



# METROPOLITAN GOVERNANCE: CHARACTERISTICS AND FUNCTIONS OF METROPOLITAN GOVERNANCE BODIES

Diogo Machado  
CFE & STI, OECD

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# WHY ARE WE INTERESTED IN METROPOLITAN GOVERNANCE ?



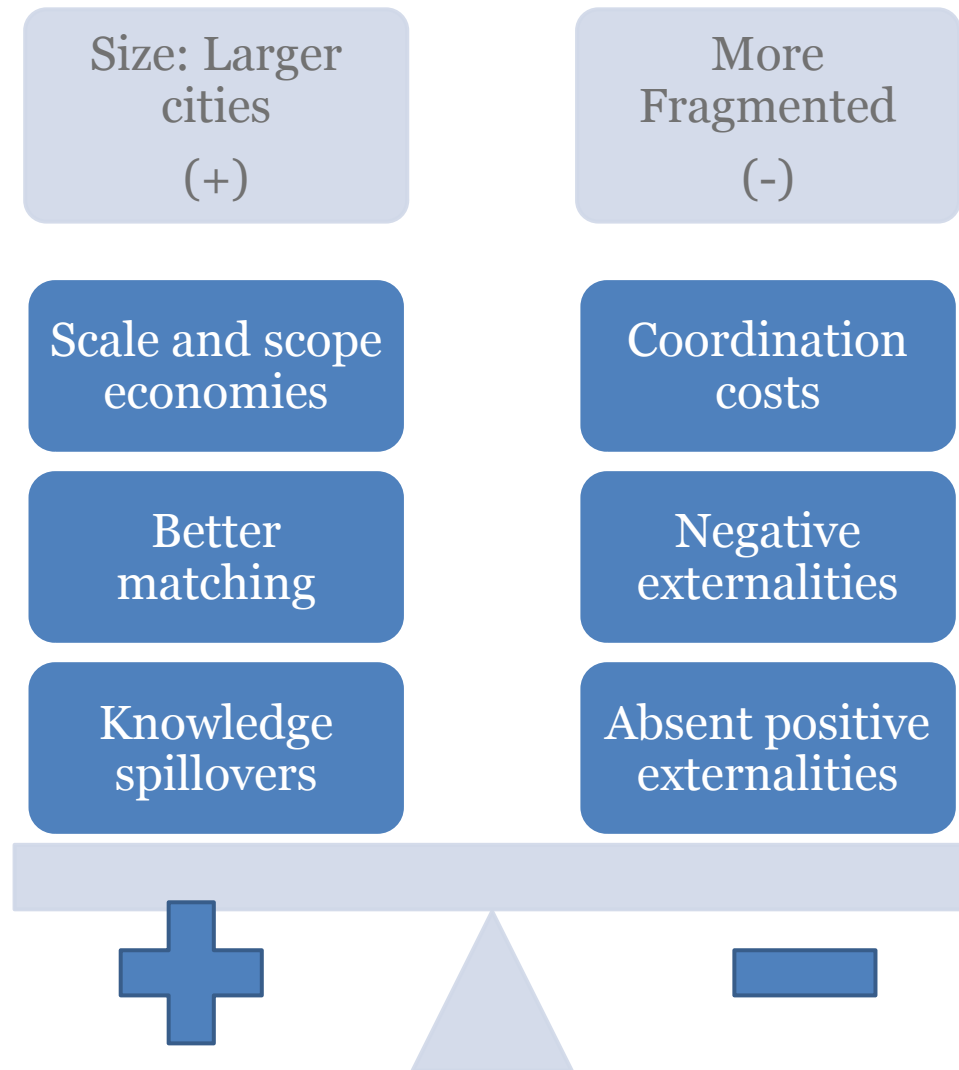
# Agenda

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- City size
- Fragmentation
- Metropolitan Governance
- Key messages



# Two opposing effects on productivity: Size vs Fragmentation



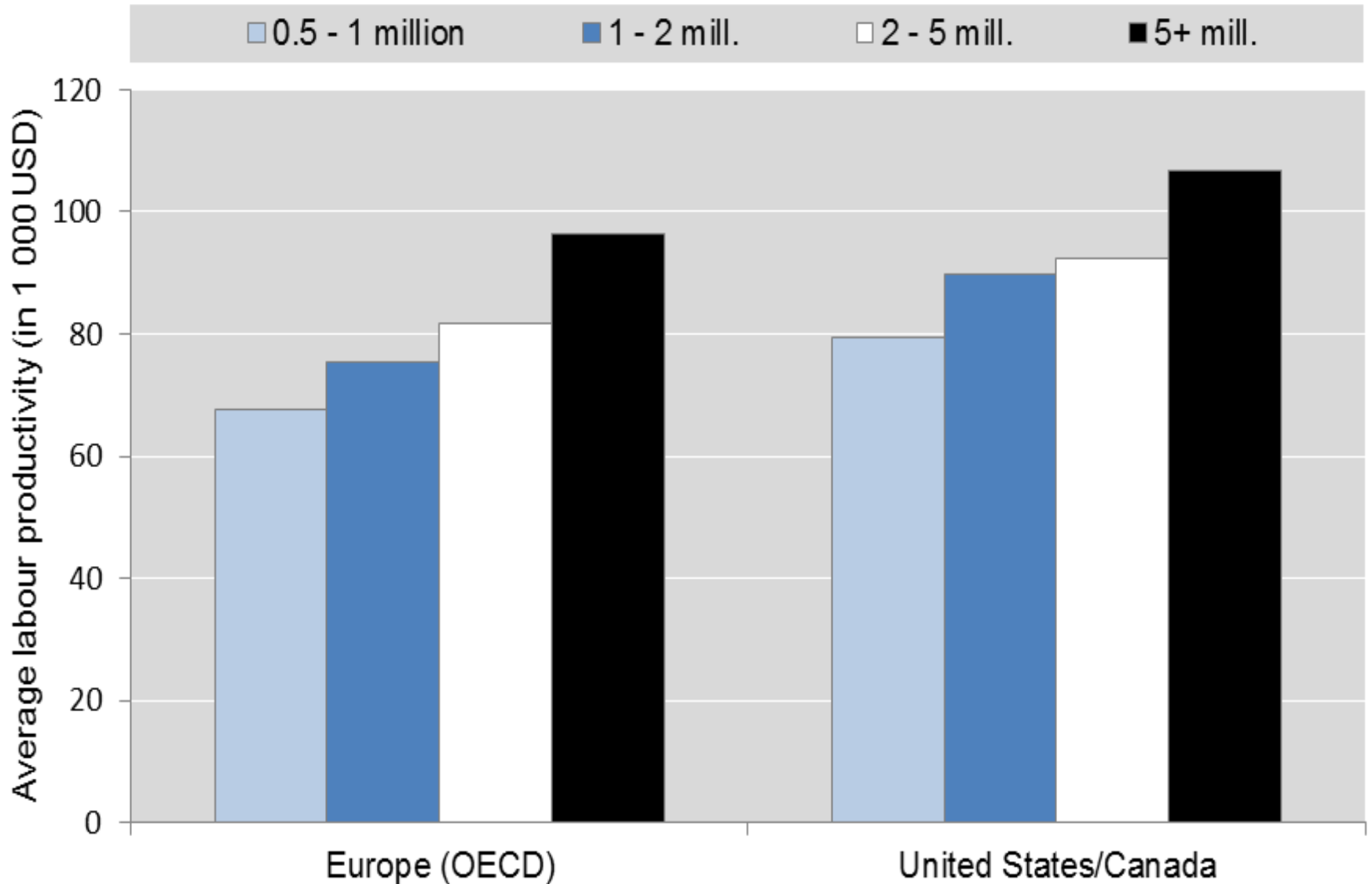


SIZE

**DOUBLING POPULATION  
SIZE ASSOCIATED WITH 2  
TO 5% HIGHER  
PRODUCTIVITY**



# Bigger urban agglomerations are more productive





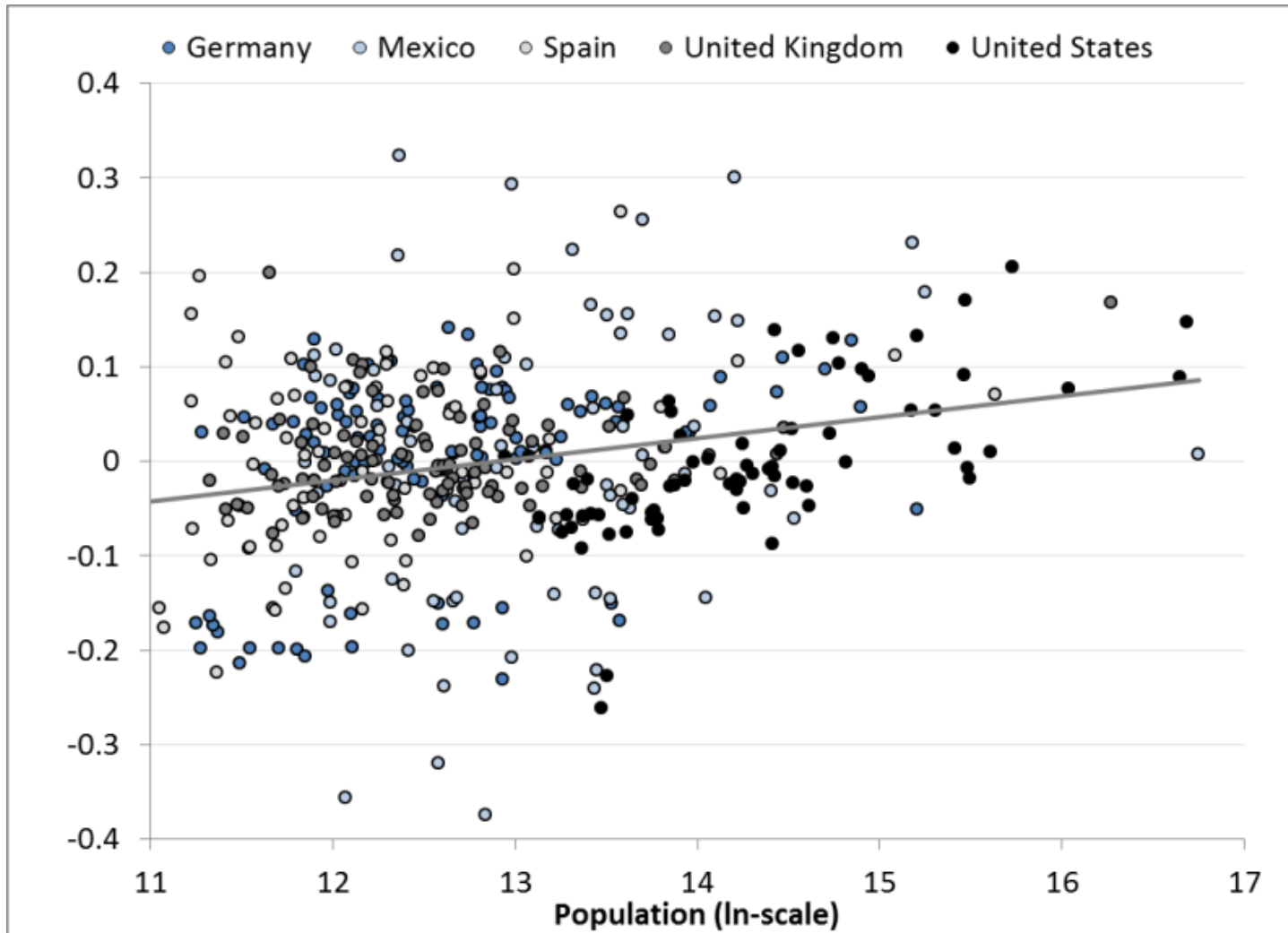
# Why do we care about productivity in urban agglomerations?

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- A country's productivity is, in large part, determined by the productivity of its urban agglomerations .
- Large urban agglomerations account for over 50% of total GDP while taking up less than 5% of total surface area.
- This can in part be a result of higher participation rates in urban agglomerations. In part this comes from sorting, as better educated individuals have a tendency to live and work in larger urban agglomerations.
- However, productivity also increases even when controlling for sorting.



# Productivity of urban agglomeration increases with size even after controlling for sorting







# Sources of agglomeration benefits

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*Thicker labour markets: labour market pooling; better matching; competition*

- gain from reduced labour acquisition and training costs in thick local labour markets with abundant specialised labour force

*Sharing facilities, inputs, gains from specialisation*

- firms may face lower costs for specialised non-traded inputs that are shared locally in a geographical cluster.

*Knowledge spillovers*

- face-to-face contact can enable tacit knowledge spillovers through increases in the intensity of the interactions with other firms or individuals

*Also : Trust (monitoring costs), connectivity, knowledge based capital*



## What makes urban agglomerations rich?

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- The productivity increase associated with increasing the population of an urban agglomeration are in the order of 2-5.0% for a doubling in population size.
  - This implies, e.g., that moving from an urban agglomeration of roughly 50000 inhabitants to the Paris agglomeration – on average - increases productivity by an order of magnitude of 20%.
- There are productivity spill-overs form nearby cities (implying that smaller cities can “borrow” agglomeration benefits)

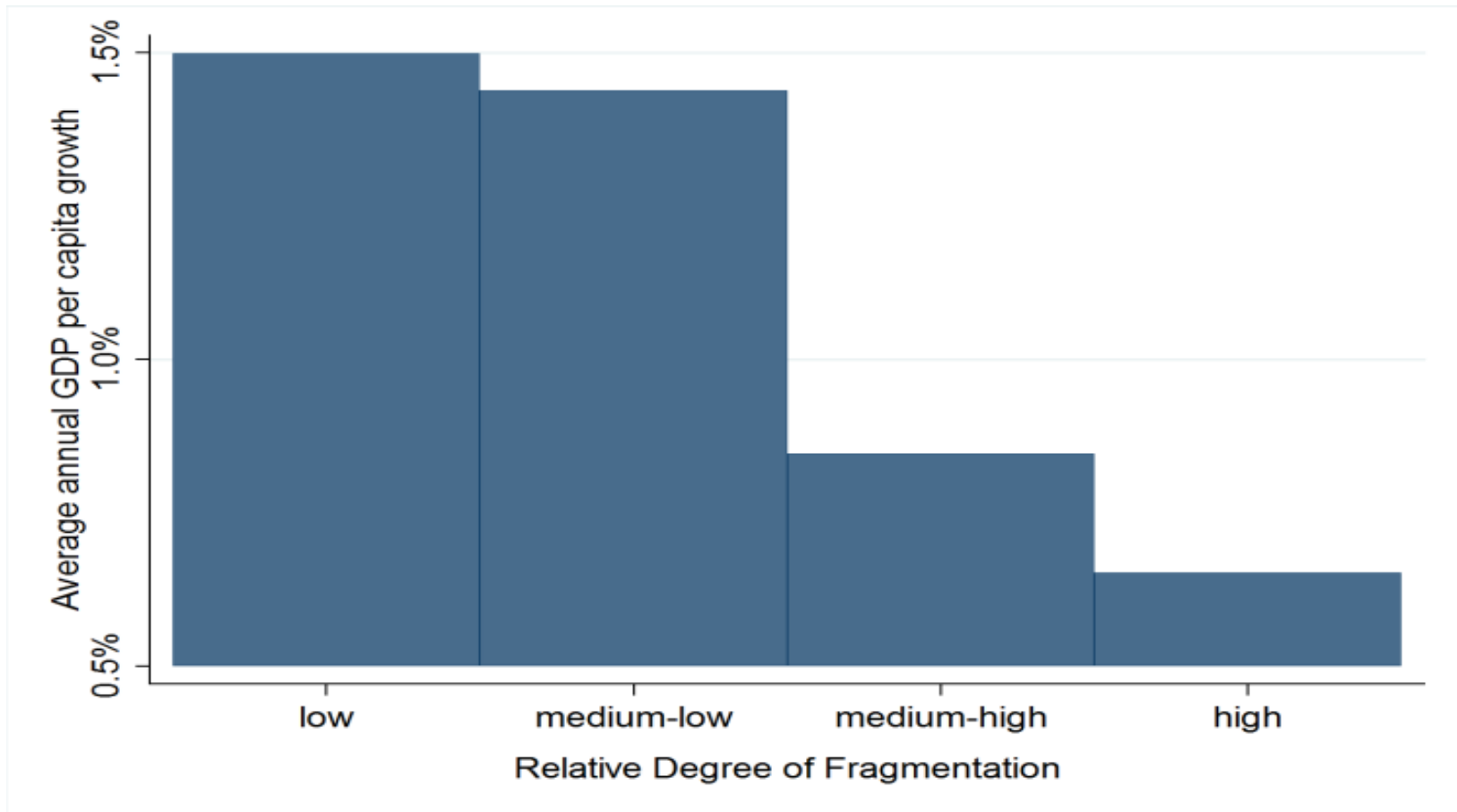


# FRAGMENTATION

**DOUBLING  
FRAGMENTATION  
ASSOCIATED WITH 6%  
LOWER PRODUCTIVITY**

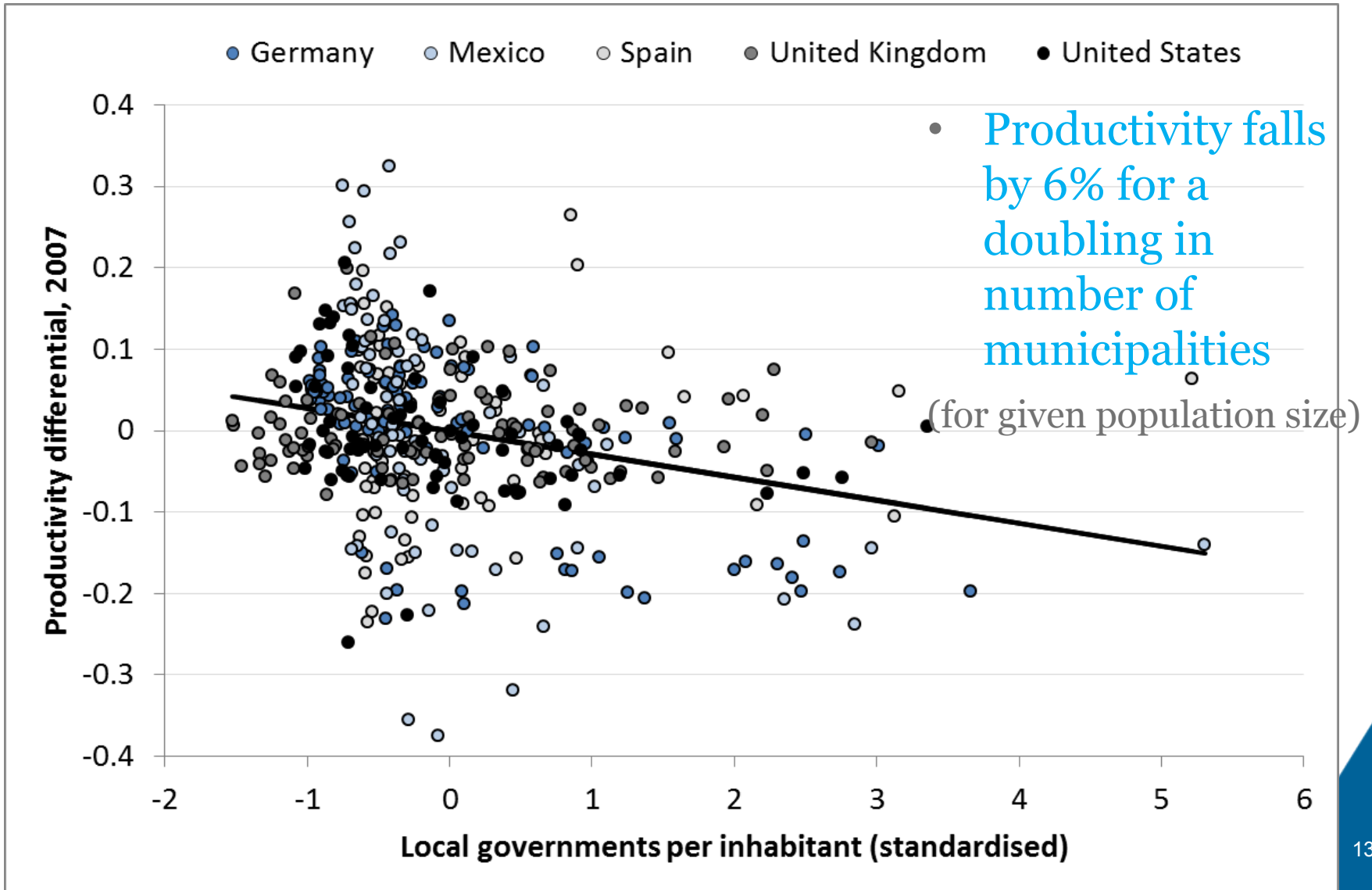


# More fragmented urban agglomerations have experienced lower economic growth





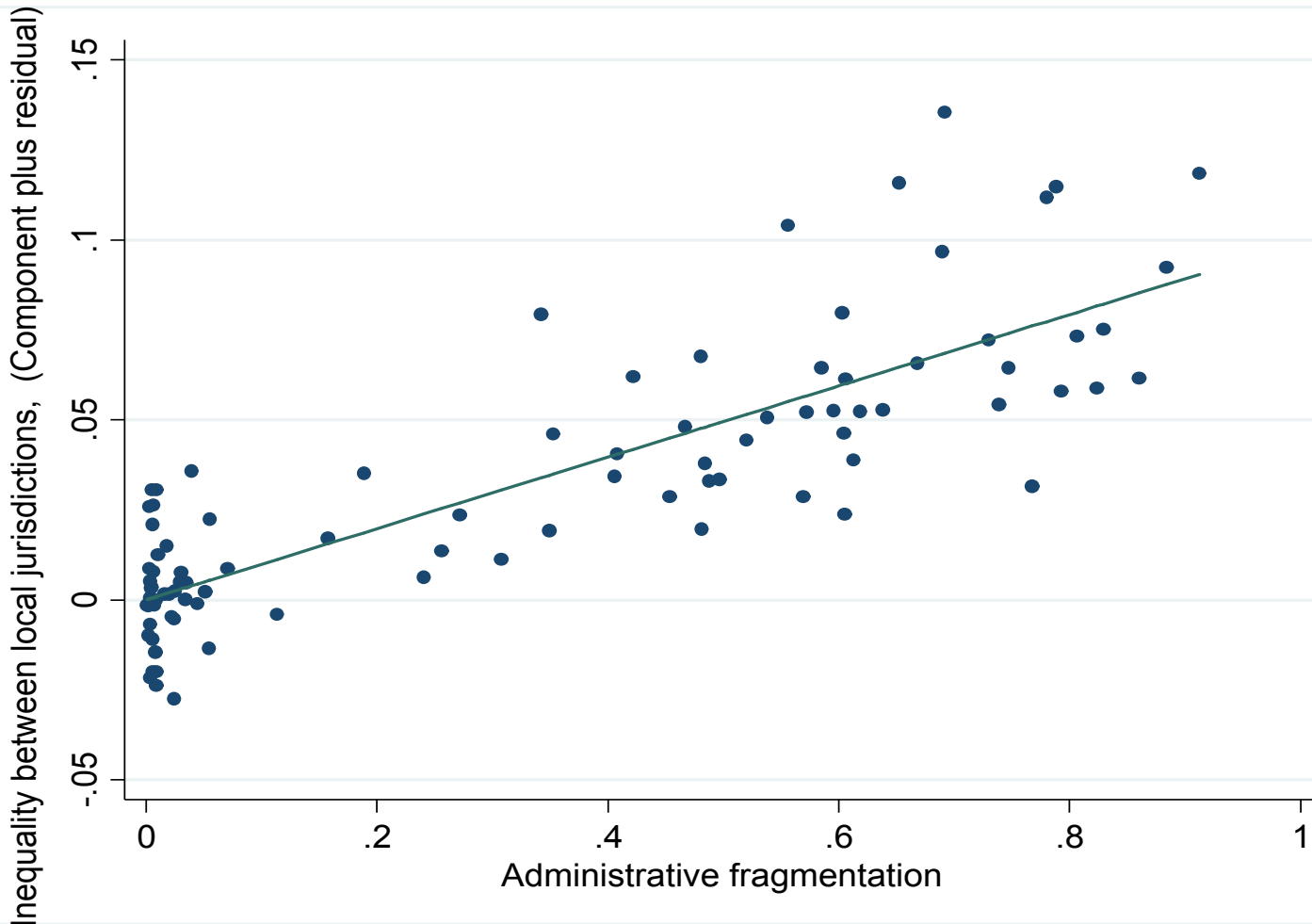
# City productivity & administrative fragmentation





# Higher Fragmentation is associated with higher segregation of people

*Hypothesis:* Fragmented metropolitan governance can facilitate segregation at the level of local units.



Controlling for country fixed effects and other city characteristics (i.e. income, population, spatial structure), higher administrative fragmentation is associated to higher spatial segregation by income in different municipalities



# Urban areas are highly fragmented

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**Horizontal administrative fragmentation** is common as cities outgrow their historic boundaries (more than 10 local governments in 75% of OECD Metropolitan Areas; more than 100 in 22%).

This may lead to undesirable outcomes due to

- lack of cooperation (absence of positive externalities), and
- negative externalities.

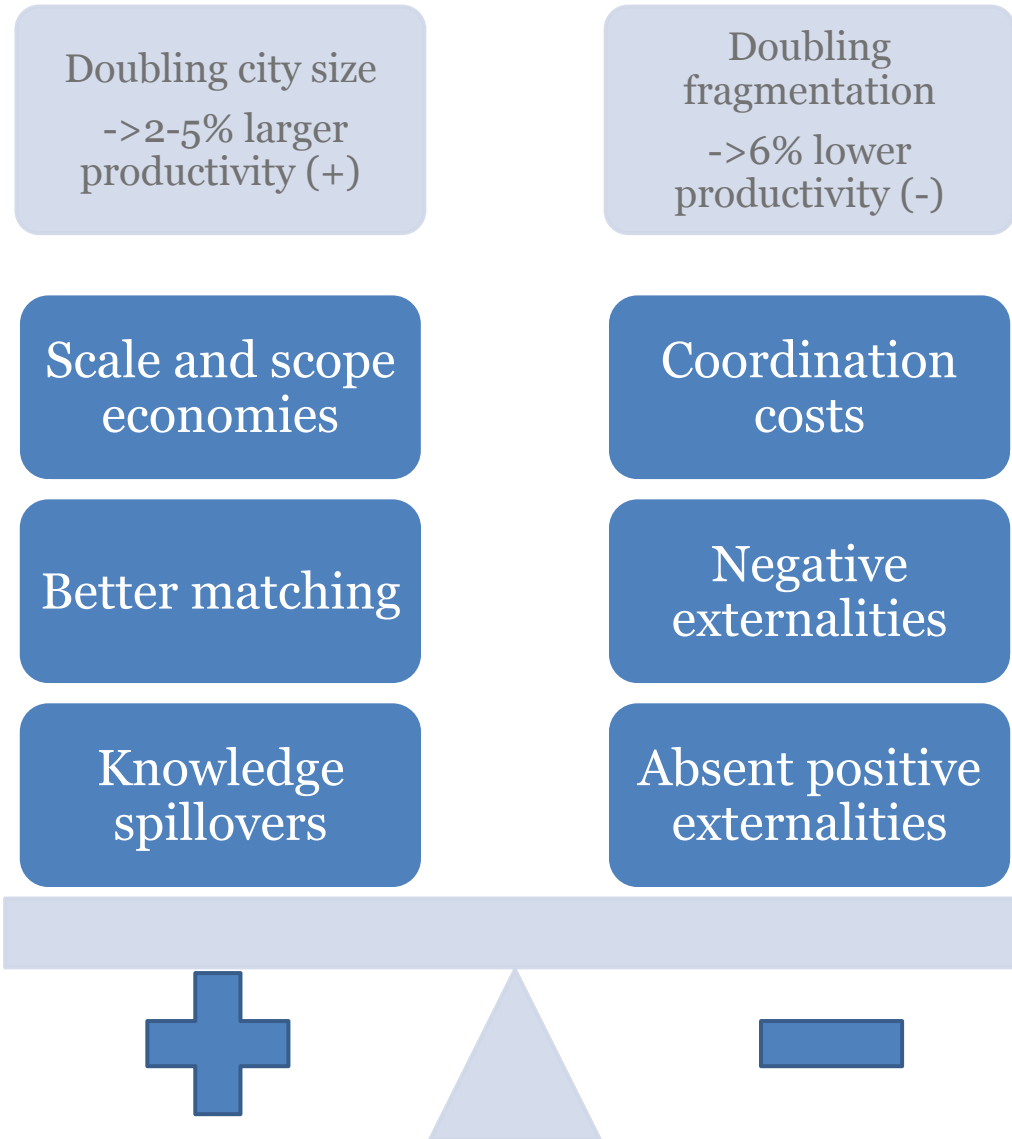
Obstacles to cooperation: Free-riding and strategic risk.

This is confirmed by more systematic econometric evidence:

[Ahrend, Farchy, Kaplanis and Lembcke \(2017\), “What Makes Cities More Productive? Agglomeration Economies & the Role of Urban Governance: Evidence from 5 OECD Countries”](#), in Journal of Regional Science



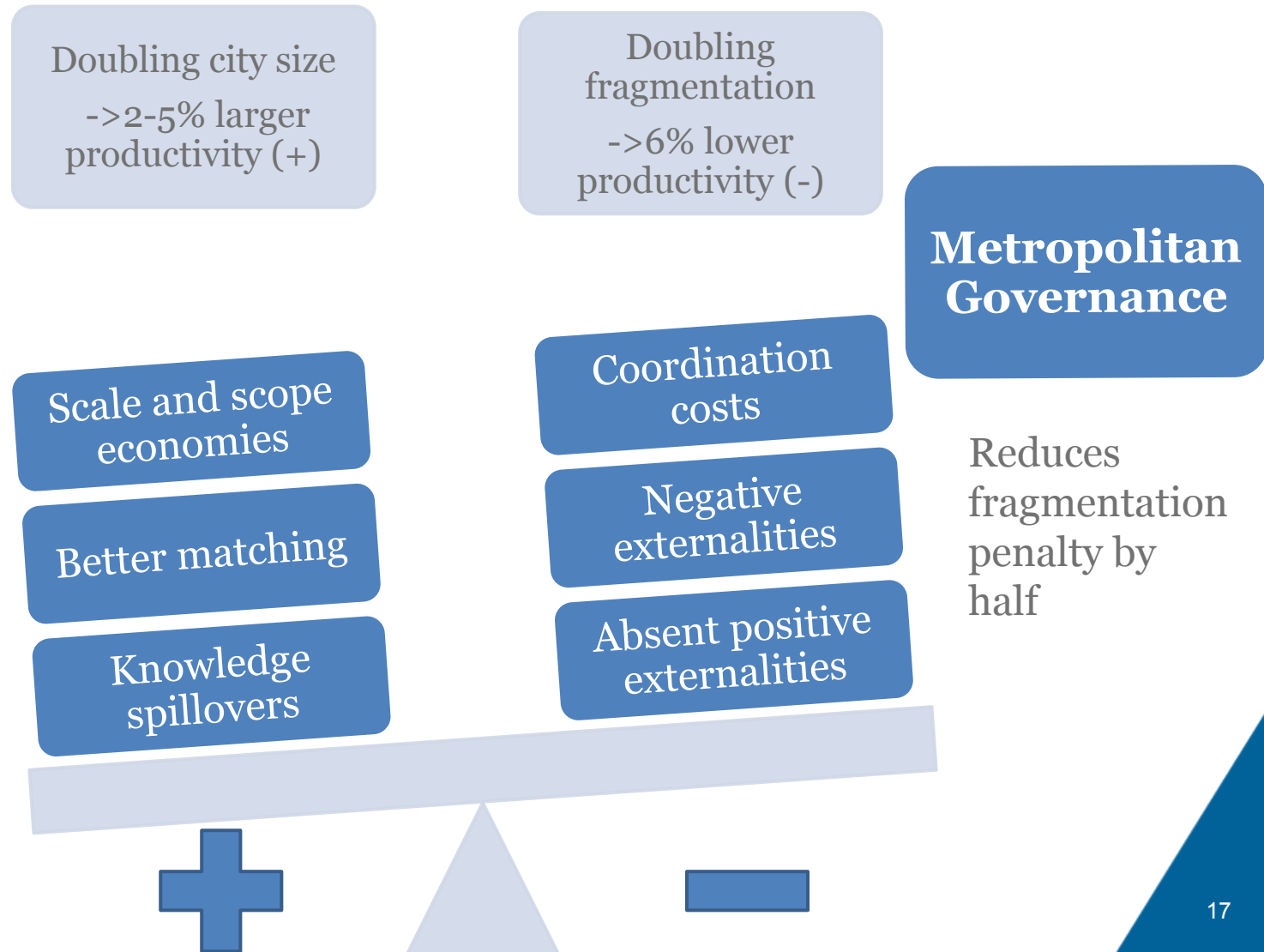
# Two opposing effects on productivity: Size vs Fragmentation







# Two opposing effects on productivity: Size vs Fragmentation





# METROPOLITAN GOVERNANCE

METROPOLITAN GOVERNANCE  
MITIGATES NEGATIVE EFFECTS FROM  
FRAGMENTATION **BY HALF**



# So what do we know about Metropolitan Governance?

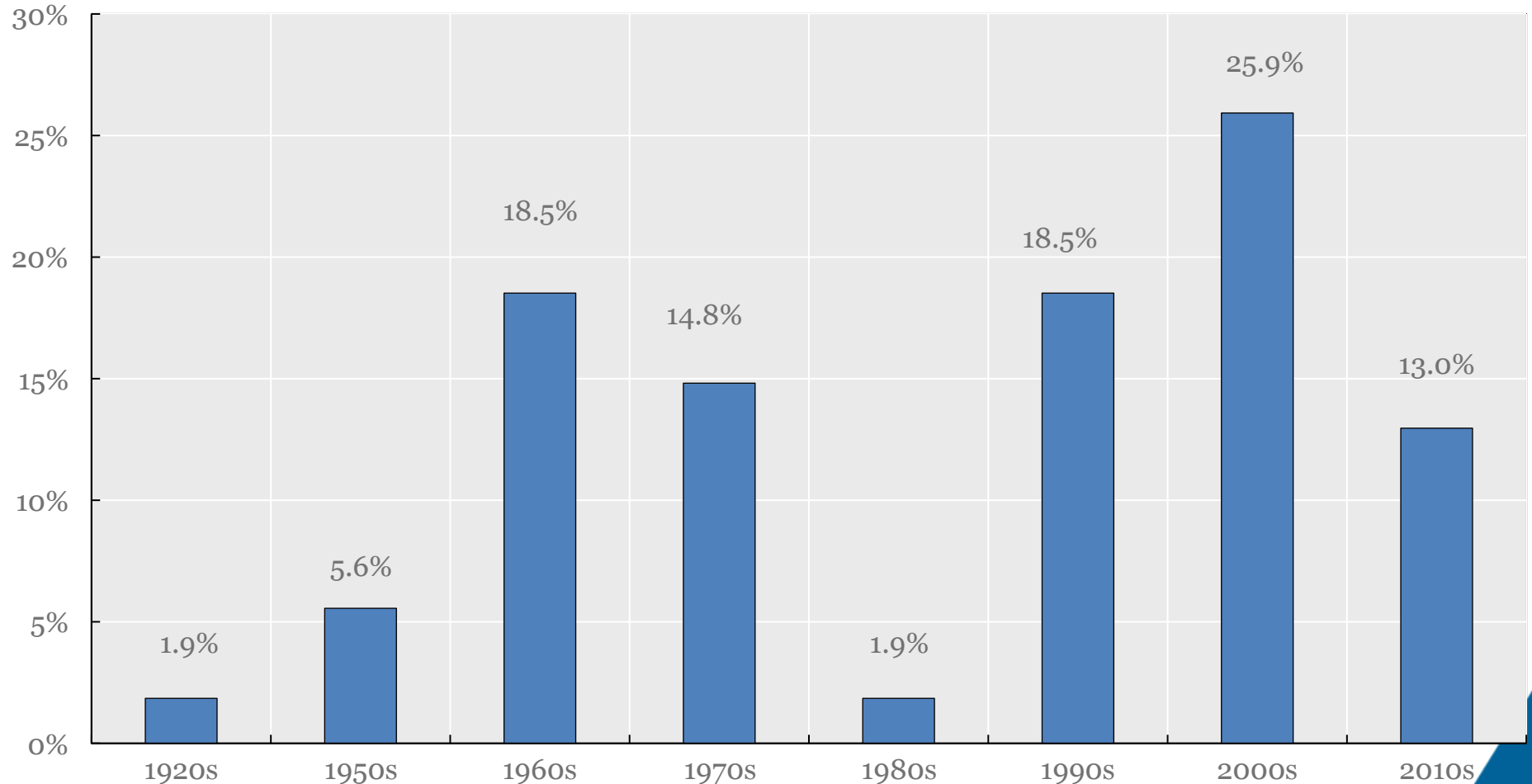
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- Little systematic data about Metropolitan Governance, so undertook first web-based research
- [Ahrend, Gamper and Schumann \(2014\) “The OECD Metropolitan Governance Database: A Quantitative Description of Governance Structures in Large Urban Areas”](#)
- Followed by Survey sent to Metropolitan Governance Bodies (MGBs) in selected countries
  - Austria, Canada, France, Germany, Mexico, Netherlands, New Zealand, Sweden, Switzerland, United Kingdom, and United States; main criteria language
- Managed to get reply from 56 Metropolitan Governance Bodies (response rate 40%) – roughly a quarter of existing MGBs in OECD countries



# Year of establishment of MGBs

## Share of each decade

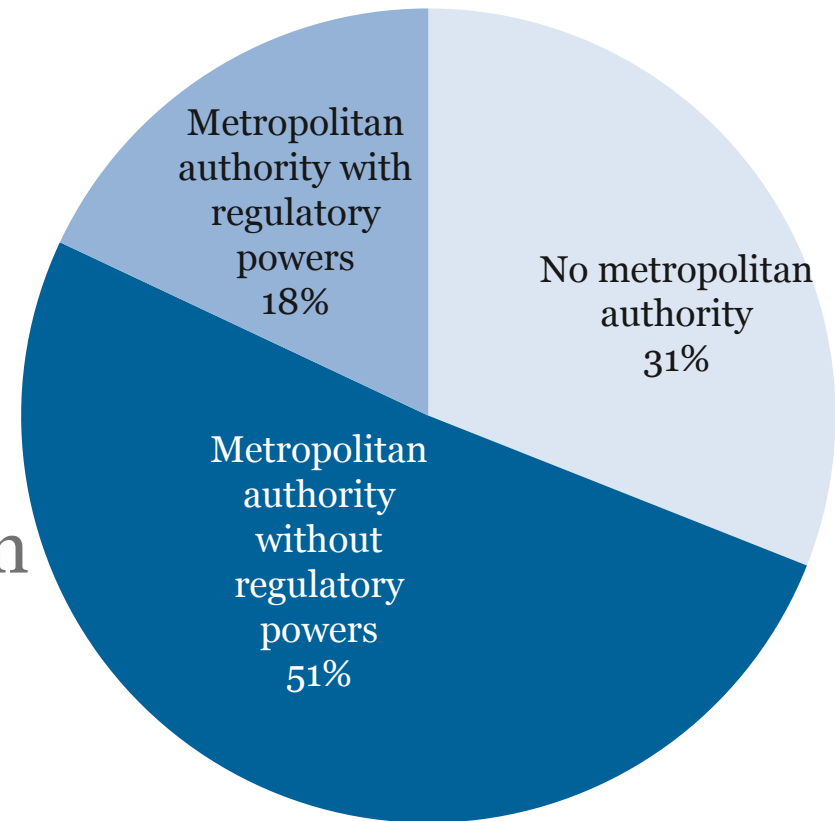


Source: 2<sup>nd</sup> Metropolitan Governance Survey, n = 56



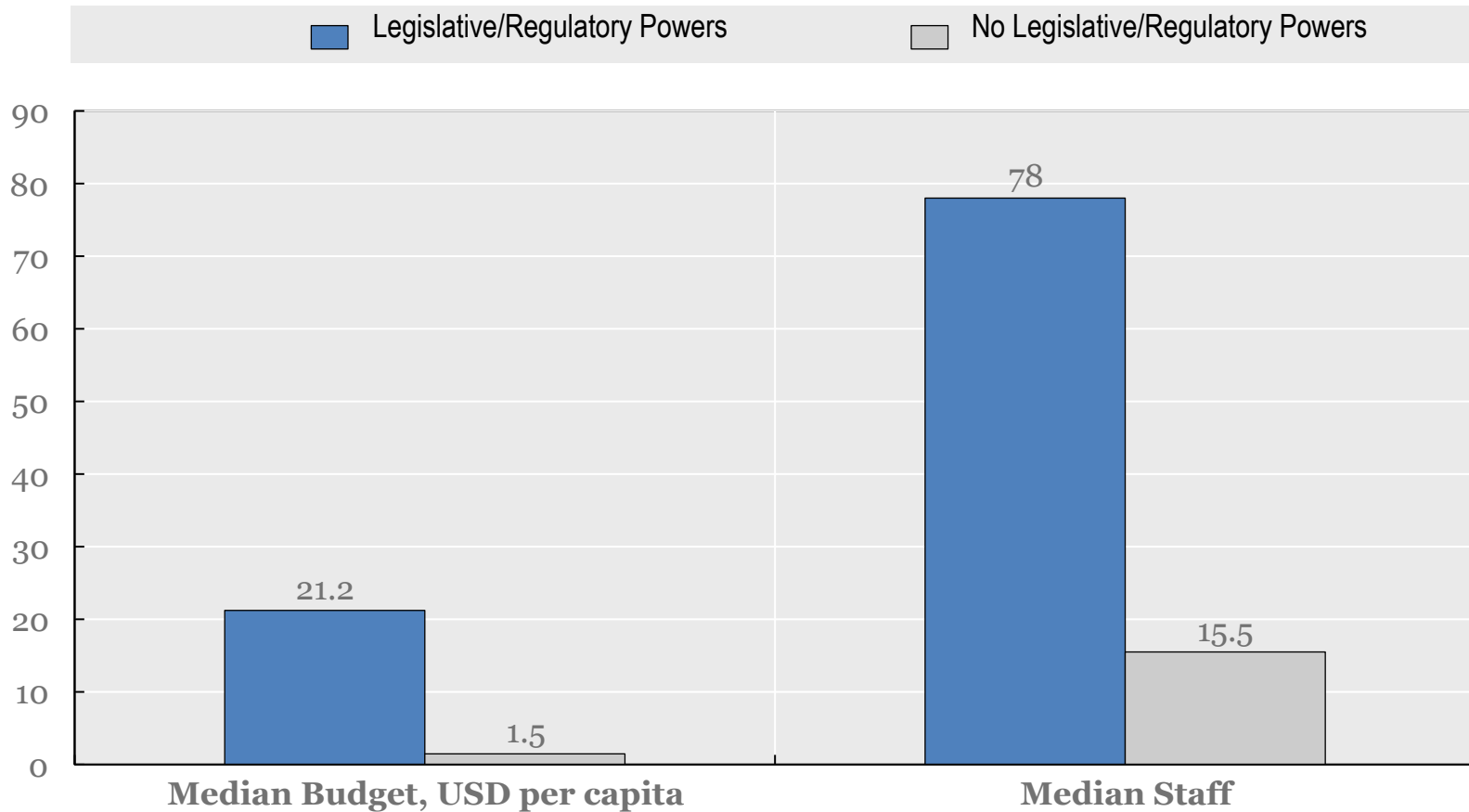
# Metropolitan Authorities

- Approximately 280 metropolitan areas with more than 500,000 inhabitants exist in OECD countries
- Two-thirds of them have some form of metropolitan authority
- Great variety in tasks and competencies





# MGBs with regulatory powers have larger staff and higher per capita budgets

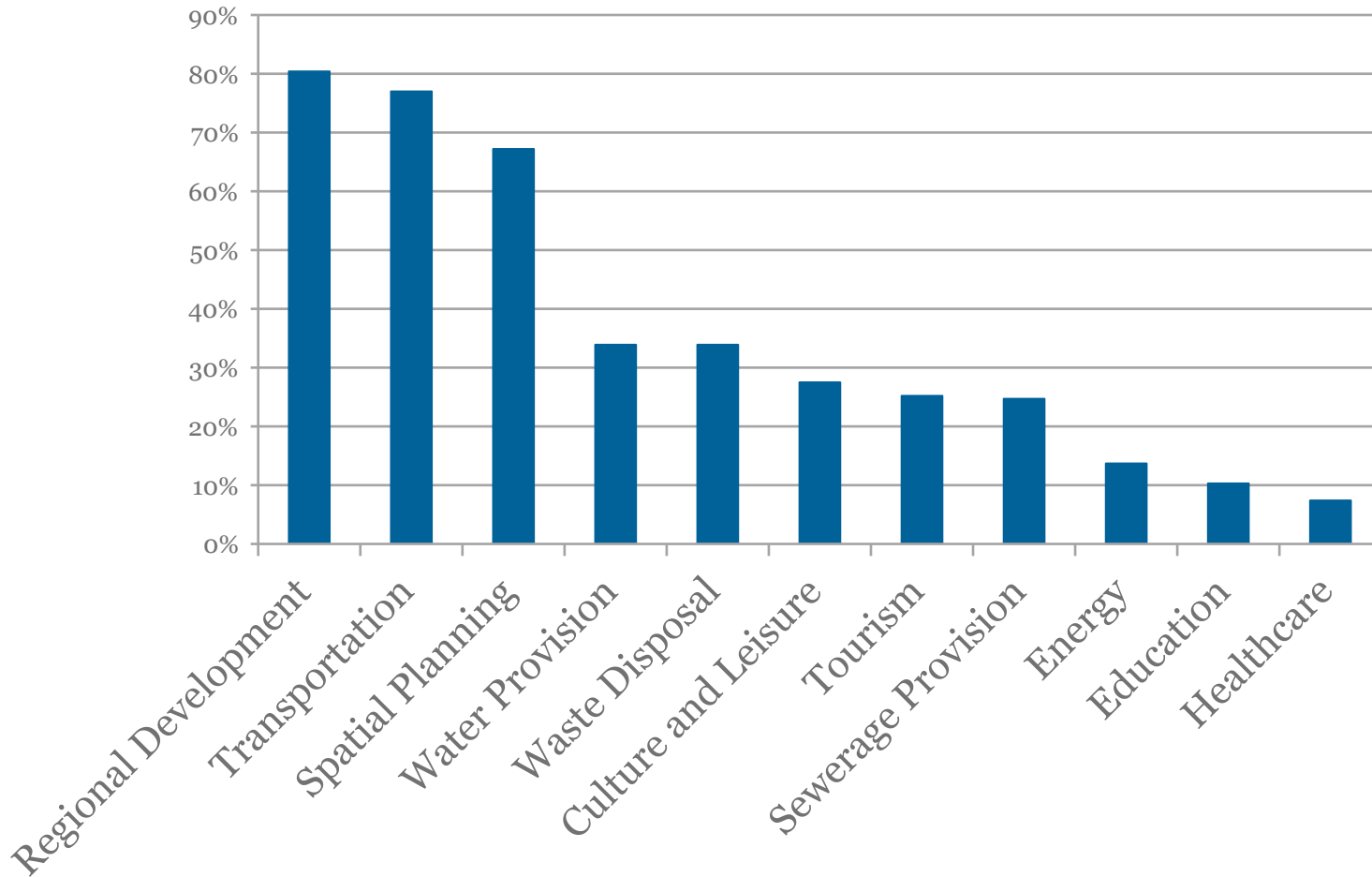


Source: 2<sup>nd</sup> Metropolitan Governance Survey, n = 56



# Fields of work

## Three fields of work dominate

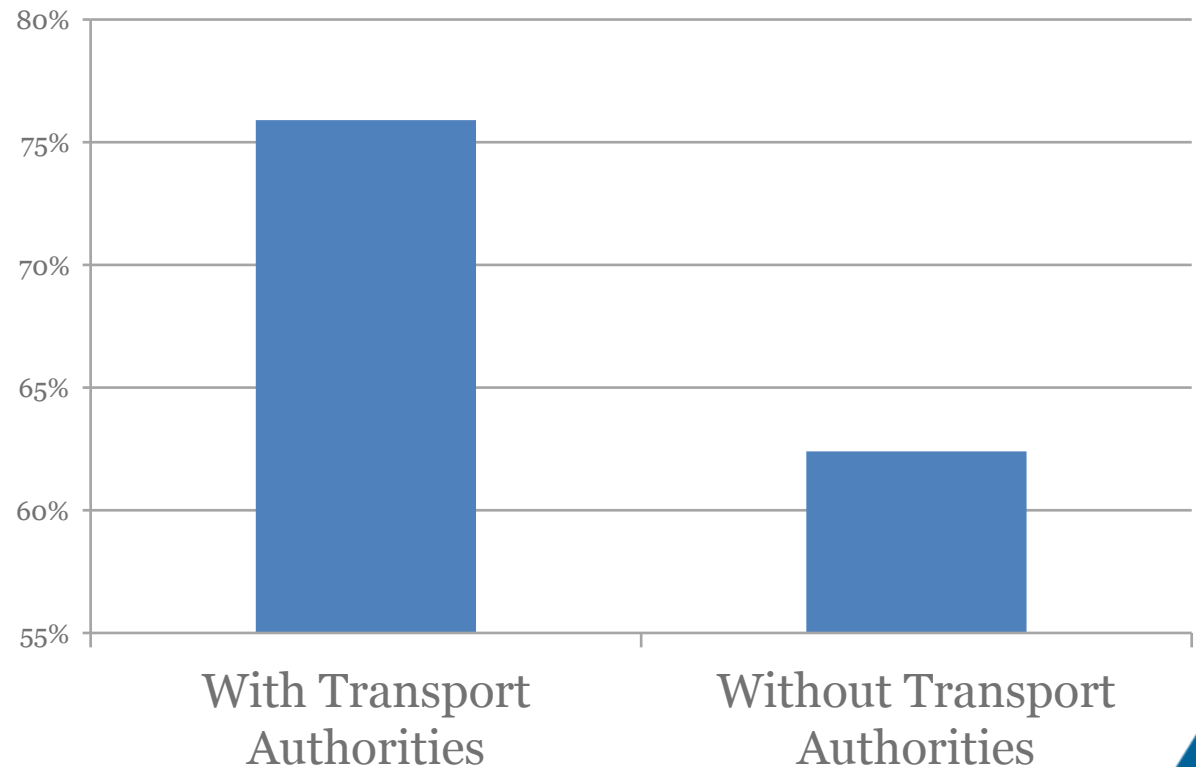




# MGBs can increase well-being

- **Citizens are more satisfied in MAs that have sectoral authorities for public transport**
- **Those MAs have also lower pollution levels (PM)**

## Share of Citizens Satisfied with Public Transport



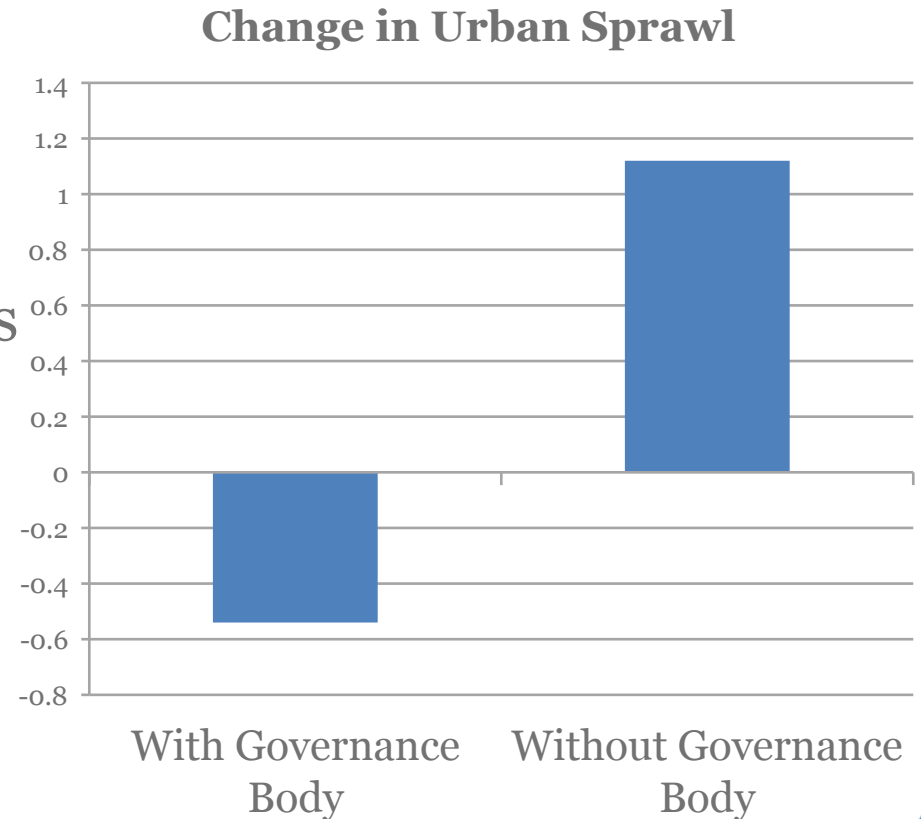
Based on European Urban Audit perception survey.  
Difference significant at 95% level.





# MGBs can reduce sprawl

- Urban sprawl creates negative externalities in Metropolitan areas (MAs)
- Cooperation is a way to internalize the externalities when making policy decisions
- -> **Sprawl decreased in MAs with governance body, but increased in those without!**



Difference significant at the 99%-level after controlling for log-population levels and country specific trends.



# MGBs positively affect economic productivity

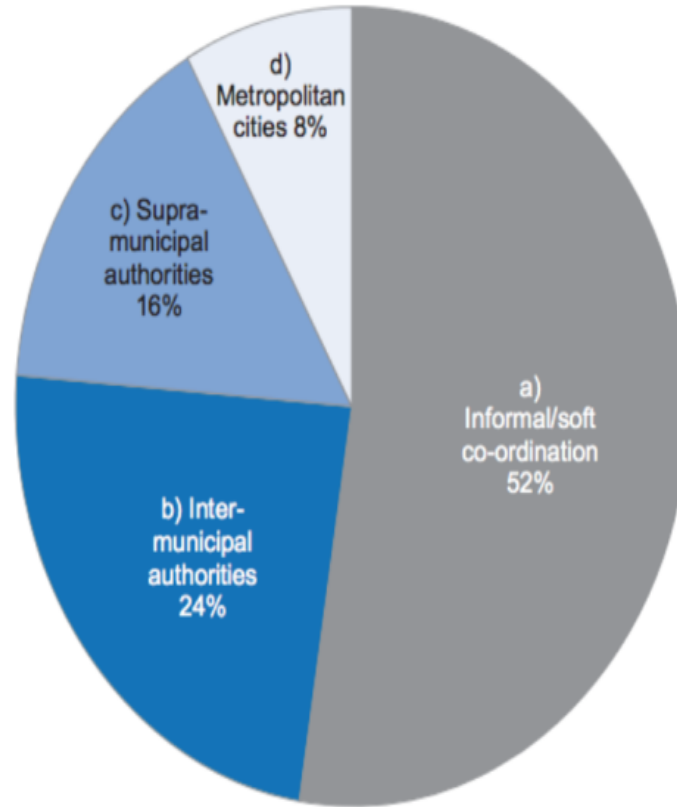
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- As previously mentioned, within countries, cities with fragmented governance structures have lower levels of productivity.
  - For a given population size, a metropolitan area with twice the number of municipalities is associated with 5-6% lower productivity.
- Effect mitigated by almost half when a governance body at the metropolitan level exists.

[Ahrend, Farchy, Kaplanis and Lembcke \(2017\), “What Makes Cities More Productive? Agglomeration Economies & the Role of Urban Governance: Evidence from 5 OECD Countries”](#), in Journal of Regional Science

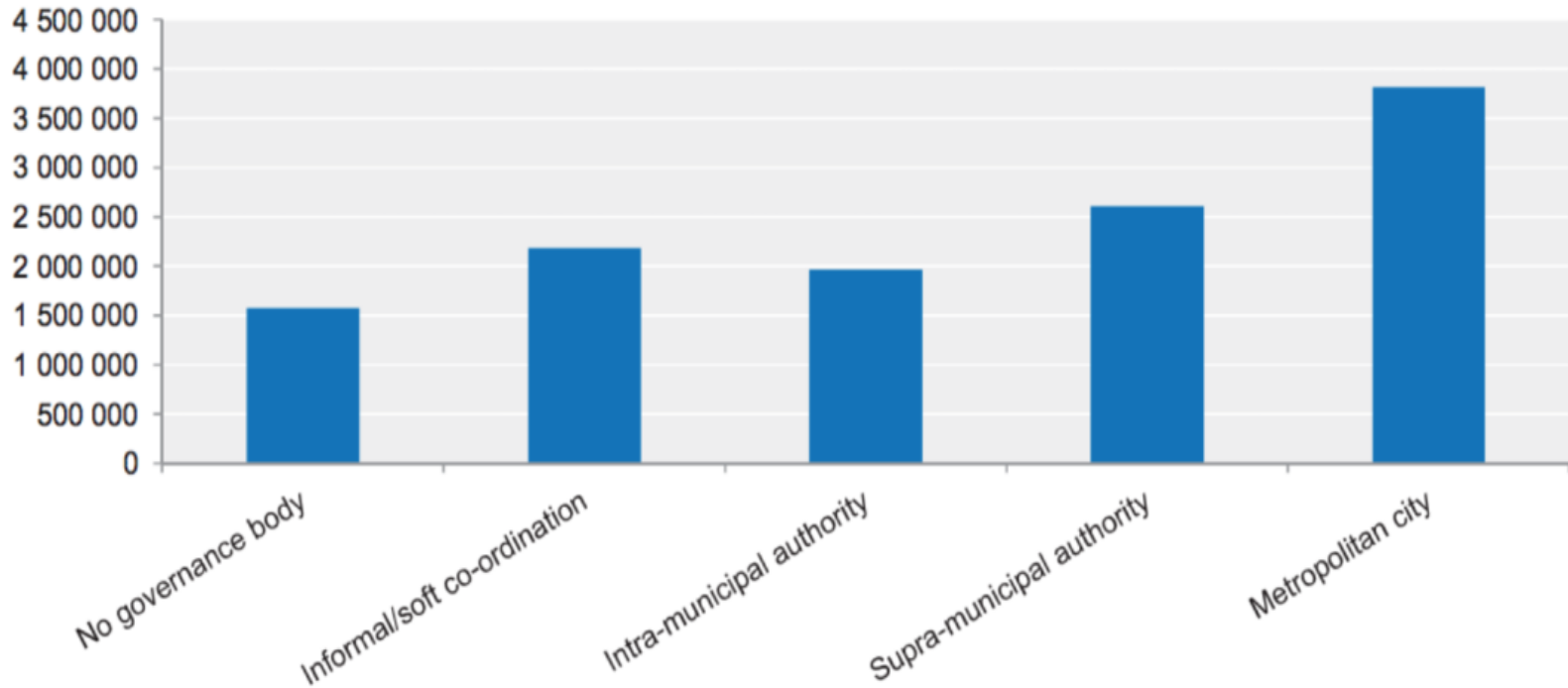


# Breakdown of Metropolitan areas by type of Governance arrangement





# Average population in OECD MA by type of Governance arrangement





## Political representation and accountability

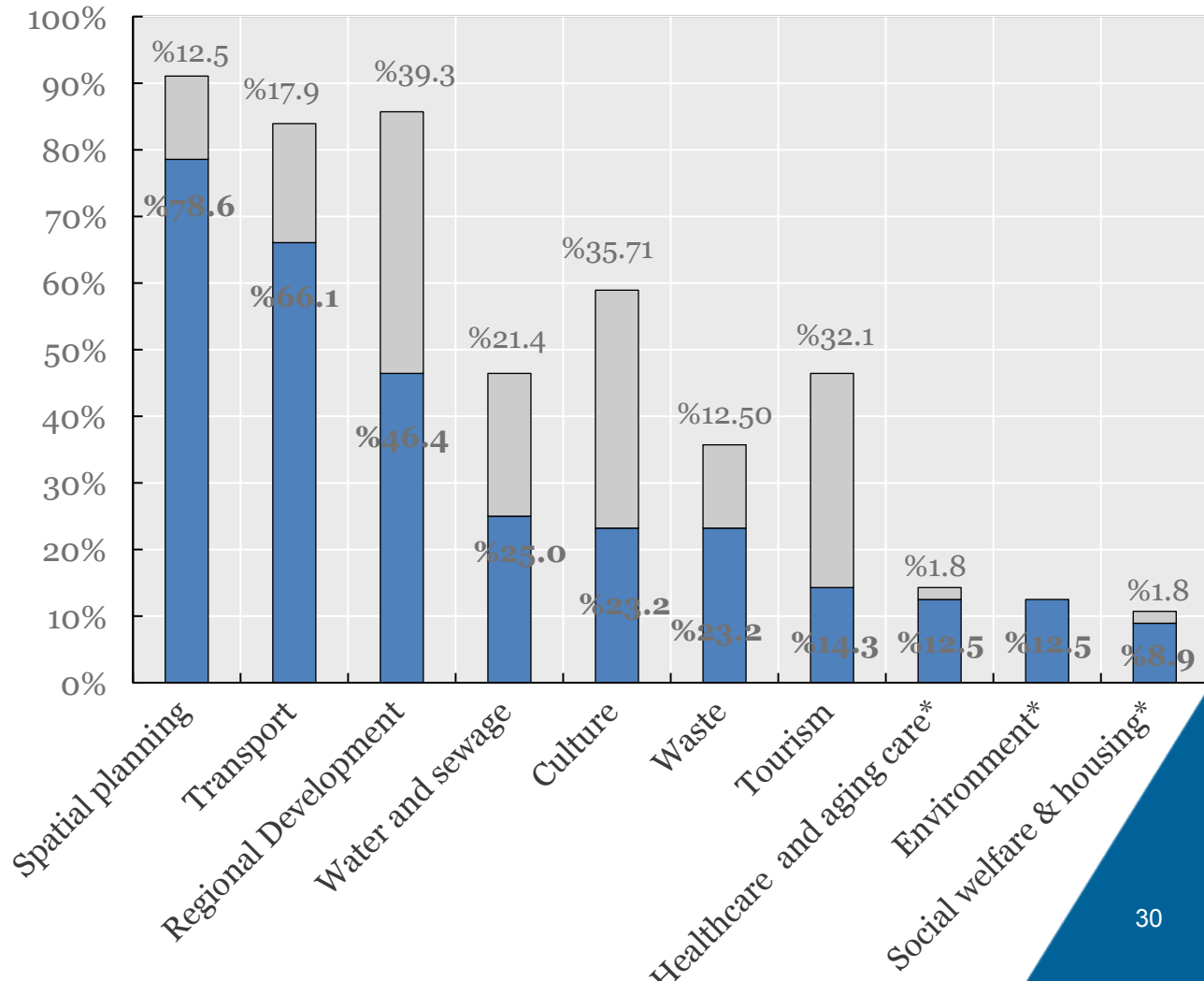
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- Economic efficiency of metropolitan integration vs lack of political accountability and weak popular legitimacy
- 55% MGB are composed by elected officials; But only 11% directly elected (typically in most stringent)
- Only 9% of MGB include representatives of civil society (typically the less stringent)

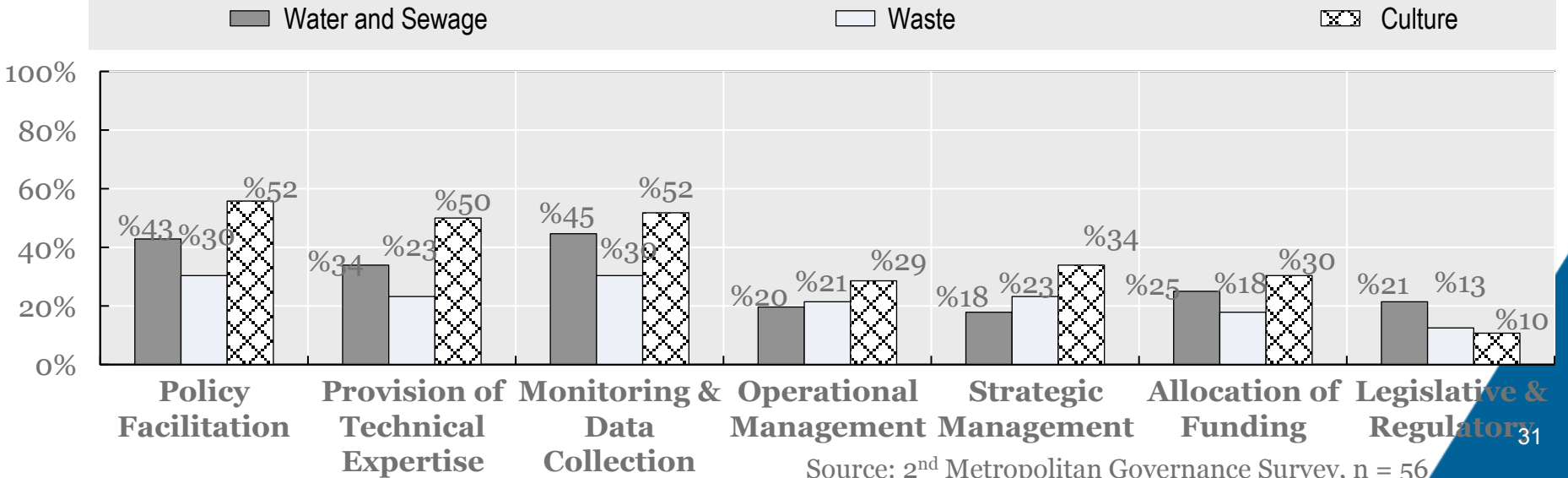
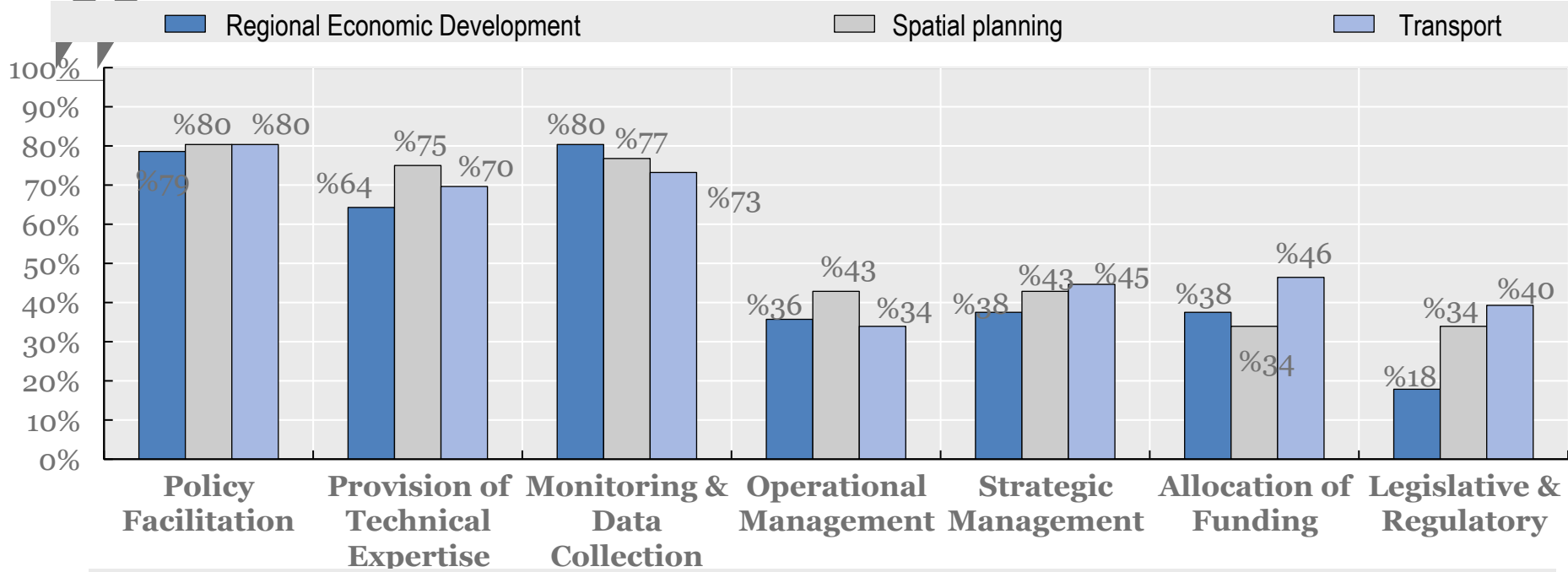


# Fields of activity of surveyed MGBs

■ Primary Field      ■ Secondary Field



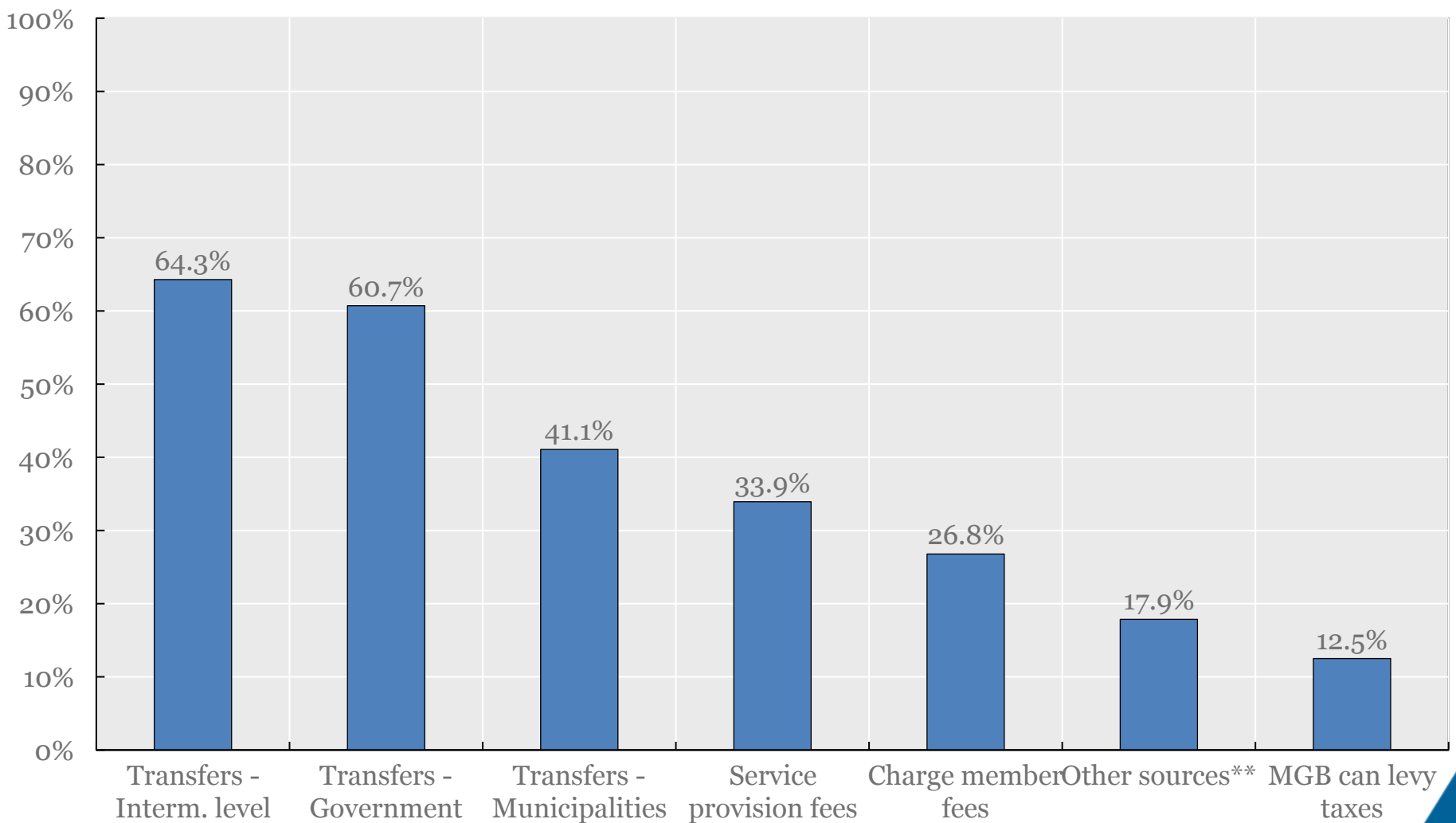
# Functions of MGBs in Fields of Activity



Source: 2<sup>nd</sup> Metropolitan Governance Survey, n = 56



# Sources of Funding of Surveyed MGBs



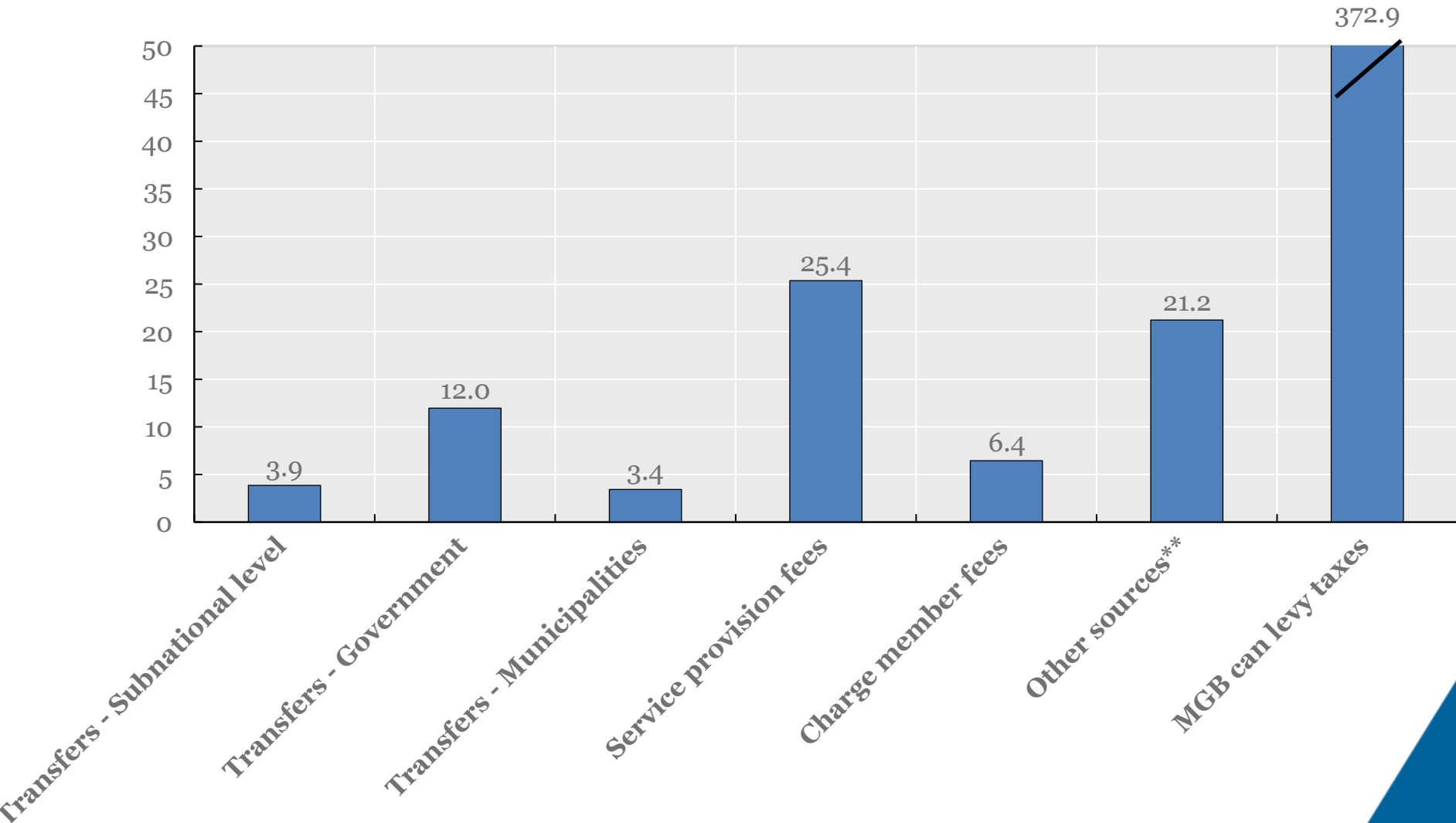
Source: 2<sup>nd</sup> Metropolitan Governance Survey, n = 56;

\*\* - EU funds, foundations,





# Median per capita budget (USD) by source of funding



Source: 2<sup>nd</sup> Metropolitan Governance Survey, n = 56



## Key messages

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- City size associated with higher productivity; but fragmentation associated with lower
- Metropolitan Governance helps mitigating fragmentation's negative impacts
- MG also contributes to reduce urban sprawl and satisfaction with public transports
- More stringent forms of Governance provide more cooperation & political representativeness
- Larger representation from civil society is needed (NGOs, private sector, etc...)



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# Thank you

Contact:

[Diogo.machado@oecd.org](mailto:Diogo.machado@oecd.org)

[@diogotmachado](#)



# 2<sup>ND</sup> SURVEY DETAILS



## 2<sup>nd</sup> Survey (after web-based research)

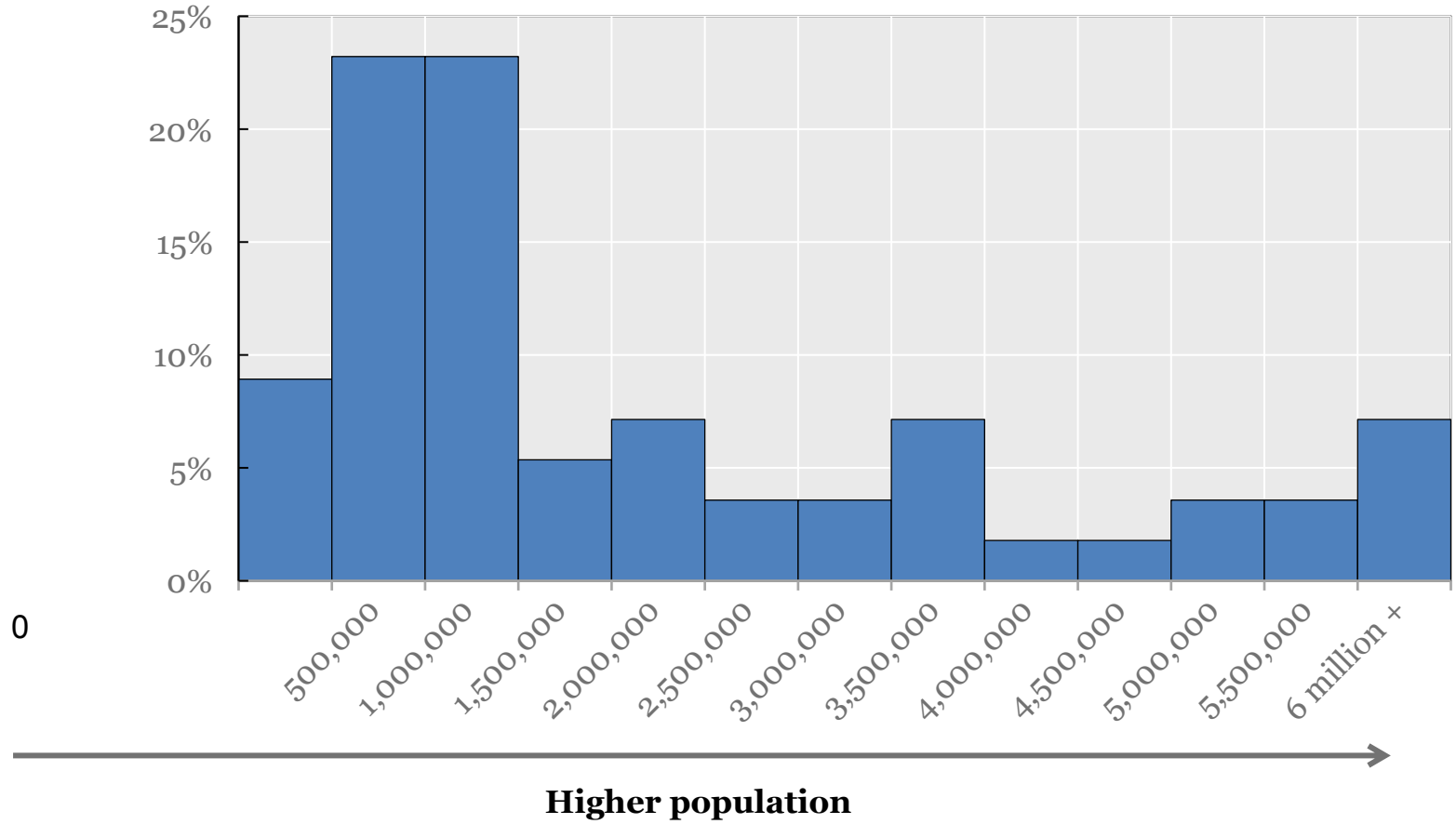
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- Attempt to increase evidence about metropolitan governance bodies
- Survey sent to Metropolitan Governance bodies in selected countries
  - Austria, Canada, France, Germany, Mexico, Netherlands, New Zealand, Sweden, Switzerland, United Kingdom, and United States; main criteria language
- Managed to get reply from 56 Metropolitan Governance Bodies (response rate 40%) – roughly a quarter of existing MGBs in OECD countries



# Respondents by population size

Frequency (%)



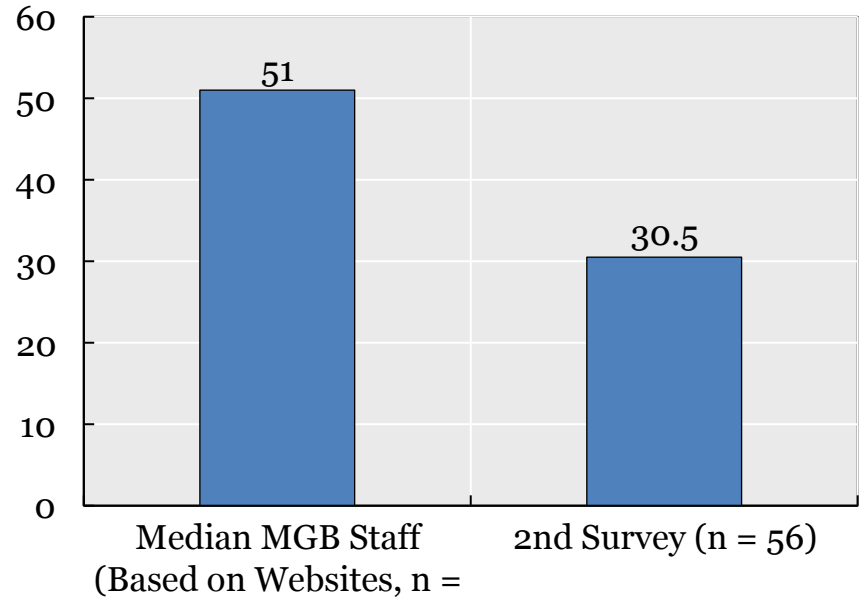
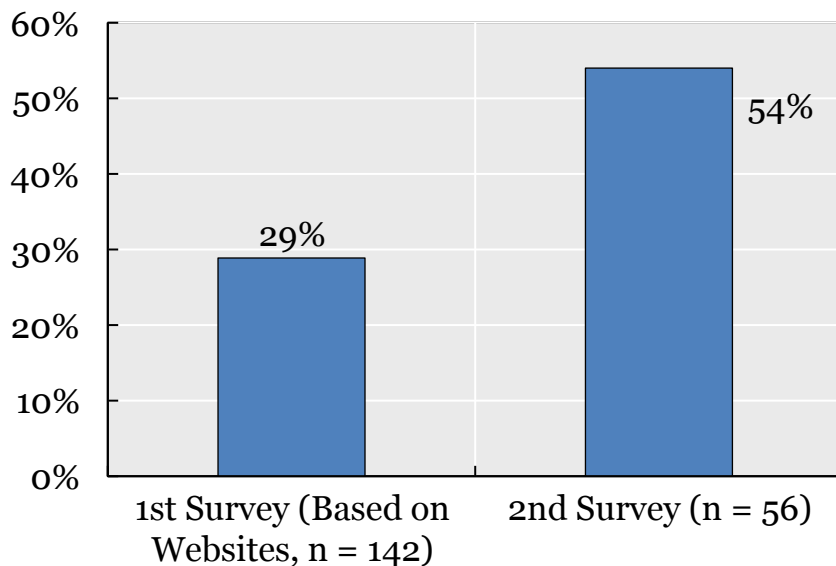
Source: 2<sup>nd</sup> Metropolitan Governance Survey, n = 56



# Positive selection bias? (Better organised MGBs more likely to respond?)

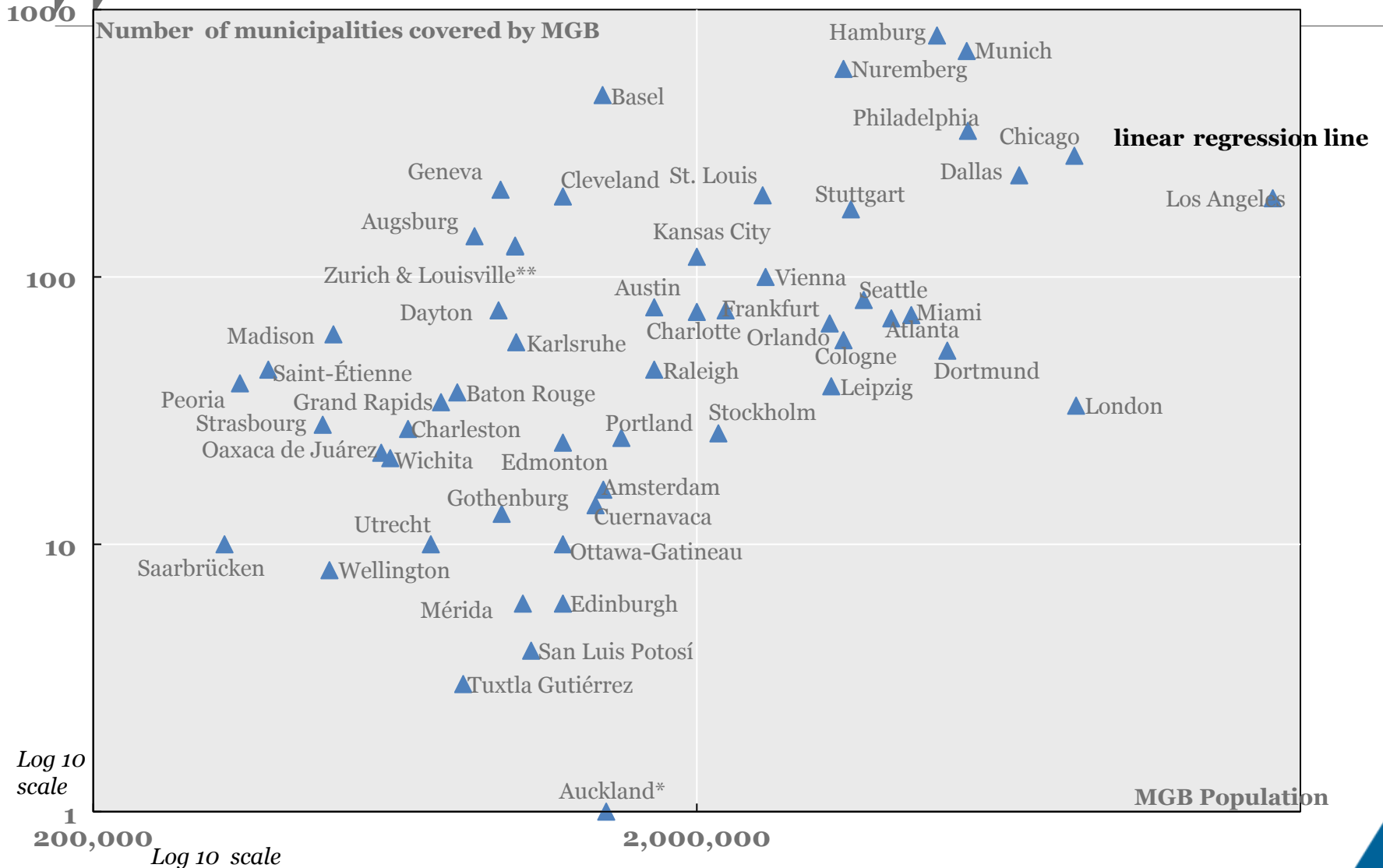
*Share of MGBs with legislative or regulatory authority is higher...*

*... but Median MGB staff is lower than the first survey*



**NB. Figures based on the same 11 countries** (Austria, Canada, France, Germany, Mexico, Netherlands, New Zealand, Sweden, Switzerland, United Kingdom, and the United States)

# Population and municipalities covered by MGBs



Source: 2<sup>nd</sup> Metropolitan Governance Survey, n = 56  
 \*Auckland Council is a single municipality \*\* These 2 cities have almost the same population size and number of municipalities.





# OECD Metropolitan Governance Survey

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- Data focuses on permanent structures of cooperation:
  - Do *Governance Bodies* exist?
  - What are their powers, fields of work, budgets, staff numbers, etc.?
  - Who is represented on them?
- Governance Bodies can be classified in four categories
  - a) Organisations based on informal/soft-coordination
  - b) Inter-municipal authorities
    - i. (Single-purpose)
    - ii. Multi-purpose
  - c) Supra-municipal authorities
  - d) Metropolitan Cities



# A functional definition for cities (EU/OECD)

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- Definition of Functional Urban Areas based on population density in 1km<sup>2</sup> cells that are matched to municipal boundaries and connected via commuting patterns.
- Urban centres are identified by aggregating densely populated 1km<sup>2</sup> cells. Urban centres with at least 50,000 inhabitants are kept.
- They are matched with the boundaries of the lowest administrative level for which statistical data is typically available (NUTS5/LAU2)
- Urban centres and the less densely populated municipalities in the commuting zone are combined into Functional Urban Areas based on commuting flows (>15%).
- More info: OECD (2012) Redefining Urban
- <http://measuringurban.oecd.org>



# Administrative boundaries are not the answer

