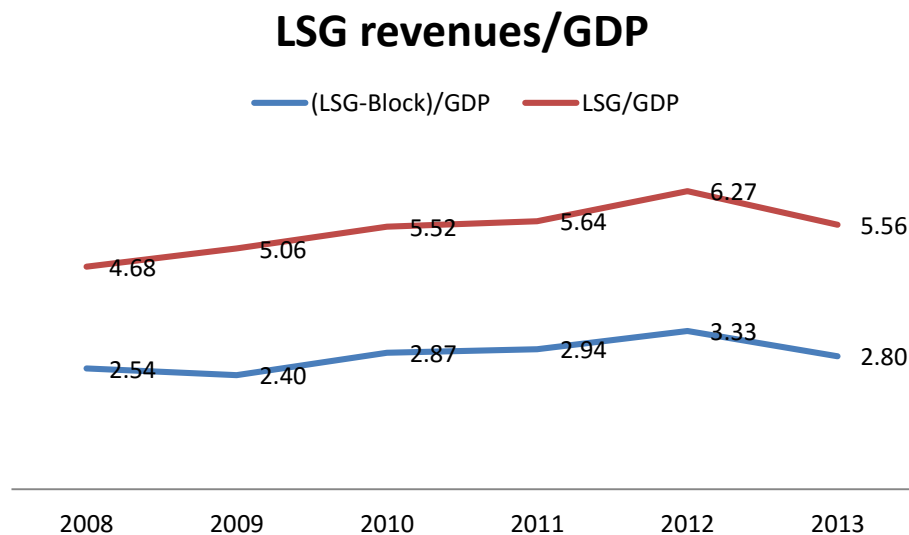
# Competencies

Country	Wages and benefits	Other current expenditures	Capital expenditures
Albania	24	38	38
Croatia	28	67	5
Turkey (for 2009)	23	44	33
Federation of Bosnia and Herzegovina	26	46	28
Republic of Srpska	30	41	29
Serbia	23	48	29
Slovenia	6	50	44
Bulgaria	41	41	18
Montenegro	17	46	37
Kosovo	49	2	49
Romania	33	47	20
Moldova	51	36	13
<b>Average</b>	<b>29</b>	<b>42</b>	<b>29</b>
<b>Average without Fed. B and H and RS</b>	<b>30</b>	<b>41</b>	<b>29</b>
<b>Macedonia</b>	<b>50</b>	<b>29</b>	<b>21</b>

# Revenues

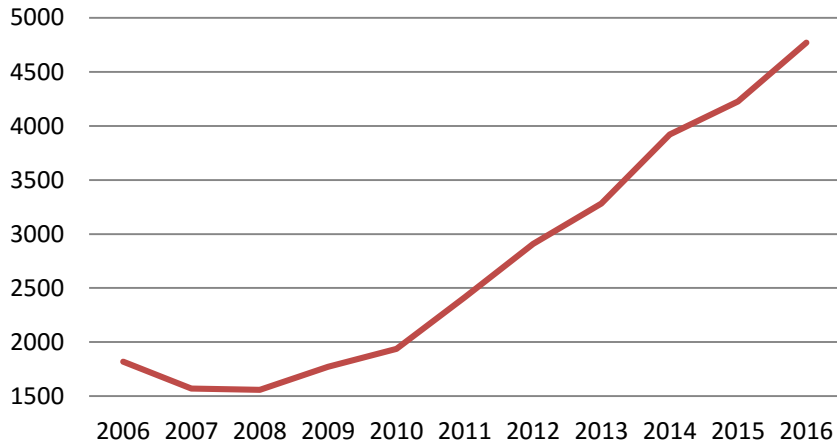
# Revenues

Year	GDP (million current denars)	Central government revenues (share in GDP in %)	Municipal revenues (share in GDP in %)
1999	225,751	35	0.88
2000	241,366	34	1.00
2001	238,018	41	1.22
2002	248,062	41	1.25
2003	254,510	34	1.85
2004	275,404	33	1.84
2005	298,468	35	1.96
2006	324,322	34	2.74
2007	369,830	33	3.38
2008	413,280	33	4.68
2009	414,614	31	5.06
2010	437,275	30	5.52
2011	464,182	30	5.64
2012	466,705	30	6.27
2013	499,537	28	5.56
2014	525,619	28	5.36
2015	560,158	29	5.38

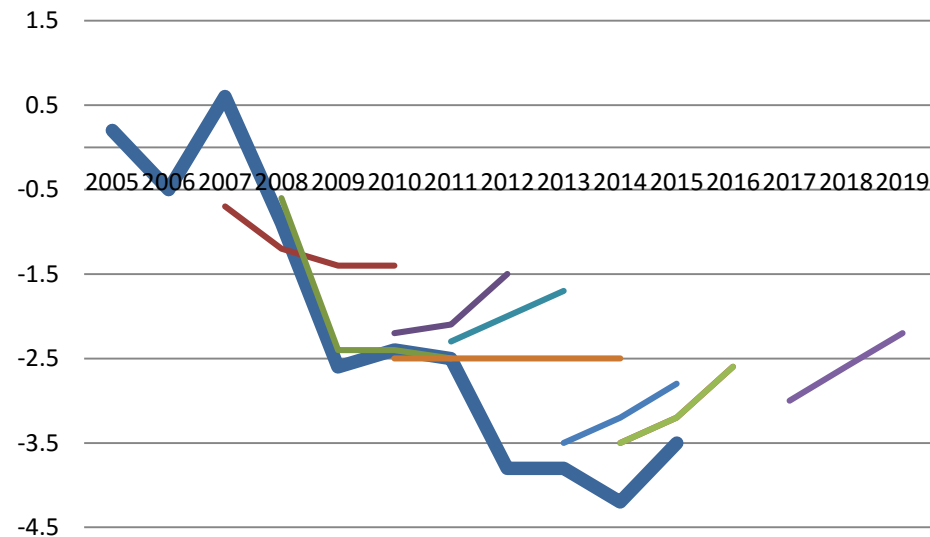
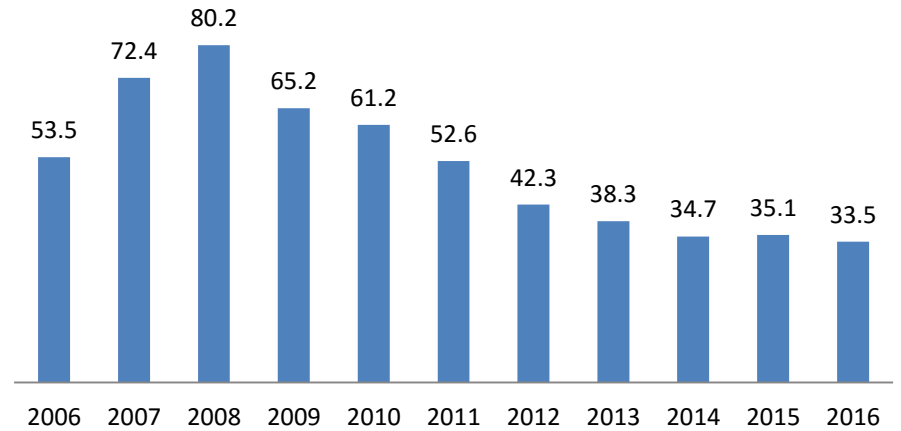


# Revenues

Public debt in mln Euros



Tax revenues as percent of the public debt



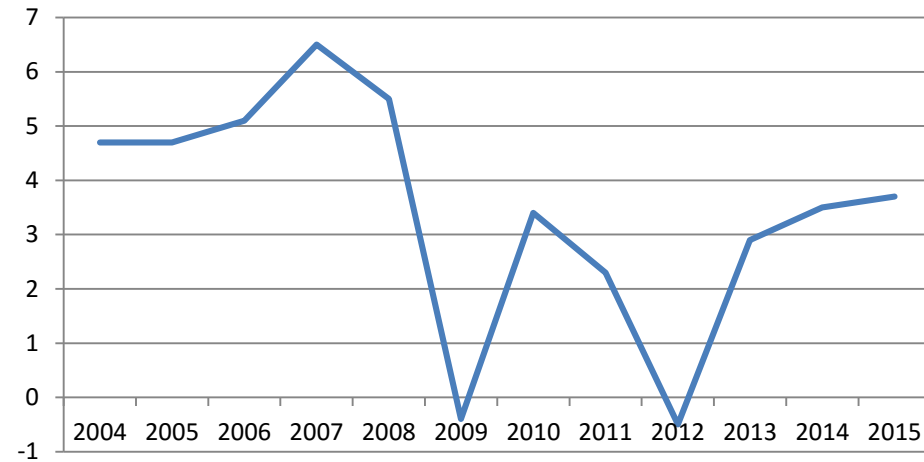
Промена на транспарентноста по години



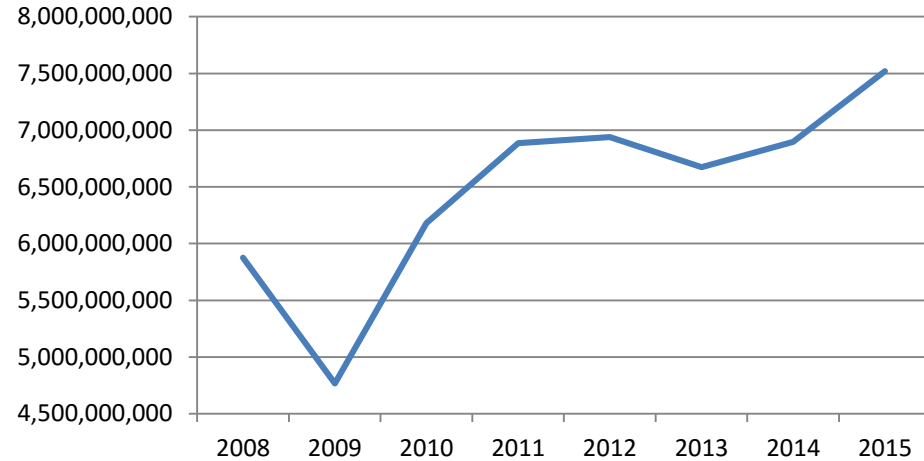


# Revenues

## GDP growth

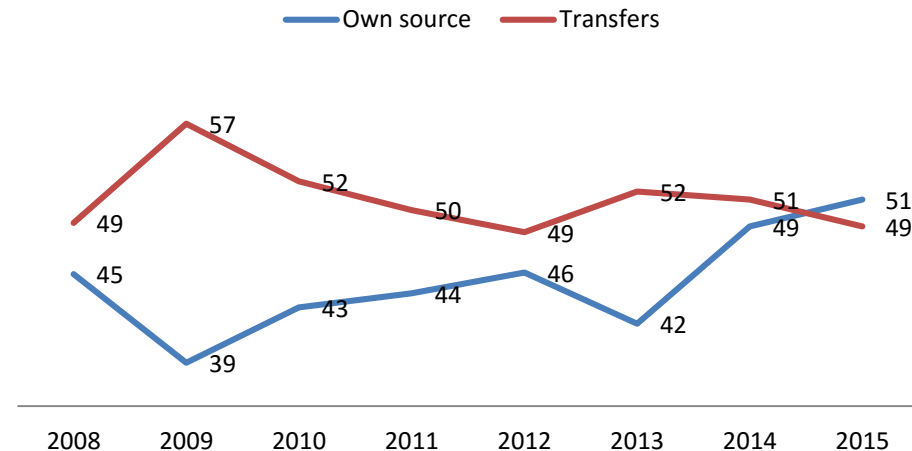


## Tax revenue



- W-impact of the global crisis
- Resulting higher fiscal effort changed the structure of revenues, helping to create a more resilient tax base and buoyant total revenues

## Fiscal dependency



# Local economic development

# Local economic development

- Cross-country experiences reveal that there is no systematic relationship between fiscal decentralization and long-term economic growth (Panel data model on EU15, CEE and SEE).
- We assessed the capital investment needs of the Macedonian local government by examining their strategic documents
- Around 13 LSGs out of 84 LSGs representing half of the population

# Local economic development

- We use Excel Spreadsheet *CEA Macroabc model* that is similar to the Financial Programming of IMF and more advanced than the Reduced Minimum Standard Model (RMSM-X) of the World Bank
- Findings: Only short-term impact on real GDP growth of around 1pp and mild increase of the domestic inflation rate of around 0.1 percentage points per annum thus, no adverse macroeconomic impact on Macedonian economy

# Special issues

# Issues

- Decentralisation in Macedonia is more of a **deconcentration and is less about fiscal autonomy and the devolution of power to the municipalities.**
  - The case of water regulation.
  - The case of the property tax

Sub-item 713113	2008	2009	2010	2011	2012	2013
No. of LGUs	0	16	67	53	61	56
Sub-item 713112	2008	2009	2010	2011	2012	2013
No. of LGUs	10	10	9	8	8	8

# Issues

- Economists have started to pay substantial attention to the effects of **ethnic fragmentation** across countries at least since a paper by Easterly and Levine (1996).
- These authors argued that, ceteris paribus, more racially fragmented countries grow slower.
- The Ethnic Fragmentation Indicator (ETF) used is based on Easterly and Levine's (1996) work. The indicator algebraically is:

$$ETF = ETHNIC = 1 - \sum_i (ethnicaffiliation_i)^2$$

# Research findings

## SECOND STAGE-KERNEL

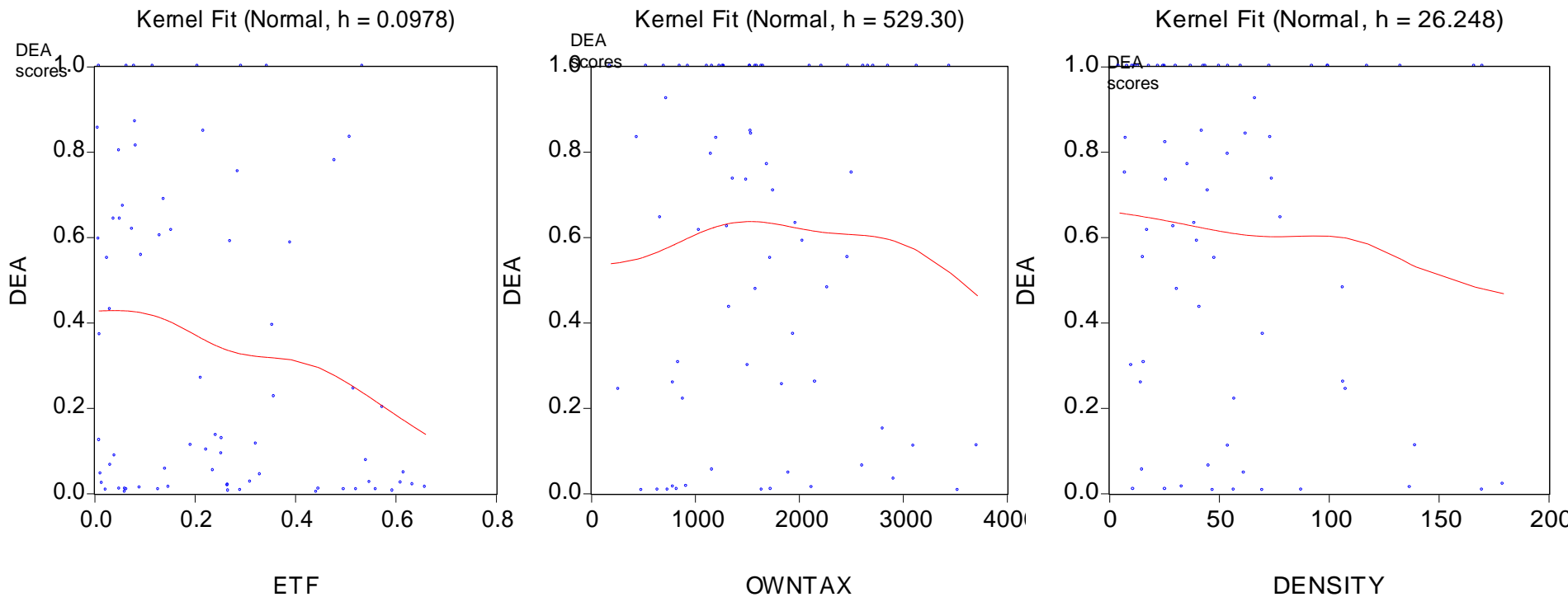


Figure. Kernel estimation of the explanatory variables on DEA-VRS efficiency scores



# Research findings

## SFA

	Variables $\beta_0 + \sum_1^5 \beta_i * OUT_i \beta_1$	SFA Cobb-Douglas model
0	Intercept	9.532*** (21.457) <sup>3)</sup>
1	Population with ages between 0-4	0.124** (1.893)
2	Population with ages between 5-19	-0.698*** (-3.372)
3	Population with ages between 20-64	1.113*** (4.282)
4	Population over 65	0.152 (1.160)
5	Roads	0.224*** (3.389)

3) t-statistics in brackets

\*-significant at 10% level of significance (with critical value 1.293)

\*\* -significant at 5% level of significance (with critical value 1.665)

\*\*\* - significant at 1% level of significance (with critical value 2.376).

# Research findings

## SFA

	Variables	$\delta_0 + \sum_{i=1}^5 \delta_i * z_i$
0	Intercept	-0.074 (-0.531)
1	Density	-0.568E-03** (-1.995)
2	Own tax	-0.282E-03*** (-6.816)
3	ETF	-0.452*** (-3.018)
4	MAYCENTRA	0.212** (1.716)
5	MAYCOUN	0.01 (0.07)
	Sigma-squared	0.07*** (4.129)
	$\gamma$	0.999*** (26619.025)

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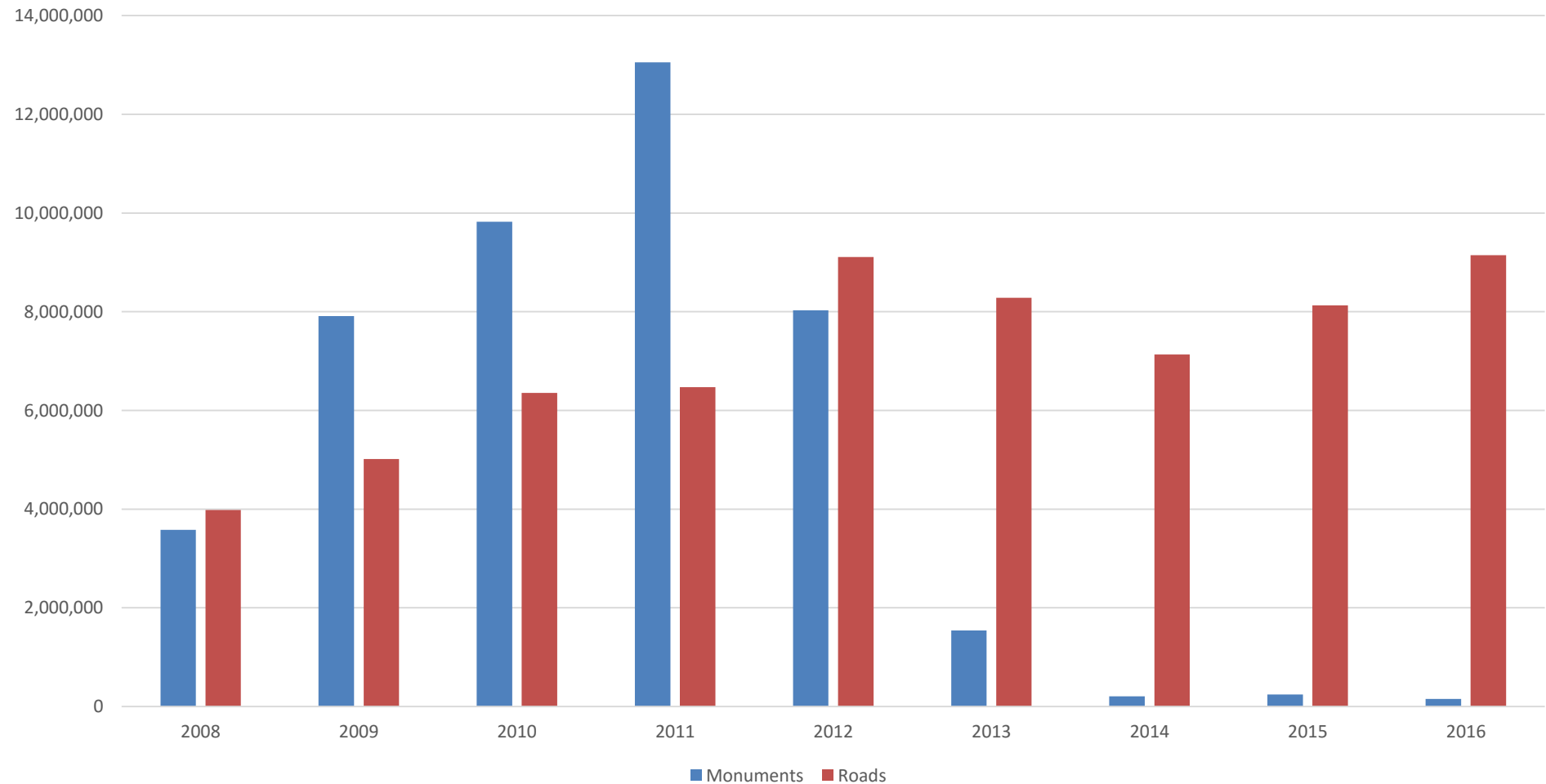
# Issues

- **Urban Space**
  - Conflicts related to green areas vs. parking spaces and residential area
- **LED vs national themes**
  - Mining industries
- **Local referendums = 5 + 2 and counting**

# Issues

- **LED vs national themes**

LSG expenditures for monuments and roads maintenance



Thank you