Adaptability on a local level in Mazowieckie voivodeship

Dorota Celińska-Janowicz and Adam Płoszaj

EUROREG | CENTRUM EUROPEJSKICH STUDIÓW REGIONALNYCH I LOKALNYCH UNIWERSYTET WARSZAWSKI
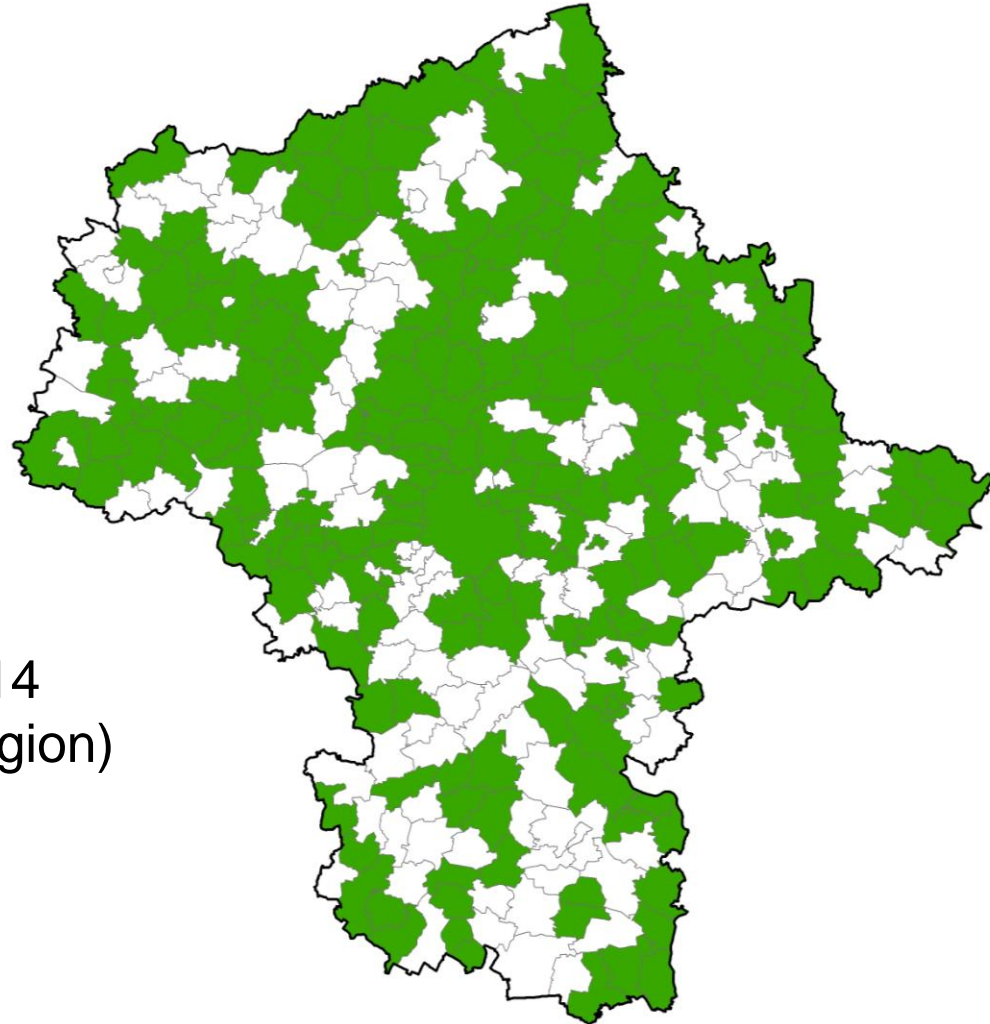
Plan of the presentation

1. Aim

2. Data and regional setting

3. Background: crisis in Poland

4. How to measure adaptability on the local level?

    – Dependent variables

5. How to measure adaptive potential (factors of adaptability) on the local level?

    – Independent variables

6. Regression results

7. Conclusions

Aim

To test empirically selected plausible indicators of adaptability and adaptative potential

Regional setting: Mazowieckie voivodship

GDP per capita 2010

Population

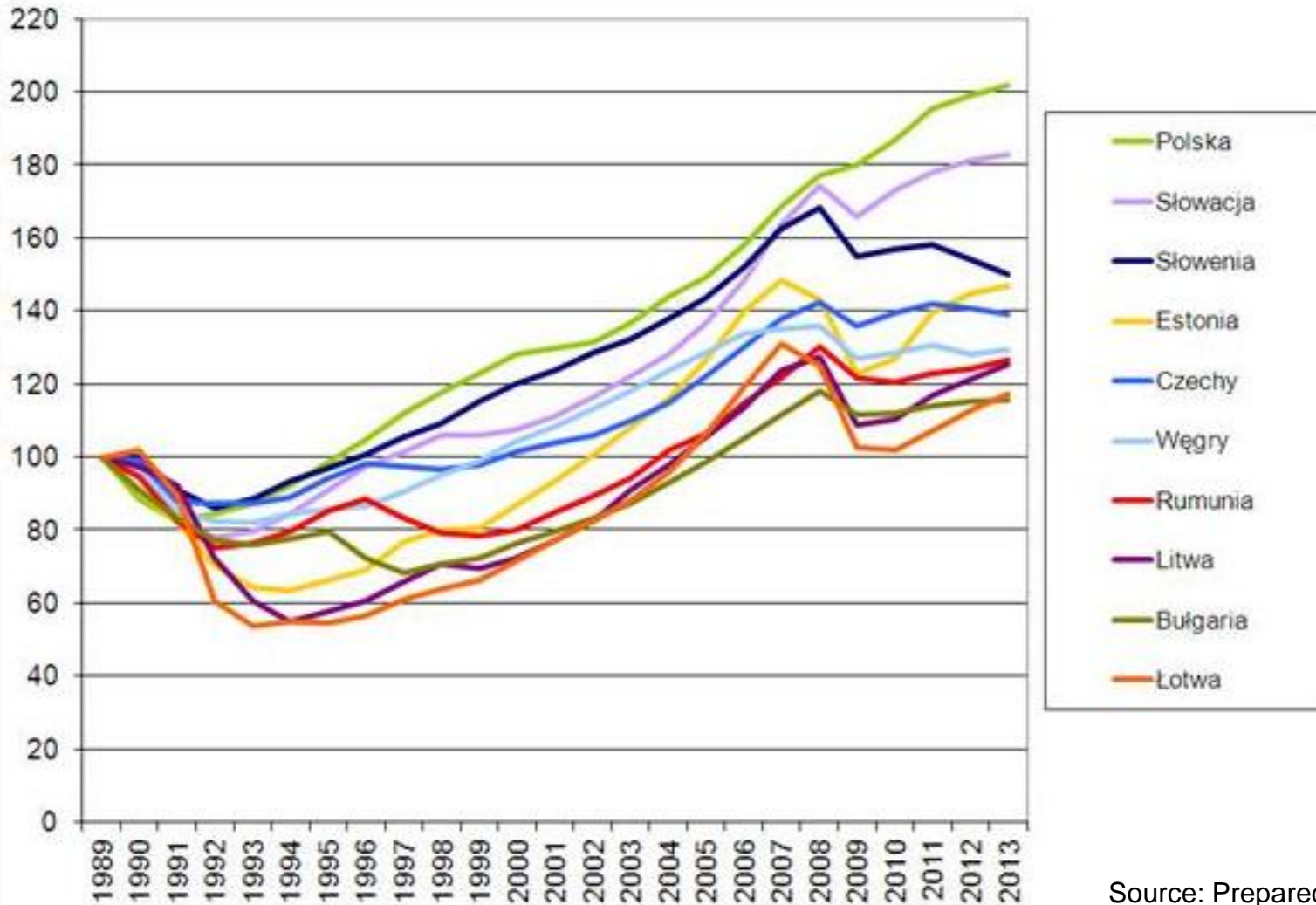|	
	72 665 - 111 696
	45 920 - 72 664
	35 781 - 45 919
	26 656 - 35 780
	21 830 - 26 655
	19 718 - 21 829

Data

1. Polish public statistics

2. Survey of local councils (municipalities; PL: gmina)

Return rate: 60.5% (190 from 314 municipalities in Mazovieckie region)
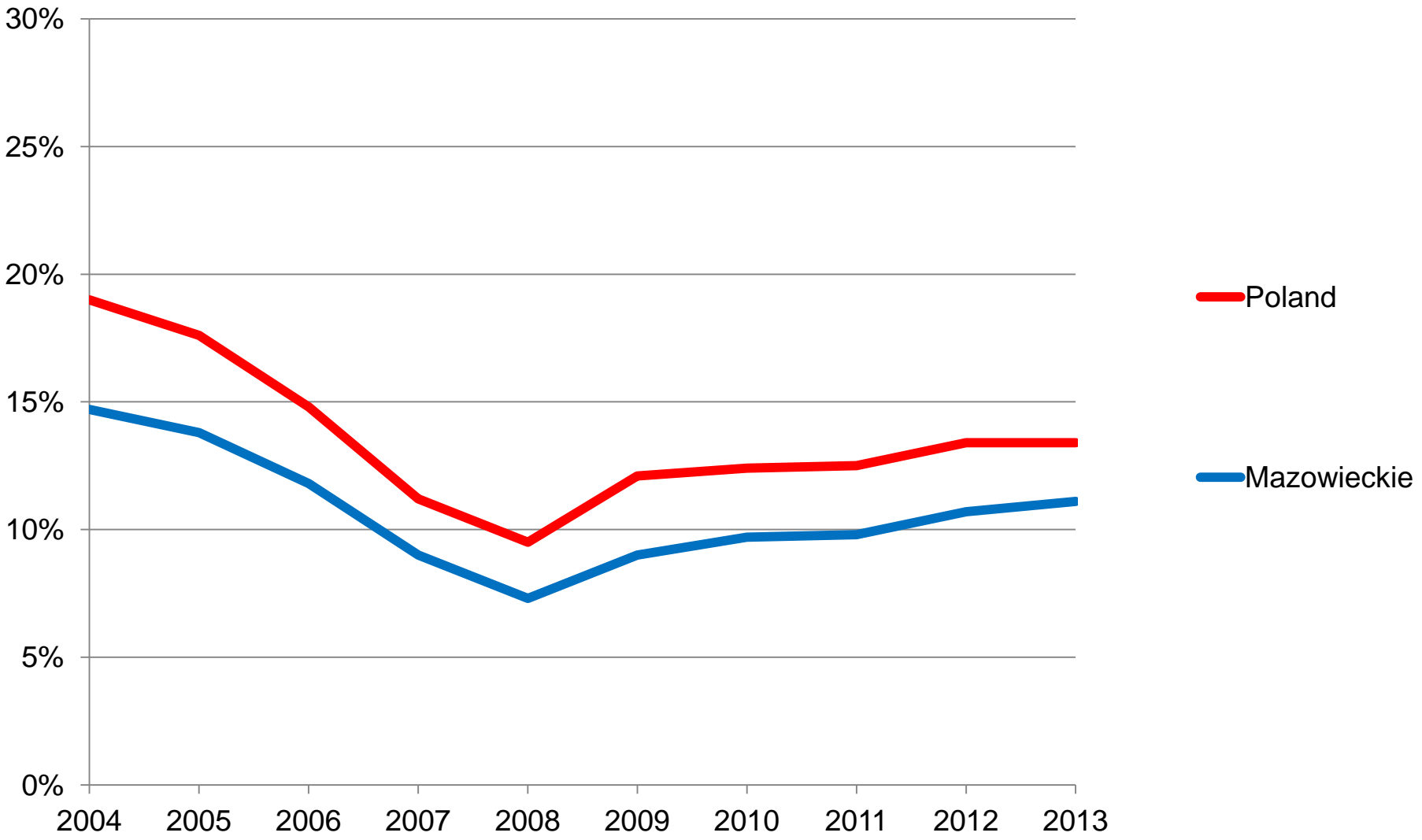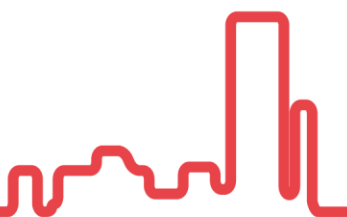
Background: no real crisis in Poland

Real GDP dynamics (1989 = 100)

Legend: Polska, Słowacja, Słowenia, Estonia, Czechy, Węgry, Rumunia, Litwa, Bułgaria, Łotwa

Background: no real crisis in Poland…
but unemployment has risen

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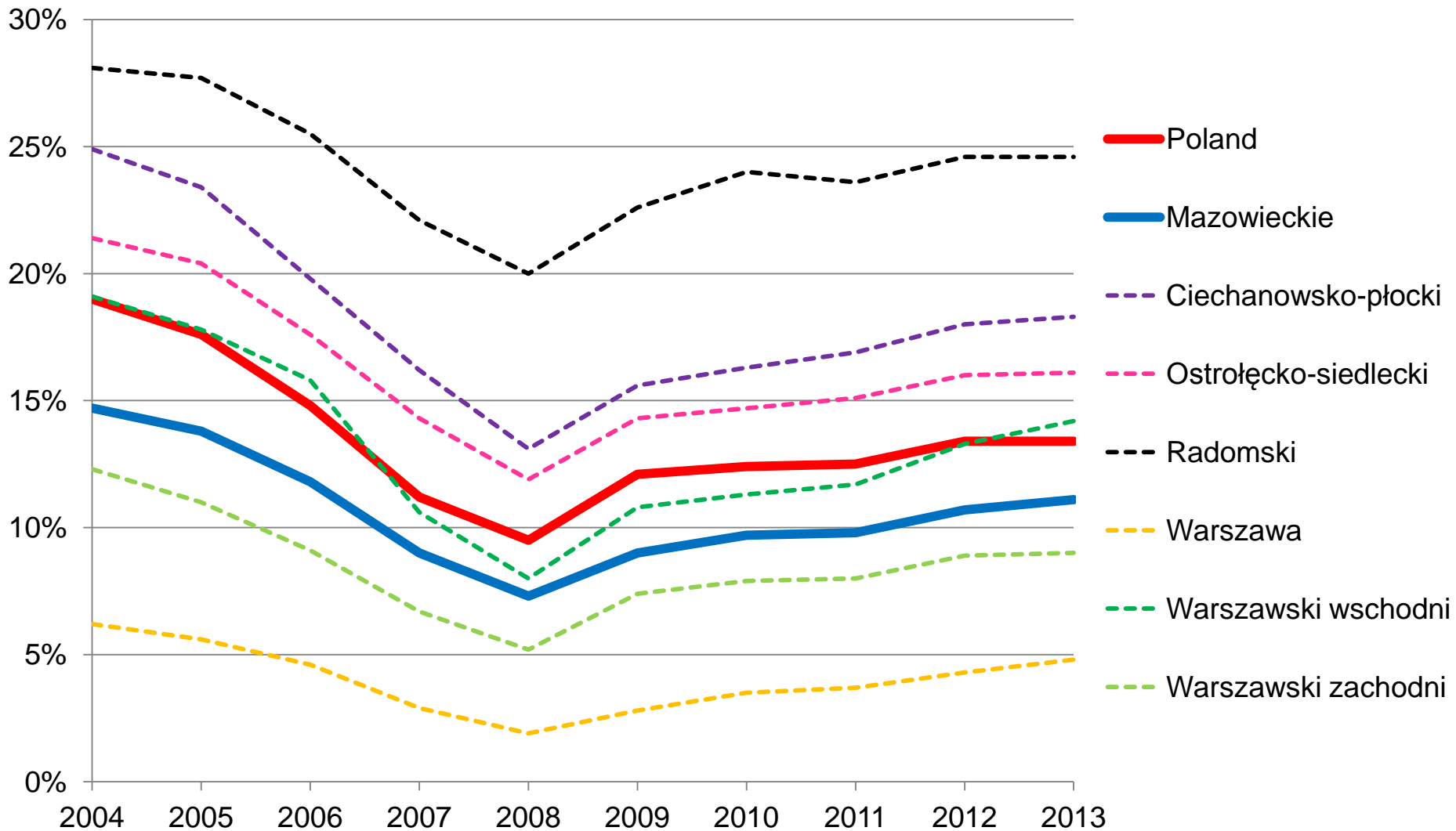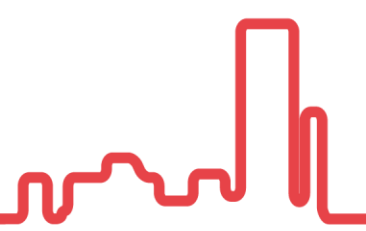
Legend:
- Poland
- Mazowieckie
- Ciechanowsko-płocki
- Ostrołęcko-siedlecki
- Radomski
- Warszawa
- Warszawski wschodni
- Warszawski zachodni

Background: no real crisis in Poland...
but municipalities tax revenues has fallen

Municipalities' own revenue per capita (constant prices)

Legend: Poland (red), Mazowieckie (blue). X-axis: 2004–2013. Y-axis: 0–3000.

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but municipalities tax revenues has fallen

Municipalities' own revenue per capita (constant prices)

Legend:
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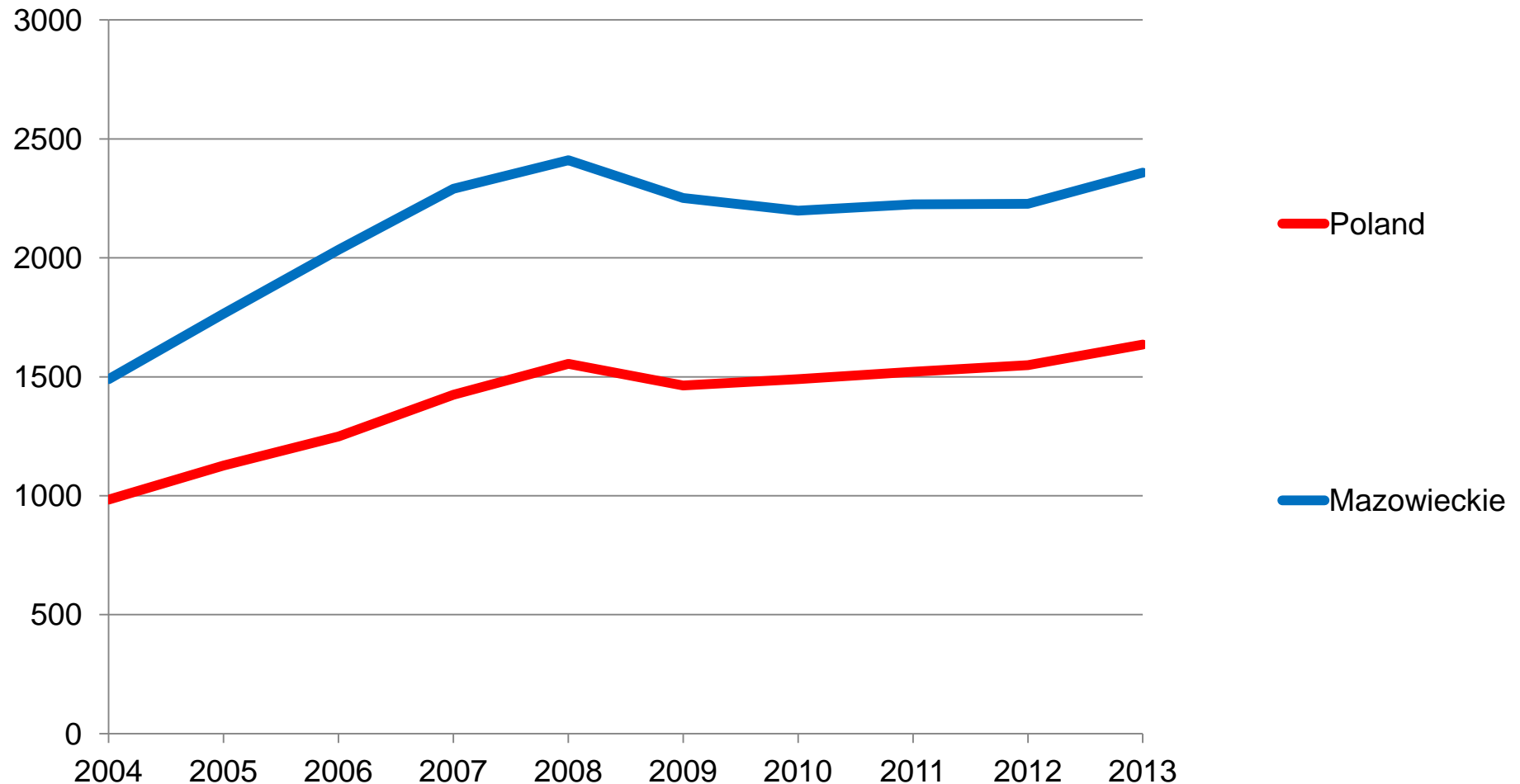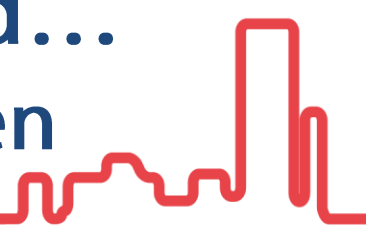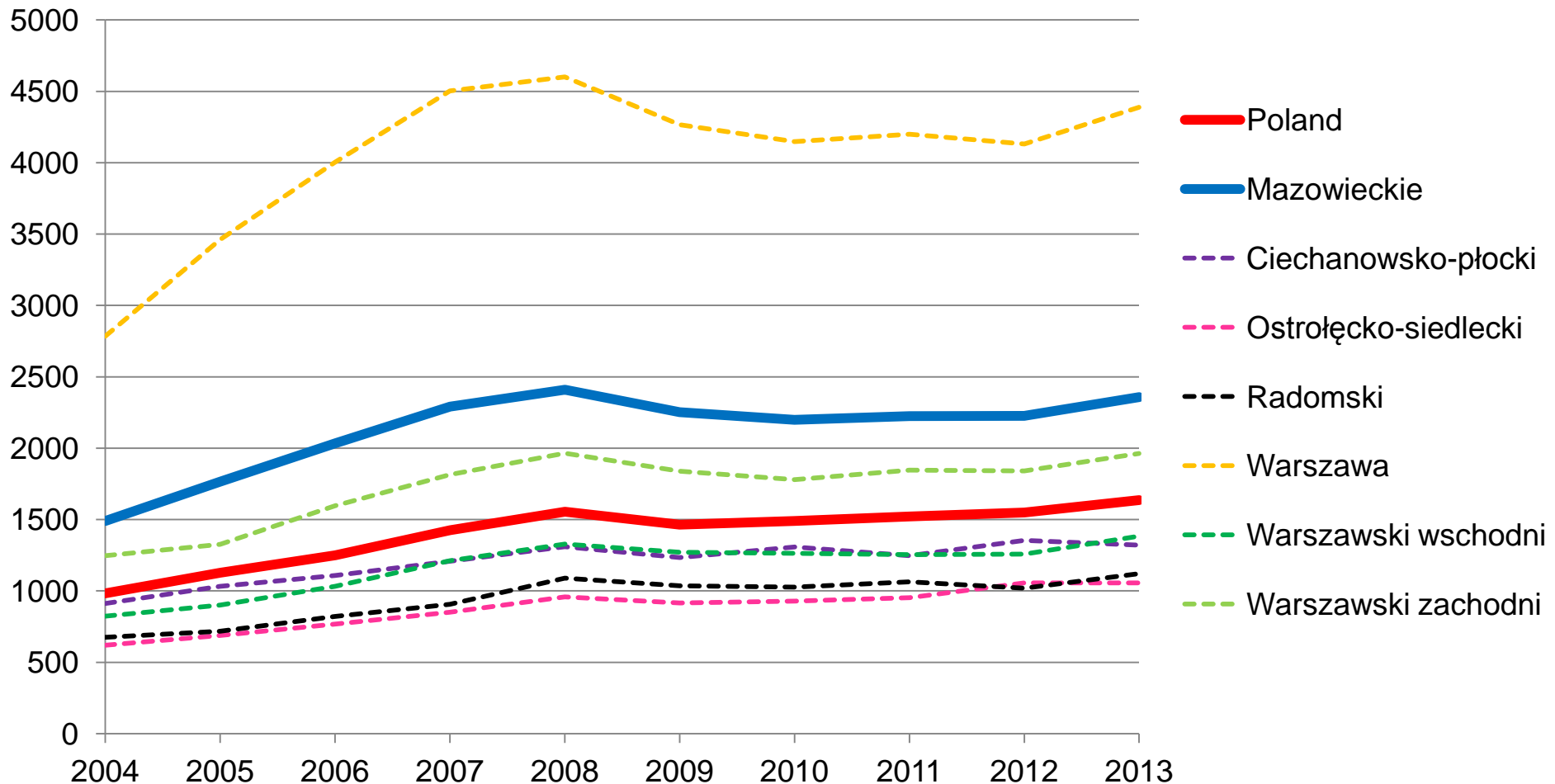
Dependent variable: unemployment

(relative values: regional average = 100)
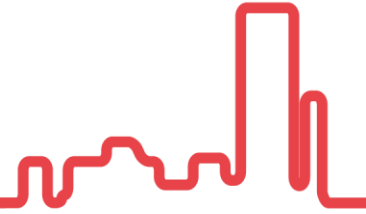
Unemployment 2012

Unemployment change 2008-2012

Rel. unempl. rate 2012
- 34 - 57
- 58 - 77
- 78 - 97
- 98 - 123
- 124 - 152
- 153 - 194
- 195 - 272

Rel. unempl. 2008-2012
- 0,44 - 0,79
- 0,80 - 0,92
- 0,93 - 1,03
- 1,04 - 1,17
- 1,18 - 1,34
- 1,35 - 1,55
- 1,56 - 1,97
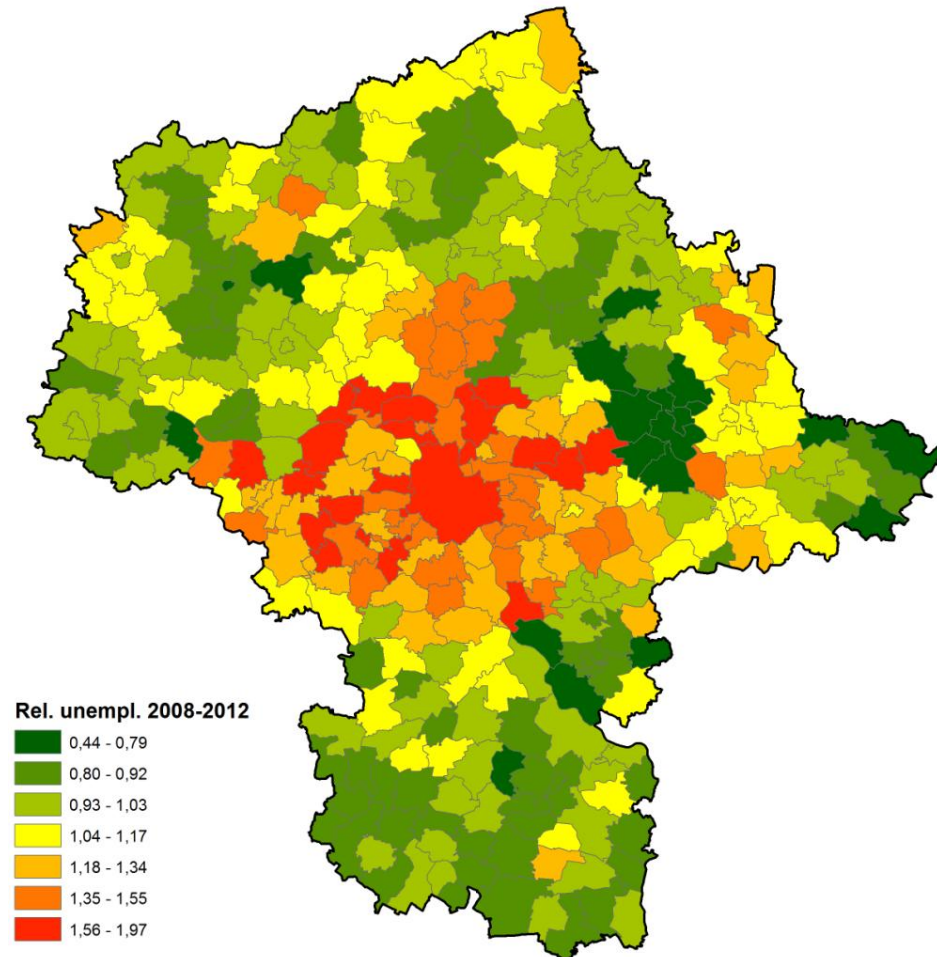
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Unemployment change 2008-2012

Dependanet variable: municipalities' tax revenues
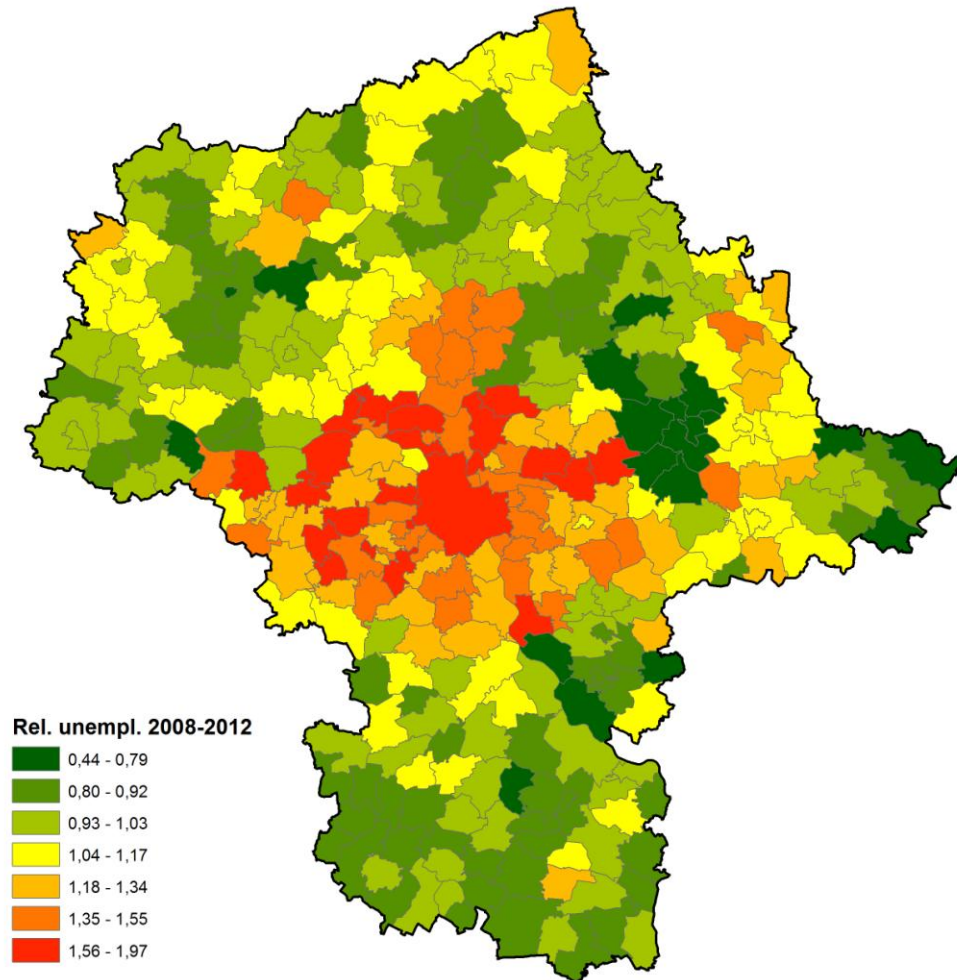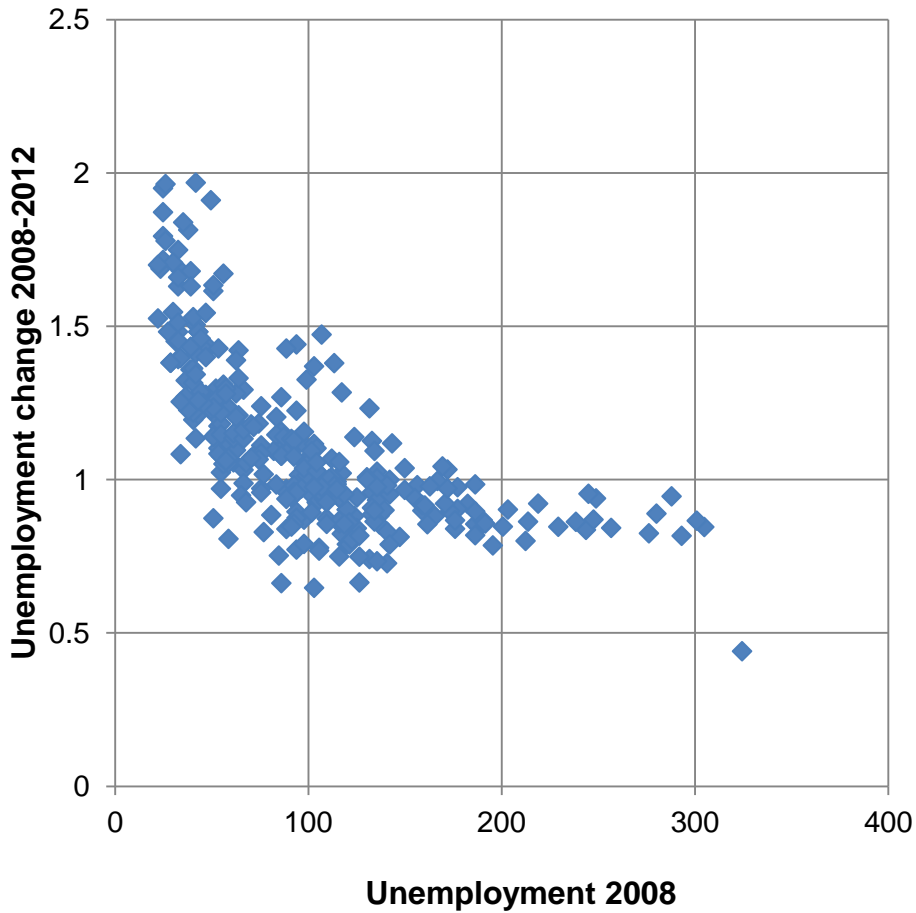
(relative values: regional average = 100)

Municipalities' own revenue 2012

Change 2008-2012

Com. inc. 2012
- 254 - 415
- 171 - 253
- 122 - 170
- 95 - 121
- 77 - 94
- 58 - 76
- 32 - 57

Com. inc. 2008-2012
- 2,08 - 3,49
- 1,44 - 2,07
- 1,17 - 1,43
- 1,03 - 1,16
- 0,92 - 1,02
- 0,76 - 0,91
- 0,40 - 0,75
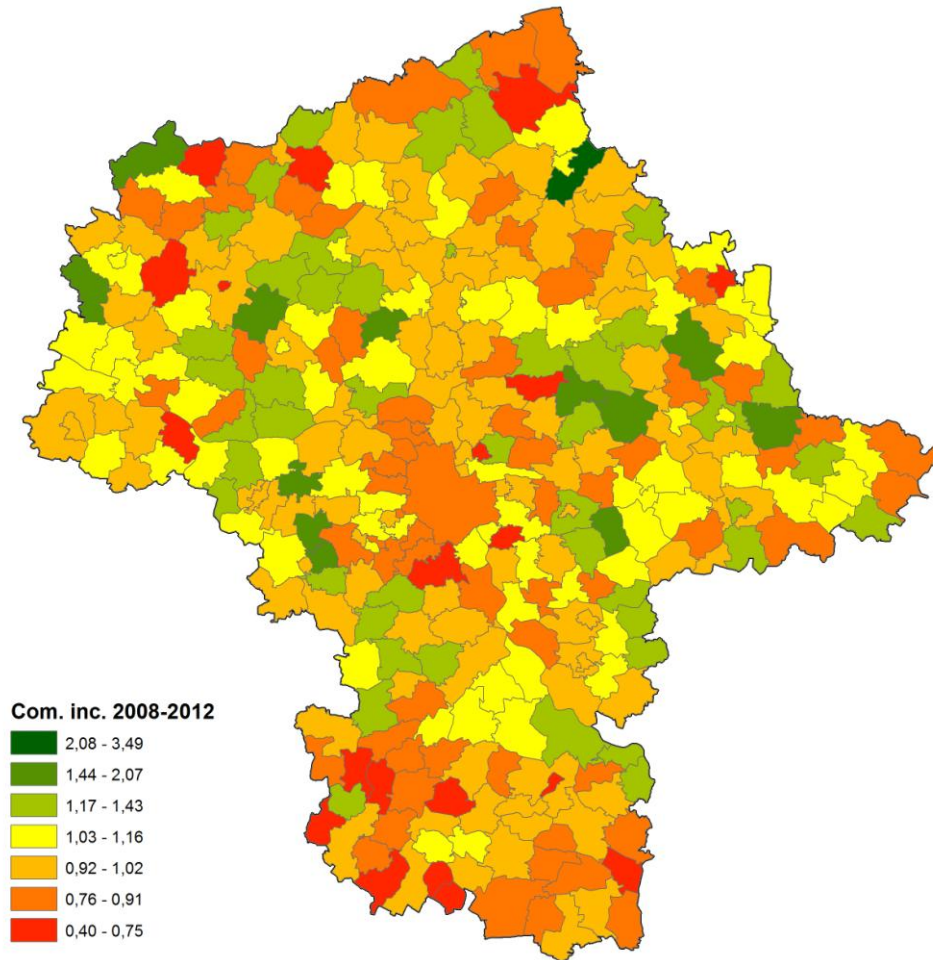
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Factors of adaptability: characteristics of local council

To what extent the following statements describe situation in your municipality?

Statement	Definitely yes	Rather yes	It is difficult to say	Rather no	Definitely no
Municipal Office has a significant impact on local economy	14%	45%	21%	18%	3%
Municipal Office has a significant impact on local businesses' condition	2%	14%	34%	40%	10%
Municipal Office has a significant impact on local unemployment	3%	17%	34%	39%	7%
Municipal Office has a significant impact on migration	1%	18%	26%	42%	13%
Municipal Office monitors local businesses' condition	1%	15%	15%	45%	24%
Municipal Office collects information about problems of local businesses	3%	27%	18%	40%	12%
Municipal Office monitors situation on the local labor market	8%	51%	17%	20%	4%
Municipal Office monitors scale of emigration from the municipality	14%	46%	11%	25%	3%
Municipal Office monitors scale of inflow of new residents	20%	53%	9%	15%	3%
Municipal Office has a monitoring system of the quality of the office's work	25%	24%	8%	28%	16%
Employees of the Municipal Office improve their qualifications	57%	41%	0%	2%	1%

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Sense of influence on the state of the municipality

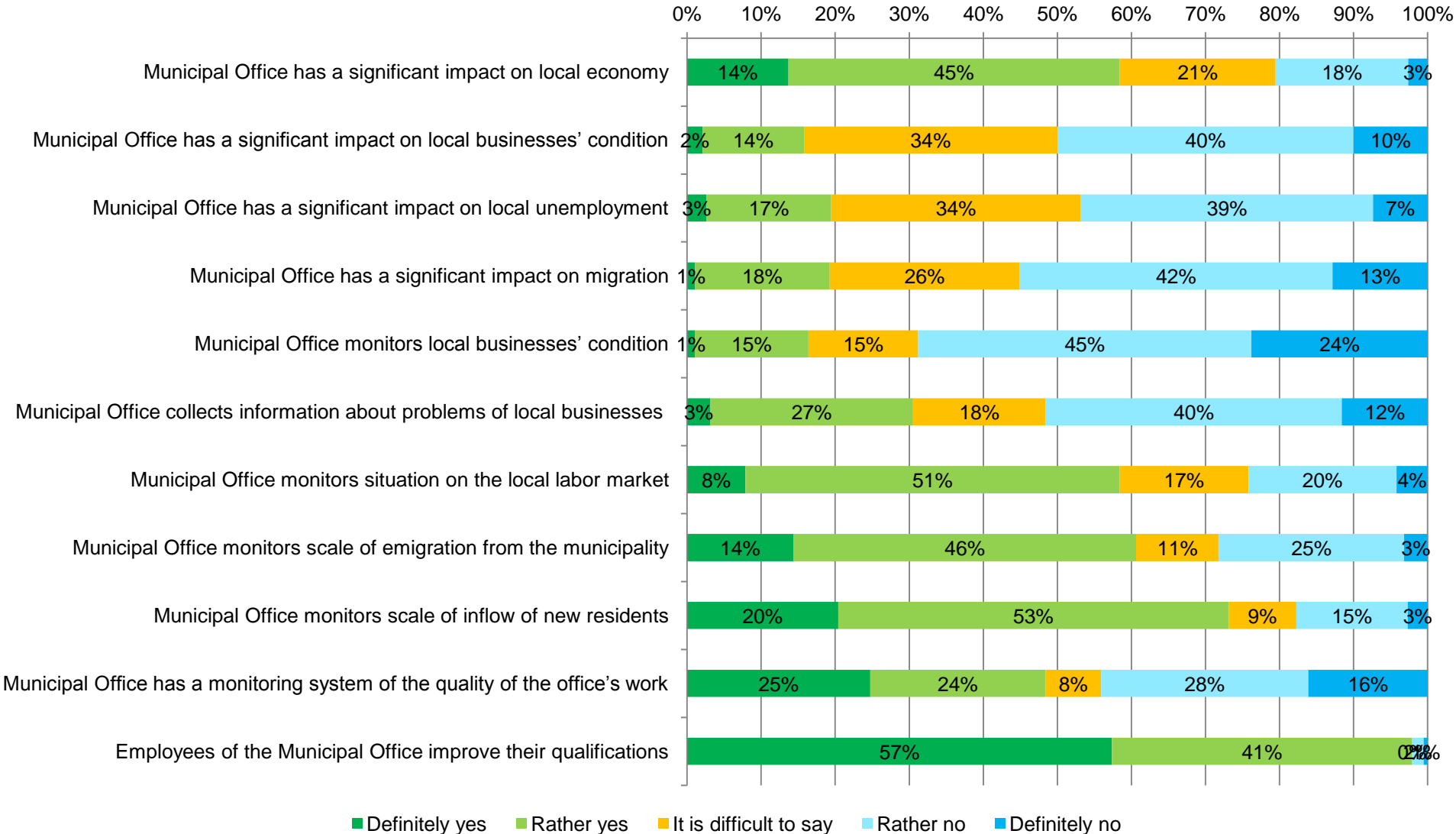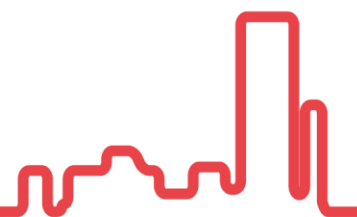Legend: ■ Definitely yes ■ Rather yes ■ It is difficult to say ■ Rather no ■ Definitely no

Factors of adaptability: characteristics of local council

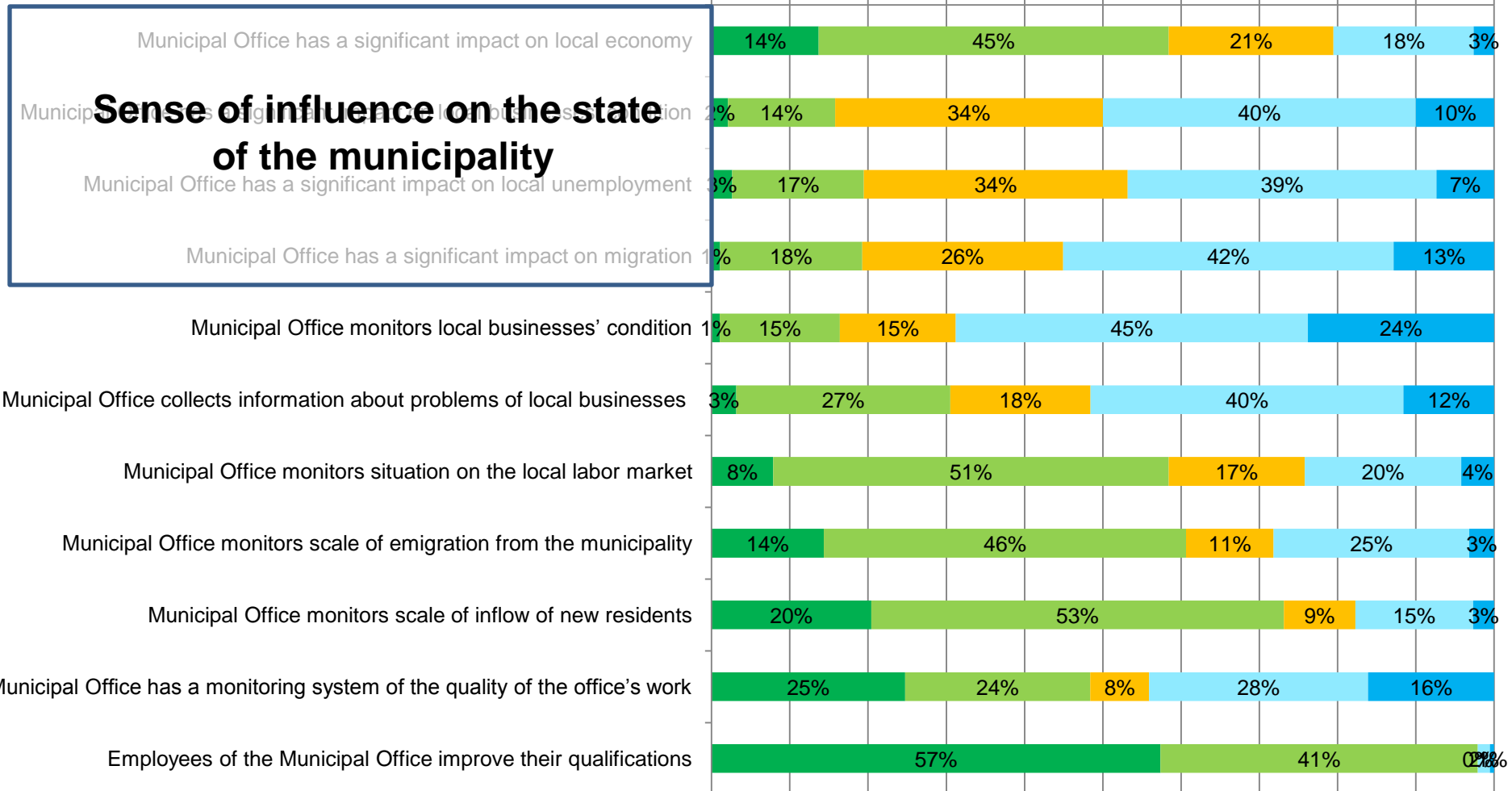**To what extent the following statements describe situation in your municipality?**

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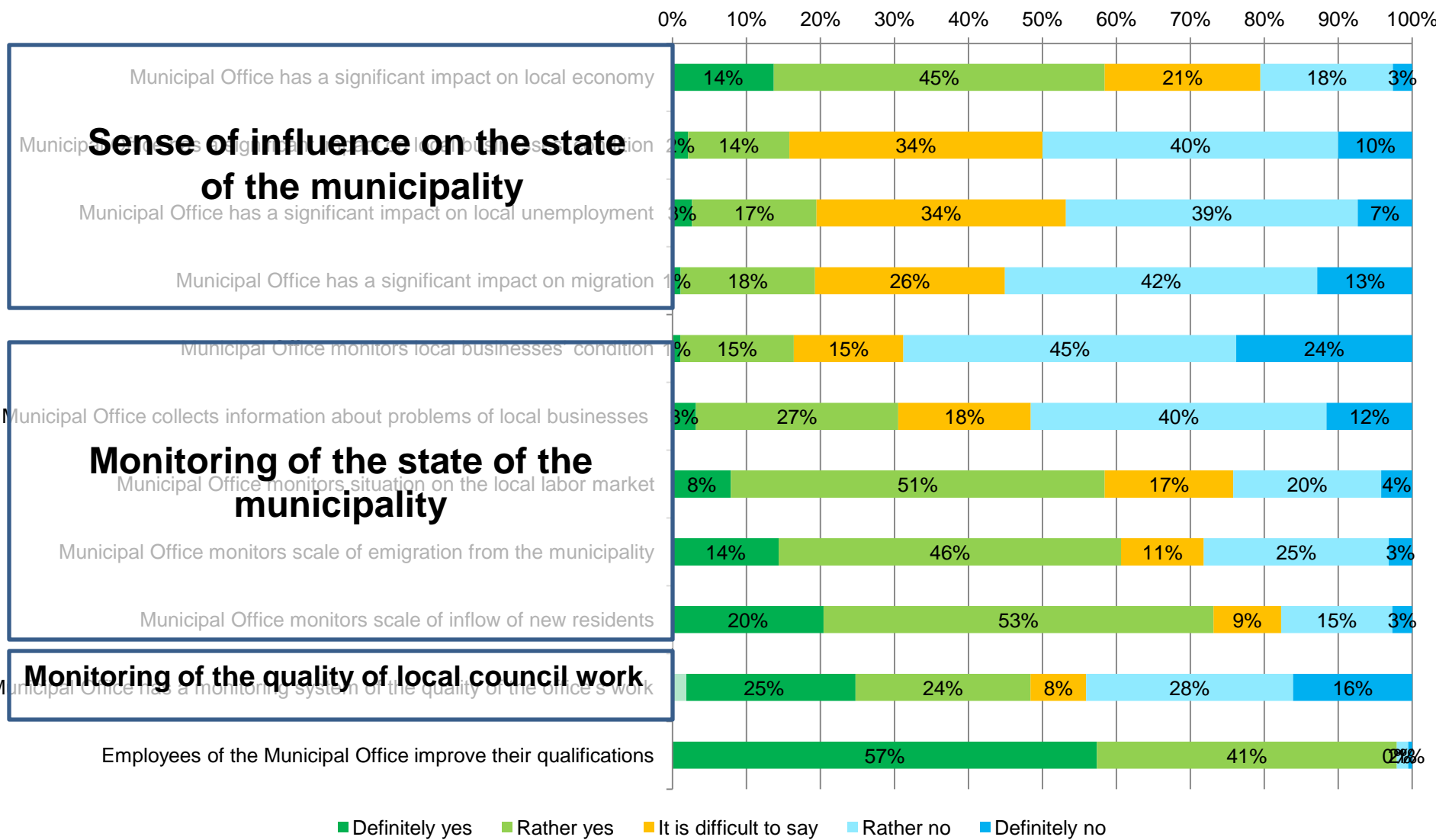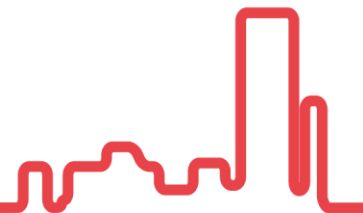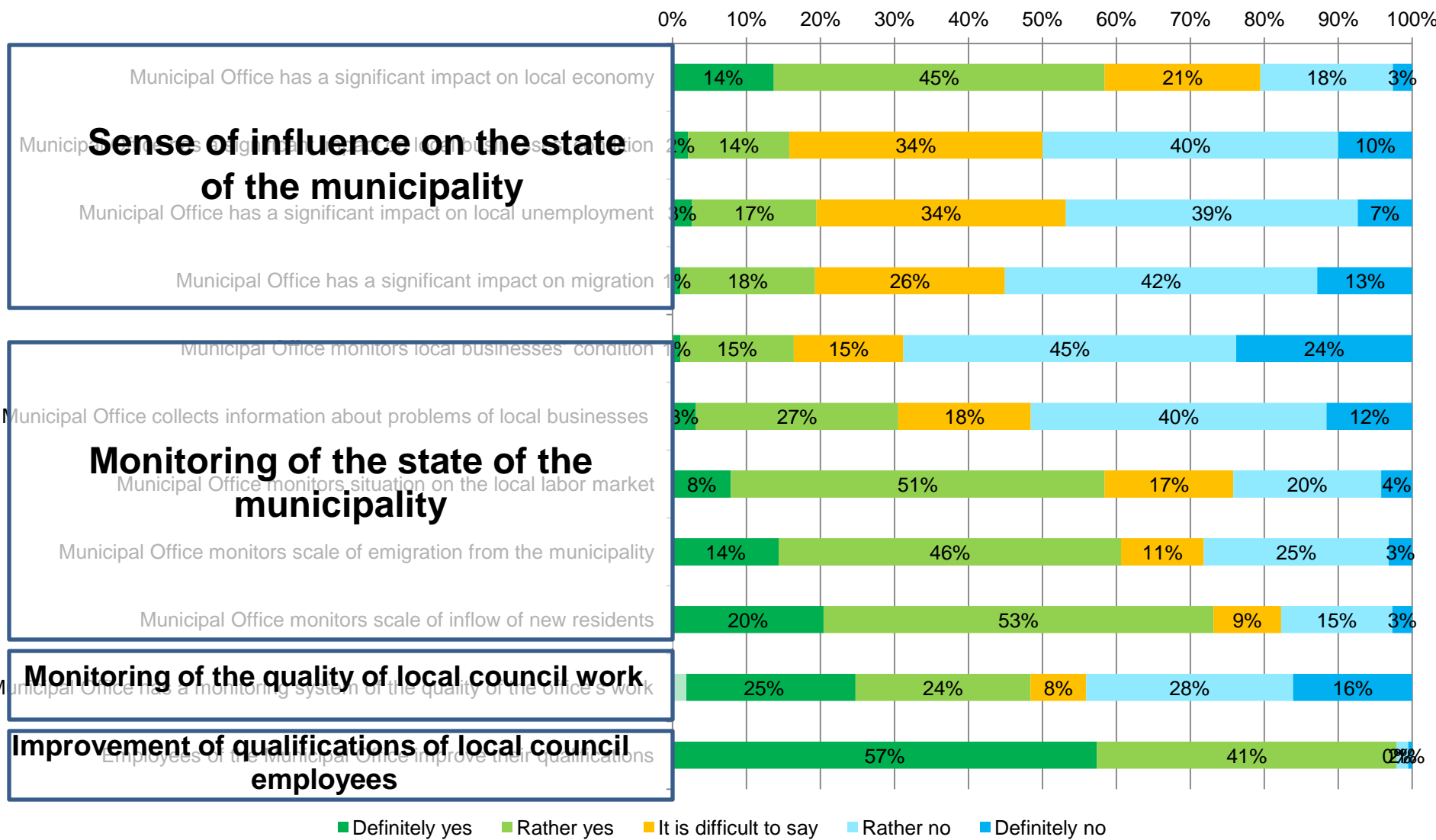
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Sense of influence on the state of the municipality

Monitoring of the state of the municipality

Monitoring of the quality of local council work

Factors of adaptability: characteristics of local council

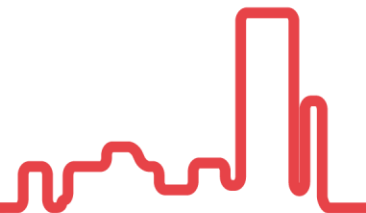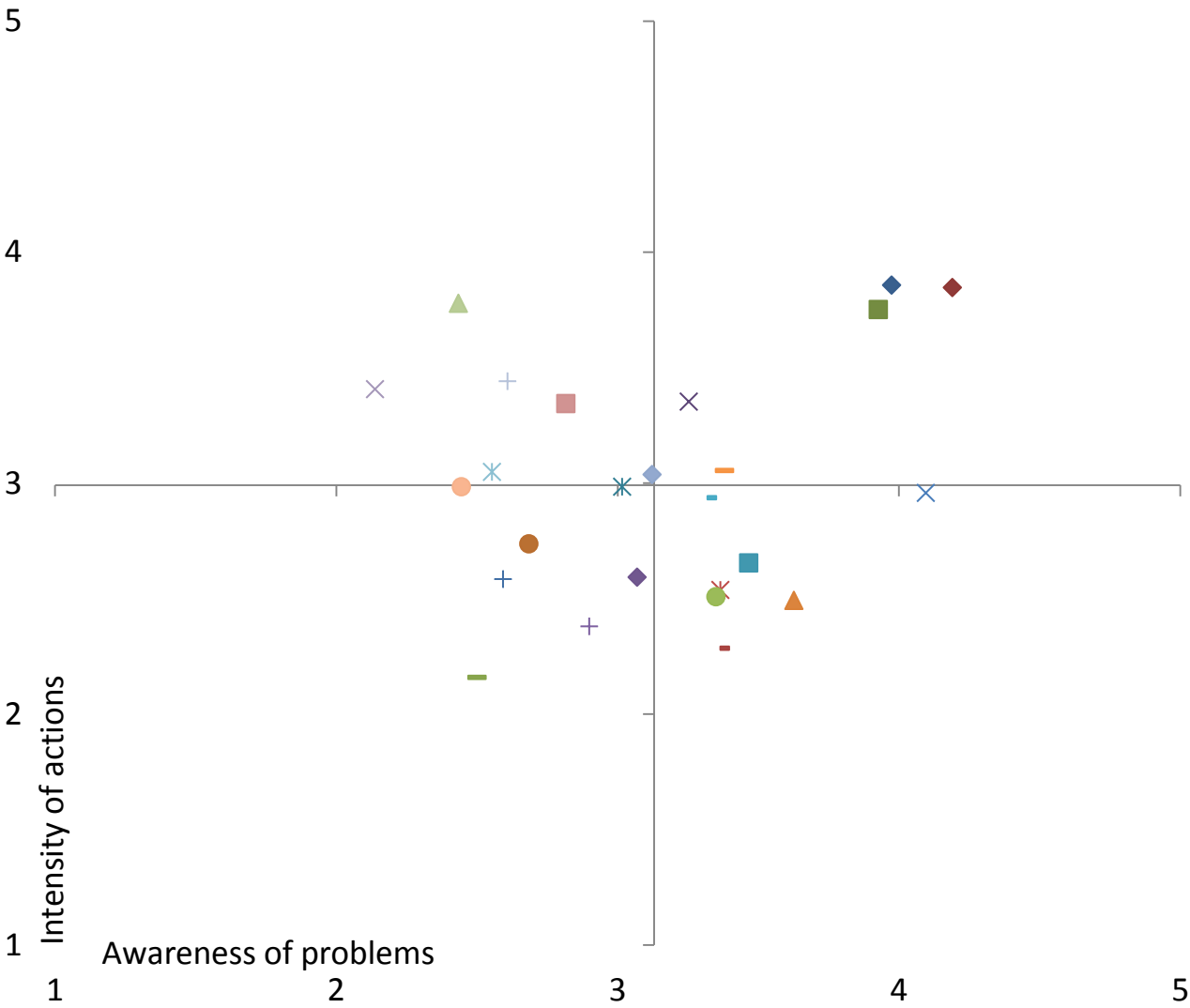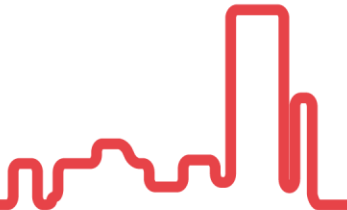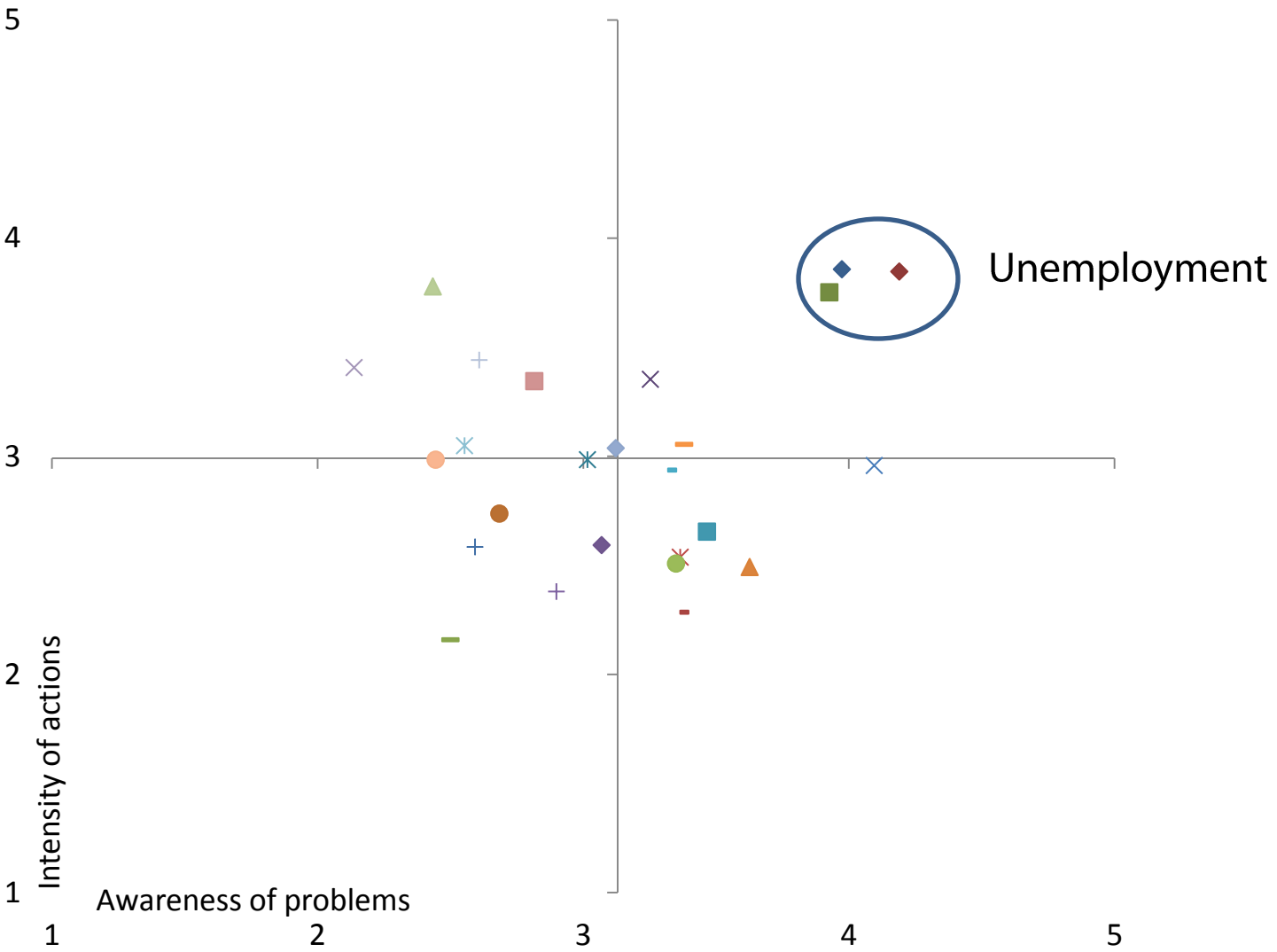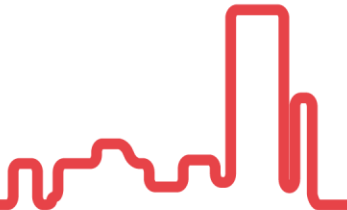**To what extent the following statements describe situation in your municipality?**

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Improvement of qualifications of local council employees

Statement					
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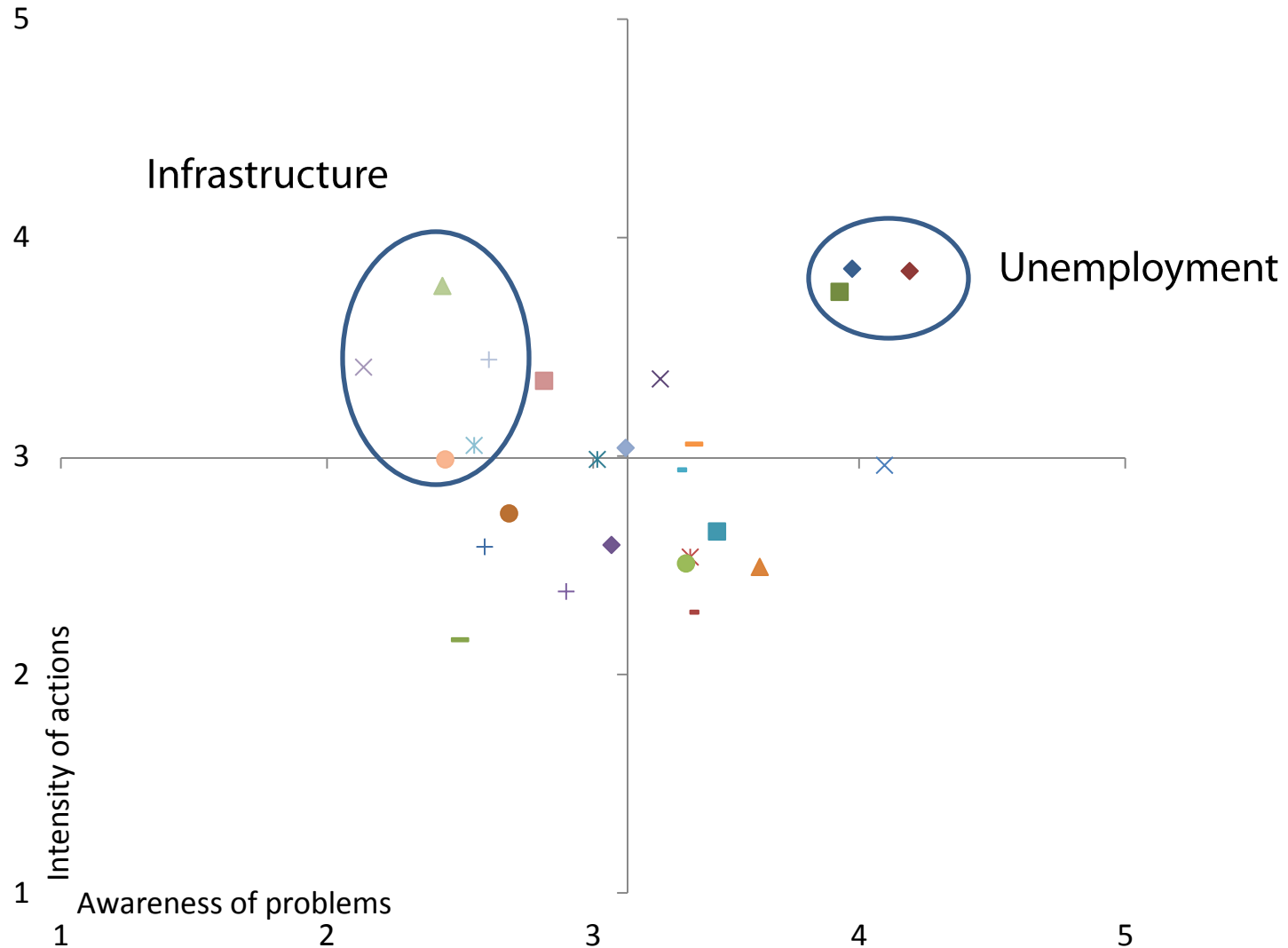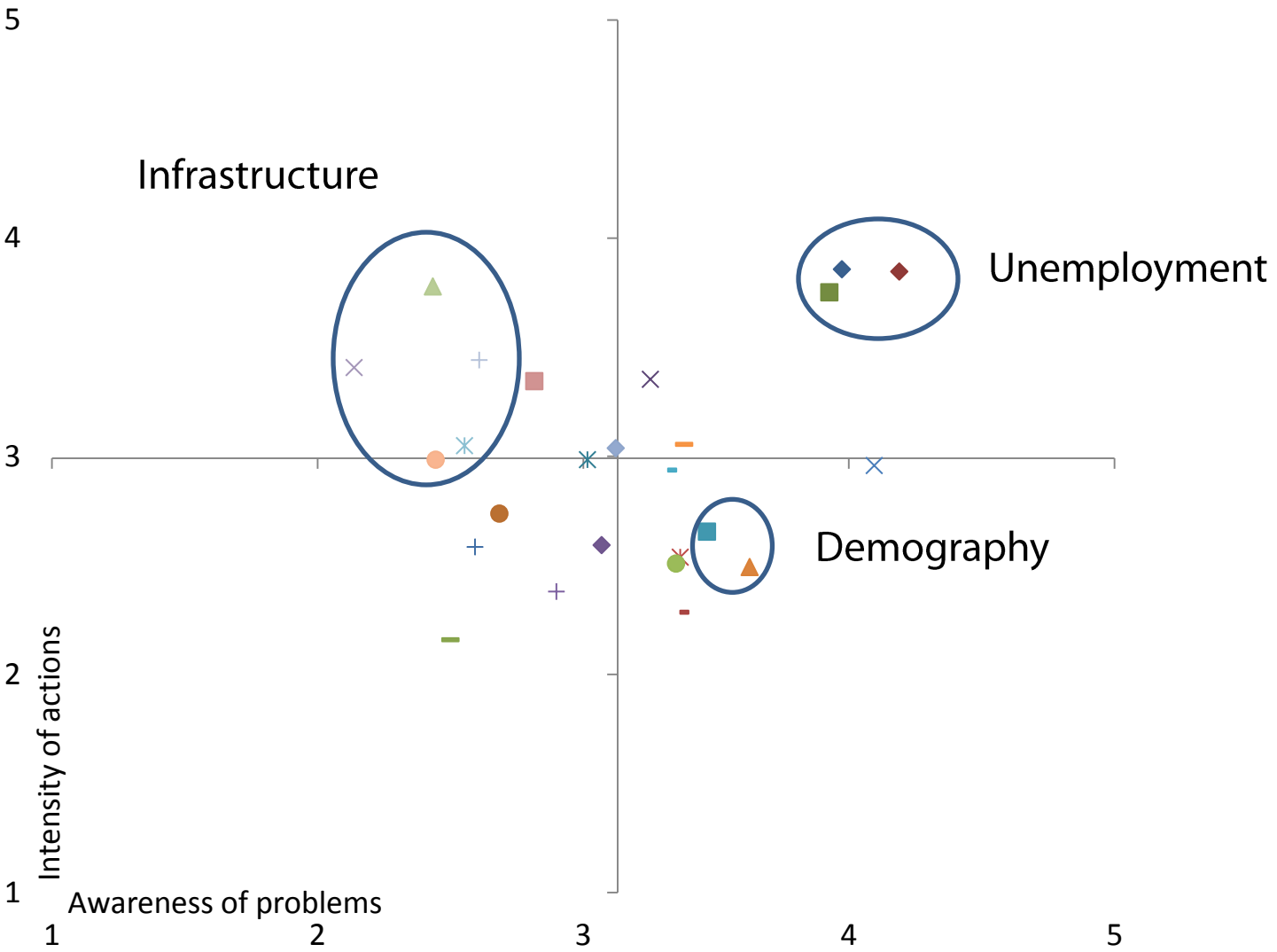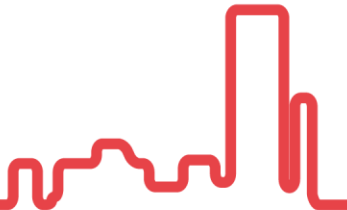Legend: ■ Definitely yes ■ Rather yes ■ It is difficult to say ■ Rather no ■ Definitely no

Factors of adaptability:
Problems vs actions as seen by local governements

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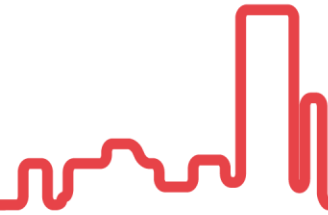## Problems vs actions as seen by local governements

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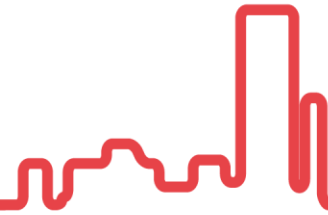
Results – static indicators
Linear regression

Dependent variables	Unemployment		Municipalities' tax revenue	
	B	Sig.	B	Sig.
Sense of influence on the state of the municipality	0,007	0,940	-0,078	0,372
Monitoring of the state of the municipality	-0,094	0,323	-0,062	0,503
Monitoring of the quality of local council work	-0,030	0,498	0,081	0,056
Improvement of qualifications of local council employees	-0,284	0,091	-0,020	0,902
Evaluation of local council actions	-0,030	0,676	0,030	0,670
Intensity of problems	-0,063	0,704	**-0,509**	**0,001**
Overall activity	0,035	0,814	0,157	0,278
Number of inhabitants [2012]	0,131	0,025	0,077	0,176
Population density [2012]	0,084	0,065	0,003	0,950
Distance to Warsaw	**0,083**	**0,001**	-0,002	0,927
Entreprises per 10 ths inhabitants [2012]	0,106	0,370	**0,683**	**0,000**
Human capital - average secondary school final test grades [2008]	**-0,908**	**0,000**	-0,470	0,065
Social capital - local government elections elections voter turnout [2010]	**0,664**	**0,001**	-0,348	0,078
Poverty - percent of people covered by social welfare [2012]	**0,430**	**0,000**	0,119	0,120
Unemployment [2012]			**-,0235**	**0,002**
Welth of the municipality - own rewenue per capita [2012]	**-0,252**	**0,002**		
Constant	1,597	0,322	7,184	0,000
Adj-R2	*0,510*		*0,692*	

Results – dynamic indicators
Linear regression

Dependent variables	Relative Unemployment change		Relative municipalities' tax revenue change	
	B	Sig.	B	Sig.
Sense of influence on the state of the municipality	-0,062	0,155	-0,008	0,892
Monitoring of the state of the municipality	-0,036	0,423	-0,058	0,358
Monitoring of the quality of local council work	0,041	0,059	0,033	0,267
Improvement of qualifications of local council employees	-0,145	0,073	0,124	0,271
Evaluation of local council actions	0,026	0,450	0,031	0,526
Intensity of problems	-0,117	0,134	-0,188	0,086
Overall activity	0,114	0,116	0,036	0,722
Number of inhabitants [2012]	-0,017	0,548	0,028	0,477
Population density [2012]	0,019	0,371	-0,003	0,933
Distance to Warsaw	-0,006	0,604	-0,001	0,960
Entreprises per 10 ths inhabitants [2012]	0,177	0,003	0,105	0,201
Human capital - average secondary school final test grades [2008]	-0,094	0,454	-0,307	0,082
Social capital - local government elections elections voter turnout [2010]	0,104	0,286	**-0,440**	**0,001**
Poverty - percent of people covered by social welfare [2012]	**0,113**	**0,003**	0,039	0,453
Unemployment [2008]	**-0,348**	**0,000**	-0,061	0,133
Welth of the municipality - own rewenue per capita [2008]	-0,092	0,027	**-0,254**	**0,000**
Constant	0,637	0,388	3,905	0,000
Adj-R2	*0,658*		*0,148*	

Conclusions

1. Awareness of problems does not always translate into actions
2. Local authorities tend to undertake actions in simple and 'familiar' areas (like unemployment and infrastructure), while more complex problems are perceived but not addressed
3. Municipalities do not feel that they can influence on local economy
4. Only a limited number of local governments systematically monitor the state of the municipality
5. No evidence that quality of local government have a direct influence on adaptability
   - Other factors could be more important (macro, exogenouos)
   - Path dependency
   - Too short period of the analysis

Period of the analysis
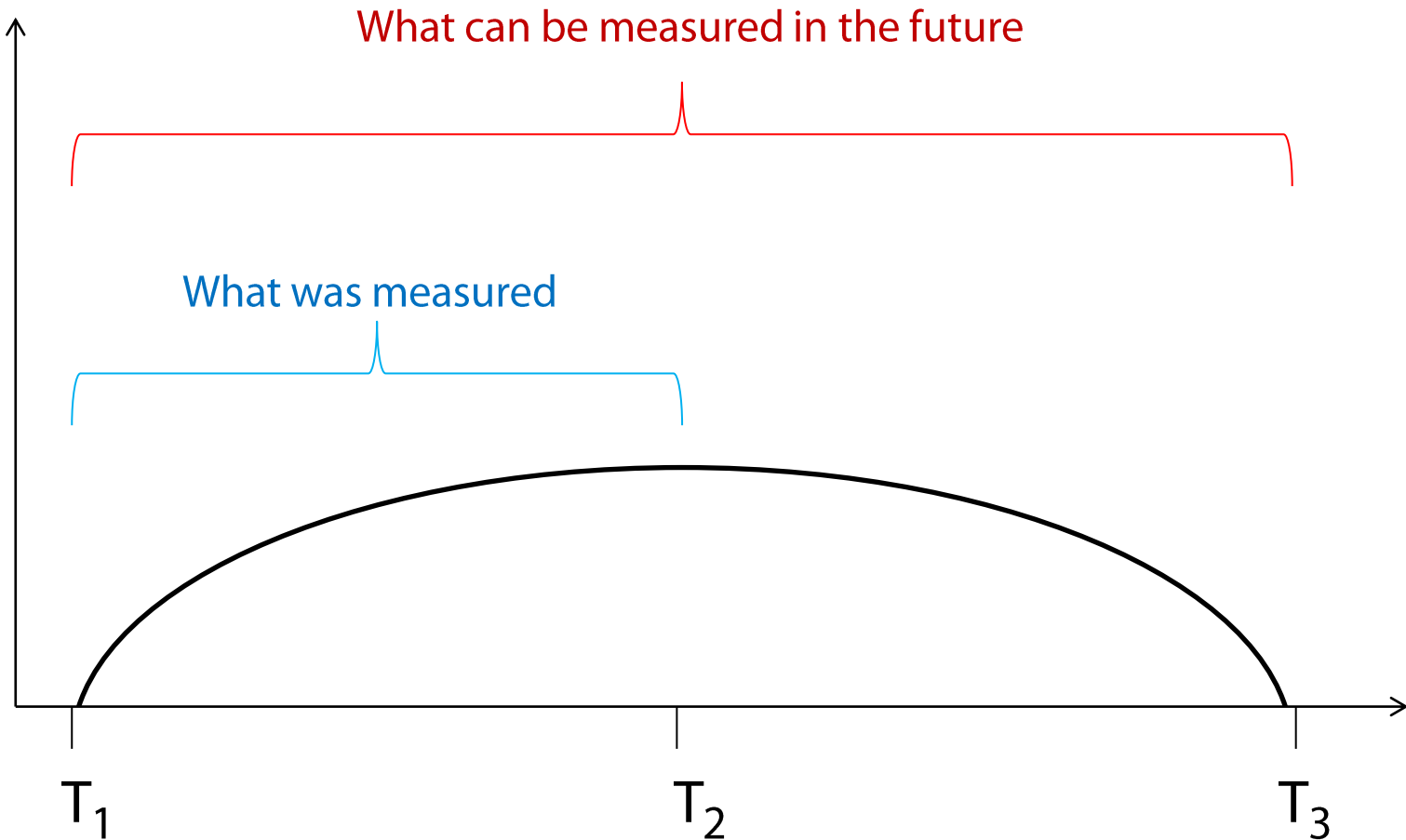
Thank you

Adam Ploszaj: aploszaj@gmail.com
Dorota Celońska-Janowicz: d.celinska@uw.edu.pl

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