

Secondary yet metropolitan? The advantages and challenges of metropolitan integration for second-tier cities

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Abstract

This paper discusses whether the areas where metropolitan integration can be beneficial for cities in general correspond to the typical areas of disadvantage of many second-tier cities in Europe, and how integration can contribute to overcome them. We define metropolitan integration as a process entailing a functional-spatial, a political-institutional and a symbolic-cultural dimension. Its potential advantages include capturing the agglomeration benefits emerging from the aggregate metropolitan size, such as increased functional performance; increasing regional organising capacity to deploy existing metropolitan resources; and acquiring greater political-institutional influence over policymaking. We discuss the different contexts and prospects of second-tier cities across Europe, and the persistent disadvantages that many face in comparison to first-tier cities (usually large capitals): little capacity to exploit agglomeration benefits based on size and functions, neglect in the reception of national public investment, and weak political influence at higher policy levels. We explore the potential effect of metropolitan integration on these setbacks, first by empirically assessing the gains in demographic and functional mass that second-tier cities experience by aggregating the metropolitan scale, then by drawing from examples illustrating their need to increase institutional and political capacity. Metropolitan region formation seems indeed a relevant strategy for many second-tier cities, most prominently for those embedded in large and dense urban territories, and located in countries where a first-tier city dominates the economic and political life. We further discuss the planning and governance strategies which manage the opportunities and hurdles of the process in order to realize the potential benefits of integration.

Keywords: second-tier cities, metropolitan regions, metropolitan integration, European urban system, agglomeration benefits.

Second-tier cities rediscovered

There is a renovated interest in second-tier cities in Europe. Policymakers, researchers and specialist media are widening their narrow focus on the largest cities, in favour of a more diverse typology of second-tier cities, promoted as business and tourism destinations, as well as places to live and work, in alternative to overcrowded and expensive capitals (National Geographic Traveller, 2014; Grant Thornton, 2015). Second-tier cities are defined here as non-capital cities, mostly medium-sized, “whose economic and social performance is sufficiently important to affect the potential performance of the national economy” (ESPON/SGPTD, 2012: 3). While they usually lack ‘command and control’ functions at higher spatial scales (Hodos, 2011), they are nonetheless important nodes of the European urban system. Several recent policy reports stress the need to invest in second-tier cities to rebalance territorial development and improve the national economic performance, mainly in countries where the capital city (or a ‘first-tier’ city, even if not a national capital; both terms appear here as synonyms) dominates the economic and political life (OECD, 2012; ESPON/SGPTD, 2012; Dijkstra, 2013; Martin et al., 2015).

The advantages of developing counterweights to single dominant cities have been discussed for decades, starting with the French *métropoles d'équilibre* in the 1960s, and have gained traction across Europe, from the solid tradition of powerful regional capitals in Germany to the self-styled Core Cities group that emerged in the 1990s in the United Kingdom. And yet, recent research shows that the fortunes of second-tier cities vary greatly among and within European countries (Dijkstra, Garcilazo & McCann, 2013). They are influenced by their location in relation to European core economic areas or international economic corridors (Kunzmann & Wegener, 1991; Faludi, 2015), but also by the hierarchic or decentralised structure of the different national urban systems. The decentralisation of powers, resources and investments influences the extent to which a country enjoys a “powerful multi-cylinder economic engine” (ESPON/SGTPD, 2012: 23) consisting of a range of strong cities. However, in many countries, investments and policies tilt visibly towards capital cities and growing gaps between them and second-tier cities are visible in a variety of economic, functional and institutional capacity indicators (ESPON/SGPTD, 2012; BBSR, 2011).

Second-tier cities also seem more volatile than capitals in their reaction to broader economic circumstances. Recent research shows that most of them, even those which had flourished in previous years, suffered greater GDP falls during the economic crisis of 2008-2010 than capitals, which were largely protected from extreme drops (Parkinson, Meegan & Karecha, 2015). However, they have been also more agile to recover after 2013, and a recent ESPON update on the matter shows many second-tier cities in Europe growing again faster than their capitals (ESPON, 2016).

These trends are visible, at least partly, in second-tier cities in different contexts, suggesting that there are common factors shaping their development options and relation to national 'first-tier' cities. When that relation is visibly unbalanced, as in the more centralised urban systems, the literature refers to disadvantages in the available paths to second-tier city development. The most pressing include (1) a weaker ability than their larger counterparts to reap the benefits of urban agglomeration due to their smaller size, and, quite often, lack of important urban functions (Cardoso & Meijers, 2016; BBSR, 2011); (2) neglect in the reception of public investment aimed at increasing competitiveness (Kresl & Ietri, 2016; Crouch & Le Gales, 2012); (3) and lack of political influence on higher-level (national or European) policymaking (ESPON/SGPTD, 2012). Such setbacks reveal hierarchical, 'first-city' biases embedded in the long history of urban Europe (Hohenberg, 2004), justifying an assessment of the reasons for their persistency and the strategies to mitigate them. While the analysis that follows addresses European second-tier cities in general, this paper is particularly concerned with those where a combination of geographical, political and economic circumstances makes them experience these disadvantages more strongly.

A new strategic space for cities

Many researchers have noted that a new strategic space to address urban problems has emerged at the metropolitan region scale. As cities coalesce into vast and interconnected urban territories, the relevance of that scale to organize their economic activity, governance scope, functional assets and planning strategies becomes clear (Salet et al., 2015; Savini, 2012; Balducci et al., 2011). Tighter functional and institutional integration of metropolitan

regions is advocated as a generally desirable strategy for a variety of reasons, including exploiting the benefits of a greater demographic mass, organizing a larger and more diverse array of urban functions, enhancing governance capacity in issues that mobilise the metropolitan scale, and becoming more competitive in international rankings.

The aim of this paper is to discuss whether the areas where metropolitan integration can benefit cities in general overlap with the areas where many European second-tier cities tend to experience persistent setbacks in comparison to first-tier cities. In the next section, we define integration and summarize its potential benefits for metropolitan regions. Then we address some typical disadvantages of European second-tier cities and analyse how metropolitan integration can contribute to overcome them. The argument will focus, first, on the relative increases in population and urban functions achieved by integrating the metropolitan scale, thereby capturing the benefits of agglomeration to a larger extent than individual centres. Then, it will refer to the ability of metropolitan regions to act as large and coordinated entities, to become more efficient in the use of metropolitan resources and acquire a louder political voice at higher decision-making levels. We draw from existing evidence and illustrative examples to explore whether those latent benefits can give second-tier metropolitan regions a particular incentive to strengthen their integration. But this reveals only a potential which needs a case-by-case strategy to be realised, and the subsequent section discusses the planning and governance approaches managing the paths to integration in second-tier metropolitan regions, linking our arguments to broader scholarly debates. We finish with conclusions and suggestions for research.

The benefits and challenges of metropolitan integration

A process of metropolitan integration is defined here as the extent to which different places within each other's potential sphere of influence are knit together and interact. It involves a spatial-functional dimension, based on complementary economic specialisations and functions in different places and the existence of efficient networks between them (Batten, 1995; Meijers, 2008); a political-institutional dimension, formalised by metropolitan governance structures and inter-municipal cooperation networks (Feiock, 2007; Lefèvre,

1998); and a symbolic-cultural dimension, supported by processes of metropolitan identity-building and the expansion of individual place attachments to the metropolitan scale (Lambregts, 2006; Kübler, 2016).

From an agglomeration economics perspective, the importance of metropolitan regions also comes from the notion that the continuous concentration of activity in single, large centres produces increasingly negative returns (Camagni, Capello & Caragliu, 2016), and therefore other ways to capture the benefits of agglomeration, usually emerging from dense clusters of 'sharing, matching and learning' (Duranton & Puga, 2004), must be tested. Alternative proposals explore the advantages of strong networks of cities in larger polycentric spaces (Batten, 1995; Van Oort, Burger & Raspe, 2010), as well as the rise of 'agglomeration externality fields', a shift from a nodal to a zonal conception of the spatial organization of agglomeration benefits, now seen as a field of varying intensity covering large geographical areas, where different places can mutually 'borrow size' but the costs of overconcentration are mitigated (Burger & Meijers, 2016; Phelps, Fallon & Williams, 2001).

To organize the spread out potentials of this renewed 'urban field' concept (Friedmann & Miller, 1965) for the benefit of citizens, communities and firms, deeper functional and political integration of metropolitan regions becomes a promising development strategy. Its promise relies on two main arguments, arguably relevant for all cities:

- First, the potential advantages of exploiting a large and well connected demographic and functional mass, following the positive associations between urban size and economic productivity (Melo, Graham & Noland, 2009; Combes and Gobillon, 2015), and between the presence of urban functions and attractiveness for firms and population; functional performance is indeed one of the key agglomerative advantages triggered by size, mainly in the case of consumer amenities (Glaeser, Kolko & Saiz, 2001; Burger et al., 2015).
- Second, the chance to increase governance capacity by lowering institutional fragmentation and upscaling joint agency. This serves both to organize shared metropolitan resources (Albrechts, Healey and Kunzmann, 2003; Meijers & Romein, 2003) and to gain political influence in higher governance levels and networks, from the national to the global scale (METREX, 2014).

Integration is considered necessary because simply aggregating the size of several nearby centres does not provide the same level of agglomeration benefits of a single large centre (Meijers, 2008). The cases which do achieve comparable benefits depend on factors which 'qualify' that aggregate size as more than the sum of its parts: the ability to build and support networks of all kinds over large scales, coordinate the provision of urban functions among different locations and connect them efficiently, or develop cooperation between agencies and municipalities overcoming core-periphery hierarchies (Camagni, Capello & Caragliu, 2015; Savini, 2013; Van Oort, Burger & Raspe, 2010).

Bringing into action these 'carriers of integration' is therefore necessary to unlock the economic potential of metropolitan regions and planning strategies play a key role in facilitating or hampering this process, for instance in their ability to mediate institutional relations between core and peripheral places with contrasting socio-economic profiles and interests (Feiock, 2007; Savini, 2012); mobilise human and financial resources to allow the implementation and support of sophisticated planning frameworks (Lefèvre, 1998); or gather citizens, firms and institutions around a persuasive narrative of identity-building, which allows the metropolitan project to evolve from a technocratic exercise into a culturally and symbolically meaningful concept, where actors can 'anchor' their different priorities (Salet et al., 2015; Hajer, van't Klooster & Grijzen, 2010).

However, the different political relations, functional structures and cultural perceptions shaped over time in different types of metropolitan region – for instance, around large, hegemonic capitals and smaller second-tier cities – are likely to create different conditions for these processes to develop. This means that not only the *incentive* but also the *ability* to pursue integration varies from city to city, and that the questions about how much integration promotes socio-economic benefits, and what its preferred institutional shape should be, do not have generic answers. The factors which define divergent growth paths for second-tier cities, such as geographical location in privileged economic corridors, the quality of local leadership, the historical legacy of inter-city relations, and the type of national urban systems and spatial planning frameworks, not only differentiate their need to access the benefits of integration, but also constrain what integration can offer them and their partners (Albrechts, Healey & Kunzmann, 2003; Nelles, 2013). Nevertheless, policy-

makers and planners across Europe seem undeterred and determined to increasingly develop governance agreements and strategic visions aimed at metropolitan ‘upscaling’ in order to exploit the promised advantages of integration, adding relevance to this discussion.

The persistent disadvantages of second-tier cities

Second-tier cities were defined by the ESPON/SGTPD report (2012) as cities lacking the economic, demographic and political importance of the capital, but still playing a significant economic and social role in the national context. For the analysis that follows, we select cities from that report, of all sizes and facing all kinds of socio-economic prospects. But, clearly, the setbacks experienced by second-tier cities are more likely to be visible (or to become a problematic issue for planners and strategists to address) further away from privileged economic regions, as well as in the urban systems with a dominant capital at the top, such as the United Kingdom, France, Portugal, Ireland, Hungary or Greece, as ESPON also suggests. While providing a measure to this spectrum is beyond the scope of this paper, we assume that the need to overcome existing disadvantages, by metropolitan integration or other means, has different degrees of urgency in different places.

While their presence and visibility varies, we can classify the typical drawbacks of second-tier cities in comparison to first-tier cities in two related categories:

- the first regards their urban mass expressed in population size and available urban functions, the related presence of agglomeration benefits and the ability to exploit them;
- the second emerges from the historical processes prioritizing the growth of first-tier cities and strengthening their political and economic dominance over secondary cities.

Both dimensions are intertwined in such a way that a virtuous positive development cycle can develop for many first-tier cities, and a virtuous downward development cycle lures for many second-tier cities. The next two sections will present these two areas of disadvantage in detail and discuss whether the potential benefits of metropolitan integration may have a particularly positive effect in mitigating them. This potential will then be framed from a planning perspective, discussing the role of planning strategies in mobilising metropolitan

resources, dealing with complexity and managing intra-metropolitan relations as a way to manage this process.

Urban mass and the effects of metropolitan integration

Large cities thrive on agglomeration economies based on 'sharing, matching and learning', mechanisms, which tend to be proxied with size and density. Second-tier cities are by definition smaller, thus enjoying fewer agglomeration benefits of this kind, but are also often unable even to build upon their scale proportionately as much as first-tier cities: throughout the history of urban Europe, a feedback loop between the clustering of political and economic power reinforced the 'fusion at the top' of major urban functions in capital cities (Hohenberg, 2004). Functional performance is one of the main agglomeration benefits triggered by size, and this process boosted the ability of capitals to profit from agglomeration beyond differences in size, increasing the gap to other cities in the urban system.

This gap is visible today in the presence of urban functions in first-tier and second-tier cities. A study by the German Federal Institute for Research on Building, Urban Affairs and Spatial Development on 125 European metropolitan areas includes a map (BBSR, 2011: 104) showing the agglomerations which have fewer urban functions than their demographic size would predict, given the comparative index values of all metropolitan areas. The study is based on a selection of top-level functions in five areas: politics, economy, science, transport and culture. Most cities in this condition are indeed second-tiers (together with some Eastern European capitals): Manchester but not London, Lyon but not Paris, Porto but not Lisbon. Cardoso & Meijers (2016) use this database to compare the functional performance of first-tier and second-tier cities and conclude that the former do benefit from a surplus that cannot be rationalised by size differences or a variety of other control variables, and is best explained by a 'first city bias' in the location patterns of important functions. Since the presence of amenities and other functions is a key factor of attractiveness for households and firms (Glaeser & Gottlieb, 2006; Chen & Rosenthal, 2008), cities hosting an insufficient functional array and diversity are likely to have a disadvantage in this respect.

In response, many cities and regions actively aim to increase their demographic and functional mass to better reap the benefits of agglomeration, while trying to avoid the diseconomies of excessive concentration in single centres. Integration policies, through which a larger existing urban mass can be contained in a coordinated and connected metropolitan space, offer a potential way forward.

Comparing the wider metropolitan regions of first-tier and second-tier cities reveals some remarkable differences, both in demographic and functional terms. For the analysis below, we started with the list of 26 first-tier cities and 124 second-tier cities provided by ESPON/SGPTD (2012). We then excluded all second-tier cities which are not part of the BBSR study of urban functions (2011) mentioned earlier, as they do not provide any data for the functional performance comparison. We further excluded second-tier cities which fall in the BBSR-defined metro area of a larger first-tier city, as well as the correspondent first-tier cities (e.g. Rotterdam and Amsterdam, Malmo and Copenhagen, Antwerp and Brussels) to enable meaningful comparisons. Zurich was used instead of Bern as a first-tier city, given its national economic importance. Capitals in countries with no second-tier cities were excluded (Reykjavik, Luxembourg, Nicosia, Valetta). Cities whose GDP is higher than the capital were not considered second-tier; this was the case of Milan, Munich, Frankfurt and Hamburg. In the end, we focus on 22 first-tier and 71 second-tier cities (see Table 1).

First-tier cities	Second-tier cities			
Athens	Aarhus	Genova	Manchester	Torino
Berlin	Bari	Gent	Mannheim	Toulon
Bucuresti	Basel	Glasgow	Maribor	Toulouse
Budapest	Belfast	Göteborg	Marseille	Valencia
Dublin	Bergen	Graz	Metz	Wroclaw
Helsinki	Bielefeld	Grenoble	Montpellier	
Kobenhavn	Bilbao	Hannover	Nantes	
Lisboa	Birmingham	Innsbruck	Napoli	
Ljubljana	Bologna	Katowice	Newcastle	
London	Bordeaux	Köln	Nice	
Madrid	Bremen	Krakow	Nottingham	
Oslo	Brescia	Lausanne	Nürnberg	
Paris	Bristol	Leeds	Odense	
Praha	Brno	Leicester	Palermo	
Riga	Cardiff	Leipzig	Porto	
Roma	Cork	Lens	Poznan	
Sofia	Dresden	Liège	Salerno	
Stockholm	Düsseldorf	Lille	Salzburg	
Tallinn	Edinburgh	Linz	Seville	
Vilnius	Eindhoven	Liverpool	Sheffield	
Warszawa	Firenze	Lyon	Strasbourg	
Zürich	Genève	Malaga	Stuttgart	

Table 1. List of 22 first-tier and 71 second-tier cities used in the analysis.

Population growth

We can analyse whether the potential gains from metropolitan integration in terms of added population are generally larger for second-tier than for first-tier cities. This was signalled by ESPON research (2005), which analysed European functional urban regions and defined accessibility areas around them, which could provide important growth potential if ‘polycentric integration policies’ were followed (called PUSH and PIA areas¹; see ESPON/1.1.1, 2005, for details). That potential was deemed small for the largest cities, due

to their already dominant role in the region, suggesting the existence of strong core-periphery contrasts in terms of population and economic activity. But the gains were considered very significant for a majority of medium-sized cities, as their accessibility areas contained a higher relative proportion of population, and they would have greater interest in integrating with these surroundings to capture the benefits of a larger demographic mass with 'sharing, matching and learning' potentials. Second-tier cities like Genoa, Montpellier, Nürnberg or Strasbourg were at the top of the list of potential winners.

Using the list of first-tier and second-tier cities listed in table 1, we compared the relative increase in terms of population between various territorial delimitations developed by ESPON (2007) and BBSR (2011). The purpose is to see whether second-tier cities have proportionally more to gain than first-tier cities from capturing the spread out demographic potential of the surrounding region.

Figure 1 illustrates the population difference between the contiguous built-up area of the core city, referred to as MUA² (Morphological Urban Area; see ESPON, 2007) and the larger metropolitan area (MA), as defined by BBSR (based on 60-minute accessibility areas to clusters of top-level metropolitan functions; see BBSR, 2011, for details). The vertical axis indicates the proportional increase, obtained simply by dividing the population of the MA by the population of the MUA. The horizontal axis distinguishes between first-tier and second-tier cities. We find that second-tier cities consistently have greater increases than first-tier cities, with cities in polycentric urban regions with other second-tiers nearby emerging as outliers. These are the cases of Düsseldorf, Cardiff or Maribor. Ljubljana and Zurich are the only relative outliers among first-tier cities. But even calculating the median values, to avoid the effect of these exceptions, second-tier cities, with a median of 3.35, outperform first-tiers, which only reach 1.53.

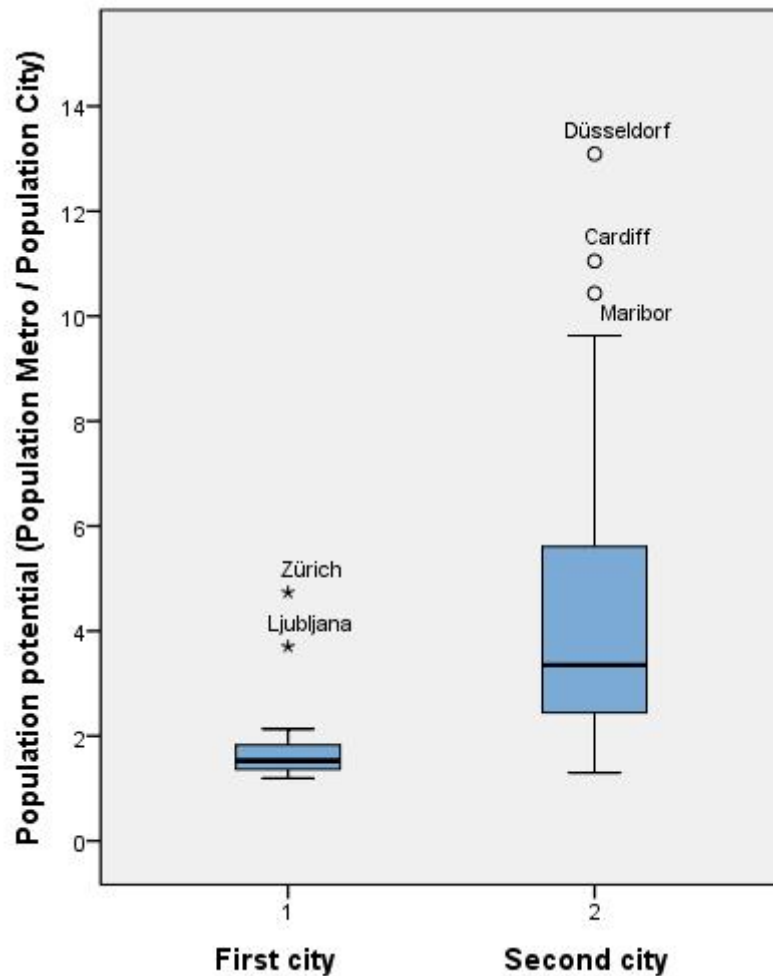


Figure 1. Metropolitan population potential: increase in population through integration with surrounding metro area in first-tier and second-tier cities (relative to MUA size) Median value first-tier cities (n=22): 1.78 / Median value second-tier cities (n=71): 3.35

Not depicted: Salerno (second-tier city, increase ratio 28.6x)

This is a robust finding, as other metropolitan delimitations yield confirmatory results. If we take the population mass of the smaller Functional Urban Area definition provided by ESPON (2007), based on travel-to-work areas, and also compare it to the MUA, we observe a median increase ratio for second-tier cities of 1.77, while first-tier cities reach 1.22. Even if an upper limit to the territorial scales with integrative potential should be considered, so that functional and institutional integration policies remain viable and cultural integration factors remain meaningful, this suggests that second-tier cities may have even more to gain

from integration at higher spatial scales, namely when other important centres can contribute to form a larger metropolitan entity.

Functional performance

A similar story can be told about the potential to gather important urban functions spread across the metropolitan region. As mentioned earlier, the recent report on European metropolitan areas by the BBSR (2011) shows many second-tier cities enjoying fewer top-level urban functions than their size would suggest. However, research by Cardoso & Meijers (2016) finds that the regions around second-tier cities also tend to be better served by important functions than in the case of first-tier cities, suggesting that second-tiers need access to those functions to host a relevant functional array. First-tier cities, in contrast, tend to over-concentrate top-level functions in the core, projecting a functional ‘agglomeration shadow’ over the surroundings.

Figure 2 illustrates the potential gains, in terms of functional performance, of integration with higher spatial scales. Here we use the aforementioned dataset developed by the BBSR (2011) which provides a functional index for each LAU2 unit in Europe. This index can then be aggregated for any given scale, meaning that we can derive the functional performance for single cities or larger metropolitan regions. We compare again the second-tier and first-tier cities presented in Table 1. All forms of calculation are analogous to Figure 1.

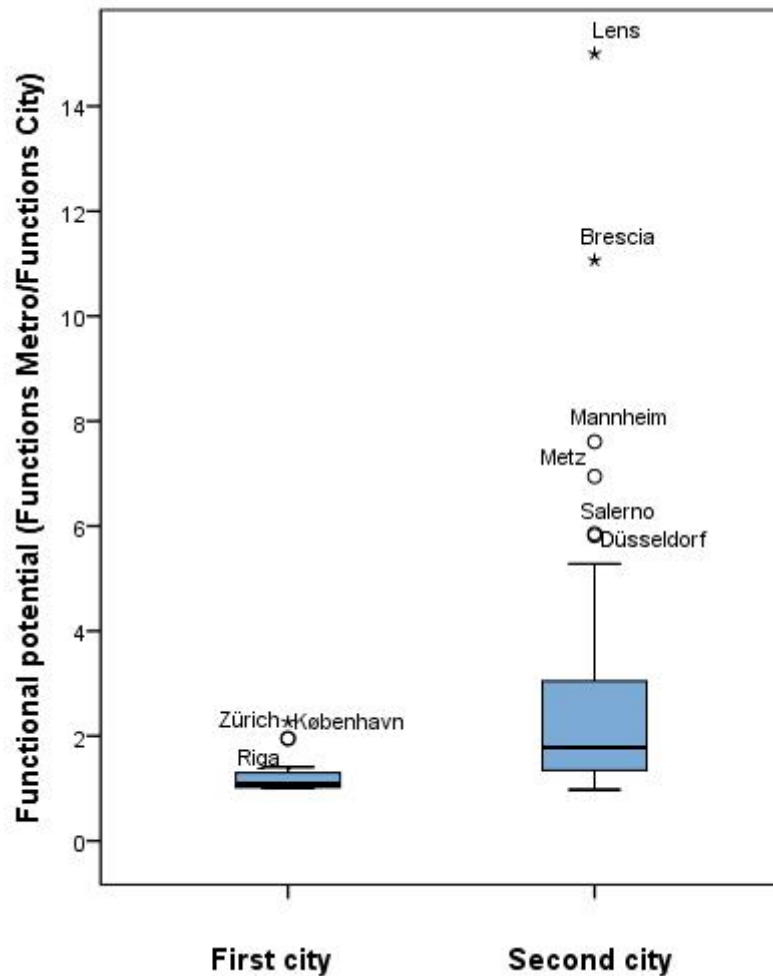


Figure 2. Metropolitan functional potential: increase in metropolitan functions through integration with surrounding metro area in first-tier and second-tier cities (relative to MUA functional performance index) Median value first-tier cities (n=22): 1.24 / Median value second-tier cities (n=71): 1.78

Not depicted: Maribor (second-tier city, increase ratio 43x), Toulon (second-tier city, increase ratio 22x)

Once more, second-tier cities have higher proportional gains than first-tier cities. The outliers are relatively small cities in metropolitan regions with larger second-tiers, such as Toulon (near Marseille) or Lens (near Lille). In those cases, greater integration might in the end benefit the functional mass commanded by those larger cities rather than their smaller partners. However, as in the case of population, the median values (1.78 versus 1.07 in first-tier cities) show a consistent advantage for second-tier cities of all sizes throughout Europe. A likely explanation is that, rather than the functional ‘agglomeration shadow’ projected by

the larger cities over their surroundings, different centres across second-tier metropolitan regions may be able to 'borrow size' from the aggregate scale, and have the opportunity to develop functions (namely those still missing in larger centres) which they would not host in isolation or near a functionally too encompassing core city. This implies greater interdependence between places and encourages integration strategies to organise the potential functional array.

Political and institutional capacity and the effects of metropolitan integration

A related set of disadvantages common to many second-tier cities regards their need to cope with scarce metropolitan resources, and their weak political influence at higher government and policy levels. Stronger integration can play a role in mitigating these setbacks, by developing greater institutional and political capacity, and the question is whether second-tier cities would have a greater need to pursue it, in comparison to first-tier cities. This will be discussed by resorting to existing literature and drawing from relevant examples.

Regional organizing capacity

The feedback loop favouring 'fusion at the top' in large capitals can be traced back to historical efforts by nation states to prioritize their growth and strengthen their political dominance (Hohenberg, 2004), with capitals accumulating power and investment while the political intervention space of other cities was reduced. Today, as the ability of governments to plan the economic future of cities and regions decreases, policies emerge favouring the so-called 'national champion' cities (Crouch & Le Gales, 2012). Governments direct their influence (e.g. via investment in infrastructure) to ensure the success of those cities which are already more successful and better positioned to compete globally, providing potentially higher returns. These are likely to be the largest national cities, as illustrated by Crouch & Le Gales with examples from London and Paris. These policies divert investment streams from other (second-tier) cities, also reducing their attractiveness for firms which could otherwise be matched with optimal city sizes (Dijkstra, 2013), if important public infrastructural investments were in place.

The implication is that many cities and regions, namely the ones this paper is concerned with, are faced with a situation where they need to rationalize more consistently their existing resources, as they are more prone to be overlooked by new investments, for example in transport infrastructure, top-level functions or collective services. Efficiently sharing existing and complementary resources – rather than relying on the addition of new ones – thus becomes a strategy for metropolitan regions to cope with the pressures of scarce (national) public investment (Hulst & van Montfort, 2007; European Communities, 2008). Capital cities, commanding an oversized amount of resources and likely to expect that the national investment stream is kept, may have a lower incentive to engage in metropolitan integration strategies for the purposes of resource rationalization.

In their study of competitiveness in ‘smaller cities’, Kresl & Ietri similarly stress that, when capital cities take the “lion’s share of national urban investment” (2016: 19), other cities must develop greater marginal efficiency in their use of investment. This includes exploiting the potential of existing resources to serve the larger region rather than a single centre – e.g. a major university or an airport. There are several examples of strategies in second-tier cities following this path: Hodos (2011) describes Manchester Airport as a key economic and symbolic engine driving the affirmation of the city-region scale as a centre of economic power alternative to London. The West of England region (UK) jointly promotes the economic vitality of Bristol, the historic environment of Bath, the quality of universities in both cities, and the economic-industrial nodes in the surrounding region, all joining forces as part of an integrated economic and spatial planning strategy (West of England LEP, 2014). Different actors around Lund and Malmö (Sweden) cooperate to brand themselves as a leading ‘knowledge region’ and redevelop large swaths of urban land (a partnership between municipalities and the regional planning authority), taking advantage of the installation of two major EU-funded research laboratories outside Lund.

Therefore, a developed organising capacity to share metropolitan resources which may be both sparse *and* spread out is quite important for second-tier cities. Different organizational forms are available to explore this capacity, and many do not necessarily involve a formal scale of metropolitan government. Meijers, Hoogerbrugge and Cardoso (2017) have investigated the relations between integration and economic performance in European

polycentric urban regions and concluded that the presence of any type of entity dedicated to metropolitan policy coordination and the duration of that partnership have a greater positive effect than whether or not it is formalised as a specific government layer. A similar argument is made by Albrechts, Healey & Kunzmann (2003), namely for the second-tier city-region of Hannover. But if a formal administrative level is not the decisive factor, a sufficient scope and depth in the organization may well be: a comparison of inter-municipal cooperation by Hulst and Montfort (2007) shows that loosely associated 'spatial planning forums' and narrow service delivery agreements do not perform as well as wider policy development and coordination organizations, as they lack implementation capacity and the ability to override conflicting interests between partners.

A certain level of integration seems therefore necessary to sustain regional organising capacity. A progression towards integrated metropolitan planning is visible, for instance, in France. Alongside the political integration driven by the newly created *métropoles*, communities have long been part of coordinated inter-municipal spatial planning frameworks, such as SCOT (*schéma de cohérence territoriale*). Governing infrastructure, natural spaces, housing and employment targets and the provision of collective services, SCOTs aim to increase regional organising capacity between interdependent urban areas, and can define cross-boundary planning objectives. Interestingly, all major cities in France are covered by a metropolitan SCOT, with the telling exception of Paris: actually, the vision of Grand Paris almost as a 'national identity' problem creates layers of political complexity which have hampered institutional integration for years (Bourdeau-Lepage, 2013).

Political voice

The Paris case reflects the way that the nation-state and the capital city scales seem interchangeable, symbolically and politically, and illustrates another typical difference between first-tier and second-tier cities. Especially in politically centralised countries, the voice of the capital city is the voice of the nation, with some literature (e.g. in the United Kingdom) pointing out how the centralisation of government institutions in capitals makes politicians reinterpret the interests of the capital city as a proxy for the interests of the

nation (Amin, Massey and Thrift, 2003). Second-tier cities and regions in these contexts may experience corresponding setbacks in terms of political voice, and the question of how to gain influence at higher decision-making levels becomes relevant. The ESPON second-tier cities report (2012) insists on decentralisation of responsibilities and powers, but the challenge for second-tier cities is to become powerful political players to influence the debates in favour of this decentralisation, on one hand, and be taken as reliable partners capable of absorbing the new responsibilities and powers, on the other.

Several changes in the relations between cities, regions and nation states in recent decades offer some ways forward. Hodos (2011) analyses the demise of national control over the agency of individual cities in international contexts to propose the concept of ‘municipal foreign policy’. He argues that “the recent and increasing openness of national urban systems gives greater latitude for direct international linkages on the part of the lesser cities” (Hodos, 2011: 6). Faludi (2016) offers a non-territorial, ‘neo-medieval’ framework to European spatial planning, where different networks of cities and regions define different planning territories, according to needs, objectives and opportunities. This implies that cities of all kinds become powerful actors, able to shape political debates, mobilise resources and throw in the weight of their metropolitan economy. It further implies that metropolitan regions act as coherent entities.

Indeed, the ways through which second-tier cities can strengthen their political agency are likely to build upon their demographic, economic and institutional weight. This has been perhaps a less observed potential advantage offered by metropolitan integration, compared to the ones discussed earlier. Exploring the case for agglomeration economies in Europe, ESPON researchers enumerate the key features of a favourable policy regime, including “city-regional institutions or networks that seek and achieve significant ‘vertical’ influence, at higher levels of government (regional/national), and are able to shape the policy agenda and encourage policy integration” (ESPON/CAEE, 2010: 11). What separates second-tier from first-tier cities here, is that the latter are more likely to achieve these purposes without having to rely on wider metropolitan scale. They may have privileged access to higher decision-making levels and policy influence, as well as the economic and demographic weight to push it through (ESPON/SGPTD, 2012).

The attempt to reduce these contrasts via deeper integration of second-tier metropolitan regions has been strongly championed in Britain, and is seen as one of the reasons why Manchester pioneered a devolution process before other city-regions (Harding, Harloe & Rees, 2010). First, the integrated actor can advance its size as an argument for attention: its demographic and economic weight just makes it too big to ignore. National and capital city authorities are thus likely to recognise an 'equal partner', which is a key condition to enable collaboration based on the perception of symmetrical gains (Feiock, 2007). Second, if that important partner has a track record of collaboration and policy integration, governments are more likely to entrust it with responsibilities and resources. In other regions advancing their size and economy as arguments for greater devolution, the lack of integration as a combined authority was seen as an obstacle (Harrison, 2015); and, indeed, six English city-regions progressed to elect combined authority mayors in 2017. The fact that larger agglomerations tend to elect higher-profile political leaders, who, in turn, have higher positions in national parties and closer ties to national leadership, may also contribute to strengthen the role of combined authorities in devolution debates, and suggests a further incentive for second-tier cities to upscale their territory of action.

Managing integration: planning and governance strategies

The arguments above regarding the effects of metropolitan integration in second-tier cities reveal a potential whose actual realization is as differentiated as the historical, political and geographical contexts throughout Europe. This does not exclude, however, that the possibilities advanced here are explored by metropolitan planning and policy authorities for the benefit of their regions. What follows is a discussion about managing the barriers and opportunities for metropolitan integration in second-tier cities. Three links with important planning and governance debates emerge from the discussion. The first relates to the ways to deploy metropolitan functional resources. The second relates to governance complexity in metropolitan regions of different types. The third regards the strategies to manage the relations between core and periphery locations in these regions.

Integrating functional regions

The previous discussion about size and functions suggests that a conjugation of weaker individual capacity and greater distributed opportunity would give second-tier cities an incentive to capture the demographic and functional potential of the metropolitan region, for instance by developing connective infrastructure and adopting measures to explore synergies between places. But while the incentive is there, second-tier cities may be actually *less* able to implement such strategies.

In a sense, functional integration has actually gone further in first-tier than in second-tier metropolitan regions. Figure 3 represents, for both population size and urban functions index, the proportion of the BBSR-defined metropolitan area (based on accessibility potential to core functions) considered to be outside the ESPON-defined FUA (based on actual travel-to-work areas). In other words, how much of the accessible metropolitan potential, capable of being mobilised to achieve greater agglomeration benefits, is not yet integrated in a functionally related area. We refer to the ESPON (2007) and BBSR (2011) definitions and datasets explained earlier. We find that second-tier cities have a larger proportion of non-integrated potential, approximately 44% for population and 38% for urban functions, while first-tier cities leave little potential outside the FUA they already command. Therefore, functional integration strategies are more pressing for second-tier cities also because they have been less successful so far in pursuing them.

It is perhaps in the nature of second-tier cities to have an historically weaker influence on the spatial-functional organisation of the larger region. Many first-tier cities, like London, Paris or Madrid, have experienced early centrifugal growth, via vast swaths of suburban expansion, functional relocation and infrastructural interventions emanating from the core (Mogridge and Parr, 1997). Together with the political power centred in capitals, these cities exerted a disproportionate influence over the spatial-functional configuration of their surroundings, and were often able to project their growth agenda over a comparatively passive hinterland, providing the context for the tight functional links depicted in figure 3. By contrast, smaller, 'weaker' cities usually experienced more modest growth processes, and their transformation into urban regions may have been less determined by the outward

expansion and functional reorganization of the core, with more autonomous urbanisation processes shaping the territory (Champion, 2001).

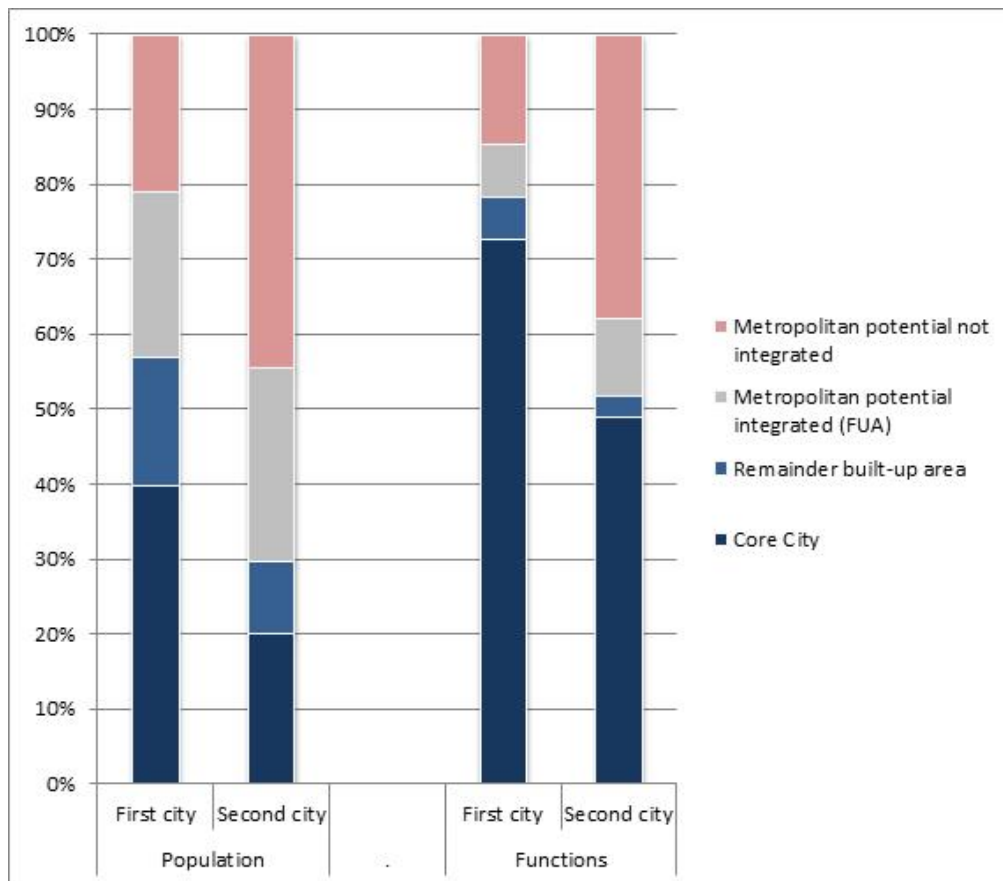


Figure 3. The non-integrated demographic and functional potential of second-tier and first-tier metropolitan regions.

However, the ability of large core cities to determine a hierarchic structure of metropolitan scale also relies on historical policy options which reflect and perpetuate “the traditional perspective of a nested hierarchy with clearly demarked core/periphery” (Thierstein, 2015: 257). Today, this approach is insufficient to deploy the resources of whole metropolitan regions, especially when economic, infrastructural and functional assets are not distributed according to a similar hierarchy. Moreover, with the increasing shift from comprehensive, publicly-led planning to the ad-hoc provision of services and functions driven by complex public-private agreements, the potential effects of planning strategies in predetermining

(typically hierarchic) functional arrangements become modest. Strategists should concentrate on “responsively build on these forces” (Salet et al., 2015: 252), rather than controlling them, to make the best of ever-changing locations and relations.

This implies abandoning core-periphery and spatially selective assumptions and addressing the heterogeneity of the whole urban territory. The ways to achieve it suggest new planning directions for cities with a history of weak hierarchical command over the development of their urban region. A variety of proposals have reflected this view, such as the ‘City of Cities’ strategy for Milan by Balducci, Fedeli & Pasqui (2011). There, the entire urban region is conceived as the ‘city’ for intervention, meaning that the features and expectations formerly assumed to belong to ‘proper’ cities (quality of the built environment, amenities, public transport, infrastructure, etc.) were reconceptualised for the metropolitan scale. The purpose was to ensure ‘liveability’ for people and business *at any point of the territory*, rather than in a selection of predefined centres.

The approach to integrated planning in urban regions working to deploy their larger metropolitan resources, such as West of England, mentioned earlier, but also in Turin, Lyon or Manchester, also seems to align with this view that the urban assets and qualities are multi-centric and the core city is just a particular configuration of a larger and more relevant urban form. While hierarchic, city-first perspectives may be more difficult to forsake in urban regions with a history of strong core-periphery contrasts and centralisation, linking such non-hierarchic, heterogeneous views of entire urban territories as ‘extensive cities’ to the spatial-functional configurations and growth trajectories typical of many second-tier urban regions offers new ways to conceive their integration.

Governing complexity

Comprehensive planning strategies are hard to implement in large, first-tier metropolitan areas because of the complexity involved. They are vast and complex entities, whose governance frameworks can hope to be consistent, encompassing and effective only to a degree. They are the ‘struggling giants’, in the words of Kantor et al., (2012), urban regions which may not only be partly ungovernable, but may even not *need* to be governed in the

classical sense of the word (Harrison, 2013; Le Gales & Vitale, 2013). In other words, the increase in complexity changes the attainable scope of governance, from a rational, encompassing framework envisioning overall metropolitan development, to a pragmatic focus on avoiding governance failures with long-term negative effects in areas like housing, education, health or crime (Le Gales & Vitale, 2013).

The implication of this minimalist approach is that it also forsakes the purposeful construction over time of strong shared identities and persuasive visions and narratives of the future, which are essential to turn metropolitan regions into symbolically meaningful places for citizens, firms and institutions (Healey, 2009; Hajer, van't Klooster & Grijzen, 2010). Despite their many differences, second-tier metropolitan regions tend to have overall lower levels of complexity than their larger counterparts. If this is the case, can their governing bodies still deliver such proactive visions, and therefore contribute to shape culturally integrated spaces, whose citizens share a feeling of belonging?

As Hodos (2011) writes about second-tier cities in general, (1) they are smaller; (2) their transport infrastructure and public services may be easier to manage; (3) their economic and functional scope is usually less encompassing and complex; (4) the pressure of globalizing forces over local governance trajectories is weaker; and (5) their urban migration streams tend to be smaller and more specialized. This 'simpler world' may still provide opportunities for planning strategies able to shape the symbolic and place qualities of metropolitan regions, such as: (1) ensuring access and proximity of citizens to local government (Healey, 2009); (2) making the plethora of networks, associations and partnerships operating at the metropolitan scale visible, accessible and inter-relatable (Nelles, 2013); (3) promoting daily mobility transversally across the metropolitan region, to facilitate the expansion of the citizens' place attachments to that scale (Kübler, 2016); or (4) developing a toolkit of stories, metaphors and images carrying the 'metropolitan idea', which a majority of the population can understand and engage with (Hajer, van't Klooster & Grijzen, 2010). It is important to assess the threshold of complexity under which this approach is viable against the features of different second-tier metropolitan regions in Europe.

Managing core-periphery relations

Literature in recent years has pointed out the importance of rebalancing relations between core and periphery to allow a productive ethos of cooperation in metropolitan regions. Actors tend to collaborate when they perceive symmetrical mutual relations and anticipate joint gains. Feiock (2007) writes that socio-economic and demographic homogeneity between municipalities in urban regions is positively associated with the likelihood of collaboration: interests are more likely to be shared and no city is in the position to 'call the shots' or exit the negotiation. Conversely, highly dominant core cities, such as large, powerful capitals, may restrict the willingness to collaborate of neighbouring actors, if they introduce asymmetrical power relations (Rayle & Zegras, 2013) and create the perception that the gains of one city happen at the cost of the neglect of others.

Clearly, inter-municipal cooperation regarding land use, transport or environmental questions, can happen in such sites of deep-rooted political contrasts, as Savini (2012) writes about Paris. But such arrangements often reflect the strategic interest of smaller centres to be symbolically associated with the large core city, or even to build a stronger network of peripheral centres bypassing the core, thereby hampering the possibilities of deeper metropolitan integration. Therefore, capital cities can offer obstacles to integration. In many cases, municipalities close to large capitals become more aware of the negative effects of the core city economic and political dominance than of the potential benefits of their location: this was the rationale behind the Edge Cities Network (Phelps et al., 2006), small European cities united by a common need to respond to the proximity of a large capital. A common perception is that capitals are able to use their political influence as they like, as 'gateways' to higher power levels (Savini, Majoor and Salet, 2015), but this advantage is likely to be restricted to the core city itself, given the highly asymmetrical relations between partners and the low sense of interdependence (Cardoso, 2016).

Can second-tier metropolitan regions mitigate some of these problems? In fact, the functional and demographic specificities discussed earlier, in contrast to capitals, may reduce potentially asymmetric power relations and the perceived political-cultural gaps between different parts of the region, associating to the need to collaborate a greater willingness to collaborate. However, they might face the opposite problem, namely the lack

of a leading city able to mobilise sufficient technical and financial resources to support metropolitan strategies, mediate between conflicting actors and provide a strong, shared identity to the metropolitan region (Lefèvre, 1998; Lambregts, 2006; Cardoso, 2016).

This implies a thin balance between being 'leading' and being 'dominant', which metropolitan integration strategies must address. Lefèvre writes about the failure of "technocratic projects dominated by the central cities" (1998: 21): the most successful projects noted in his early survey of metropolitan governance were indeed led by the added capacities of the core cities, but only when they were ready to make concessions, accepting roles in the network below their economic and demographic weight and limiting their decision power to facilitate metropolitan policymaking. Lefèvre's early examples included second-tier cities like Bologna or Stuttgart, but metropolitan strategic planning bodies following similar lines are active today in places like Lyon, Turin or Hannover.

Such practices reflect the previously discussed non-hierarchic perspective on metropolitan territories, also supported by the transformation of peripheral municipalities from 'rural backwaters' into strong political and economic actors. Nicholls (2006) documents the case of the second-tier city of Toulouse, explaining that this process is partly due to the decreasing role of state-led public policies (typically hierarchic) and the rise of spatially fragmented market forces shaping the functional and economic structure of metropolitan areas. As the aforementioned case of the creation of Grand Paris illustrates, the state may take longer to withdraw from capital cities, as their paths of development so closely stand for that of the nation. In this sense, Hodos (2011) may be correct in his insights about the loosening of the national grip and the new freedom of agency by 'the lesser cities'.

Conclusions

While academics "have won the intellectual battle and demonstrated that city regions matter" (Parkinson, 2016: 629), further research can determine in what conditions and in what type of regions integration matters more. This paper explores whether the areas where metropolitan integration can generally benefit cities tend to correspond to typical areas of disadvantage of many second-tier cities, and asks if this might give them additional

incentives for integration. We identified these disadvantages and organised them into two categories, while stressing that their presence and the urgency to overcome them varies among European cities. We then explored the potential benefits available to integrated second-tier metropolitan regions. In terms of potentiating agglomeration advantages through an increased demographic and functional mass, we find greater relative gains in second-tier cities than in first-tier cities. Regarding the benefits of acting as a large and coordinated entity, to share metropolitan resources efficiently and enhance political influence, we distilled a set of conditions shaped by European urban history and current policy trends and drew from relevant examples to suggest that many second-tier cities could benefit from that strategy.

There are clearly boundaries to this argument: the detected potential has as many forms of realization as the different historical, political and socio-economic contexts in European cities. We cannot claim any universality in the *isolated* argument that integration will benefit second-tier metropolitan regions. But we do claim that the possibilities offered by integration must be carefully explored and adapted to local contexts by policy-makers and planners *particularly* in those regions, and we indicate the aspects they need to consider. Therefore, this discussion must include the planning and governance strategies that manage the obstacles and opportunities for integration in metropolitan regions. There are three scholarly debates to which our arguments can be linked: how planning can address the heterogeneity of whole urban territories to better deploy their aggregated functional resources; the limitations to the scope of governance set by metropolitan complexity, namely the capacity to shape a shared cultural and symbolic imagination; and the importance of rebalancing core-periphery relations to benefit metropolitan cooperation. We discussed relevant specificities and promising paths for second-tier metropolitan strategies from all these perspectives, and identified some of the hurdles they might face.

In conclusion, and alongside the recent engagement in second-tier cities in Europe, the concept of the 'second-tier metropolitan region' can be recognized as useful for policy and research. This argument particularly applies to second-tier cities in countries with a dominant capital and a centralised urban system, as those are the cities likely to have greater disadvantages in the areas discussed here. It also speaks to second-tiers embedded in larger

and dense urbanised areas, as they are prone to have an interest in capturing the demographic, economic and functional mass of their surroundings.

However, the European urban system is supported by widely diverse national institutional frameworks, with great contrasts in terms of political power, financial and institutional resources, fiscal autonomy and democratic legitimacy. Some metropolitan regions, for instance in France and Germany, are able to command vast amounts of resources, lobby their interests at higher instances, plan for the larger scale, and offer their citizens and firms concrete applications of the gains they can extract from integration. Other metropolitan regions have little political power, insufficient resources and autonomy, and are unable to exercise overall decision-making in their territory (European Commission & UN Habitat, 2016: 206). This contrasting state of affairs avoids that second-tier metropolitan regions develop comparable abilities to pursue integration and shape a meaningful dialogue among them, with only some of them taken as relevant policy actors.

The attention to the specificity of second-tier cities is recent, and their state of metropolitan integration is differently advanced in European countries. An ongoing engagement with second-tier metropolitan regions will be necessary - through detailed case study research and wide-ranging comparative work - to assess how the policy relevance of the concept develops in time and how well the apparent potentials of integration confront the social, economic and environmental challenges of European cities.

References

- Albrechts, L., Healey, P. & Kunzmann, K. (2003). Strategic spatial planning and regional governance in Europe. *Journal of the American Planning Association* 69(2), 113-129.
- Amin, A., Massey, D. and Thrift, N. (2003) *Decentering the nation: a radical approach to regional inequality*. London: Catalyst.
- Balducci, A., Fedeli, V. and Pasqui G. (2011). *Strategic planning for contemporary urban regions. City of Cities: A Project for Milan*. Farnham: Ashgate.

Batten, D. (1995). Network cities: creative urban agglomerations for the 21st century. *Urban Studies* 32(2), 313-327.

BBSR (2011). *Metropolitan areas in Europe. BBSR-Online-Publikation 01/2011*. Bonn: Bundesinstitut für Bau-, Stadt- und Raumforschung.

Bourdeau-Lepage, L. (2013). Introduction. Grand Paris: projet pour une métropole globale. *Revue d'Économie Régionale & Urbaine*, August(3), 403-436.

Burger, M.J., Meijers, E., Hoogerbrugge, M. & Treserra, J. (2015). Borrowed Size, Agglomeration Shadows and Cultural Amenities in North-West Europe. *European Planning Studies* 23(6), 1090-1109.

Burger, M.J. & Meijers, E. (2016). Agglomerations and the rise of urban network externalities. *Papers in Regional Science* 95(1), 5-15.

Camagni, R., Capello, R. & Caragliu, A. (2015). The Rise of Second-Rank Cities: What Role for Agglomeration Economies? *European Planning Studies* 23(6), 1069-1089.

Camagni, R., Capello, R., & Caragliu, A. (2016) Static vs. dynamic agglomeration economies. Spatial context and structural evolution behind urban growth. *Papers in Regional Science* 95(1), 133-158.

Cardoso, R. (2016). Overcoming barriers to institutional integration in European second-tier urban regions. *European Planning Studies* 24(12), 2197-2216.

Cardoso, R. & Meijers, E. (2016). Contrasts between first-tier and second-tier cities in Europe: a functional perspective. *European Planning Studies* 24(5), 996-1015.

Champion, A. G. (2001). A Changing Demographic Regime and Evolving Polycentric Urban Regions: Consequences for the Size, Composition and Distribution of City Populations. *Urban Studies*, 38(4), 657-677.

Chen, Y. & Rosenthal, S. (2008). Local amenities and life-cycle migration: Do people move for jobs or fun? *Journal of Urban Economics* 64, 519-537.

- Combes, P. & Gobillon, L. (2015). The Empirics of Agglomeration Economies. In G. Duranton, J.V., Henderson & W. Strange (Eds.), *Handbook of Regional and Urban Economics 5A* (pp. 247-348). Amsterdam: Elsevier.
- Crouch, C. & Le Galès, P. (2012). Cities as national champions? *Journal of European Public Policy* 19(3), 405-419.
- Dijkstra, L. (2013). Why investing more in the capital can lead to less growth. *Cambridge Journal of Regions, Economy and Society* 6(2), 251-268.
- Dijkstra, L., Garcilazo, E. & McCann, P. (2013). The Economic Performance of European Cities and City Regions: Myths and Realities. *European Planning Studies* 21(1), 334-354.
- Duranton, G. & Puga, D. (2004). Micro-foundations of urban agglomeration economies. In: Henderson J.V., Thisse J-F. (Eds.), *Handbook of Regional and Urban Economics 4*. Amsterdam: Elsevier.
- ESPON/1.1.1 (2005). *Potentials for polycentric development in Europe. Project report – revised version*. Stockholm: ESPON and Nordregio.
- ESPON/1.4.3 (2007). *Study on urban functions. Final report*. Brussels: ESPON and IGEAT.
- ESPON/CAEE (2010). *The case for agglomerations economies in Europe. Final Report*. Manchester: ESPON and University of Manchester.
- ESPON/SGPTD (2012). *Second Tier Cities in Territorial Development in Europe: Performance, Policies and Prospects. Final report*. Liverpool: ESPON and European Institute of Urban Affairs.
- ESPON (2016, June). *European second tier cities in cohesive territorial development*. Presentation at ESPON workshop, Berlin.
- European Commission & UN Habitat (2016). *The State of European Cities 2016. Cities leading the way to a better future*. Luxembourg: Publications Office of the European Union.
- European Communities (2008). *Green Paper on Territorial Cohesion, the way ahead. Inforegio 28*. Luxembourg: Office of the Official Publications of the European Communities.

Faludi, A. (2015). The 'Blue Banana' Revisited. *European Journal of Spatial Development* Refereed Article No. 56, March 2015.

Faludi, A. (2016) The Poverty of Territorialism: Revisiting European Spatial Planning, *disP - The Planning Review* 52(3), 73-81

Feiock, R. (2007). Rational choice and regional governance. *Journal of Urban Affairs* 29(1), 47-63.

Friedmann, J. & Miller, J. (1965). The urban field. *Journal of the American Institute of Planners* 31(4), 312-320.

Glaeser, E.L. & Gottlieb, J.D. (2006). *Urban Resurgence and the Consumer City*. (Discussion Paper No. 2109). Cambridge, MA: Harvard Institute of Economic Research.

Glaeser, E.L., Kolko, J. and Saiz, A. (2001). Consumer city. *Journal of Economic Geography*, 1(1), 27-50.

Grant Thornton (2015). The Rise of the Second City [article]. Retrieved from <http://www.gtlongread.uk/>.

Hajer, M., van't Klooster, S. and Grijzen, J. (eds.) (2013). *Strong Stories – How the Dutch are Reinventing Spatial Planning*. Rotterdam: 010 publishers.

Harding, A., Harloe, M. & Rees, J. (2010). Manchester's Bust Regime? *International Journal of Urban and Regional Research* 34(4), 981-991.

Harrison, J. (2013), Struggling Giants: City-Region Governance in London, New York, Paris, and Tokyo [book review]. *Journal of Regional Science* 53: 541-542.

Harrison, B. (2015, 19 March). How Bristol can claw its way back on the devolution agenda. [blog]. *Centre for Cities*. Retrieved from <http://www.centreforcities.org/blog/how-bristol-can-claw-its-way-back-on-the-devolution-agenda/>

Healey, P. (2009). City Regions and Place Development. *Regional Studies* 43(6), 831-843.

Hodos, J. (2011). *Second Cities: Globalisation and Local Politics in Manchester and Philadelphia*. Philadelphia: Temple University Press.

- Hohenberg, P.M. (2004). The Historical Geography of European Cities: an Interpretative Essay. In J.V. Henderson & J.F. Thisse (Eds.) *Handbook of Regional and Urban Economics, Volume 4* (pp. 3021-3052). Amsterdam: Elsevier.
- Hulst, R. & Van Montfort, A. (2007). *Inter-municipal cooperation in Europe*. Dordrecht: Springer.
- Kantor, P., Lefèvre, C., Saito, A., Savitch, H.V. & Thornley, A. (2012). *Struggling Giants: City-Region Governance in London, New York, Paris, and Tokyo*. Minneapolis: University of Minnesota Press.
- Kresl, P.K. & Ietri, D. (2016). *Smaller Cities in a World of Competitiveness*. Abingdon: Routledge.
- Kübler, D. (2016). Citizenship in the fragmented metropolis: An individual-level analysis from Switzerland. *Journal of Urban Affairs*. doi:10.1111/juaf.12276.
- Kunzmann, K.R. & Wegener, M. (1991). The pattern of urbanisation in Western Europe, *Ekistics*, 58, 282-291.
- Lefèvre, C. (1998). Metropolitan government and governance in western countries: a critical review. *International Journal of Urban and Regional Research* 22(1), 9–25.
- Le Gales, P. & Vitale, T. (2013). Governing the large metropolis: a research agenda. Working Paper, cahiers de recherche du Programme Cities are Back in Town n° 2013-8.
- Martin, R., Pike, A., Tyler, P. & Gardiner, B. (2015). Spatially Rebalancing the UK Economy: the need for a new policy model. Report, Regional Studies Association, UK.
- Meijers, E. (2008). Summing Small Cities Does Not Make a Large City: Polycentric Urban Regions and the Provision of Cultural, Leisure and Sports Amenities. *Urban Studies* 45(11), 2323-2342.
- Meijers, E. & Romein, A. (2003). Realizing Potential: Building Regional Organizing Capacity in Polycentric Urban Regions. *European Urban and Regional Studies* 10(2), 173-186.

Meijers, E., Hoogerbrugge, M. & Cardoso, R. (2017). Beyond polycentricity: does stronger integration between cities in Polycentric Urban Regions improve performance? *Tijdschrift voor Economische en Sociale Geografie* (forthcoming).

Melo, P., Graham, D. & Noland, R. (2009). A meta-analysis of estimates of urban agglomeration economies. *Regional Science and Urban Economics* 39(3), 332-342.

METREX (2014). *Metropolitan dimension: position statement*. Glasgow: the Network of European Metropolitan Regions and Areas.

Mogridge, M. & Parr, J. (1997). Metropolis or region: on the development and structure of London. *Regional Studies* 31(2): 97-115.

National Geographic Traveller (2014). Cover story: Europe's second cities. Retrieved from <http://www.natgeotraveller.co.uk/destinations/europe/cover-story-europes-second-cities/>.

Nelles, J. (2013). Cooperation and Capacity? Exploring the Sources and Limits of City-Region Governance Partnerships. *International Journal of Urban and Regional Research* 37(4), 1349-1367.

Nicholls, W.J. (2006). Power to the periphery: suburban empowerment in Toulouse, France. *Environment and Planning A* 38(9), 1715-1737.

OECD (2012). *Promoting Growth in All Regions: Lessons from across the OECD*. Paris: OECD.

Parkinson, M. (2016). UK city regions: policies, performance and prospects. *Town Planning Review* 87(6), 629-653.

Parkinson, M., Meegan, R. & Karecha, J. (2015). City Size and Economic Performance: Is Bigger Better, Small More Beautiful or Middling Marvelous? *European Planning Studies* 23(6), 1054-1068.

Phelps, N., Fallon, R. & Williams, C. (2001). Small Firms, Borrowed Size and the Urban-Rural Shift. *Regional Studies* 35(7), 613-624.

Phelps, N., Parsons, N., Ballas, D. & Dowling, A. (2006). *Post-suburban Europe: planning and politics at the margins of Europe's capital cities*. Basingstoke: Palgrave Macmillan.

- Rayle, L. & Zegras, C. (2013). The Emergence of Inter-Municipal Collaboration: Evidence from Metropolitan Planning in Portugal. *European Planning Studies* 21(6), 867-889.
- Salet, W., Vermeulen, R., Savini, F. & Dembski, S. (2015). Interface. Planning for the new European metropolis: functions, politics and symbols. *Planning Theory & Practice* 16(2), 251-275.
- Savini, F. (2012). Who makes the (new) metropolis? Cross-border coalition and urban development in Paris. *Environment and Planning A* 44(8), 1875-1895.
- Savini, F. (2013). Political dilemmas in peripheral development: investment, regulation, and interventions in metropolitan Amsterdam. *Planning Theory & Practice* 14(3), 333-348.
- Savini, F, Majoor, S. & Salet, W. (2015). Urban peripheries: reflecting on politics and projects in Amsterdam, Milan, and Paris. *Environment and Planning C* 33(3), 457-474.
- Thierstein, A. (2015). Metropolitan regions: functional relations between the core and periphery. *Planning Theory & Practice* 16(2), 254-258.
- Van Houtum, H. (1998). *The Development of Cross-Border Economic Relations* (doctoral dissertation). Amsterdam: ThelaThesis Publishers.
- Van Oort, F.G., Burger, M.J. & Raspe, O. (2010). On the economic foundation of the urban network paradigm. Spatial integration, functional integration and urban complementarities within the Dutch Randstad. *Urban Studies* 47(4), 725-748.
- West of England Local Enterprise Partnership (2014). We are a partnership for growth. Retrieved from <http://www.westofenglandlep.co.uk/>.

¹ PUSH = Potential Strategic Urban Horizon: area that can be reached within 45 minutes by car. PIA= Potential Integration Area: areas constructed by merging FUAs of which the PUSH areas that can be reached within 45 minutes overlap by at least 33%. See ESPON/1.1.1, 2005 for details.

² The core MUA was used instead of the municipal boundaries of the core city to avoid the probable bias caused by administratively under- or over-bounded agglomerations.