

Strategies of cities in globalized interurban competition: the locational policies framework

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Abstract

Globalized interurban competition affects cities of various sizes and cities in various locations. Cities have to find ways to position themselves in global markets by formulating locational policies. To capture this wide range of policies, this paper develops an analytical framework of locational policies that is interdisciplinary informed by theories of economic geography and political science. We compare the cities of Lucerne and Ulm as two case studies that illustrate the added value of the locational policies framework. We found that these two cities feature very different locational policies agendas. By employing a neo-institutional lens, we suggest that place-specific factors enable and constrain the formulation of locational policies. We outline three possible venues to tentatively explain these different locational policies, namely the economic sector mix, the national tax system, and politics. Beyond these empirical findings, this paper shows that the locational policies framework is able to capture a wide range of policies that aim to enhance the competitiveness of a city. Thus, the locational policies framework is a tool that can be used to reveal how cities face the globalized, and increasingly knowledge-intensive, interurban competition.

Keywords

Interurban competition, locational policies, neo-institutionalism, Lucerne, Ulm

Introduction

Economic globalization pushes a variety of cities into a rapidly changing and globalized playing field. To cope with this challenge, local governments are “maintaining and enhancing the locational advantages of their delineated territorial jurisdictions” (Brenner, 1999: 440). Place-specific advantages become essential in interurban competition because they allow localities to escape from a level playing field. Local officials in cities of various sizes and varying economic power react to the changing dynamics of economic globalization by formulating locational policies. With the goal of positioning cities in an interconnected and increasingly knowledge-intensive global market, these types of policies aim to enhance the economic competitiveness of a locality by identifying, developing and exploiting the place-specific assets that are considered to be most competitive.

Locational politics and locational policies have been studied in cities and regions of global importance (e.g. Brenner, 1999; Jessop and Sum, 2000; Parnell and Robinson, 2006; Savitch and Kantor, 2002). However, the ways in which so-called small and medium-sized cities (SMSCs) position themselves in global interurban competition by formulating locational policies has not yet been systematically scrutinized. SMSCs are often seen as the victims of interurban competition. Although global cities have some ‘command and control’ functions, SMSCs are perceived as objects within the changing dynamics of globalization. Thus, the specific challenges of SMSCs, their international economic ambitions and their corresponding strategies are particularly downplayed and understudied (Giffinger et al., 2007). In addition, there is a lack of systematic research about locational policies in general because it is difficult to identify, distinguish and categorize them. Such strategies are often mutually dependent and appear in complex bundles, do not occupy a narrow policy domain and do not operate in isolation from each other (Uyarra, 2010: 132). Therefore, a relatively rich catalogue of possible locational policies is needed. This paper addresses these two gaps by (a) proposing a locational policies framework and (b) applying this framework to two European SMSCs. Thus, the aim of this paper is the explorative use of a novel analytical framework in two cities that are seldom studied in an in-depth manner.

The remainder of this article is structured as follows. First, we outline an analytical framework of locational policies that takes a policy analysis perspective and is interdisciplinary informed by theories of economic geography and political science. Second, we apply the locational policies framework to two illustrative case studies, namely Lucerne in Switzerland and Ulm in Germany. We then outline three potential explanatory factors that may help us to understand the formulation of locational

policies, namely the economic sector mix, the national tax system and political factors. We conclude by highlighting the added value of the locational policies framework.

An analytical framework of locational policies

Locational policies emerged as a concept within urban entrepreneurialism literature (e.g. Harvey, 1989). In the 1980s and early 1990s, locational policies described competitiveness enhancing strategies that emerged at the expense of territorial equalization policies (Begg, 1999; Brenner, 1999). Locational policies have also been adapted by the optimistic, neo-classic view of interurban competition. This strand of research assumes that each city-region has the potential to identify its own competitive niche (e.g. Porter, 1990). According to the latter perspective, locational policies should aim to enhance the economic competitiveness of the targeted locality by identifying, developing and exploiting place-specific assets.

The neo-institutional strand of urban research emphasizes place-based resources and constraints in the formulation of policy choices. Globalized economic pressures do not lead to converging policies, but instead to a variety of responses. In their seminal book, Savitch and Kantor (2002) highlight that urban development policies are formulated within a complex set of economic and political interactions. Malecki (2007) proposes that the motivation for engaging in interurban competition is similar in different places, but that the local economic development policy choices are shaped by place-based resources and constraints. Uyarra (2010: 132) concludes that economic development policies are not drafted “on a *tabula rasa*, but in a context of pre-existing policy mixes and institutional frameworks which have been shaped through successive policy changes”. In his study of urban external relations, Van der Heiden (2010) finds that the concrete forms of these endeavours are dependent on the respective place-specific needs and characteristics. Furthermore, Jessop and Sum (2000: 2291) propose that “the sort of strategies that are likely to be pursued will clearly depend on state institutional and/or territorial structures as well as on broader economic, political and sociocultural factors”. We follow these neo-institutional assumptions by suggesting that place-specific settings are essential in interurban competition because they allow for an escape from a fully competitive, and therefore level, market. Thus, the goal of locational policies is to position its city in interurban competition by enhancing and presenting the attributes that are considered to be most competitive (van der Heiden, 2010: 10).

To do justice to the diverse strategies that cities may formulate, our locational policies framework should cover a relatively rich catalogue of possible locational policies (Mayer et al., 2016). In the following, an analytical framework of locational policies (see Table 1) will be presented and discussed. This consists of six distinctive categories: *innovation policies*, *image building*, *business prerequisites*, *acquisition*, *coordination*, and *public funds and transfer payments*. The categories of locational policies are distinguished by policy orientation and policy domain.). With regard to the former, locational policies target institutions, groups, actors or capital within the city or the region (inward orientation) or beyond the city-region (outward-orientation). The latter, the policy domain, differentiates between the policy addressees: locational policies can either address individuals and corporate market actors (economic domain), or they may address political entities from different state levels (political domain).

Table 1. Locational policies framework.

Policy orientation			
Policy domain	Inward	Outward	
Economic	Soft factors	<p>Innovation policies</p> <ul style="list-style-type: none"> - Cluster policies - Start-up promotion - Knowledge generating infrastructure - Public venture capital <p>Aim: Developing its Regional Innovation System</p>	<p>Image building</p> <ul style="list-style-type: none"> - City branding - Location marketing and promotion <p>Aim: Improving the reputation of the region, attracting residents and guests</p>
	Hard factors	<p>Business prerequisites</p> <ul style="list-style-type: none"> - Taxes - Land and real estate <p>Aim: Creating a favourable business environment</p>	<p>Acquisition</p> <ul style="list-style-type: none"> - Acquisition of firms - Acquisition of investments <p>Aim: Attracting mobile capital, jobs and taxes</p>
Political	<p>Coordination</p> <ul style="list-style-type: none"> - Regional coordination organizations - Informal networks <p>Aim: Developing coherent locational policies in the region, avoiding competition within the region</p>	<p>Public funds and transfer payments</p> <ul style="list-style-type: none"> - Applying for higher-tier governmental funds - Fiscal equalization or transfer payments <p>Aim: Justifying and increasing public funds and transfer payments</p>	

Innovation policies

Innovation policies are an essential feature of the Regional Innovation System (RIS) concept. Public policies have the potential to further develop a RIS by addressing specific system failures (Doloreux, 2002). The economic geography literature distinguishes between three RIS failures: organizational thinness, fragmentation, and lock-in (e.g. Tödtling and Trippl 2005). As a consequence, innovation policies may aim to develop the organizational set up of a region, enhance the transfer and sharing of knowledge flows between relevant industries, academia and public actors within the region, as well as to ensure the inflow of extra-regional knowledge to avoid the ‘overembeddedness’ of its local actors. Local governments, therefore, have a powerful role as they may act as ‘local brokers’ (Bradford and Wolfe, 2013: 11).

Cluster strategies are a classic example of innovation policies. Their aim is to create spatially concentrated networks of firms that practice research and development (R&D) in similar areas and enhance interaction and knowledge transfers in these clusters (Porter, 1990). Cluster-oriented innovation policies can take many forms. Such policies may support and incentivize R&D, organize specific industry related training, create cooperative networks, or foster knowledge exchange between cluster entities (Cumbers and MacKinnon, 2004: 959). Innovation policies are also concerned with establishing and developing knowledge infrastructures. Universities may be enriched with science parks, technology transfer, commercialization programs and university-based venture capital funds. In this vein, universities may be direct drivers of innovation, but they are arguably more important in educating talent, and are thus an underlying component of the regional knowledge-creation infrastructure (Mayer, 2007: 50).

Further examples of innovation policies are the promotion of start-ups through incubators or the support of entrepreneurship through accelerators. Incubators offer an ideal environment for start-ups by providing office space at below market-rates, consulting services in legal and administrative tasks, providing access to networks of investors, and by stimulating knowledge exchange with bigger firms and other start-ups. Similarly, so-called accelerators support young firms that outgrow the start-up phase with services tailored to their level of development before they operate fully independently. Local governments may also step in with public funds when venture capital is lacking.

Image building

Image building strategies “include branding exercises, hosting cultural initiatives, tourism promotion, and even immigration campaigns” (Harvey, 2012: 4). Image building and place marketing are tools

used to increase the competitiveness of places and they are often tailored to specific target groups such as tourists, prospective residents, talent and investors (Eshuis and Edwards, 2013; Harvey 2012: 3). In today's global market, image building has almost become a necessity for public authorities as a way 'to sell' their city (Harvey, 2012: 8).

It is essential to position the city according to attributes that are difficult to imitate elsewhere in order to avoid a level playing field with other, potentially more powerful cities. Thus, image building should be guided by considerations of locational substitutability: "The lower the locational substitutability of these place-bound assets, the harder they can be imitated by others and the stronger the region's position is in the (...) global economy" (van der Heiden and Terhorst, 2007: 342).

Business prerequisites

Business prerequisites are perceived as 'hard factors' because this category is tangible and easier to measure. The tax rate level and the availability and cost of land and real estate are two important factors for setting the business condition of a locality. Not all business prerequisites are within the competence of local governments. The degree of local tax autonomy varies considerably given different national tax systems (Page and Goldsmith, 1987). Some local governments may be allowed to collect personal and corporate income tax as well as property taxes, whereas other national tax systems only allow municipalities to collect the latter. Thus, property taxes may constitute the largest independent source of tax revenue for some municipal budgets. In such a context, the availability and cost of land and real estate become a major concern for local governments and they may try to increase the availability and value of land and real estate through land-use planning, providing databases of vacant real estate and sometimes developing and managing their own business complexes.

Acquisition

Acquisition refers to strategies that seek to enlarge the tax base through the acquisition of firms and mobile capital and not through organic growth. Cities may base their acquisition strategy on specific business prerequisites. A classic example is to lure firms into the jurisdiction of the city by lowering tax rates or offering specific tax incentives. Sometimes land deals or reduced real estate costs are also part of the 'acquisitions package'. Acquisition is a big business as local development agencies try to acquire firms and mobile capital around the globe. To initiate contacts with firms that are potentially relocating, local governments, or their hired brokers, may directly approach firms with inquiries or already tailored propositions, and brokers may sometimes initially negotiate with side-locators that work on the firms' mandate.

Coordination

Coordination is important for ensuring policy coherence within a functional region. Regional coordination of actors and policies is conditioned by the mismatch between functional regions and jurisdictional territories. This is especially true given that the reforms of jurisdictional boundaries are unable to keep up with the accelerated pace of urban sprawl (Kübler, 2012: 431). Effective coordination is rarely achieved through amalgamations or top-down institutional consolidations. Instead, it is attained through cooperative arrangements — mostly ad hoc and sometimes institutionalized — that stabilize networks of policy-relevant actors (Sager, 2006: 434). Such forms of coordination are based on the voluntary involvement of its members without any method of policy enforcement.

In a comparative analysis Kübler and Piliutyte (2007: 365) find that a metropolitan-wide commonality of interest regarding their common promotion is likely to exist. However, the two step logic of firm-location — the first step consisting of a regional choice and the second, and later decision, consisting of a specific location within the chosen region (Cohen, 2000) — aggravates regional coordination. This reveals the double logic of competition: competition within a region is a threat to economic competitiveness in the competition between regions. The worst case scenario of competition within a region would be that different localities engage in ‘beggar-my-neighbor’ policies within a city-region (Keating, 1995: 120).

Public funds and transfer payments

These strategies justify, or possibly increase, vertical money transfers and attempt to tap into public funds. Given that this locational policy targets public funds, a city has to play its political card and emphasize its importance for the whole political system (Mayer et al., 2016). National or regional public funds often exist to support big infrastructure projects, or to develop specific industries of regional or national interest. National fiscal equalization schemes are also part of this category, however, they are mostly based on non-negotiable allocation formulas. European cities also have access to diverse EU funding possibilities. However, such strategies feature a preservative rather than an active logic. Jessop and Sum (2000: 2293) assess such strategies as being unsustainable in the long-term, and furthermore, they “pose an awkward dilemma over the trade-off between maintaining local autonomy and accepting resources that come with restrictive strings attached”.

The locational policies framework applied

The locational policies framework is applied to two European SMSCs, namely Lucerne and Ulm. Table 2 compares the two illustrative case studies. We did not theoretically sample these two cities from the population of European SMCSs. Nevertheless, these two cities are well-suited for a comparison because they are similar in demographic size, geographical location, economic performance, and the political orientation of their city governments. However, the two cities vary, for example, in terms of their economic sector mix, the national state systems in which they are embedded and their degree of local tax autonomy.

Table 2. Comparison of Lucerne and Ulm.

Key figures	Lucerne	Ulm
Population	81,000 (2015)	123,000 (2015)
Geographic location	In the northern Alps, in central Switzerland	North of the Alps, in southern Germany
GDP per capita	51,122 EUR (2013, cantonal data)	68,000 EUR (2013)
GDP per capita growth	13.8% (2000–2013, cantonal data)	25.9% (2000–2011)
Economic sector mix	Service sector (especially tourism)	Metal and machine building, pharmacy, logistics and utility vehicles
State system	Small decentralized federal state, direct democracy	Large unitarian federal state
City government	Middle left	Middle left
Local tax autonomy	High local tax autonomy	Rather low local tax autonomy

Sources: Population: LUSTAT (2016); City of Ulm (2015, 30). GDP: LUSTAT (2015, 116), converted from Swiss Francs to Euro using the historical currency exchange rate (1 January 2013); City of Ulm (2015, 97). State systems: Braun (2003).

The selected cases fit the underlying practical and theoretical motivation of this paper. First, the practical motivation is to study locational policies formulated in cities that are not the economic powerhouses of their nations. Such cities are specifically challenged to position themselves in the globalized interurban competition. Both cities represent typical cases of European SMSCs, as defined by Dijkstra and Poelman (2012). Table 3 lists the six categories of cities (Dijkstra and Poelman, 2012), their quantity and their population share in respect to the total population of Europe, Germany, and Switzerland. With this categorization in mind, 40% of the total European population lives in cities. If we include cities' commuting zones, the share rises to 61% of people living in urban zones. SMSCs, defined as categories *S* and *M*, host 17% of the total European population and 42% of the total European city population. SMSCs account for 678 cities out of a total of 828 European cities (82%). Thus, SMSCs are a typical urban settlement type in Europe.

Table 3. Categorization of cities by Dijkstra and Poelman (2012).

Category	Total Europe	Germany	Switzerland
S	410	63	4 (<i>Lucerne</i>)

50,000 – 100,000 inhabitants			
Share of total population	7.5%	6.6%	3.7%
M	268	39 (<i>Ulm</i>)	3
100,000 – 250,000 inhabitants			
Share of total population	9.4%	8.7%	7.3%
L	73	12	2
250,000 – 500,000 inhabitants			
Share of total population	5.0%	5.3%	8.6%
XL	41	7	1
500,000 – 1,000,000 inhabitants			
Share of total population	5.8%	4.9%	7.3%
XLL	24	4	0
1,000,000 – 5,000,000 inhabitants			
Share of total population	9.3%	8.9%	
Global City	2	0	0
More than 5,000,000 inhabitants			
Share of total population	2.8%		
Total cities	828	125	10
Share of total population	40%	34%	27%

Source: Adapted from Dijkstra and Poelman (2012). The data is from 2006. Total Europe is defined as EU27 plus Iceland, Croatia, Norway, and Switzerland.

Second, the theoretical motivation of this paper is to study whether local assets and constraints are reflected in the formulated locational policies. Given the variety of economic, political and institutional preconditions in the two cities, we can study whether these local specificities are important for formulating locational policies.

The two illustrative case studies of Lucerne and Ulm serve three purposes. First, they demonstrate how the framework could be used in an explorative way to trace and categorise locational policies. Second, they shed light on the explanatory factors that may be meaningful for explaining locational policies. Third, they highlight the added value of a comprehensive framework of locational policies.

This paper draws on a range of qualitative data. We conducted seven in-depth interviews with relevant decision-makers and experts. The interviewees occupy different roles within the cities but are

comparable between the cities (see Table 5 appendix). Furthermore, we reviewed statistical data, reports, press articles and other secondary literature to triangulate the interviews (reactive data) with non-reactive data. This data triangulation should enhance the reliability of the inference (Webb et al., 1999: 2).

Lucerne

The city of Lucerne is the capital of the canton of Lucerne, located in central Switzerland. In the Swiss Confederation, the 26 member states (i.e. cantons) are the key political entities. First and foremost, legal competences reside with the cantons. This frequently leads to conflicts over urban policy issues between cities and their cantons (Kübler et al., 2003). Direct democratic instruments (such as popular initiatives and referenda) can be found at every state level. All levels of government can levy an array of taxes on firms and residents. The cantons levy 24% of all taxes and the municipalities acquire a share of 15% (OECD, 2014). The economic sector mix of the city of Lucerne is dominated by the service sector and nine out of ten employees are employed in this sector. The tourism industry is of prime importance.

The city of Lucerne does not have its own economic development agency. The cantonal economic development agency, Business Development Lucerne (BDL), which is a public-private partnership, is responsible for implementing locational policies in the area of innovation policies, image building and acquisition. Politically, since 2012, the executive of the city of Lucerne has been comprised of two left-wing parties (the Social Democrats and the Greens), one middle party (the Green Liberals), and two centre-right parties (the Free Democrats and the Christian Democrats). The political realities of the city contrast with those at the cantonal level: since 2015 the cantonal executive has consisted of centre-right and right-wing representatives.

Innovation policies

The cantonal economic development agency, BDL, consults start-ups and attempts to connect them to relevant partners in the start-up scene. However, these are only very limited services for entrepreneurs. The city of Lucerne does not formulate concrete innovation policies. The innovation capacity of Lucerne is considered to be a distinctive weakness that is reflected by a low number of patent applications, a below average number of newly established firms and an exodus of highly skilled labour (Swiss Federal Statistical Office 2013; Graf and Wyrsh, 2012: 51). Looking at the high-tech sector, Lucerne still ranks below the average of other Swiss cities (LUSTAT, 2011: 10). Knowledge

transfers between universities and firms are limited for three reasons. First, the University of Lucerne is the youngest (founded in 2000) and smallest (2,800 students in 2016) university in Switzerland. As such, the university does not appear in most international university rankings. Second, the University of Lucerne only includes the disciplines of social and cultural sciences, economics, law and theology, making the University of Applied Science and Arts the only research facility that offers technical studies. Third, even though there are efforts to enhance knowledge transfers, the interviewees highlight that this potential is not fully exploited through the formulation of innovation policies.

Image building

Lucerne fully focuses on its image as an internationally renowned tourist destination. One study concludes that the city of Lucerne is primarily associated with its landscape and its culture (BDL, 2013: 8–9). For example, Lucerne ranks the highest in Switzerland when it comes to overnight stays (15 per inhabitant) (LUSTAT, 2011: 14). Lucerne engages in several city partnerships.¹ Activities in these partnerships are mainly used for the promotion of Lucerne as a tourist destination (van der Heiden, 2010: 76-78). In a study mandated by BDL, consultants concluded that the problem of this fixation on tourism is that it impedes the perception of Lucerne as a business city (BDL, 2013: 8).

Business prerequisites

The middle-right governed canton of Lucerne has followed a low tax strategy since a referendum in 2009 reduced corporate tax rates by half. It now has the lowest level in Switzerland. Even though the middle-left city government recommended voting against the revision, the new regulation found a majority among the townspeople. The interviewees identified the reduction of tax rates as the prime strategy for enhancing business conditions in Lucerne. This low tax strategy should be understood within the context of the tax competition in central Switzerland, whereby as the surrounding cantons lowered their taxes, the canton of Lucerne followed suit.

To date, empirical studies on the effects of the low tax strategy are scarce. The cantonal competitiveness indicator of the bank UBS (2014) ranks the canton of Lucerne sixth out of 26 cantons. Similarly, in Credit Suisse's (2013) locational quality indicator, Lucerne climbed from rank 13 to rank seven. Both banks explain Lucerne's rise as a result of the drastic reduction in corporate tax rates. It comes as no

¹ Lucerne has partnerships with the following cities: Bournemouth (England), Chicago (USA), Cieszyn (Czech Republic), Murbach/Guebwiler (France), Olomouc (Poland), and Potsdam (Germany) (van der Heiden, 2010).

surprise that banks are cheerleaders of low tax strategies, however, some media articles are more critical, referring to substantial ‘break-ins’ of tax revenue. The interviewees are cautious about assessing the success of the tax reform because it is still too early for an evaluation. However, one interviewee criticizes the local authorities for not coordinating the low tax policy with a land-use management strategy (Interview 2).

Acquisition

Again, it is the low tax strategy that should attract external firms. BDL was already successful in acquiring some new firms from China, the USA and some other Swiss cantons. Although the interviewee from this development agency was enthusiastic about the low tax strategy — “this century belongs to us’ — (Interview 3), the expert interviewee raised concerns about the one-dimensionality of the tax policy (Interview 2). Nevertheless, it is apparent that city officials and their partners rely heavily on the low tax strategy.

Coordination

Lucerne is an ‘underbound city’ where not just the outskirts of the city, but also the urban centre, stretch beyond the city’s territory (Dijkstra and Poelman, 2012: 6–7). To increase its governing capacity the city hall advocated for amalgamations in the agglomeration, however, the surrounding municipalities have opposed such attempts in several referenda. As an alternative to the failed amalgamations, the city engages in three coordination bodies of various scopes. First, there is the so-called *K5* that is a sparsely formalised coordination platform made up of the city plus the four surrounding municipalities (Ebikon, Emmen, Horw and Kriens). At the moment, the collaboration within the *K5* is considered to be too informal to substantially coordinate locational policies between the political entities (Interview 2). Second, the city of Lucerne is a member of the municipal association, *LucernPlus*, which is comprised of 25 municipalities in the region. The association is active in different policy sectors (land-use planning, mobility, and energy). The interviewees all emphasize the importance of the association and confirm the positive outcomes of its activities to date. However, tax competition between the municipalities is considered to be too intense and a hindrance to further cooperation (Interview 2) Third, Lucerne is also a member of the supra-regional coordination association, Metropolitan Conference Zurich. However, this is of minor importance to Lucerne because of the association’s diversity and huge scope.

Public funds and transfer payments

The Swiss Confederation provides different funding programs for infrastructure, transport, culture, regional development and agricultural projects. Fiscal equalisation schemes exist between Swiss cantons and between the municipalities in the canton of Lucerne. The interviewees unanimously consider the strategy of tapping into public funds as of minor importance for the local authorities in Lucerne. However, they all mention the city's rather unsatisfactory situation because it carries out a lot of specific central city costs: infrastructures of regional importance are mostly solely financed by the city. In the perspective of the city's authorities, the burdens of being the cantonal capital, as well as the central city of the agglomeration, are not sufficiently compensated (Interview 1).

Synthesis

The superordinate cantonal authorities dominate the formulation of locational policies in Lucerne. This strong position of the canton is not an idiosyncratic feature of Lucerne, but a general characteristic of the Swiss political-institutional setting (Kaufmann et al., 2016: 124). This low discretion in the formulation of locational policies, together with the dominance of the tourism sector, might be the reason for the striking absence of concrete strategies to strengthen the city's innovation capacity. This lack of innovation policies is a missed opportunity given that Lucerne features two knowledge generation institutions that are assets for a city of its size. The interviewees emphasize that the low corporate tax rates should establish favourable economic conditions, which in turn should indirectly enhance the innovation capacity of local firms and simultaneously attract the relocation of external firms. In this respect, the city hall has adopted a passive take on locational development.

Ulm

Ulm is located in the German federal state of Baden-Württemberg, at the immediate border with the federal state of Bavaria. Even though Germany is a federation, the degree of local tax autonomy is rather low. Municipalities are only allowed to levy property taxes. The German federal states levy 21% of all taxes and the municipalities only acquire a share of 8% (OECD, 2014). Together with the surrounding jurisdictions (*Landkreise*) Neu-Ulm, Alb-Donau and Günzburg, the agglomeration of Ulm is known to be one of the most competitive German regions in the fields of metal and machine building, pharmacy, logistics and utility vehicles (Beschorner et al., 2010, 17–22).

In order to overcome the coordination failures of the past, by the turn of the millennium the economic development agency, City Development Association Ulm/Neu-Ulm (CDAU, *Stadtentwicklungsverband Ulm/Neu-Ulm*), had been founded as a project of both cities. Politically, both Ulm and the federal state

of Baden-Württemberg are dominated by the centre-right Christian Democratic Union (CDU) and the left Social Democratic Party (SPD). The left Alliance 90/The Green Party (the Greens) has started to gain votes both in Ulm and Baden-Württemberg. From 1992 until 2016 the mayor of Ulm was a SPD member, and as of 2016, the new mayor belongs to the CDU. Hence, the political difference between the city and the subordinate federal state has always been rather low. In the city of Neu-Ulm the conservative right Bavarian Christian Social Union (CSU) is strong as it holds the mayoral office, as well as the majority in the city's legislative branch.

Innovation policies

Ulm positions itself as an excellent research location. In 1986, the so-called City of Science Ulm was established in the northeast of the city. The campus first encompassed a university, a technical oriented University of Applied Sciences and two hospitals. In 1993, the research centre of the Daimler Corporation was added to the research campus as a major private partner. Of prime importance is the so-called science park, the aim of which is to establish new high-tech firms, develop dynamic clusters and foster start-ups. The strong interaction between academic research and application-oriented development (such as the Daimler research centre) is a distinct advantage for the region's innovation capacity. This strong research capacity is reflected in international university rankings: according to the 2016-2017 ranking of Times Higher Education, the University of Ulm is ranked as the 135th best university and as the 65th best university when it comes to the category of 'industry income (knowledge transfer)' (Times Higher Education, 2017). Nevertheless, one interviewee (Interview 4) mentions that the different actors at the science campus only cooperate selectively; a more institutionalized interaction would be needed to better exploit the potential of the innovation ecosystem in Ulm. The City of Science strategy reflects the local authorities' understanding of Ulm as a city that competes on the global scale. The formulation and implementation of this strategy has been at the top of the city's agenda for years (Interview 4).

Image building

The City of Science concept has dominated Ulm's image building strategies for many years. However, in recent years Ulm has attempted to build a two-dimensional image building strategy by marketing itself as a "dynamic, open-minded, young, and at the same time 'old micropolis' in the sandwich of the two big metropolises Stuttgart and Munich" (Interview 4). To the north of the railway station the

city is planning a new mixed-used neighbourhood with housing space, workplaces, gastronomy, retail sales and public sites. Thus, Ulm positions itself as an innovative research site and, simultaneously, as an urban place with a high quality of life.

Business prerequisites

In Germany, property taxes are only levied by municipalities. Around 90% of this property tax revenue is retained by the communities, the rest flows into the tax revenue sharing systems of Baden-Württemberg. The real estate investments of local authorities focus especially on the City of Science campus. The city hall and the CDAU actively engage in the management and development of the campus by purchasing large areas of brown field sites and transforming them into research facilities. Similarly, the local authorities engage in the planning of the neighbourhood north of the railway station. One interviewee points out that the “main emphasis” of the local authorities is on a very active land-use management (Interview 4).

Acquisition

Innovative and interactive clusters in metal and machine building, pharmacy, logistics and utility vehicles form the basis for attracting firms to Ulm. Ulm targets firms that fit with their clusters, are contractors to anchor firms and that could contribute to regional research activities. In the interviews, tax rates were considered as of minor importance for the acquisition of new firms because the city of Ulm has little discretion in this regard. Aside from that, the Urban Micropolis strategy targets real estate investments with the goal of expanding the property tax bases.

Coordination

The city of Ulm looks back on a 15-year history of coordination with the neighbouring city of Neu-Ulm, which lies in the neighbouring federal state of Bavaria. All of the interviewees consider the coordination between the two cities to be highly successful. Both cities are equal partners of the CDAU. Coordination with municipalities beyond the perimeter of Ulm and Neu-Ulm is less institutionalized. Together with relatively rural districts, the two cities constitute the Innovation Region Ulm: an association mainly dedicated to the marketing of the region. However, this collaboration has never been as intense as that of the CDAU. To achieve greater international visibility, a study by an external research institute advises that there should be better coordination of the larger

region's promotional policies to form the future centre of a *Regiopol Donau-Iller* (Beschorner et al., 2010: 144–151). In the interviews the local authorities express their support for strengthening the collaboration with municipalities beyond Neu-Ulm. It seems that this will be the strategy for the next decades, although not all interviewees attach the same importance to it (Interview 6).

Public funds and transfer payments

Subsidies for public funds in the areas of infrastructure, transport and education are important sources of revenue for Ulm. For example, Ulm was successful in acquiring financial support for the new train connection to Stuttgart, as well as for further development of the City of Science campus. Ulm occasionally benefits from financial contributions from the European Union but they “do not play a big role in the overall volume” (Interview 7). With regard to the fiscal equalization system in Baden-Württemberg, Ulm belongs to the group of net payers. However, the local authorities do not perceive these high transfer payments as unsatisfactory (Interview 4).

Synthesis

For decades Ulm has pursued a coherent and successful locational policies agenda under the label ‘City of Science’. Innovation policies have established research organizations and fostered interactions and knowledge transfers between the crucial actors of the different clusters, such as research institutions, anchor firms (e.g. Daimler) and innovative small and medium-sized firms. By actively planning and managing land-use, the city hall has substantially contributed to the evolution of the science campus to ensure spatial proximity within the clusters. In the future, Ulm aims to have a two-dimensional image building strategy: strengthening its position as an innovative research site and becoming a dynamic micropolis between the two metropolises of Stuttgart and Munich.

Towards explaining locational policies

The four economic locational policies discussed in the case studies are dominated by two omnipresent but different agendas (see Table 4). In Lucerne, the low tax strategy and the tourism industry are reflected in most locational policies. In Ulm, the City of Science and the Urban Micropolis agendas are similarly ubiquitous. In the two cities, the manifestations of locational policies differ in every category. As outlined in the theoretical part of this paper, we rely on neo-institutional presumptions, i.e. place-specific settings that constrain and enable the formulation of locational policies, to tentatively explain these differences. In the course of this chapter we outline three possible venues for explaining

these varieties of locational policies, namely the economic sector mix, the national tax regime, and political factors.

Table 4. Locational policies agendas in Lucerne and Ulm.

Locational policy	Lucerne	Ulm
Dominant locational policies agendas	- Low tax strategy - Tourism	- City of Science - Urban Micropolis
Innovation policies	- Mostly absent	- City of Science
Image building	- Tourism: culture and nature	- City of Science - Urban Micropolis
Business prerequisites	- Low tax strategy	- Land-use management and real estate
Acquisition	- Low tax strategy	- City of Science for firms - Urban Micropolis for investments
Coordination	- Failed amalgamations - Low level coordination on various scopes	- Coordination Ulm/Neu-Ulm - Desired larger regional coordination
Public funds and transfer payments	- Better compensation for city-centre costs	- Public funds for infrastructure, transportation, and education

The *economic sector mix* may explain innovation policies and elements of image building and acquisition strategies in Lucerne and Ulm. Only few resources are dedicated to strengthening Lucerne's innovation capacity. This may be explained by the specificities of the tourism industry that is, to a lesser degree, dependent on innovation policies compared to the knowledge-intensive and technology-intensive sectors in Ulm. Ulm's economic sector mix was a necessary condition for its City of Science agenda. Without the presence of high-tech sectors, this shift towards an innovation agenda would not have been possible, at least not to this extent. These favourable path-dependent conditions were proactively exploited by the City of Science strategy. The strong tourism industry in Lucerne accounts for image building around nature and culture. This persistent image aggravates a position strategy as a business city. Parts of the image building strategy and parts of the acquisition strategy in Ulm draw on the City of Science and its underlying industries. However, future image building and acquisition strategies will place more emphasis on Ulm as an urban micropolis.

The *national tax system* seems to explain business prerequisites, acquisition strategies, and public funds and transfer payments. The national tax system determines the localities' capacity to raise income (Page and Goldsmith, 1987: 7). Crucial in this regard is the degree of local tax autonomy, i.e. the availability of tax instruments and higher-tier governmental funding for municipalities that compensate for a low degree of local tax autonomy. The comparably high local tax autonomy of Swiss municipalities and cantons has led to a harsh tax competition in which the low tax strategy of Lucerne has to be understood. Hence, tax policy dominates business prerequisites and acquisition strategies. One interviewee summarizes this by pointing out that “the most powerful economic promoter is politics” meaning that this determines the establishment of favourable business prerequisites (Interview 3). Given the various local tax instruments, public funds are not very important revenue sources for Lucerne. In Ulm, low local tax autonomy seems to trigger a more interventionist approach to locational policies. In the words of a senior public servant: “We do not limit ourselves to set business prerequisites [...], we rather understand ourselves as entrepreneurs” (Interview 7). The city hall focuses on land-use and real estate management both in the City of Science campus and around the railway station where the core investment area of the Urban Micropolis is located. These activities may be explained by the importance of property taxes because this tax revenue constitutes an independent income source within a national tax system that does not allow municipalities to tax personal and corporate income. The low discretion in setting tax rates is thus a factor that explains why Ulm acquires firms based on the City of Science strategy. Various higher-tier governmental funds for infrastructure, transportation and education compensate for Ulm's constraints in raising tax income.

Political factors, such as the degree of agency that political actors enjoy in a multilevel governance setting, as well as partisanships, also influence the formulation of locational policies. In Lucerne, the superordinate cantonal authorities dominate the formulation of locational policies. The decisive decision to lower corporate tax rates was a cantonal decision and the decisive organization (BDL) is a cantonal organization. This is an unfavourable situation for the city. The canton comprises a population that is five times larger than the size of the city. As a consequence, locational policies challenges differ considerably between the city-region and economically distinct rural areas. Thus, cantonal decision-makers do not formulate clear-cut urban locational policies. Furthermore, the low level of coordination in the city-region of Lucerne does not increase the political leverage of the city compared to the canton. The political discrepancy between the middle-right dominated canton and

the middle-left city-government manifests itself in different locational policies priorities. The low corporate tax strategy, implemented by the canton against the will of the city government, exemplifies these conflicting priorities between the city and the canton. In Ulm, local decision-makers enjoy substantially more discretion in formulating locational policies than those in Lucerne. For example, the City of Science strategy was formulated by the CDAU without much interference from superordinate authorities or agencies. The political discrepancy between the federal state of Baden-Württemberg and the city of Ulm has always been rather small, thus reducing potential conflicting interests in locational policies priorities. Furthermore, Ulm extended its political ‘room for manoeuvre’ by overcoming regional institutional fragmentation in its city-region when it joined forces with Neu-Ulm. Counter-intuitively, this cooperation between Ulm and Neu-Ulm was accomplished despite partisan differences.

These tentative explanations suggest that the economic sector mix, the national tax system, and political factors explain the formulation of locational policies. However, we do not postulate that these three potential explanatory factors cover the full range of potential explanatory factors, or that they operate mutually exclusive of each other. For example, the Urban Micropolis strategy seems to be incentivized by a low degree of local tax autonomy, but may be also triggered by Ulm’s geographical location between two German economic powerhouses (Stuttgart and Munich). Another example is the underexploited research capacity of Lucerne, which seems to not only be caused by the unfavourable economic sector-mix, but also by deliberate political decisions, i.e. agency, such as refraining from establishing a Faculty of Sciences at the University of Lucerne, or largely excluding innovation policies from their locational policies agenda. However, relying on neo-institutional assumptions, our argument is that economic, institutional, political and geographical factors all coalesce into a specific local setting that constrains and enables the locational policy choices of local decision-makers.

Conclusion

This paper has illustrated the application of the locational policies framework on two European SMSCs. The illustrative case studies have revealed that the two cities formulate very different sets of locational policies. In accounting for these differences we outlined three potential venues for explaining the formulation of locational policies: the economic sector mix, the national tax system and politics. The shared underlying neo-institutional rationale of these three potential explanatory factors is that cities formulate locational policies based on their local settings. This research has examined

locational policies in an explorative manner. Generalizing these findings should be done with caution because the cases were not systematically selected from an analysed population of European SMSCs. However, it would be fruitful for further research to go beyond describing locational policies by formulating theoretically derived expectations to explain locational policies, or by evaluating the effects of concrete locational policy choices.

There are three reasons why the locational policies framework adds value for studying the strategies cities adopt in interurban competition. The first is that the framework makes it possible to chart locational policies agendas and to draw several connections between locational policies. For example, Lucerne's low tax strategy is not only a business prerequisite but is also heavily used in attempts to acquire firms.

Second, the locational policies framework is able to reveal a counter-intuitive impact of local autonomy and it also pointed to the limits of the formulation of place-specific locational policies. In Lucerne, the high degree of local autonomy does not automatically account for greater autonomy in policy-making. If tax competition becomes too intense, the focus on low tax rates may overshadow other locational policies, there may be no resources left to invest in other locational policy instruments and the ability of cities to formulate place-specific locational policies may decrease significantly. Ulm, which only has limited local tax autonomy, invests in a wider range of locational policies. Its innovation policies are especially likely to contribute to sustainable economic development in Ulm. Due to the fact that the locational policies framework incorporates a broad range of policy instruments, we could trace such a counter-intuitive impact of tax autonomy on local autonomy.

Third, locational policies are an ideal area of research for studying the effects of globalization on the policies of a variety of cities because locational policies simultaneously target and respond to an intensified, interurban competition. We could detect that the rationale to be competitive in a globalized, knowledge-intensive interurban competition is shared by both cities. The actual policy responses, however, are different as they are mostly dependent on place-based constraints and resources. These findings strengthen neo-institutional arguments that highlight similar motivations for engaging in economic development, whereas concrete policy choices are shaped by place-based resources and constraints (e.g. Malecki, 2007; Savitch and Kantor, 2002). This study shows that local decision-makers seek to capture the potential gains of globalization and that they try to manage global economic pressure by adjusting their local economy to the requirements of an increasingly knowledge-intensive economy. Locational policies are the products of their local context, but they aim to further

embed their own jurisdiction into a globalized market. In these ways are locational policies – in the terminology of Cerny et al. (2005) – internalizing globalization.

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Appendix

Table 5: Interview participants

Label	City	Type	Description
Interview 1	Lucerne	Senior public servant	City of Lucerne, Department of Economics
Interview 2	Lucerne	Expert	Professor at University of Applied Sciences Lucerne, Economics Department
Interview 3	Lucerne	Economic development agent	Business Development Lucerne
Interview 4	Ulm	Senior public servant	City of Ulm, Department Urban Development
Interview 5	Ulm	Economic development agent	City Development Association Ulm/Neu-Ulm
Interview 6	Ulm	Expert	Professor at University of Ulm, Department of Economics (written responses)
Interview 7	Ulm	Senior public servant	City of Ulm, Department of Finance and Organization (written responses)