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## Metropolitan Challenges and Reform Pressures across Europe – the Perspectives of City Mayors

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Metropolitan governance arrangements and their policy purposes have been a matter of debate among researchers and practitioners around the globe. While we may trace three broad schools of metropolitan governance – reform school, public choice theory and new regionalism – with each still having its proponents, we are interested to learn whether there are assumptions on metropolitan governance that have today become general knowledge among urban political elites. By investigating the attitudes and perceptions of city mayors across Europe, we show that functional multi-purpose governance bodies are indeed more generally associated with equitable service distribution, whereas the preconditions for cost-efficiency and sustainable development are more equivocally placed at different modes of governance. Moreover, we show that a perceived general lack of problem solving capacities does not automatically translate into pressures for metropolitan reform, but it is only in combination with a general disaffection with the governance modes currently in place.

Keywords: mayors; metropolitan governance; equity; cost-efficiency, sustainable development; reform pressure

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#### Introduction

The twentieth century has witnessed and consolidated the transformation of the European population structure from a territorial point of view: nearly three-quarters of the European population (Eurostat 2014) currently live in metropolitan and urban areas, making these areas a prime subject for political reforms at the local level. Most of the times, however, the growth of metropolitan areas has not been accompanied by a rational and planned process of metropolitan institution building. In many countries, metropolitan areas have not been institutionally empowered in line with their demographic and economic potential due to political constraints and power struggles.

From a political and institutional perspective, most of the controversy revolves around the reasons and arguments for creating arrangements for collective action, such as a metropolitan government, multi-purpose bodies, intermunicipal contracts, or delegation to higher state levels. Indeed, since these concerns are strongly related to the political necessity of solving new (and old) problems at a reasonable (or affordable) cost, the issue of the effectiveness of such institutional architectures naturally emerges. Scilicet, together with more principled preferences for building (or not) metropolitan governments, basic concerns regard the effectiveness of these reforms for tackling local challenges.

Up to present, scarce evidence exists regarding the local elite's preferences for creating metropolitan governments linked to the perceived effectiveness of such reforms. This paper directly tackles with this issue by asking whether there is an identifiable pattern across European mayors when it comes to launching metropolitan reforms. From the current theoretical literature in this field, one might expect the existence of differences regarding the mayors' evaluations of existing modes of

metropolitan governance and their effectiveness. This, in turn, is expected to influence mayors' attitude towards metropolitan institutionalization.

The present contribution provides valuable insights by linking individual mayors' assessment of metropolitan problem solving capacities and various modes of governance to their preferences for metropolitan institution building. Using the rich data from the POLLEADER II-survey on mayors (second round), the article tests, in a first step, the perceived problem solving capacities of certain modes of governance together with their efficiency in tackling central metropolitan challenges. In a second step, the paper connects the evaluation of such particular modes of governance to the desirability for implementing stronger metropolitan institutions. To the best of our knowledge, this work is the first comprehensive study of a set of European mayors accounting for these challenges and pressures for reform.

#### Schools of metropolitan governance meet real-world practitioners

The debate on how metropolitan areas, urban agglomerations and, more recently, cityregions, should be governed has become recurrent not only in the research fields of urban politics and urban studies but also on the political agenda (for a review see Brenner 2002; Heinelt and Kübler 2005; Savitch and Vogel 2009). Indeed, regular waves of reforms inspired by alternative conceptions of metropolitan governance and the specific institutional arrangements are being put in place around the globe. From the academia there is a consensus on highlighting the existence of three main approaches to metropolitan governance (the reform school, the public choice school and the new regionalism). These three perspectives differ by the way they define main metropolitan problems, the goals to be achieved, the degree of institutionalization of metropolitan cooperation, and the representation of the metropolitan area (as a political space, as a

market and as a space for public-private cooperation, respectively).

The first approach in the metropolitan debate, the metropolitan reform tradition, considered politico-administrative fragmentation of the region as a problem for solving social inequalities, ensuring an efficient delivery of services and enhancing local democracy. Consequently, its proponents opted for creating a single political unit based on one integrated government for the entire metropolitan area (one-tier after amalgamations or a two-tier metropolitan structure) (Stephens and Wikstrom 2000). The first wave of this approach (1930s) focused on managing intense urban growth outside the core city (Brenner 2002, 7) and dominated metropolitan debate until the late 1950s. The second wave came as a response to the opposing public choice school raising in the late 1950s, and focused more on the 'internal sociospatial differentiation and re-differentiation of metropolitan regions' (Brenner 2002, 7). Its development resulted in relatively numerous undertakings in Europe and the U.S., mainly between 1950 and 1970. Some two-tier metropolitan structures were created, like the Metro Toronto (1954) or the Greater London Council (1965) (Keating 1995). New reforms (the so called 'second golden age of institutional reforms'; Jouve and Lefèvre 2002) in the 1990s and 2000 in Canada including mergers in large agglomerations (such as Toronto, Montreal, Ottawa) and recent reforms in Denmark (2007) illustrate the influence of the reformist approach.

In the late 1950s, the famous article of Tiebout (1956) set the basis for the development of the public choice approach in metropolitan debate. Its proponents support fragmentation of metropolitan areas for the main reasons of protection of local communities, closeness to the citizens, and competition among the independent municipalities (Bish and Ostrom 1973; Tiebout 1956). All the drawbacks of institutional fragmentation (like high cost of service delivery) can be overcome by the means of

voluntary inter-municipal cooperation (creation of single-purpose agencies, i.e. for the delivery of transport or water services). This approach has been criticised for its localism and lack of consideration of social inequalities at the metropolitan scale, focussing instead on cost and organisational efficiency in the fragmented region. The abolition of metropolitan governments in the 1980s, like in London (1986) and Barcelona (1987), were inspired by this perspective, as well as the proliferation of special districts in the US as the tool to solve metropolitan problems (Stephens and Wikstrom 2000).

Both traditional approaches were widely criticised, not only from a theoretical perspective, but also due to the very few success examples of their implementation (Lefèvre 1998; Norris 2001). Several factors hampering successful implementation of those approaches were enumerated, including:

- (1) for metropolitan reform: fears of meso and local level about losing their powers or even being abolished; unwillingness of central government to empower metropolitan areas by giving them special legal status; reluctance of central government to engage in a difficult political problem (it's hard to satisfy everybody with the details of the reform) which therefore never moves to the top of the political agenda. These problems show the importance of intergovernmental relations for metropolitan reform.
- (2) for inter-municipal cooperation: organisational, political (losses of power) and financial costs of launching cooperation hamper its development as voluntary process; in most cases (as in the French case) IMC has to be supported by a set of incentives meaning top-down intervention, questioning its bottom-up character. The most quoted and most universal conditions for reaching metropolitan governance were mentioned by Heinelt and Kübler (2005) and

include: political will and tradition to cooperate, leadership and incentives. Although the authors assigned them to the new regionalism, they are also true for the public choice perspective.

As a consequence of both global changes and disappointment with the two metropolitan schools, in the 1990s, 'new regionalism' appeared as an alternative conception of metropolitan governance (Savitch and Vogel 2000). The new approach is strongly shaped by the context of globalization and the internationalization of the economy, which has forced metropolitan regions to compete against each other on the global scene (Goldsmith 2005; Denters and Rose 2005). For the first time in the history of the metropolitan debate both economic development and non-public actors were taken into consideration. Therefore, new regionalism has shifted main attention of the metropolitan debate from its institutional setting to other issues like international competitiveness, inclusion of non-governmental actors and metropolitan citizenship. All these challenges require a coherent metropolitan policy (Brenner 2002; Stephens and Wikstrom 2000) – metropolitan-wide strategies of development have started to flourish since the 2000s (Matusiak 2011). One of the new aspects is sustainable development, especially important for large urban agglomerations willing to keep their attractiveness for new citizens.

The details of the composition of metropolitan arrangement have become less important, even though new regionalists are most willing to see flexible arrangements like strategic planning and multi-purpose arrangements that include a plurality of actors as the best way for promoting economic competitiveness, but also for dealing with social inequalities and urban sprawl (Frisken and Norris 2001). Yet, again, new regionalists have been criticised of having difficulties in putting their ideas into practice (Norris 2001; Swanstrom 2001), mainly because economic competitiveness of city

region has failed to serve as a sufficient incentive for metropolitan cooperation. However, we can see the influence of neo-regionalist ideas through the creation of public-private initiatives like metropolitan associations for strategic planning (like in Turin or Barcelona) and platforms for economic development (like in Frankfurt, London or Toronto).

As many studies have shown, these discourses on metropolitan governance are adopted by different groups, such as political leaders and civil servants, business organisations, social movements and community groups, experts, trade unions, etc. (for some examples, see Keil 2000; Oliver 2000; Feiock and Carr 2001; Boudreau 2003). In many of the studies a strong focus is placed on citizens' support for metropolitan reform, regardless of the institutional arrangement put in place (like Schaap 2005, about Netherlands or Hamilton 2000, in his conceptual paper based on other studies and the case of Pittsburgh). Other studies have focused on the citizens' perceptions of metropolitan governance, not only on their perception of metropolitan areas as political and communitarian spaces but also on the specific institutional models of metropolitan governance (mergers, direct election of metropolitan mayors and assemblies) (see for instance Kübler 2005 for the Swiss case; Lidström 2006, 2010, 2013 for Sweden; Lackowska and Mikuła 2015 for Poland; and Vallbé, Magre and Tomàs 2015 for the case of Barcelona).

But also the support of local politicians is taken up as an important reform factor. In relation to the role of mayors, several case studies have analysed their preferences and actions for a type of metropolitan arrangement, both from quantitative and qualitative approaches (see for example Baraize and Négrier 2001 on the process of creation of multipurpose metropolitan structures in France; Hogen-Esch 2001 on the case of the secession of Fernando Valley in Los Angeles; Savitch and Vogel 2004 on

the consolidation of Louisville and Jefferson County, Kentucky; Heinelt and Zimmermann 2011 on the German case; Mikuła 2011 on metropolitan arrangements in Poznan, Poland; Tomàs 2012a, 2012b on the creation of the megacity of Montreal; Dąbrowska and Szmigiel-Rawska 2015 on metropolitan cooperation in Warsaw).

These studies show that mayors are more inclined to one or another school and to a particular governance mode, this depending mainly on local contextual factors, but also political orientations and preferences of other actors. For instance, the size and shape of the agglomeration (monocentric, polycentric, having a big or small central city), the ideology of the mayor (left-wing, right-wing) and the socio-economic composition of the metropolitan area (high or low inequalities, high or low segregation, poor or rich financial situation) are variables that shape mayors preferences to a specific model of metropolitan governance. Moreover, institutional factors like the political recognition of local governments and their place in the multilevel system of governance (more or less decentralised systems) have been taken into account. Especially important are intergovernmental relations – as we mentioned, various tiers may fear metropolitan arrangements would take away their powers, and in the 'new local democracies' of Central-Eastern and South-Eastern Europe, municipalities which regained autonomy only recently may not be willing to undertake any intermunicipal initiatives (Lackowska 2009). In general, trust and political will to cooperate seem to increase chances for undertaking any kind of metropolitan initiatives.

However, there has been no previous systematic European work on the perceptions of political elites regarding these issues, so we do not know whether there are general patterns on the role of mayoral characteristics and their perceived local context. We assume that mayors' perceptions may be driven jointly by their political orientations and preferences, social background and their institutional constraints.

#### Hypotheses

For this paper, we propose a basic framework to analyse mayors' perceptions. Taking into account the limitations derived from an evident multicausal environment, we proceed to test our research question related to how to understand individual mayors' assessments of metropolitan problem solving capacities, together with their preferences for the creation of metropolitan governments. Specific problem solving capacities focus on three items present in the three approaches to metropolitan governance: equitable distribution, cost-efficiency and sustainable development. As it has been highlighted by the existing literature, mayoral satisfaction with problem solving capacity and pressures for metropolitan reforms will depend on a wide range of aspects, including their experience with various elements of their particular metropolitan arrangement (e.g., multi-purpose government, single-purpose units, voluntary cooperation). In order to account for all these aspects, we consider mayors' evaluations as a function of their individual attitudes, their social background as well as their local context, which can be designed in the way presented in fig.1.

#### [Figure 1 near here]

Considering the high number of issues involved and the intricacy of the theoretical challenges, several aspects are present that cannot be straightforwardly analysed pooled in a single statistical model. Therefore, the paper depicts the discussed theoretical tensions in two sets of distinct hypotheses. The first group aims to analyse the relations between mayoral evaluations of existing governance modes and its relation with the perceived capacity to solve metropolitan problems. The second hypothesis puts in relation both unsolved challenges in metropolitan functioning and core beliefs of mayors to understand the determinants for the support (or not) for creating metropolitan

governments.

Generally stated, hypothesis 1 considers that the problem solving capacities reported by a mayor relate to the particular mix of governance modes he or she perceives as currently effective. Rather than investigating the possible causal effects between the actual governance arrangements and their effectiveness as defined by some general criteria, we are thus interested in the subjective associations in the mayors' minds: how do evaluations of single governance modes in place relate to their overall evaluation with regard to equity – or, with regard to cost-efficiency or sustainability? Given the three different challenges under investigation, we formulate three separate sub-hypotheses on associations regarding each.

Since equity is the distinctive focus most clearly tied to reform theory, where metropolitan governance should be multipurpose and hierarchic in order to overcome negative externalities involved in intermunicipal competition and for achieving areawide redistribution, we formulate **H1a** as follows: '*Mayors satisfied with the degree of equity across the metropolitan area are likely to assign upper-level governments and multi-purpose bodies a stronger present relevance when it comes to the development of their metropolitan area, compared to mayors who are discontent with the degree of equity.*' This assumption is also in line with the later work on 'City Limits' by Peterson (1981), where we should expect more redistributive policies through allocating competences at higher levels of the political structure.

A second sub-hypothesis, **H1b**, accounts for the main focus of public choice perspective, which plants intermunicipal cooperation (mainly in the form of intermunicipal contracts and single-purpose organisations) to be the best way for municipalities to ensure cost-efficient production of public services. Therefore, H1b is stated as follows: *'Mayors satisfied with cost-efficiency are likely to attribute a stronger* 

role to single-purpose authorities and inter-municipal cooperation, compared to mayors who are not satisfied with cost-efficiency.'

The final sub-hypothesis, **H1c**, departs from the fact that sustainability is a relatively new issue, recently incorporated into the metropolitan debate. Moreover, the issue per se requires coordinated management of the whole metropolitan area and across different policy fields and can therefore not be achieved under a fragmented management (cooperation between single municipalities). Therefore, '*mayors satisfied with sustainable development report a stronger role of new regionalism approaches, combining multi-purpose governance bodies with (public-private) single-purpose authorities.*' In addition to this proposition we also expect mayors satisfied with sustainable development to report a stronger role of upper tiers regulations, as studies on local climate policies show a strong influence of central incentives and policies for locally undertaken actions (Hanssen et al. 2017).

The second main hypothesis is concerned about pressures for reform resulting from the mayoral evaluations of their present governance arrangement and their combined problem solving capacities. More specifically, it is directed towards the most contentious of all metropolitan governance reforms: the creation of a metropolitan government, as proposed by the reform school.

Under this framework, **H2** functions in this way: 'the *support for creating metropolitan governments is stronger with mayors perceiving their existing governance-mix as dysfunctional and ineffective with regard to addressing major metropolitan challenges.*' This statement relies specifically on the core believes theoretically assigned to the reform school of metropolitan governance.

Besides these mayoral evaluations of their governance arrangements and related problem solving capacities, we ascribe an important role to previous core beliefs leaning

towards a particular school of metropolitan governance. Additionally, we expect positive mayoral attitudes towards intergovernmental cooperation to favour the support for a metropolitan reform.

#### Data and method

The analysis draws on data from the POLLEADER II survey, conducted in 27 European countries (plus Israel and Iceland) between the years 2014-2016. The questionnaire was addressed to all mayors of cities with more than 10'000 inhabitants and the average return rate was 39 percent. The wording of survey items used for the following analysis can be found together with the descriptions of transformations in the appendix (table 4).

Even though the items on governance modes and problem solving capacities were only asked to mayors declaring that their city formed part of a larger urban agglomeration (with its meaning explained in the filter question), we filtered the available answers based on the Eurostat (2011) database on functional urban areas. Since the sample included smaller or more rural countries with few or no cities from functional urban areas covered, we further restricted our database to the eight countries actually counting more than 25 observations and making for most of the available data. The following section gives an overview of the variables of interest for the selected countries.

Important data transformations refer to the battery on the effectiveness of single governance modes in place in a given metropolitan area. High values on the single items suggest that the respective governance mode is a relevant component of the local governance-mix, having an actual impact on the development of the metropolitan area. In order to discriminate the relative relevance of particular modes also for mayors perceiving most of the governance modes as effective, we created dummy variables

indicating that the governance mode was not only perceived as effective, but also more effective than the median response in that battery.

Additionally, in view of the analysis on the pressures for metropolitan reform, we developed a dichotomous variable assigning mayors either to the reform school or the public choice school. Mayors were asked whether they conceived inter-municipal cooperation or amalgamation as more effective with regard to four criteria: professionalization, service quality, cost saving, and political participation. If mayors ticked amalgamation more often than inter-municipal cooperation, we assigned them to the reform school camp.

As for the method, we use ordered logistic hierarchical (multi-level) regressions, nesting mayors and their cities (level 1) in their metropolitan area (level 2) and their country. Since the number of countries does not allow to adequately specifying models for explaining cross-country variation, we use fixed effects in order to control for the particularities of each country (e.g., institutional setting, ongoing or completed national reforms, the national political discourse, socio-economic context).

#### Mayoral evaluations and reform pressures across Europe

Before we turn to the actual regressions, we here present the overview of our key variables of interest for our subsample of eight countries (table 1). Based on the evaluations of mayors, we realise that most modes of governance do have at least some relevance in most countries. It is clear that metropolitan governance often involves multiple modes of governance at once. Top down regulations and transfers combined with inter-municipal cooperation, sometimes taking the form of single-purpose authorities or multi-purpose governance bodies. Often, upper-level governments themselves provide the legal basis and incentives for inter-municipal cooperation and

creating supra-local authorities (see, e.g., Heinz 2000). Where multi-purpose governance bodies exist, they are usually charged with deciding on strategic directions and coordinating various sectoral policies, whereas the implementation of sectoral policies might be delegated to single-purpose authorities (e.g. in Germany or Central Eastern Europe).

Looking at national patterns in the table, we can distinguish two patters: (1) major relevance of inter-municipal cooperation and (in the second place) single-purpose associations or (2) relevance of inter-municipal cooperation and multi-purpose metropolitan bodies. The first group is represented by Federal states and Poland, the second group by Italy, Spain, France and Sweden. Only in Greek responses support from the upper-level comes as a second most relevant governance mode (after intermunicipal cooperation). It is definitely worth noticing that in the vast majority of the countries under study, inter-municipal cooperation is chosen as the most relevant option for tackling metropolitan challenges. Therefore, it is difficult to find patters linking specific governance mode with effectiveness in one of the three fields – 'specific governance mode' is in most cases inter-municipal cooperation.

Finally, support for establishing metropolitan government is evident only in Italy. Spain and Greece seem slightly positive about this idea, whereas the strongest 'no' comes from Sweden.

[Table 1 near here]

#### [Figure 2 near here]

Beyond the discussed cross-national patterns, it would be interesting to relate mayoral evaluations to the actual governance structures in their respective metropolitan areas. While corresponding data would be difficult to gather regarding single purpose

authorities or inter-municipal cooperation, with regard to multi-purpose governance bodies we can adhere to the OECD Metropolitan Governance Survey (Ahrend, Gamper and Schumann 2014), published around the time we conducted the mayoral survey. We complemented their coding for all cities figuring in the regressions below. Figure 2 shows that even in areas with more or less full-fledged metropolitan government mayors do not generally perceive this body as particularly effective for addressing metropolitan challenges. Still, there are clearly more satisfied mayors in these areas compared to areas with only soft governance bodies or without metropolitan governance bodies altogether.

# Mayoral associations between governance modes and problem-solving capacities

Our analysis brings evidence for hypothesis 1, stating that specific problem solving capacities are associated with the particular mix of governance modes perceived as currently effective. We investigated this hypothesis by a regression model for each of the three challenges under investigation (table 2).

Regarding equitable distribution, a favourable evaluation seems to coincide with multi-purpose governance bodies being perceived as effective (model M1). We must note however, that this association is purely subjective, since we do not find any significant effect for the existence of either a metropolitan governance body or a metropolitan government. Rather than concluding a unidirectional causal relation from actual governance structures to actual problem solving capacities, we simply note that mayors who are satisfied with equitable distribution of public services across their region tend to emphasise the role of their multi-purpose metropolitan governance arrangements above the role of other governance modes. Inversely, mayors evaluating their multi-purpose governance bodies are likely to use equity as an evaluation criterion.

An additional regression model (appendix, table 5) suggests that this finding holds for the entire population of mayors, and not just for mayors sharing core beliefs with the metropolitan reform school.<sup>1</sup>

Positive evaluations of cost-efficiency, in contrast, seem to be less unanimously linked to multi-purpose governance bodies, since effective inter-municipal cooperation seems to equally have a positive effect (model M2). Besides, there is some evidence for a positive association with support and regulations from higher state levels. We here focus on the stronger two effects and check whether multi-purpose governance bodies and inter-municipal cooperation achieve the effect in combination or separately. We calculate an additional model (M3) including an interaction term with both governance modes. Since the interaction term is insignificant, there seems to be a substantial share of mayors associating efficiency with multi-purpose bodies in some instances and another substantial share of mayors associating efficiency with inter-municipal cooperation in other instances. Whether cost-efficiency is associated with multi-purpose bodies or with inter-municipal cooperation seems not to depend on the mayors' adherence either to the reform school or to public choice theory (appendix, table 5). As was the case with regard to equity, the association with multi-purpose governance body pertains solely to the question whether a mayor perceives a city's metropolitan governance body as relevant, whereas the mere existence of a governance body or metropolitan government is not essential.

<sup>&</sup>lt;sup>1</sup> Our hypotheses and regression models presume general associations between governance modes and problem solving capacities across the entire population of city mayors. The interaction term added to the respective model in table 5 (appendix) is insignificant, indicating that the found associations are not conditional upon the reform school ideology of a mayor.

Lastly, the perceived capacities for implementing a sustainable metropolitan development strategy seem to be strongly related to the perception of inter-municipal cooperation as working effectively (M4). Additionally, mayors perceiving a stronger role of upper-level governments tend to be more satisfied with their metropolitan capacities with regard to sustainable development. Once again we test the combined effect for both governance modes. We find that perceived capacities for sustainable development remain strongly related to a mayor's assessment of inter-municipal cooperation as effective or not (M5). The combined effect and also the independent effect by upper-level governments, however, do not reach any conventional levels of statistical significance. In either case, mayoral associations again seem to be driven by their local experiences rather than their adherence to one or the other metropolitan governance school (appendix, table 5).

In general, we note that individual, city or regional characteristics do not have a systematic impact on the mayoral evaluations of problem solving capacities – with few exceptions in the case of sustainability. Here, leftist mayors seem to be generally more satisfied with the efforts for sustainable development in their region, as do mayors in capital city regions, whereas satisfaction is generally lower in the larger cities within the metropolitan regions. Interestingly, the challenge of equal distribution seems not to be perceived more strongly by leftist mayors or by mayors reporting a poor financial situation of their municipality. Also at the metropolitan level, whether the area pertains to a smaller, secondary or capital city region does not seem to make a difference when it comes to perceptions of the achieved equity or efficiency. Different from the case of sustainability, within-country variance at the metropolitan level is almost inexistent in these two domains.

In sum, whereas most of our control variables at individual, city and regional level seem to be of little relevance for mayoral evaluations of metropolitan problem solving capacities, the perception of their particular metropolitan governance structures clearly is related to these evaluations, thus confirming our hypothesis 1. In line with the metropolitan reform school, mayors seem to associate equitable development with multi-purpose governance bodies (H1a), but against our expectation, they do not seem to credit upper-level government support when achieving satisfactory development concerning equity. Our finding regarding cost-efficiency shows that mayors not necessarily relate high cost-efficiency with effective inter-municipal cooperation as advocated by public choice theorists (H1b), but they also seem to equally recognise the potential contribution of multi-purpose governance arrangements to cost-efficiency as expected by the metropolitan reform school. City mayors do not, however, systematically relate single-purpose authorities with efficiency gains. Lastly, against our expectations, mayors associate sustainable development mainly with the effectiveness of inter-municipal cooperation, rather than with new regionalist governance structures with single- or multi-purpose authorities (H1c). While public choice theory was more concerned about efficient service delivery and local self-determination, this finding might actually indicate a general recognition that a lack of inter-municipal cooperation hinders the effective implementation of sustainable development policies.

[Table 2 near here]

#### Pressures for metropolitan reform

Our second main hypothesis assumed that pressures for creating a metropolitan government could be explained with individual's perceptions of the general problem pressure, overall dysfunctionality of the governance structure, and their previous core beliefs leaning towards a particular school of metropolitan governance. The regression in table 3 shows that perceptions of problem pressure and dysfunctional governance indeed increase the probability of supporting a metropolitan reform – yet this effect holds only when the two factors appear together. In contrast, if mayors perceive strong problem pressures but attest at least one of the governance modes to work effectively, they will be unlikely to support a metropolitan reform. The same is true for mayors perceiving all governance modes as dysfunctional, but being less concerned about the overall problem pressure. Interestingly, mayors sharing central beliefs of the metropolitan reform school are not generally more likely to actually endorse a metropolitan reform. We only find evidence for a light conditioning effect of the reform school ideology, decreasing the negative effect of problem pressures.

From figure 3 we can further appreciate how the three effects interact. In order to simplify interpretation, we treated the dependent variable as continuous and based the conditional effects on a replicated linear two-level regression (see online appendix, table 6). The figure shows how the aforementioned interaction effect is less pronounced with mayors adhering to the reform school ideology (upper two panels). Mayors that are less fond of amalgamations and rather believe in the superiority of inter-municipal cooperation, however, react in two opposing directions when confronted with metropolitan pressures (lower two panels). If at least one other governance mode is perceived as working effectively, they clearly abstain from a metropolitan reform. But if all governance modes in place are failing, they are clearly more willing to engage in the metropolitan experiment.

Back at the regression table, our items on inter-governmental relations reveal a weak positive effect of mayors arguably taking a more positive stance towards cooperation, whereas defending the role of local governments in the political system

seems to rather undermine the support for creating a metropolitan government. From the individual control variables, we find leftist and elder mayor to be more supportive of metropolitan government reforms.

[Table 3 near here]

[Figure 3 near here]

#### Conclusions

Our descriptive analysis allows comparing the general satisfaction and discontent with particular governance modes and particular problem solving capacities across countries. With the regressions we addressed our two main working hypotheses regarding the relationships between mayoral perceptions of metropolitan governance arrangements and their satisfaction with problem solving capacities. We can confirm that mayors associate particular governance modes to particular problem solving capacities – our hypothesis 1 – and that the association between multi-purpose governance arrangements and equitable distribution is the one shared most unanimously. With regard to the question of metropolitan government reform, the most contentious issue seems to be cost-efficiency, since mayors associate cost-efficiency with the two governance modes pertaining to the opposing schools of metropolitan governance: reform school and public choice theory. Whether they attribute cost-efficiency to multi-purpose governance bodies or inter-municipal cooperation seems to be purely related to the individual perceptions and experiences with existing governance structures, but not to more principled adherence to either one or the other school. This shows that theoretical concepts of the metropolitan debate are in practice overlapping, with various effects being achieved by the means of various governance modes and mixtures.

Regarding the pressure for metropolitan reform – our hypothesis 2 –, we found only a small group of supportive mayors, but this group is best characterised as perceiving strong metropolitan problem pressures and being discontent with locally existing governance modes altogether. One or the other element alone yields the opposite result of shying away from any reform experiments at the metropolitan level. Again, more principled beliefs seem to only have a subordinated role in the real world metropolitan governance debate.

While mayors today seem to have internalised some of the concurrent expectations of the various ideal typical metropolitan governance schools, their evaluations of locally existing governance modes and the support for metropolitan reform seem to work on more pragmatic grounds, independently from individually held principled beliefs.

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## Appendix

[Table 4 near here]

[Table 5 near here]

### **Online Appendix**

[Table 6 near here]

			Relevance of governance modes in place			Problem solving capacities			Support for reform	
State tradition (Lot	ughlin/Peters 1997)		Support and regulations by upper-level governments	Multi-purpose governance bodies for the urban agglomeration	Single-purpose authorities / special purpose districts	Inter-municipal contracts and cooperation	Implementing an area-wide sustainable development strategy (limiting sprawl, protecting natural resources)	Cost-efficient production and delivery of public goods and services (e.g. energy, water, waste, maintenance, public safety)	Equitable distribution of public goods and services across the larger urban agglomeration (e.g. education, culture, health, social welfare, adequate housing, transportation, area development)	Creating metropolitan government(s)
Napoleonic	Greece	Ν	32	32	32	32	32	30	32	31
	_	Mean	3.41	3.03	3.06	3.81	4.13	3.90	3.97	3.13
	Italy	Ν	45	44	42	45	44	43	44	46
		Mean	2.73	3.02	2.26	3.91	4.00	3.98	3.82	4.09
	Spain	Ν	137	136	134	137	142	142	141	142
		Mean	3.38	3.15	2.66	3.88	4.05	4.13	4.15	3.11
	France	Ν	33	34	33	34	33	33	33	38
		Mean	2.88	3.68	2.88	3.15	3.55	3.88	3.12	2.68
Federalist countries	Germany	Ν	192	192	191	192	195	194	193	192
	_	Mean	2.83	3.30	3.62	3.73	3.50	3.57	3.37	2.85
	Switzerland	Ν	45	45	45	44	45	45	45	52
		Mean	3.13	3.11	3.31	3.82	3.84	3.67	3.00	2.77
Scandinavian	Sweden	Ν	27	26	27	27	27	27	27	30
		Mean	2.48	3.23	2.96	3.52	3.19	3.81	3.04	1.73
Central Eastern European	Poland	Ν	49	48	47	47	62	61	62	
		Mean	2.84	3.21	3.23	3.72	3.27	3.66	3.87	

Remarks: Scale for governance modes and problem solving capacities from 1 (not effective at all) – 5 (highly effective). Scale for reform pressure from 1 (highly undesirable) – 5 (highly desirable).

Table 2: Ordered logit two-level models for explaining mayoral perceptions of problem solving capacities

	Equity	Equity Effici		Sustai	nability
	M1	M2	M3	M4	M5
LEVEL 1: MAYOR / CITY					
Perception of relevant governance modes in place (dummies)					
- Upper-level government support and regulation (ULG)	0.38	$0.49^{*}$	$0.50^{*}$	$0.54^{*}$	0.29
	(0.24)	(0.24)	(0.24)	(0.24)	(0.30)
- Multi-purpose governance bodies (MPG)	0.72**	0.92***	$0.86^{**}$	0.39	0.43
	(0.23)	(0.25)	(0.33)	(0.23)	(0.23)
- Single-purpose authorities	0.14	0.17	0.19	-0.35	-0.33
	(0.25)	(0.26)	(0.27)	(0.25)	(0.25)
- Inter-municipal contracts and cooperation (IMC)	0.29	$0.57^{**}$	$0.55^{*}$	0.77***	$0.65^{**}$
	(0.19)	(0.19)	(0.21)	(0.19)	(0.21)
MPG x IMC			0.14		
			(0.52)		
ULG x IMC					0.71
					(0.49)
Leftist self-placement of mayor (dummy)	0.25	0.02	0.02	0.69***	0.69***
	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)
Age (grand-mean centred)	0.01	0.00	0.00	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Male	-0.21	0.09	0.09	-0.06	-0.03
	(0.25)	(0.26)	(0.26)	(0.26)	(0.26)
Education (ref.: elementary school)	· /	· /	· /	· /	( )
- University degree	-0.18	-0.09	-0.09	0.84	0.82
	(0.43)	(0.46)	(0.46)	(0.46)	(0.46)
- Secondary degree	-0.18	-0.21	-0.21	0.41	0.39
	(0.48)	(0.50)	(0.50)	(0.50)	(0.50)
(Rather) poor financial situation of municipality	0.26	0.15	0.15	-0.11	-0.09
	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
Population size of municipality (log., grand mean centred)	-0.17	-0.15	-0.15	-0.38*	-0.39*
	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
Centre of metropolitan area	0.25	0.48	0.47	0.69	0.71
*	(0.37)	(0.38)	(0.38)	(0.38)	(0.38)
LEVEL 2: METROPOLITAN AREA					
Metropolitan governance structure (ref.: none)					
- Metropolitan governance body	0.28	-0.22	-0.22	-0.11	-0.11
*	(0.24)	(0.25)	(0.25)	(0.28)	(0.28)
- Metropolitan government	-0.01	-0.42	-0.40	-0.24	-0.23
	(0.31)	(0.31)	(0.32)	(0.32)	(0.32)
Type of metropolitan area (ref.: smaller metropolitan area)					
- Secondary functional urban area	-0.02	-0.13	-0.13	0.18	0.18
	(0.23)	(0.24)	(0.24)	(0.25)	(0.25)
- Capital functional urban area	0.22	-0.11	-0.11	0.69	0.70
•	(0.32)	(0.33)	(0.33)	(0.36)	(0.36)
Log Likelihood	-571.37	-518.04	-518.00	-568.53	-567.48
Num. obs.	454	428	428	456	456
Groups (metropolitan area)	173	167	167	174	174
Variance: metropolitan area (intercept)	0.00	0.00	0.00	0.10	0.11

 $^{***}p < 0.001$ ,  $^{**}p < 0.01$ ,  $^{*}p < 0.05$ . Fixed country effects (not reported). Models for efficiency without Sweden.

Table 3: Ordered logit two-level model for explaining mayoral support for creatingmetropolitan governments

	Reform
LEVEL 1: MAYOR / CITY	
All governance modes in place perceived as dysfunctional (dummy)	-2.77**
in governance modes in place perceived as aystaneaonal (daminy)	(0.98)
Perceived problem pressure (inverse of average problem solving capacity)	-0.79***
referred problem pressure (inverse of average problem softing edpacity)	(0.19)
Reform school ideology (dummy)	-0.80
Kerorini seneor lacology (daniniy)	(0.80)
- All dysfunctional x problem pressure	1.29***
	(0.39)
- All dysfunctional x reformist	2.21
	(1.77)
- Problem pressure x reformist	$0.72^{*}$
I	(0.34)
All dysfunctional x problem pressure x reformist	-1.06
	(0.64)
Importance of mayoral tasks	( )
- Inter-municipal cooperation	$0.70^{*}$
I I I I I I I I I I I I I I I I I I I	(0.33)
- Defending position of local governments in political system	-0.72*
	(0.31)
Leftist self-placement of mayor (dummy)	0.58**
1 5 ( 5)	(0.21)
Age (grand-mean centred)	$0.02^{*}$
	(0.01)
Male	-0.06
	(0.26)
Education (ref.: elementary school)	. ,
University degree	-0.54
	(0.47)
- Secondary degree	-0.32
	(0.52)
(Rather) poor financial situation of municipality	0.06
	(0.22)
Population size of municipality (log., grand mean centred)	0.25
	(0.17)
Centre of metropolitan area	0.10
	(0.39)
LEVEL 2: METROPOLITAN AREA	
Metropolitan governance structure (ref.: none)	
- Metropolitan governance body	-0.03
	(0.33)
- Metropolitan government	-0.07
	(0.39)
Γype of metropolitan area (ref.: smaller metropolitan area)	
Secondary functional urban area	$0.76^{**}$
	(0.27)
- Capital functional urban area	-0.30
	(0.36)
Log Likelihood	-529.38
Num. obs.	396
Groups (metropolitan area)	144
Variance: metropolitan area (intercept)	0.08

\*\*\*\*p < 0.001, \*\*p < 0.01, \*p < 0.05. Fixed country effects (not reported).

Concept	Question wording	Original scale and transformations 0/1 1 (not effective at all) to 5 (highly effective)	
Filter question (for governance modes and problem solving	Is your municipality part of a larger urban agglomeration? A larger urban agglomeration encompasses an urban centre (over 50'000 inhabitants) and a belt of commuting zones (over		
capacities, see below) Relevance of governance modes in place	15% of employed population commuting to the city for work). "Please consider the various existing measures that have an impact on the development of your larger urban agglomeration as a whole. How effective are presently the following modes of governance for the development of your agglomeration?"		
<ul> <li>Upper-level government support and regulations</li> <li>Multi-purpose governance bodies</li> <li>Single-purpose authorities</li> <li>Inter-municipal contracts and cooperation</li> <li>All governance modes in place perceived as dysfunctional</li> </ul>	<ul> <li>Support and regulations by upper-level governments</li> <li>Multi-purpose governance bodies for the urban agglomeration</li> <li>Single-purpose authorities / special purpose districts</li> <li>Inter-municipal contracts and cooperation</li> </ul>	Dummy for each governance mode for its relative relevance: a value above 3 and above the individual median value of all governance modes (allowing for 1 missing) Dummy for all governance modes with values of 3 and lower.	
Evaluation of problem solving capacities	you consider them for tackling the following challenges involved in the development of your agglomeration?"	1 (not effective at all) to 5 (highly effective)	
<ul> <li>Equitable distribution</li> <li>Cost-efficiency</li> <li>Sustainable development</li> </ul>	<ul> <li>Implementing an area-wide sustainable development strategy (limiting sprawl, protecting natural resources)</li> <li>Cost-efficient production and delivery of public goods and services (e.g. energy, water, waste, maintenance, public safety)</li> <li>Equitable distribution of public goods and services across the larger urban agglomeration (e.g. education, culture, health, social welfare, adequate housing, transportation, area development)</li> </ul>	As independent variables: dummy for ineffective problem solving (1/2 vs. 3/4/5)	
Perceived problem pressure		Inverse average of all three problem solving capacities together	
Support for creating metropolitan government	<ul> <li>"How desirable or undesirable do you consider the following reforms, irrespective of whether they have been introduced in your context?"</li> <li>Creating metropolitan government(s)</li> <li>"Intermunicipal cooperation and amalgamation of municipalities are alternative solutions for rationalizing local</li> </ul>	1 (highly undesirable) to 5 (highly desirable)	
Reform school ideology	<ul> <li>government.</li> <li>Which of them are more effective under the following profiles?" [Third option for each profile: There is no real utility in cooperation or amalgamation]</li> <li>Professionalization of administrative staff</li> <li>Service quality</li> <li>Cost saving</li> <li>Political participation</li> </ul>	Dummy: amalgamation was ticked more often than inter-municipal cooperation	
Importance of mayoral tasks:	<ul> <li>Political participation</li> <li>"Many different tasks are associated with the mayor's position.</li> <li>How important do you think the following tasks are?"</li> </ul>	1 (not a task of a mayor to 5 (of utmost importance)	

Table 4: O	perationalization.	auestion	wording an	nd measurement	(POLLEADER II)

- inter-municipal cooperation	- To foster the co-operation with the neighbouring municipalities	
- defending position of local	- To defend and promote the influence of local authorities in the political system	Dummy: 4/5 vs. 1/2/3
governments in		
political system		
(Rather) poor financial situation of municipality	"How would describe the financial situation of your municipality?"	1 (very poor) to 5 (very good)
situation of municipality		Dummy: 1/2 vs. 3/4/5
Leftist self-placement of	"There is often talk about a left-right dimension in politics.	1(1-6) = 10(1-1-4)
mayor	Where would you place yourself on a left-right dimension?"	1 (left) to 10 (right)

	Equity	Efficiency	Sustainability
	M1	M2	M4
LEVEL 1: MAYOR / CITY			
Perception of relevant governance modes in place (dummies)			
- Upper-level government support and regulation (ULG)	0.43	0.35	0.60
	(0.25)	(0.26)	(0.31)
- Multi-purpose governance bodies (MPG)	$0.77^{**}$	$0.85^{*}$	0.24
	(0.29)	(0.35)	(0.24)
- Single-purpose authorities	0.27	0.40	-0.43
	(0.26)	(0.30)	(0.27)
- Inter-municipal contracts and cooperation (IMC)	0.34	$0.74^{**}$	1.02***
	(0.20)	(0.26)	(0.24)
Reform school ideology	-0.06	-0.07	0.16
	(0.23)	(0.30)	(0.29)
- MPG x reformist	-0.30	-0.36	
	(0.51)	(0.62)	
IMC x reformist	· /	-0.68	-0.42
		(0.45)	(0.44)
- ULG x reformist		<u></u>	-0.22
			(0.55)
Leftist self-placement of mayor (dummy)	0.23	0.05	0.75***
Lettist sen pricement of mujer (cummiy)	(0.20)	(0.22)	(0.21)
Age (grand-mean centred)	0.01	-0.00	0.00
rge (grand mean control)	(0.01)	(0.01)	(0.01)
Male	-0.27	0.06	-0.14
whate	(0.26)	(0.28)	(0.27)
Education (ref. alementary askes)	(0.20)	(0.28)	(0.27)
Education (ref.: elementary school)	-0.24	-0.40	0.83
- University degree			
	(0.44)	(0.48)	(0.47)
- Secondary degree	-0.15	-0.47	0.38
	(0.49)	(0.53)	(0.51)
(Rather) poor financial situation of municipality	0.27	0.04	-0.15
	(0.22)	(0.23)	(0.22)
Population size of municipality (log., grand mean centred)	-0.14	-0.08	-0.46**
	(0.17)	(0.20)	(0.18)
Centre of metropolitan area	0.27	0.42	0.74
	(0.39)	(0.45)	(0.40)
LEVEL 2: METROPOLITAN AREA			
Metropolitan governance structure (ref.: none)			
- Metropolitan governance body	0.32	-0.14	-0.25
	(0.25)	(0.27)	(0.30)
- Metropolitan government	0.14	-0.11	-0.25
	(0.32)	(0.35)	(0.34)
Type of metropolitan area (ref.: smaller metropolitan area)			
- Secondary functional urban area	0.03	-0.29	0.17
	(0.24)	(0.26)	(0.26)
- Capital functional urban area	0.25	-0.26	0.70
	(0.34)	(0.36)	(0.38)
Log Likelihood	-513.25	-425.31	-502.71
Num. obs.	408	353	409
Groups (metropolitan area)	151	125	151
The second se			

 Table 5: Ordered logit two-level model for explaining mayoral perceptions of problem

 solving capacities, conditional on mayoral reform school ideology

\*\*\*\*p < 0.001, \*\*p < 0.01, \*p < 0.05. Fixed country effects (not reported). Models for efficiency without Sweden and France.

0.00

0.00

Variance: metropolitan area (intercept)

0.13

Table 6: Linear two-level model for explaining mayoral support for creating
metropolitan governments

	Reform
LEVEL 1: MAYOR / CITY	
All governance modes in place perceived as dysfunctional (dummy)	-1.35*
	(0.54)
Perceived problem pressure (inverse of average problem solving capacity)	-0.41***
	(0.10)
Reform school ideology (dummy)	-0.28
	(0.43)
- All dysfunctional x problem pressure	$0.62^{**}$
	(0.21)
- All dysfunctional x reformist	1.07
	(0.99)
- Problem pressure x reformist	0.32
	(0.18)
- All dysfunctional x problem pressure x reformist	-0.50
	(0.35)
Importance of mayoral tasks	
- Inter-municipal cooperation	$0.38^{*}$
	(0.17)
- Defending position of local governments in political system	-0.32*
	(0.16)
Leftist self-placement of mayor (dummy)	0.32**
	(0.11)
Age (grand-mean centred)	0.01*
	(0.01)
Male	-0.01
	(0.14)
Education (ref.: elementary school)	(011.)
- University degree	-0.28
	(0.24)
- Secondary degree	-0.17
Secondary degree	(0.27)
(Rather) poor financial situation of municipality	0.05
(Runer) poor manetal situation of municipality	(0.12)
Population size of municipality (log., grand mean centred)	0.16
ropulation size of municipality (log., grand mean centred)	(0.09)
Centre of metropolitan area	0.01
centre of metropontan area	(0.21)
LEVEL 2: METROPOLITAN AREA	(0.21)
Metropolitan governance structure (ref.: none)	
- Metropolitan governance body	-0.02
- Metropontali governance body	
Matuonalitan acuamment	(0.16)
- Metropolitan government	-0.02
Type of metropolitan area (ref. smaller metropolitan area)	(0.21)
Type of metropolitan area (ref.: smaller metropolitan area)	0.2.4*
- Secondary functional urban area	$0.34^{*}$
	(0.15)
- Capital functional urban area	-0.14
	(0.21)
Log Likelihood	-581.90
Num. obs.	396
Groups (metropolitan area)	144
Variance: metropolitan area (intercept)	0.06
Variance: residual	0.97

 $^{***}p < 0.001, \,^{**}p < 0.01, \,\,^*p < 0.05.$  Fixed country effects (not reported).

Figure 1: Conceptual framework for the study of perceived problem solving capacities and reform pressures

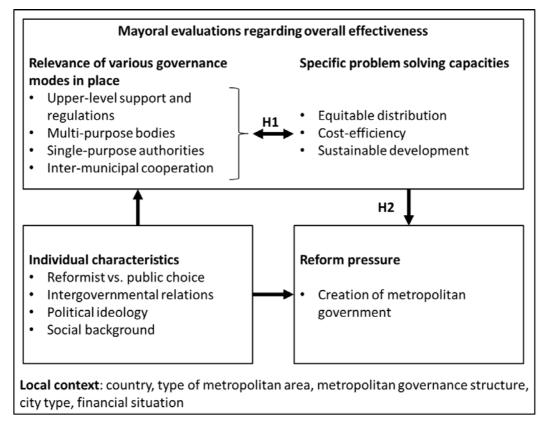
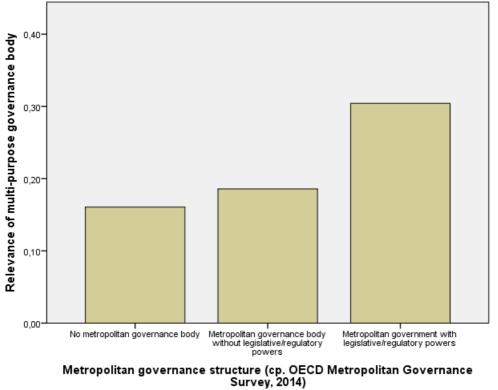


Figure 2: Shares of mayors perceiving multi-purpose governance bodies as relevant for addressing challenges in their particular urban agglomeration





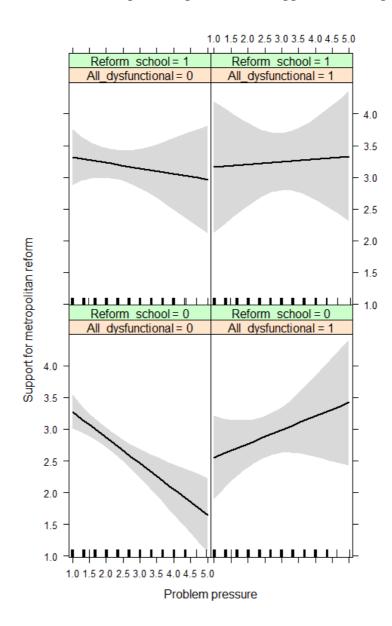


Figure 3: Conditional effects of problem pressures on support for metropolitan reform