



## EU infrastructure investment – rural aspects

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# Outline



1. EU28 infrastructure investment is diminished and lagging recovery
2. Reasons? Saturation unsatisfactory as explanation
3. Macrofinancial factors
4. Local context
5. Rural aspects



# EIB Municipalities Survey



## Key facts

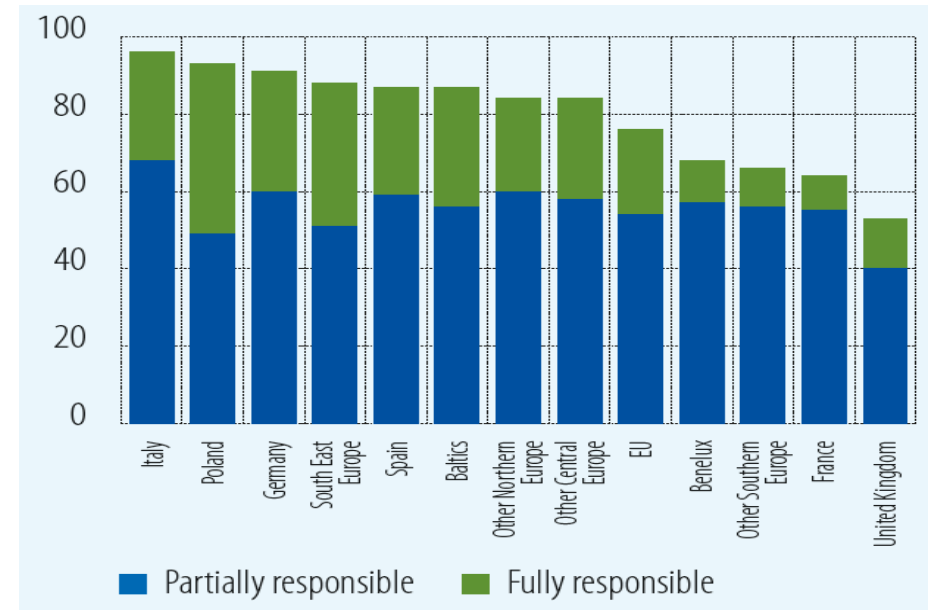
- The EIB surveyed 555 municipalities in 2017 in 28 Member States;
- Questions about infrastructure quality, investment activities and barriers;
- Focus on larger municipalities;
- An add-on module to the annual EIBIS survey of non-financial corporates in EU.

## Motivation

- Important share of public infrastructure expenditure;
- Important local aspect of infrastructure investment needs, gaps and impediments.

## Responsibility for infrastructure investment

*Share of municipalities, in %*



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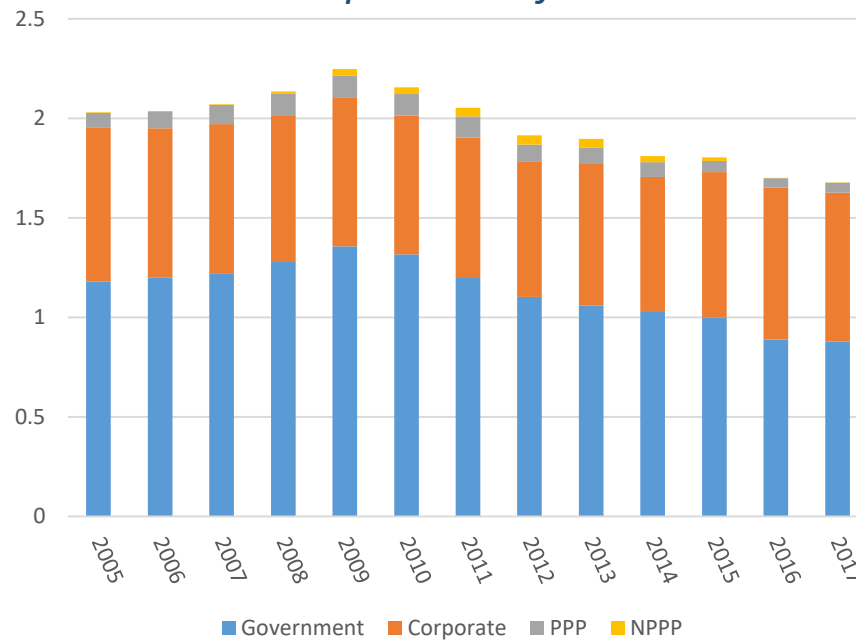


# 1. Infrastructure Investment in EU28

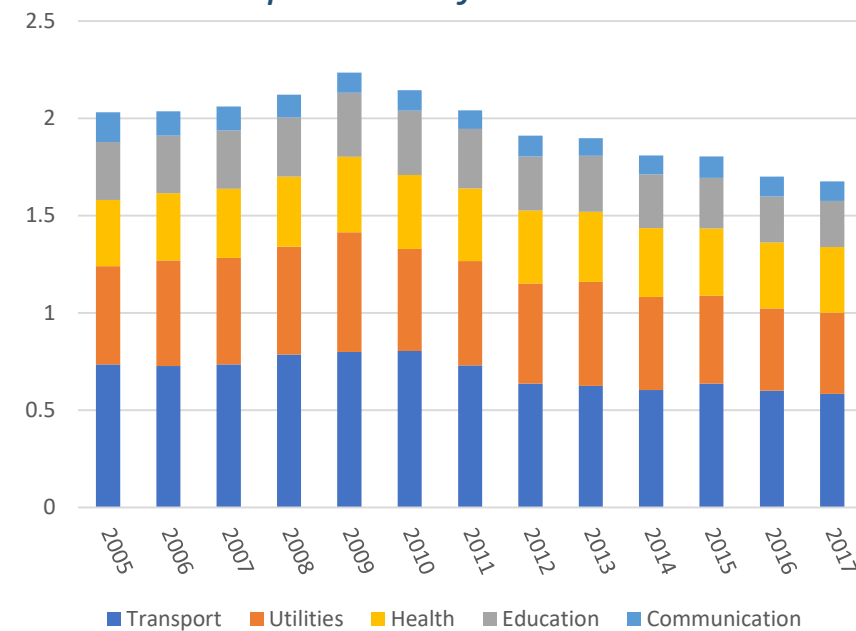


Marked by crisis and lagging behind recovery

Infrastructure by institutional sector  
*per cent of GDP*



Infrastructure by occupational sector  
*per cent of GDP*



Note: Based on EIB Infrastructure Database. Data are missing for Belgium, Croatia, Lithuania, Poland, Romania and the UK. PPP: public-private partnership. 2017 is provisional. Authors' calculations.  
Source: EIB infrastructure database.

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## 2. Reason? Saturation an unsatisfactory answer...

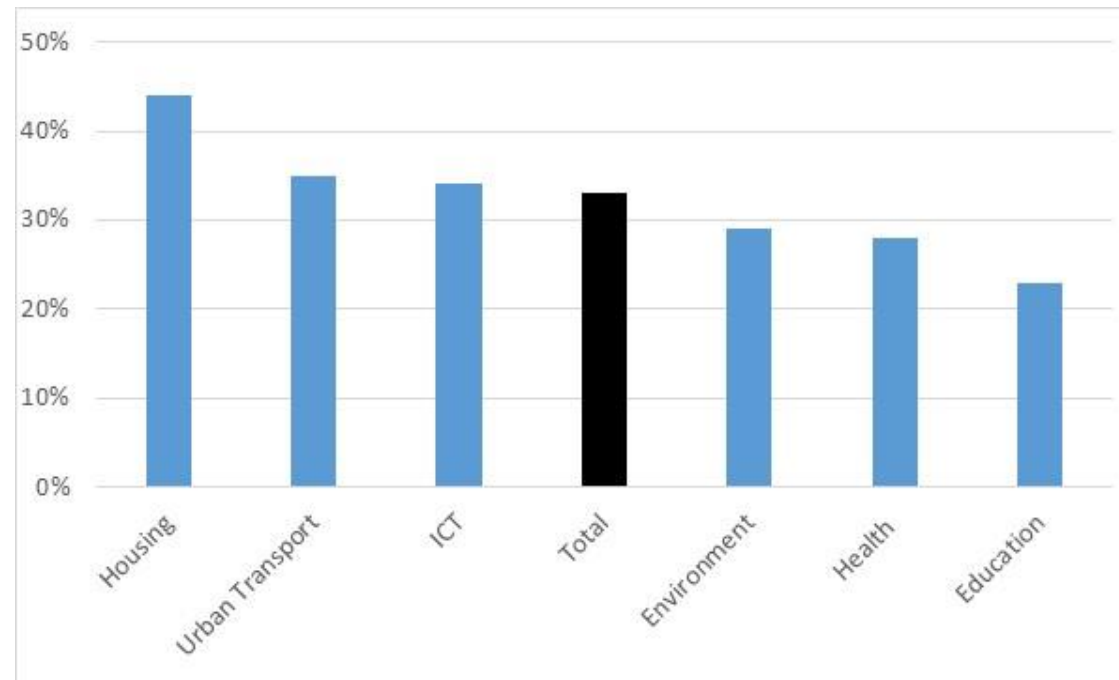


Three arguments:

- 1/3 of surveyed municipalities deem investment levels insufficient
- Infrastructure dropped most in regions reporting poor quality
- Infrastructure improvements linked to private sector capacity to benefit from economic opportunity

### Perceived underinvestment

*share of municipalities by sectoral orientation, in %*



Source: EIB Municipalities Survey 2017.

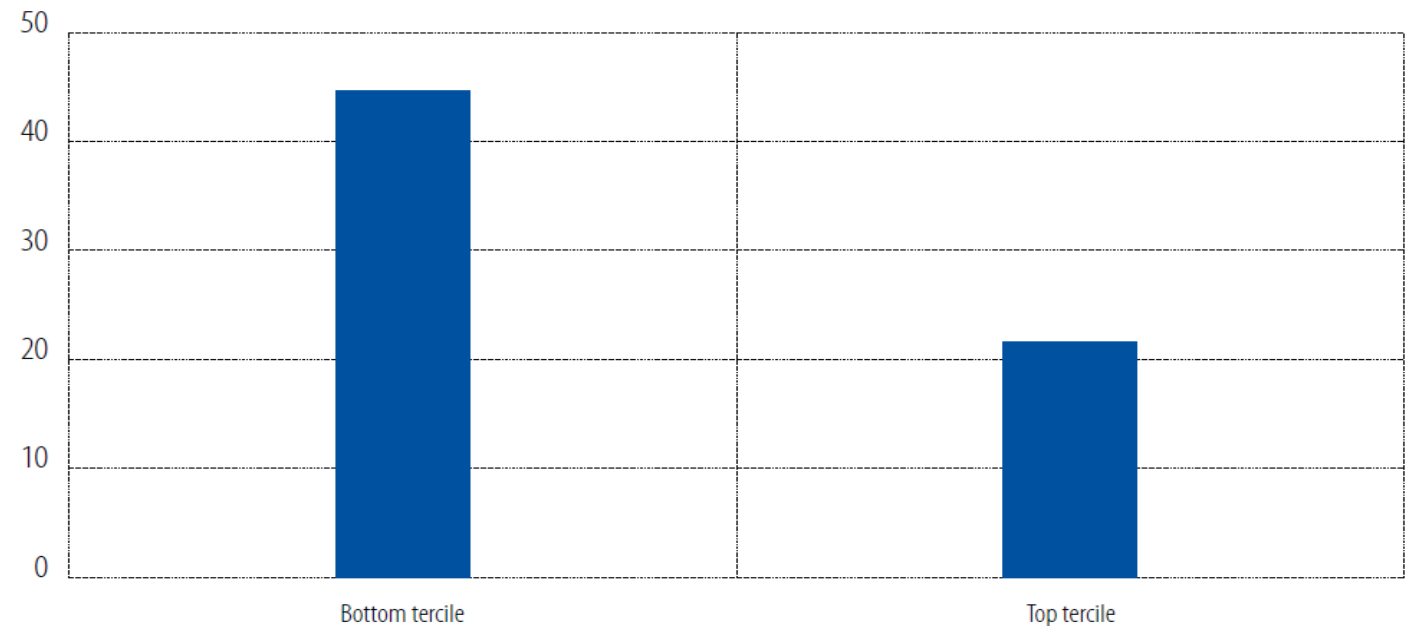
## 2. Reason? Saturation an unsatisfactory answer...



### Three arguments:

- 1/3 of surveyed municipalities deem investment levels insufficient
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**Perceived underinvestment**  
*share of municipalities by infrastructure quality in %*



Source: EIB Municipalities Survey 2017.



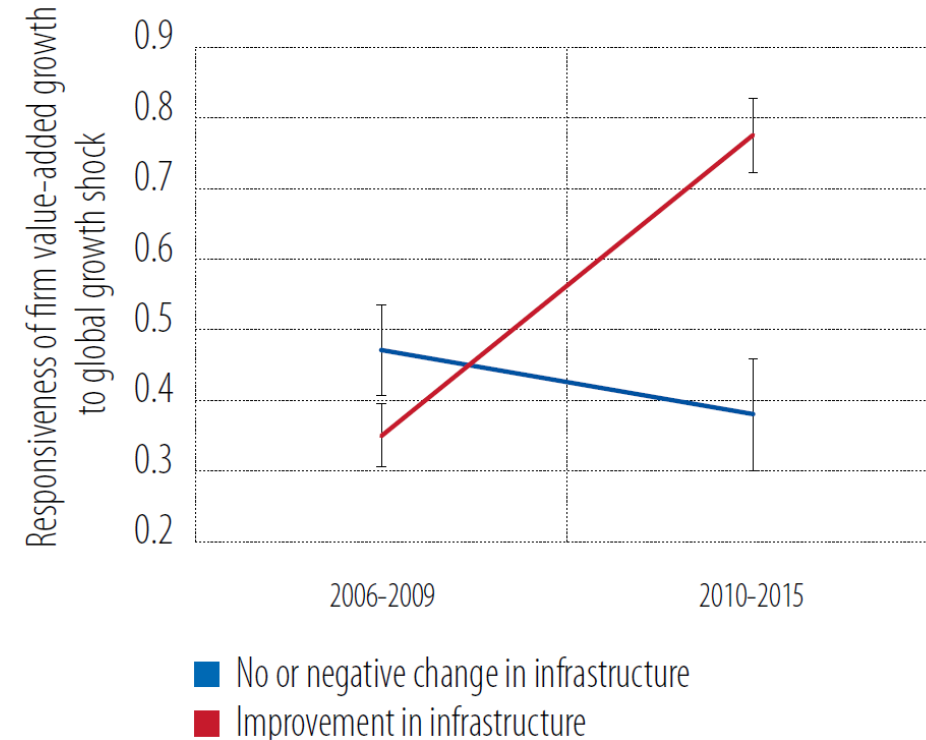
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### Three arguments:

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### Infrastructure quality & competitiveness



Source: Bureau van Dijk's ORBIS database, comprising about 100 000 firms per year in 236 European regions (NUTS-2) in the years 2005-15; (ii) Eurostat data on the level of infrastructure in corresponding regions; US industry growth data at NACE2 two-digit level from the EU KLEMS database.

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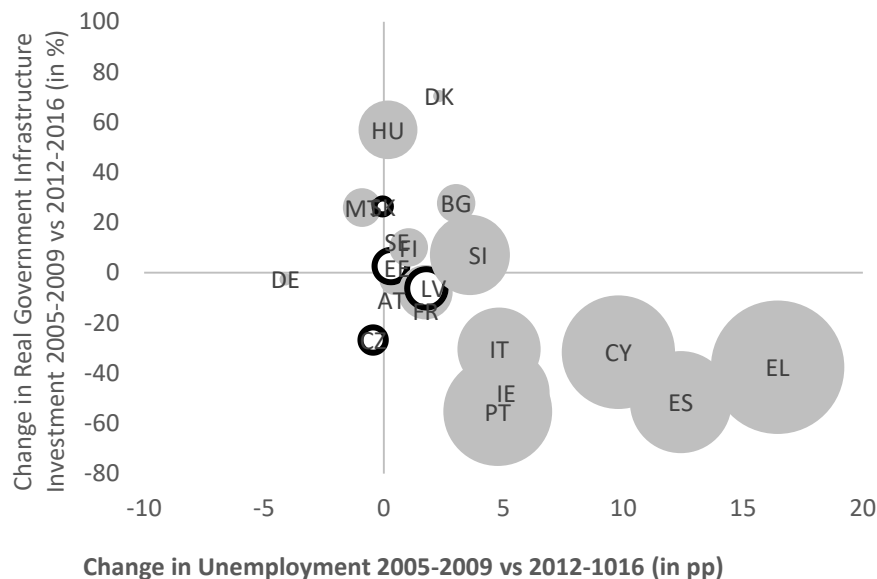


# 3. Macrofinancial factors

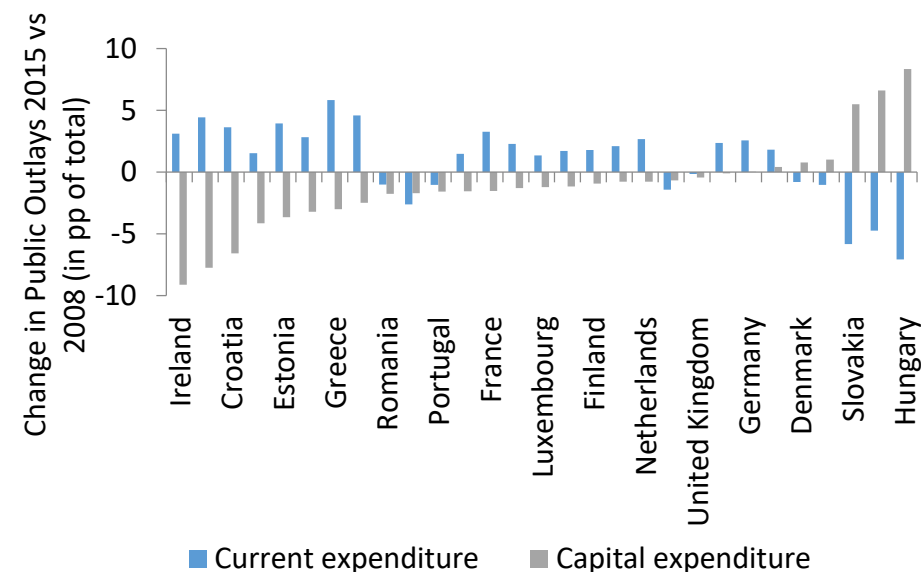


## Social spending crowded out public capital expenditure

### Investment vs fiscal stance



### Shift in budget allocation



Note: The larger the bubble size, the greater the downgrade in sovereign rating. The black circles indicate rating upgrades. To calculate rating scores, sovereign ratings from S&P, Moody's and Fitch were used and converted into numerical values.  
Source: Eurostat, Projectware, EPEC for government infrastructure investment, Eurostat for unemployment figures and EIB for rating changes.

Source: Eurostat.

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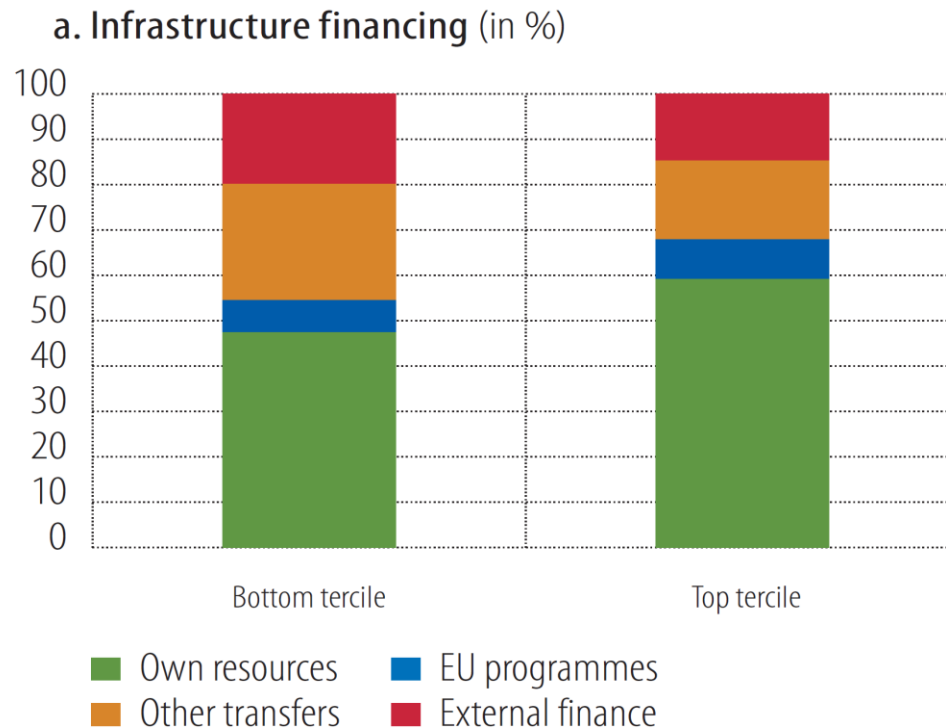
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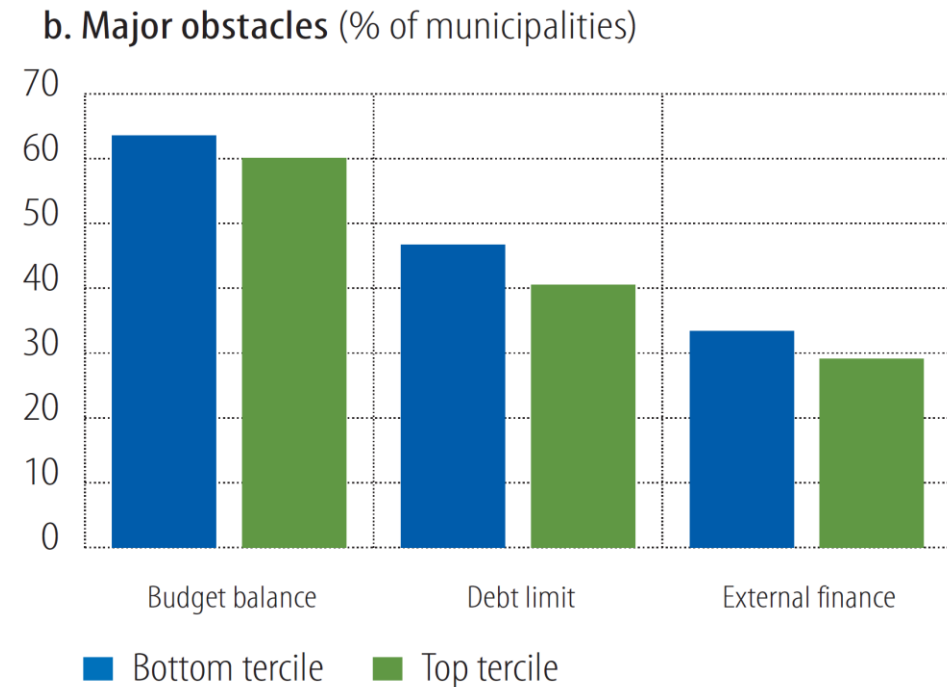
## 4. Local context matters



### Low infrastructure quality associated with financing constraints



Source: EIB Municipalities Survey 2017.



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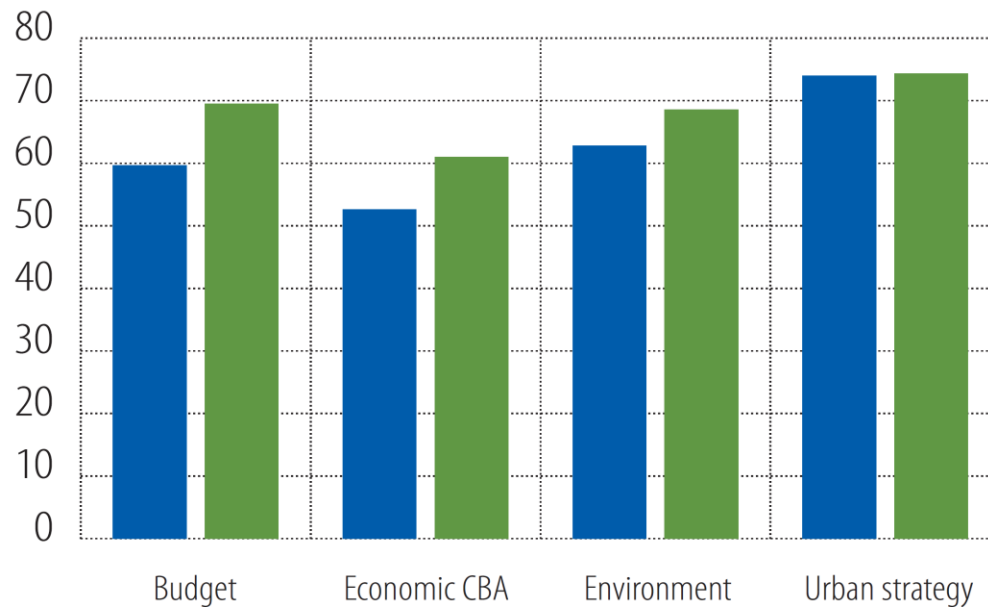
## 4. Local context matters



### Infrastructure quality and governance go hand-in-hand

#### Independent Assessment

*share of municipalities, in %*

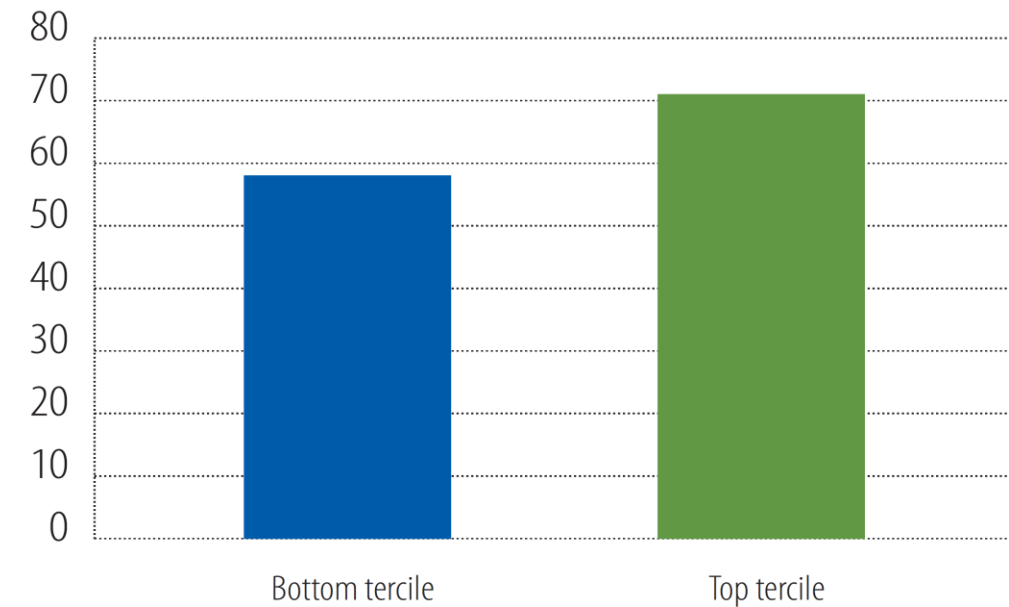


■ Bottom tercile ■ Top tercile

Source: EIB Municipalities Survey 2017.

#### Importance of Assessment

*share cent of municipalities, in %*



Source: EIB Municipalities Survey 2017.

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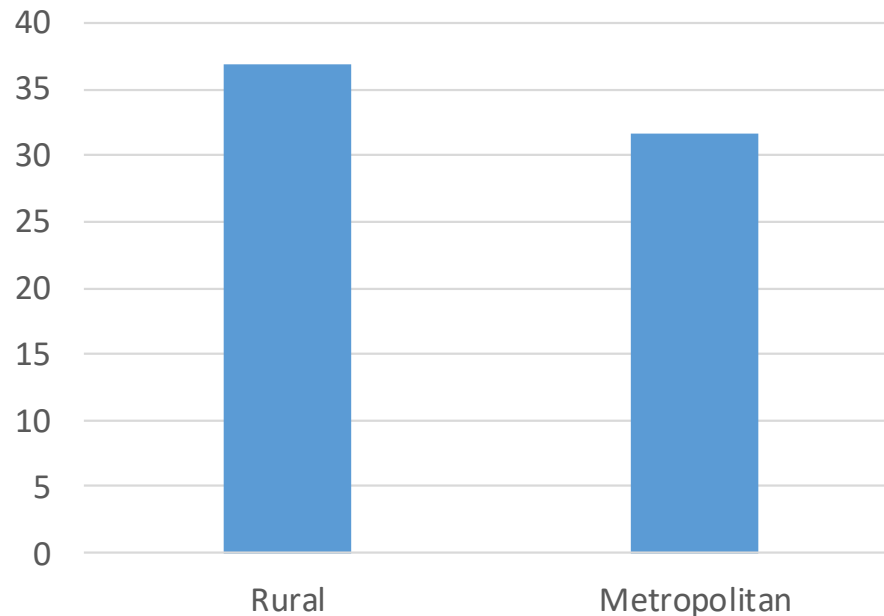


# 5. Rural municipalities

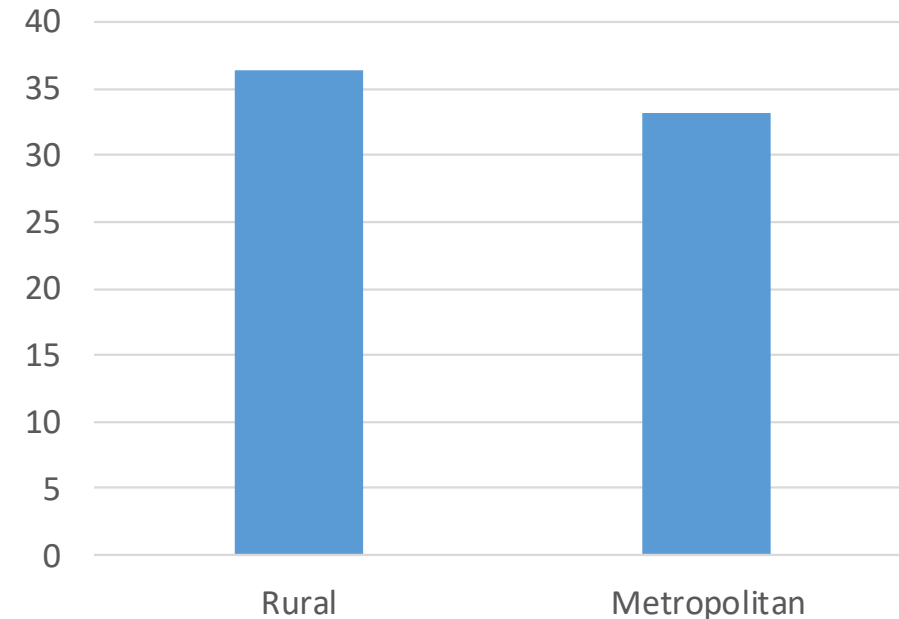


## Greater share of rural municipalities report infrastructure deficiencies

**poor perceived quality**  
*in % of municipalities*



**perceived underinvestment**  
*in % of municipalities*



Question: Low (high) quality refers to the third of municipalities reporting the lowest (highest) average score across infrastructure sectors (weighted by the importance of the sector in terms of subnational gross fixed capital formation) in response to the following question: How would you assess the quality of infrastructure in each of these areas in your municipality on a scale of 1 to 5, where 1 means it is completely outdated and 5 means it is up to latest international standards?

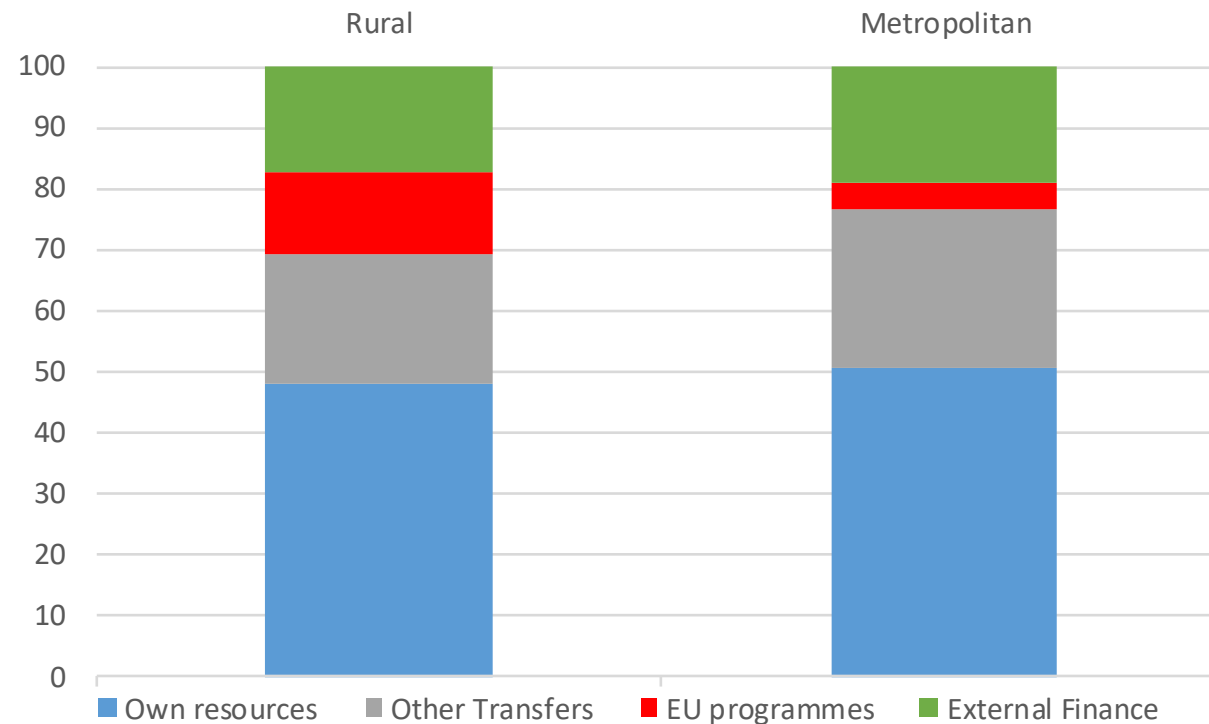
Source: EIB Municipality Survey, Eurostat.



# 5. Rural municipalities



## Financing of infrastructure – importance of EU programmes *in % of total financing*



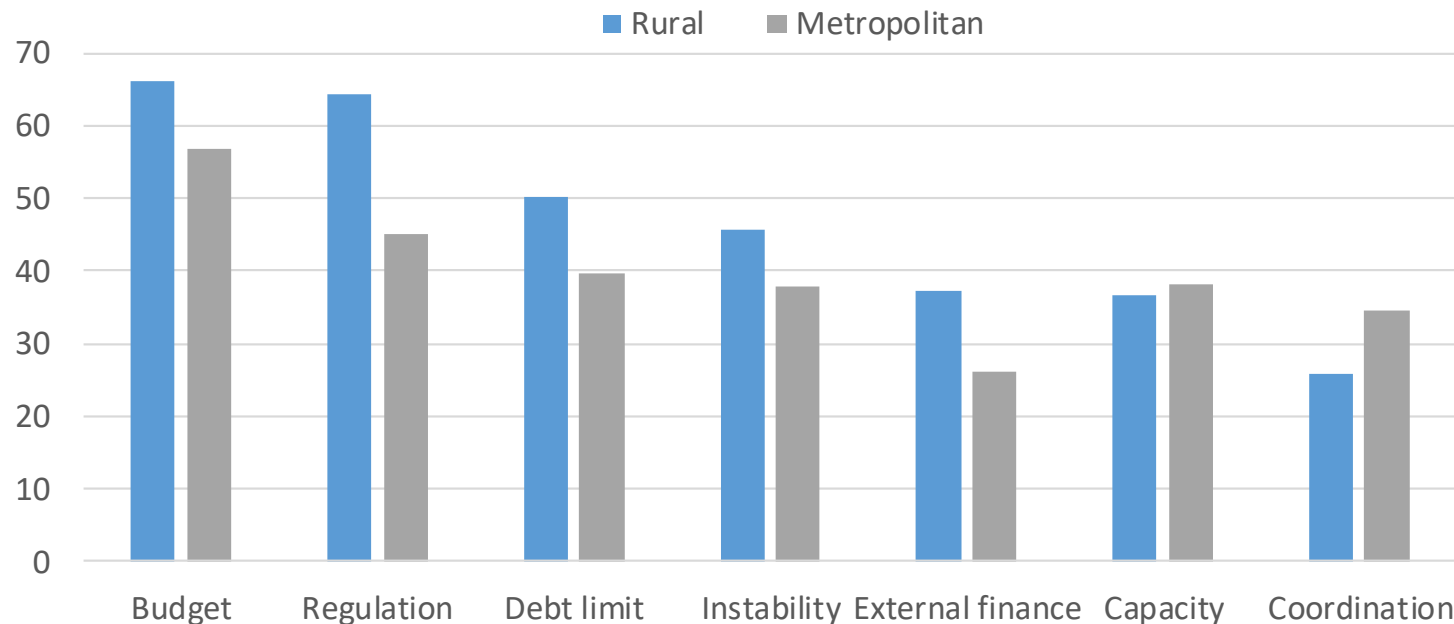
Question: Can you tell me approximately what proportion of your infrastructure investment activities in [...] were financed by each of the following...?

Source: EIB Municipality Survey, Eurostat.

# 5. Rural municipalities



## Major obstacles to infrastructure investment *share of municipalities, in %*



Question: To what extent is each of the following an obstacle to the implementation of your infrastructure investment activities? Is a major obstacle, a minor obstacle or not an obstacle at all? (1) Balance between revenues and operating expenditure; (2) Limit on amount of debt the municipality can borrow; (3) Access to external finance; (4) Technical capacity to plan and implement; (5) Co-ordination between regional and national policy priorities; (6) regulatory process: length to approve; (7) Political and regulatory stability.  
Source: EIB Municipality Survey, Eurostat.

# Key messages



- Infrastructure investment remains at 75% of pre-crisis level, chiefly due to drop in public capital expenditure;
- (Unholy) Trinity of low quality infrastructure, financing and capacity constraints, and drop in investment.
- **Rural municipalities** more frequently report
  - i. Investment gaps;
  - ii. Investment barriers;
  - iii. Reliance on EU funding;
  - iv. While less frequent use of technical assessments & planning.



# Key messages



- **Policy response** should assess quality of existing stock and additional needs; complement technical capacity; ensure adequate quality of stock and implement new projects.
- **Effective use of funds** requires:
  - i. Project prioritisation, with selection based on sound principals and strategic grounds;
  - ii. Careful project preparation, specification and implementation;
  - iii. Appropriate monitoring.



# Annex



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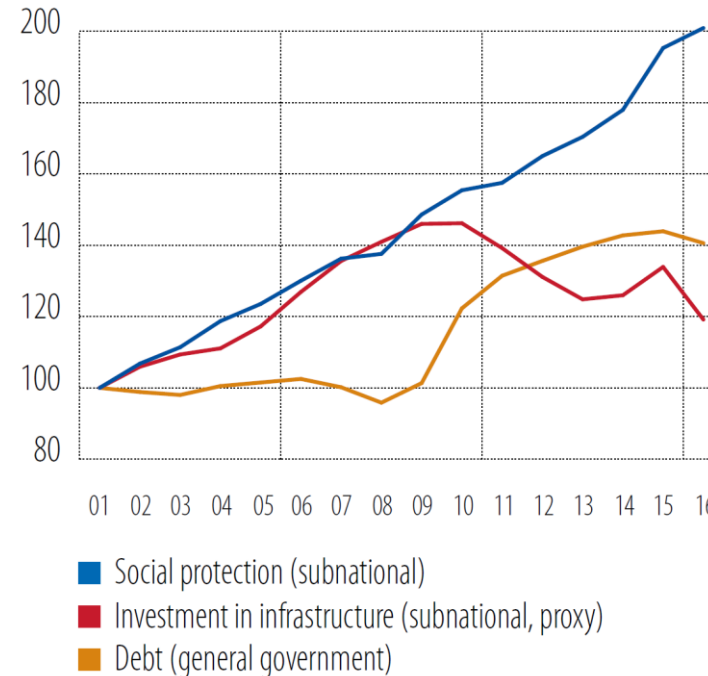


# 1. Macrofinancial factors



**With smaller fiscal space, social spending crowds out infrastructure investment**

*In real terms, Index 2001=100*



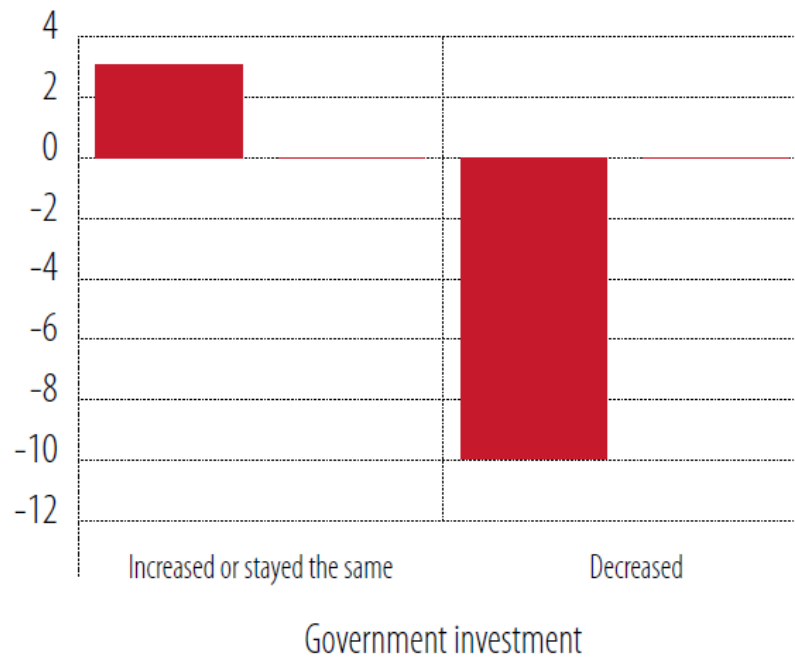
Spending on social protection deflated by the GDP deflator. Infrastructure investment refers to gross fixed capital formation in other buildings and structures for economic affairs, health, education and environment by local and state governments; deflated by GFCF deflator. Debt is expressed in per cent of GDP  
Source: Eurostat; EIB calculations.

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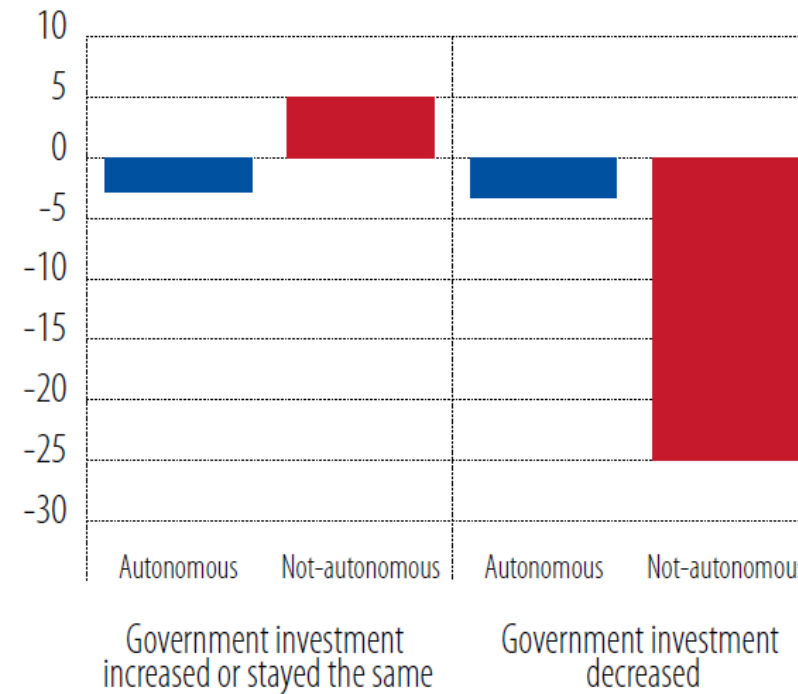


## Sub-national level affected by drop in public capital expenditure

a. Change in subnational investment share (in %)



b. Change in subnational investment share by fiscal autonomy (in %)



Source: Eurostat, Projectware, EPEC (for infrastructure investment) and Eurostat for subnational government investment in infrastructure sectors. Fiscal autonomy data comes from Hooghe et al. (2018).

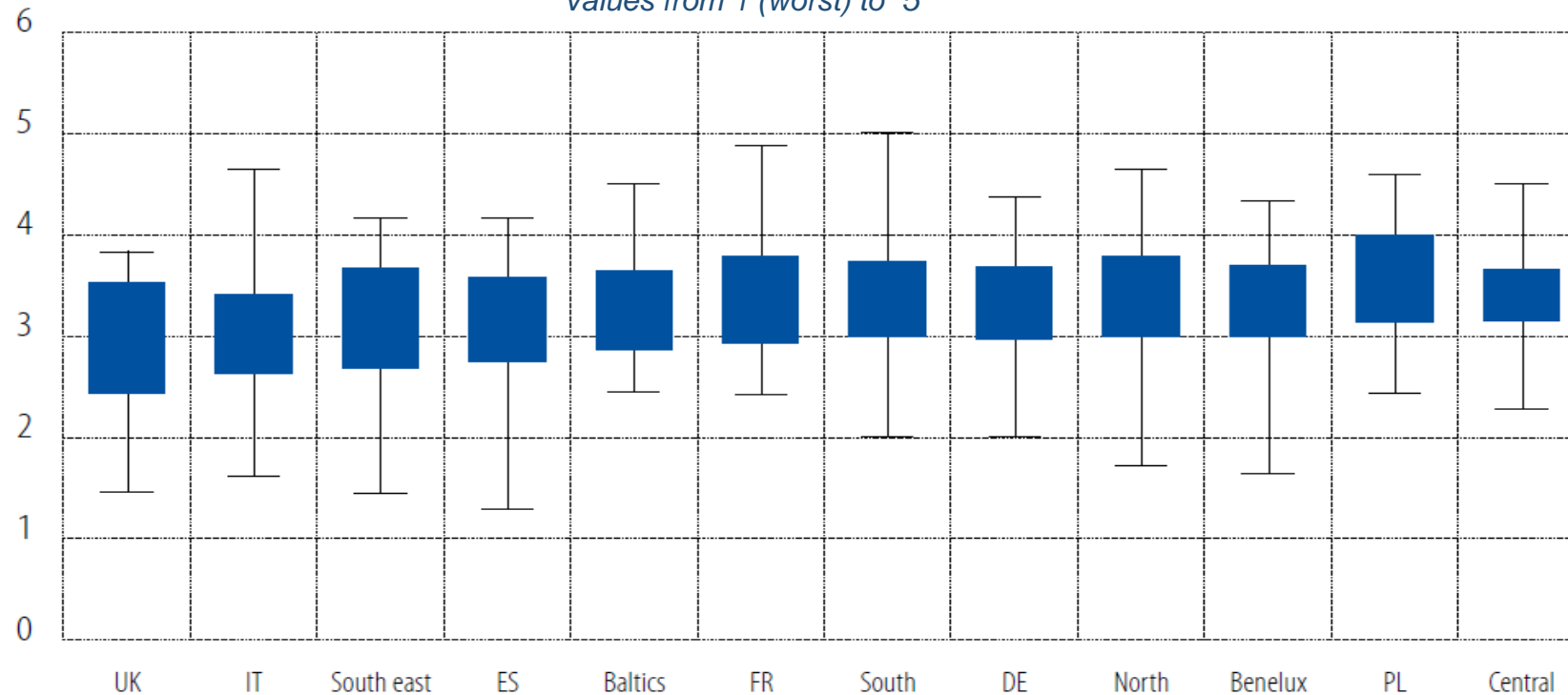
## 2. Local context matters



Infrastructure quality varies substantially over geography

Infrastructure quality dispersion within countries

Values from 1 (worst) to 5



Source: EIB Municipalities Survey 2017.

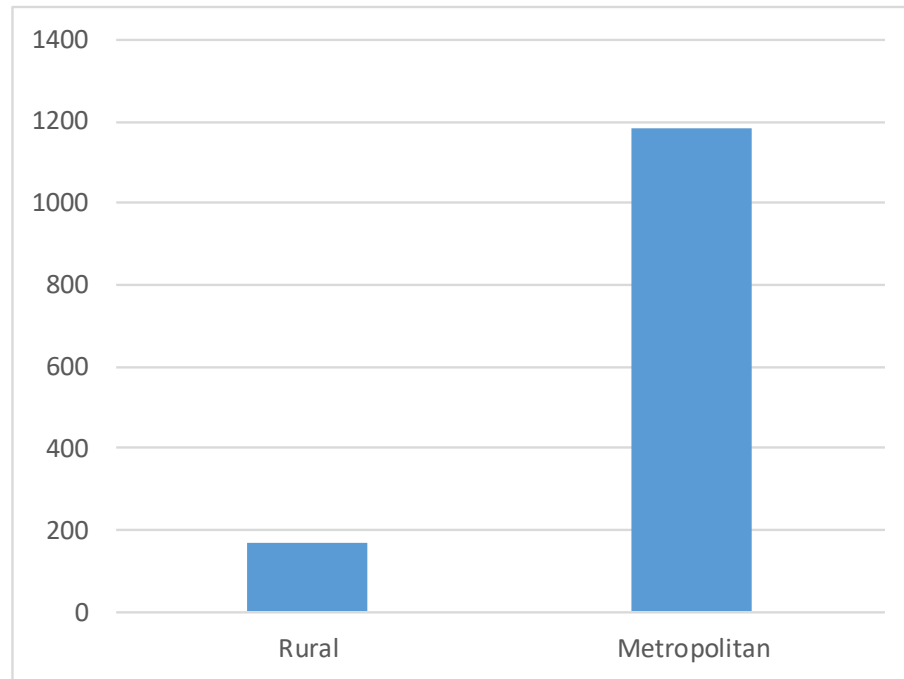


# 3. Rural municipalities

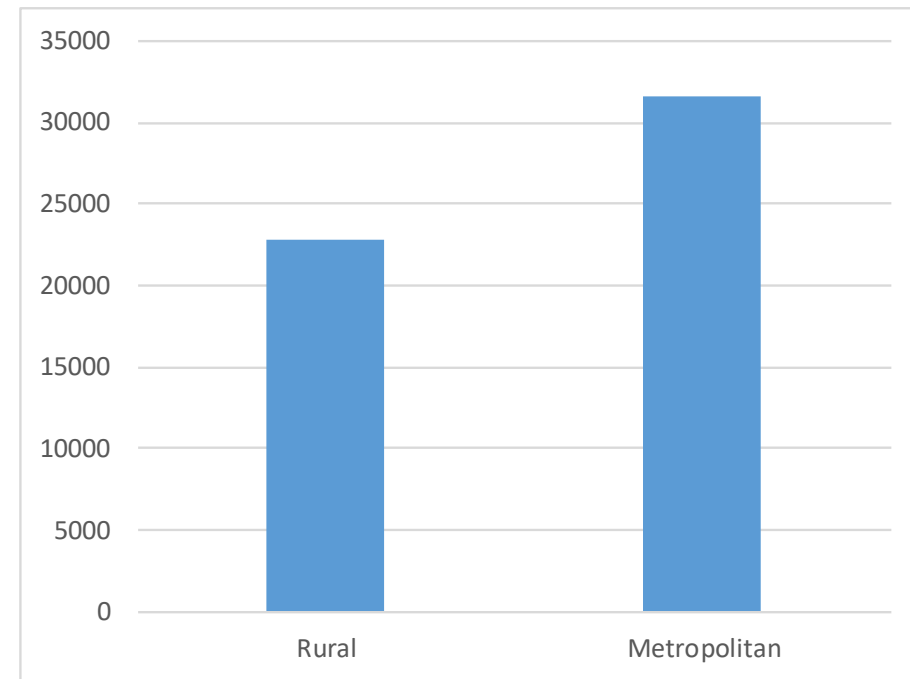


Rural Municipalities characterized by lower population density and GDP per capita

Population density  
*per square kilometre*



GDP per capita  
*in euro*



Source: EIB Municipalities Survey, Eurostat.



financial instruments capacity building Farming  
Rural development funding agreement EU guidance  
added technical support co-financing ex-ante assessment final  
value seminars governance intermediaries recipients  
leverage EAFRD fi-compass case studies  
Agriculture thematic objectives Targeted coaching  
business plan equity  
advisory services RDP guarantees private investors  
conferences banks revolving life cycle combination  
fund of funds loans microfinance CAP of support  
DG AGRI Agricultural products investment strategy factsheets  
EIB Group