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# ALIGNING POLICY INCENTIVES AND ESTABLISHING GOVERNANCE FOR "SHRINKING" CITIES: A PROFILE OF ŁÓDŹ, POLAND\*\*\*

# DOSTOSOWANIE POLITYKI ZACHĘT I ZARZĄDZANIE KURCZĄCYMI SIĘ MIASTAMI: PRZYKŁAD ŁODZI

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ABSTRACT: Why do cities shrink and what should be done about it? This paper explores this issue with a particular focus on the implications for spatial planning and land use in the city of Łódź, Poland. It focusses on the institutional structures which constrain and shape policy responses to urban shrinkage and offers comparative analysis of this phenomenon in metropolitan areas of the OECD. While Łódź has embarked on a strategy of investment and urban renewal in order to reduce the trend of population decline, a lack of metropolitan governance together with incentives for sprawl and peri-urbanisation threaten the fiscal viability, and economic, social and environmental sustainability of the metropolitan area. The national government has a critical role to play in creating the right incentives for shrinking cities like Łódź to be able to successfully adapt to its changing dynamics. The city cannot tackle this alone. The objective of this paper is to unpack the processes that are driving population shrinkage in Łódź and to recommend institutional responses and policy incentives to manage these processes.

KEY WORDS: Łódź, "shrinkage" of cities, spatial planning, metropolitan governance, central government policy, sustainable development

ABSTRAKT: Dlaczego miasta się kurczą i jakie w tym kontekście działania należy podjąć? W prezentowanym artykule podjęta zostaje problematyka kurczenia się miast ze szczególnym uwzględnieniem implikacji dla planowania przestrzennego i użytkowania ziemi w Łodzi. Rozważania skoncentrowane zostały na strukturach instytucjonalnych, które wymuszają i kształtują działania polityczne odpowiadające na proces kurczenia się miast. Przedstawiono także analizę porównawczą tego zjawiska w obszarach metropolitalnych krajów OECD. Choć Łódź rozpoczęła strategię inwestowania i odnowy miejskiej w celu ograniczenia trendu depopulacji, brak zarządzania metropolitalnego oraz sprzyjanie procesom niekontrolowanego rozwoju przestrzennego

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zagraża rentowności podatkowej oraz zrównoważonemu rozwojowi obszaru metropolitalnego w sferze zarówno gospodarczej, społecznej, jak i środowiskowej. Kluczową rolę w tworzeniu pozytywnych bodźców, które ułatwią kurczącym się miastom – takim jak Łódź, dostosować się do zmieniających się uwarunkowań rozwoju, pełnią władze szczebla centralnego. Władze miejskie mogą bowiem samodzielnie nie poradzić sobie z tym problemem. Celem artykułu jest przybliżenie procesów prowadzących do kurczenia się populacji Łodzi oraz przedstawienie zaleceń, które w postaci odpowiednich działań instytucjonalnych i zachęt politycznych mogą przeciwdziałać wspomnianym procesom.

SŁOWA KLUCZOWE: miasta kurczące się, Łódź, użytkowanie terenu, planowanie miast, eksurbanizacja

#### Introduction

Cities have long gone through cycles of population and economic growth and decline. But in Europe and Japan in particular, population aging and lower birth rates, together with structural economic shifts, have accelerated the pace of "urban shrinkage" in some areas. Over the past 50 years, 370 cities with populations over 100 000 have shrunk by at least 10% globally (Oswalt and Rieniets 2007). As such, Łódź ranks among the growing number of cities worldwide that are dealing with urban shrinkage both past and projected.

It is often remarked that cities are based upon a growth logic and that policy and planning communities have struggled to adapt to a logic of urban shrinkage which in some regions, may very well become a structural phenomenon (Sousa and Pinho 2015). There is thus an urgent need to better understand the causes and consequences of urban shrinkage in order to align policy incentives and establish the appropriate governance institutions. Whether or not urban shrinkage is "good" or "bad" depends to a large extent on how it is adapted to and on the resulting socio-spatial and economic conditions. Unfortunately, the traditional tools of statutory planning are generally poorly suited to the shrinking city context. As this paper will discuss, a broader range of tools and strategies are needed beyond that of traditional spatial and land use planning in order to ensure that cities and communities remain robust and resilient. This raises an important multi-level governance challenge; many of the most critical policy tools and incentives, such as fiscal policies, are the purview of upper level governments. Therefore, as much as urban shrinkage is a local phenomenon, policy responses require cooperative multi-level governance.

The objective of this paper is to unpack the processes that are driving population shrinkage in Łódź and to recommend institutional responses and policy incentives to manage these processes. This paper explores these issues in four parts. First, it outlines the theoretical framework and research methods. Second, it examines the dynamics of population decline and economic change in Łódź and provides comparisons with other metropolitan areas of the OECD. Third, the structure of institutional responses and incentives are analysed. Finally, the concluding section offers recommendations to better align policy incentives – spatial and otherwise—and describes the critical need for metropolitan governance in Łódź.

#### 1. Theoretical framework and research methods

The literature on shrinking cities reminds us that while this is not a new phenomenon, contemporary conditions of globalisation are intensifying these processes worldwide. The post industrial economies of global cities have led to a massive accumulation of capital, information flows and population within central nodes (Sassen 2002). Technology and a shift towards knowledge economies have accelerated the pace of urbanisation in many places (Harvey 2000; Swyngedouw 2004). At the same time, other cities and regions have experienced population and economic decline as traditional industries have collapsed and new ones have struggled to take their place. In many instances, the greater labour mobility of skilled workers has led to growing labour market inequalities, with less mobile lower skilled workers left in places with less dynamic labour markets, leading to areas of poverty and deprivation over time. While economic decline looms large as an explanatory factor for shrinking cities, it is not the only driving force. As Wiechmann and Bontje note, "demographic change (e.g., falling birth rates, outmigration in rural depopulation areas); suburbanization (flight of people and jobs to the suburbs, hollowing out of the core city, triggered by urban sprawl); structural upheaval (economic reorganization, collapse of an entire political system, unrest, resettlements) and environmental pollution" are other common reasons for urban shrinkage (2015: 6).

While there is a large body of literature that links urban decline to global economic processes and the international division of labour (e.g., Harvey 2000, 2005), there is far less of that which has explored the causes and consequences of urban shrinkage at the meso- and micro-scale, such as suburbanisation (Reckien and Martinez-Fernandez 2011). Our paper focusses on the meso and micro scale and is grounded in a historical institutionalist analysis. Borrowing a well-used definition from March and Olsen, institutions can be understood as: a relatively enduring collection of rules and organized practices, embedded in structures of meaning and resources that are relatively invariant in the face of turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstances (1989, 1995, 2006). This interpretation stresses that institutional rules and practices inform and guide actor behaviour while 'structures of meaning' or common purposes "explain, justify and legitimate behavioural codes" (March & Olsen 2006: 3). Actions are further structured through institutional resources where only certain actions are feasible given institutional constraints. Institutions themselves can "empower and constrain actors differently and make them more or less capable of acting according to prescriptive rules of appropriateness" - in this way there is an element of institutional socialization (March & Olsen 2006).

This definition of institutions highlights their 'stickiness'— there is stability to them and where change does occur, it does so within existing institutional contexts. From this reasoning, the city of Łódź's response to urban shrinkage has been shaped, moulded and guided by institutional logics that carry along certain behaviours, actions and modes of thinking. This approach offers a valuable analytical framework with which to explore

the multi-level character of urban politics and to distinguish between centralizing and decentralizing elements. Centrality is understood as a node in the network of regional connections which is distributed at different levels and territories (Read and Castro 2006). In short, institutions, temporality and scale matter.

This article draws on several sources of data/research. Substantively, it draws on the research conducted by the OECD for the study *The governance of land use in Poland: The case of Łódź* (2016). This research included a detailed questionnaire on spatial and land use planning and governance in Łódź which was completed by city officials along with two days of research interviews with over 50 participants which included city officials, academics, members of local not profits and community groups and politicians in both Łódź and a neighbouring rural Commune of Nowosolnya (conducted in October 2015). It further draws on a comparative analysis of population trends in functional urban areas of the OECD (drawing on the OECD's Metropolitan Database); an analysis of economic and demographic trends (from Polish national statistics); fiscal data (from the municipality of Łódź) and a review of policy documents and academic literature.

# 2. Depopulation and de-concentration in Łódź – unpacking the shrinking city phenomenon

## Population growth and decline in Łódź

Łódź is not new to a massive population change. The city grew rapidly from a small agrarian town in the 19th century thanks to its clothing and textile industries. Today this impressive industrial heritage marks the landscape. Former warehouses and production facilities dot the centre of the city - some have been stunningly renovated for commercial and residential use, while others lay in a state of decay. There are vast areas of post-industrial ruins along with uninhabited houses which constitute huge challenges for the revitalisation of the city. Unlike Warsaw, Łódź's built environment was not destroyed during the Second World War, but its population changed dramatically over this period, from 672 000 before the war to approximately 472 000 in the post-war period. By 1988, the population had grown to 854 000 inhabitants and today it stands at 706 000 (2014). Łódź is experiencing a faster rate of population decline than other comparable Polish cities. The population of the city is expected to fall from 706 000 in 2014 to 668 500 in 2020 and down to 638 000 by 2025 due to a combination of low birth rates and outmigration (Statistical Office in Łódź, 2014). Therefore, by 2025 Łódź will potentially have lost close to 10% of its current population. This mimics population trends at the regional level. The population of Łódź voivodeship is both aging and shrinking in terms of overall size (due to a combination of outmigration and low birth rates) and it has the highest share of citizens aged 65 of any region in Poland.<sup>1</sup>

 $<sup>^1</sup>$  Its old age dependency ratio for the region stood at 21% in 2010 and this is expected to increase to 40% by 2030.

# Population shrinkage in comparative context

Urban shrinkage is taking place in Łódź's core, not its surrounding commuting zones. The population of the functional urban area (FUA) – the area across which people live, work and commute – decreased by approximately 6% between 2000–2014.<sup>2</sup> However, this is reflective of population decline in the urban core, at approximately 8.6% between 2000–2014 and not the commuting zone which increased over this period (by approximately 8.8%). Among 256 OECD FUAs, only seven experienced greater population declines in their urban cores over this period (see Table 1).

Table 1 Top 15 functional urban areas with population decline, 2000–2014, OECD

| Population metropolitan area |       | Population urban core |       | Population commuting zone |       |
|------------------------------|-------|-----------------------|-------|---------------------------|-------|
| New Orleans                  | -13.9 | Thessalonica          | -24.5 | Gwangju                   | -20.6 |
| Bochum                       | -12.2 | New Orleans           | -22.2 | Leipzig                   | -14.9 |
| Changwon                     | -11.9 | Bochum                | -12.9 | Dortmund                  | -14.4 |
| Saarbrücken                  | -10.5 | Changwon              | -11.9 | Shizuoka                  | -13.2 |
| Cleveland                    | -9.4  | Cleveland             | -11.2 | Saarbrücken               | -12.5 |
| Dortmund                     | -7.7  | Athens                | -9.8  | Bochum                    | -9.3  |
| Duisburg                     | -7.2  | Busan                 | -9.3  | Dresden                   | -8.9  |
| Essen                        | -7.1  | Łódź                  | -8.6  | Fukuyama                  | -7.8  |
| Busan                        | -6.7  | Catania               | -8.5  | Nagano                    | -7.8  |
| Pittsburgh                   | -6.3  | Duisburg              | -7.6  | Oita                      | -7.8  |
| Łódź                         | -6.1  | Katowice              | -7.4  | Himeji                    | -7.4  |
| New Orleans                  | -6.1  | Essen                 | -7.1  | Essen                     | -7.4  |
| Bochum                       | -5.9  | Poznan                | -6.3  | Niigata                   | -7.2  |
| Changwon                     | -5.6  | Pittsburgh            | -6.3  | Kitakyushu                | -6.5  |
| Saarbrücken                  | -13.9 | Detroit               | -5.9  | Duisburg                  | -6.2  |

Source: OECD (2016) Metropolitan Statistics, https://stats.oecd.org.

Given these dynamics of population decline in the urban core and growth in the surrounding commuting zone, Łódź is similar to Thessalonica, New Orleans, Athens, Busan, Catania, Poznan and Dayton, among OECD FUAs. These cities offer some comparative lessons for Łódź – though some are more relevant than others. In Thessalonica, Greece, the migrant crises together with persistent economic stagnation in the wake of the 2008 financial crisis has led to population shrinkage and a growth in vacant houses

<sup>&</sup>lt;sup>2</sup> The OECD has developed functional urban areas (FUA) in order to facilitate the comparison of metropolitan regions. FUAs are characterised by a densely inhabited "city" and a "commuting zone", whose labour market is highly integrated with the cores. Population data exists for 256 FUAs in OECD countries.

(Gemenetzi 2016). Similar issues are observed in Athens and in both cities (Athens and Thessalonica) are compounded by inadequate institutional responses (Gospodini 2013). In Catania, urban core population loss was driven by large scale suburbanisation (Famoso and Lanzafame 2013). In the case of New Orleans, the population loss has been driven by the severe environmental disaster cause by hurricane Katrine in 2005 (Ehrenfeucht and Nelson 2011). In Busan, Korea, urban shrinkage has been driven by demographic factors – population aging and lower birth rates – a fact which Richardson and Bai note may require national policies to support expanding families (2014: 146). Dayton Ohio ranks among the American rust belt cities that have experienced population decline related to industrial shifts – not unlike the decline of the textile industry in Łódź. Poznan is perhaps one of the most directly comparable cities to that of Łódź as it rests in the same institutional context. Poznan is an economic successful city; its shrinkage in the urban core has been driven by processes of suburbanisation that are common throughout Poland (Hasse et al. 2015) – a point that will be returned to.

Among the cities listed, the urban shrinkage phenomenon bears a likeness to the types of demographic pressures faced by Busan – but it is not so severe. While Łódź's historical legacy of structural economic change bears similarities to the cities in the American rustbelt, Łódź's recent employment growth and investments in infrastructure make it quite a different context today. Nor does Łódź bear the economic stagnation and migrant crisis faced by Greek cities or the legacy of environmental destruction faced by New Orleans. As such, it is in many ways in a better position to address the negative consequences of urban shrinkage. Like Poznan and Catania, growing suburban-and peri-urbanisation exacerbate urban shrinkage in Łódź. One of this issues that this raises is why the central parts of the city have not been seen as attractive areas to live in; or, at least, as less attractive than periurban ones.

## The built form: Urban decline and growing sub- and peri-urbanisation

Unlike many post-socialist cities, Łódź did not experience rapid development in its historical core in the early 2000s. Inner city renewal programmes over this period had little effect and the share of dilapidated tenement houses rose dramatically as maintenance responsibilities were passed down from public agencies to lower income residents (Marcińczak and Sagan 2011). This has led to "enclaves of poverty" in the urban core, defined as areas in which the percentage of households receiving social assistance benefits exceeds 30% (Warzywoda-Kruszyńska et al. 2013; Warzywoda-Kruszyńska and Golczyńska-Grondas 2010). Older housing stock which is concentrated in the centre of the city – tends to be in the poorest condition (City of Łódź 2010). A 2005 assessment of housing conditions classed approximately 75% of the city's residential buildings as being in "poor condition" (City of Łódź 2010). While housing in Łódź is

<sup>&</sup>lt;sup>3</sup> Łódz is not alone; "underhousing" or inadequate housing is an issue facing much of Poland. Figures from 2015 estimate that 15% of the population reside in substandard housing conditions (Habitat for Hu-

relatively affordable compared to that of other major cities, this is in large part because it is of lower quality. $^4$ 

Recent regeneration efforts in the urban core have been more successful and have the potential to increase investment in the historic centre and residential population. The revitalisation of the historic city has been co-financed with EU funds. It is the largest project of this kind in Poland with 100 hectares slated to be developed. The regeneration project also addresses social elements of urban development, with planned support low-income neighbourhoods (including employment and training schemes). At the same time, major investments in transportation, most notably a multimodal underground railway station which together with the cross-city tunnel will form the heart of the planned High Speed Railway system "Y" V300 serving Warsaw-Łódź-Wrocław/Poznań in Poland (part of the railway route Rail Baltica). This will increase the city's connectivity to Warsaw and will potentially lead to a new residential economy of rail commuters. For understanding further context of Łódź possible development, the proximity of Warsaw may play an important role (e.g., Łódź Airport serves as a secure airport for Warsaw one in case of emergency).

While the urban regeneration project continues, Łódź is experiencing increasing development in suburban areas and beyond in adjoining rural communes. Upon Polish independence there was a reduction in state-led housing construction and growth in the demand for private detached homes. Łódź, like cities across Poland experienced the height of such suburban development around the 2000s. Suburban areas have a mix of socialist state era, condo and private detached homes; peri-urban areas have a mix of agricultural lands (typically small farms of less than five hectares), forests, residential developments and some commercial developments (such as warehouses and light industry).

The growth in sub- and peri-urbanisation is in part explained by concentrated areas of deprivation in the urban core; until recently, a lack of investment in an attractive centre and in high quality amenities for residents, and; social and cultural preferences for single family homes in a pastoral setting. It is also driven by the relative affordability of suburban and peri-urban homes and the accessibility of land for development in these locations. These are institutionalised processes which are common throughout Poland. Local spatial development plans allow an estimated 62 million residential settlements across Poland – far exceeding any potential housing demand (Kowalewski *et al.* 2013).

# The consequences of depopulation and de-concentration for Łódź

Very rarely is developed land ever returned to an undeveloped state. Of 354 regions examined across the OECD that experienced population decline since 2000, only 36

manity, 2015). Further, 44.8% live in overcrowded conditions, in contrast to the EU average of 17% (Habitat for Humanity, 2015).

<sup>&</sup>lt;sup>4</sup> In comparison to the five other largest cities in Poland, Łódź has the lowest average prices per square meter of housing and lower average rental rates for figures going back to 2007 (Narodowy Bank Polski 2016: 9).

regions experienced a decline in developed land (OECD, 2016). Thus, 90% of OECD regions that lost population have not decreased their use of developed land; of those that did record declines in the area of developed land, more than half were located in eastern Germany. A major issue with shrinking cities is that they are not actually shrinking in terms of the amount of developed land. This can, for example, make it more difficult to provide efficient and cost-effective public transport, infrastructure and services. It can lead to areas being poorly managed and cared for, with underused and uncared for spaces, which can lead to a perception of neglect and in turn, divestment.

A deconcentrated and depopulated urban form also increases the costs of infrastructure maintenance on a per capita basis, since the same amount of infrastructure has to be maintained for a smaller population across a larger area (OECD 2017). Approximately 68% of Łódź's budget is composed of own-source revenues (Statistical Office in Łódź 2014b). Of these, the local government's share in personal income taxes out of total own-source revenues stood at 30%; the share of corporate income taxes out of total own-source revenues stood at 2.7%. Out of all taxes levied directly by the local government, the largest share is that of the property tax, which in 2013 composed approximately 11% of all own-source revenues. With population decline, the share of own source revenues can be expected to decline over time, threatening the financial viability of the city in the medium and longer terms. Compounded over time, these issues can reduce the quality of the urban infrastructure and amenities and reduce the attractiveness of the area as a place to live, work and invest, thus cementing a pattern of decline.

The pattern of demographic change in Łódź must be considered together with that of its sub and peri-urban areas. Problems arise when population growth in suburban municipalities does not occur around transport hubs, but is instead spread out in low densities over large areas, as in Łódź. Already there is growing traffic congestion in Łódź and it is estimated that 100 000 people travel into the city from the surrounding commuting zone on a daily basis, with the attendant air pollution, noise and lost time this entails. Łódź's functional economic area had the highest Sprawl Index in 2006 of any comparable functional urban area across Poland.<sup>5</sup>

# 3. Aligning institutional responses and policy incentives

Does Łódź have the right policy instruments – planning and otherwise – and the right governance institutions to manage the consequences of depopulation and deconcentration? On the whole we argue that no, the city has a limited ability to manage these socio-spatial processes. Within this discussion it is important to delineate the scale of an intervention and the level of the government's responsibility. This section

<sup>&</sup>lt;sup>5</sup> The OECD's Sprawl Index measures growth in the built-up functional economic area adjusted for growth in the city population. The assessment by functional urban area – as opposed to administrative unit – facilitates comparative analysis.

focusses on three elements: i) spatial and land use policies, ii) the fiscal environment and incentives and iii) governance institutions. While this section is focussed on instruments at the disposal of the local government, these functions are necessarily shaped by national legislation and policies. Thus, the locus to increase their effectiveness is in large measure a national-level prerogative.

#### Spatial and land use planning

In Łódź, city officials recognise the trends of urban shrinkage and the city is seeking a denser urban form, which is an important strategy. Increasing urban density can significantly reduce energy consumption in urban areas, help preserve open green space and protect urban areas (OECD 2011: 91). Higher densities also increase productivity and consequently, GDP levels of an urban area. Generally, larger and denser cities have higher productivity levels than less populous and deconcentrated ones. It can be of important magnitude; a doubling of the population of a given area increases the productivity of its businesses by up to 5% (OECD 2015b). Thus, Łódź's strategy to increase the density of its urban core is likely to reap benefits in the form of improved economic performance.

However, in Łódź, this densification comes in tandem with a massive regeneration effort which has the potential to price lower income residents out of the central areas. Meanwhile the city, like many others, has limited sources to finance or invest in housing stock. With a growing elder population, mobility and access to services becomes increasingly important. Sagan and Grabkowska criticize Łódź's regeneration efforts as being overly focused on physical regeneration with the aim to make the city more attractive to business and tourism. They conclude that, "while top-down projects can be highly effective in promoting physical regeneration, bottom-up processes are of critical significance for social and demographic regeneration" (2012: 1 135). They recommend that urban regeneration efforts employ mixed strategies which invest in physical spaces along with public services to more effectively address social inclusion. Positively, both city strategy documents and national legislation such as the Revitalisation Act (2015) emphasise the importance of social considerations alongside physical investments.

However, beyond the scope of the overall strategy, there are severe limitations in the statutory instruments presently employed which undermine this approach. In Poland, local spatial development plans are the key tool for local governments to shape urban form and use, and are the only legally binding plan; however, local plan coverage stands at just 11% of the municipal territory (in contrary to Gdansk, where almost 100% of territory is covered). Further, there are disincentives for municipalities to increase such coverage. Rules on property owner compensation for properties negatively affected by a local spatial development plan establish the potential for future litigation. The "planning decision" for an individual building or change of land use in areas where there is no valid local spatial development plan can lead to fragmented developments. Planners' ability to direct development through the "planning decision" mechanisms are

limited by specific legal procedures embedded in national laws (e.g., the presence of an existing building in the surrounding neighbourhood of a particular height provides the land owner with the right to build a similarly-scaled structure). This means that new developments are based on existing features, as opposed to desired ones and there is no legal compliance with local spatial studies. This mechanism reduces predictability of future development and quality of neighbourhood. But it is a result of complicated and often ineffective planning system, which does not correspond to rapidly changing demands and needs of city services, users and last but not least its citizens.

The planning decision mechanism facilitates sprawl. For example, a 2013 study by Kowalewski et al. on the economic and social costs of uncontrolled urbanisation in Poland finds that the current regulatory, plan-based system is increasingly incapable of managing the urbanisation processes - in the words of the authors, the present system "results in spatial chaos and a waste of space and capital". Eliminating the planning decision mechanisms would be an important step to reduce the clear incentives for sprawling developments, as would enhancing the incentives to adopted valid land use plans. But even with these changes, the planning system would be ill-equipped to address the need for timely actions to ensure a mere fiscally sustainable and coherent urban fabric. Land use plans simply take a very long time to have an effect and do not address existing scattered development patterns. Far more active forms of planning are needed. This entails more flexible, strategically equipped plans, which will be binding for the city and a clear formalized process of negotiation at lower levels of planning and decision making. Perhaps most critically, it requires a coordinated metropolitan strategy, since the functional urban area is much larger than Łódź alone – a point that will be returned to.

# Aligning fiscal incentives

While the use of the regulatory instruments to shape land-use practices in Łódź is limited, so are the fiscal ones. The major fiscal instrument used by municipalities at present is the property tax, which is based on land and building size as opposed to its value. Consequently, when public investments – such as the major transportation and regeneration investments in the centre of Łódź – are developed, or land uses are changed (e.g., from agricultural to residential), the increase in value of impacted properties is not captured through the property tax. The OECD recommends that Poland adopt a full ad valorum (or cadastral) tax on property (OECD 2008a; 2014). The rate should initially be set at a low level and should be accompanied by measures to ensure that low-income households can afford the tax without having to liquidate their property (OECD 2008a: 16). There is a large amount of literature on relative merits of different approaches which could inform of such reforms (Slack and Bird 2014; 2015). These fiscal mechanisms can be a very effective and timely tool through which to manage development and it is unfortunate that they are not employed at present. Active land policies could be used to pursue important investments and transform urban spaces.

In Poland, municipalities can levy extraordinary fees to capture increases in land/property value as a result of public investments; however, there are limitations to their use and it is likely for these reasons that such fees are not used in Łódź at present. Planning charges (or rents) and "adjacent/betterment" fees can be paid to a municipality where a property increases in value due to a change in land use, parcellation or new infrastructure. However, the charge cannot exceed 30%-50% of the value of the increase and in the case of planning charges, it can only be levied if the owner has sold the property within a set number of years. These mechanisms are limited, cumbersome and expensive to administer because of the need to value properties. The foregone revenue from increases in land value is potentially very large. For example, Polish municipalities converted 545 000 hectares of agricultural land to non-agricultural uses between 2004 and 2012 (Kowalewski et al. 2013). The increases in land value as a result of this conversion have generally not been captured by fiscal instruments.

Beyond value capture mechanisms, the city also presently uses few incentives to direct or encourage desired land uses such as urban infilling or investment in brownfield sites that could improve upon the disjointed urban fabric. Łódź's spatial strategy describes a desire to see urban infilling and development of brownfield sites over that of greenfield ones but there are presently no tax-based or other fiscal incentives to encourage such uses. Brownfield developments are often more costly due to smaller and scattered plots and property, environmental (ecological) ballast, planning regulations and in the case of post-communist countries – very low use of public-private partnership (PPP) schemes, fiscal incentives being often critical to encouraging investment in such areas. Another issue is the role of Special Economic Zones (SEZ). SEZs create a favourable regulatory and tax environment for private investment, but they are not well integrated into broader spatial planning strategies and many of them encourage development on greenfield (as opposed to brownfield) sites.

#### The need for metropolitan governance

It is evident that across Łódź's functional urban area there is limited space and competencies to tackle shrinkage, urban sprawl, and undesired development or resiliency issues. In essence, municipalities are largely competing with one another. Smaller rural municipalities adjoining Łódź are doing quite well thanks to an influx of new residents (e.g., Nowosolnya), meanwhile it is the city that bears the largest burden for providing infrastructure and services for both its own residents and those of the commuting population. Both communities need to be part of the solution in order to address the trends of de-concentration and depopulation.

These types of negative externalities between communities are well recognised across the OECD and are one of the reasons that there has been a growth in metropolitan forms of governance over the past few decades. While urban agglomerations have many benefits, they also bring along with them distinct challenges that require metropolitan-wide solutions particularly in the areas of transportation, economic

development and spatial planning. However, their policy focus, scope and composition can differ greatly. The majority of metropolitan governance bodies in the OECD tend to involve forms of informal or soft coordination; less than a quarter of OECD metropolitan areas have governance bodies that impose regulations. Despite the many benefits of informal forms of metropolitan governance, there are several drawbacks. There is the risk that collaboration will only occur on issues that are mutually beneficial to the actors involved, leaving some of the most important challenges that need to be tackled unresolved. This is particularly important when it comes to spatial planning and land use decisions which can require real and visible trade-offs. A further challenge with informal forms of metropolitan governance is the issue of establishing long term, appropriate and reliable sources of financing to carry out tasks and responsibilities.

In recent years the EU's instrument of Integrated Territorial Investments (ITI) has established incentives for metropolitan cooperation in Poland; such cooperation is mandated in order to access ITI funds. In Łódź, a metropolitan area association has been created to this end (established April 2014). At present, the association includes Łódź and cities and townships in four counties: Pabianice, Eastern Łódź, Brzeziny and Zgierz. A first goal of the association is to develop a development strategy for the metropolitan area. This is an important step; however, the voluntary nature of this association will necessarily lead to collaboration on projects that are mutually beneficial. This leads to the risk that important issues where municipal interests do not align with one another may not be undertaken or the projects linked to the long term planning and policy development. For example, should rural municipalities be pursuing growth strategies and competing with the central city for residents? Should more constrained land use policies be pursed in these localities? Further, there is the risk that the activities and outcomes of the ITI will be at the end seen as an ad hoc solution or purpose based (to guarantee the EU funding) as opposed to concerted long term ways of coordinating between communities.

#### 4. Conclusions

The tandem trends of de-concentration and depopulation are recognised by the Łódź administration and the city is working to manage this phenomenon. It has embraced urban revitalisation as the main mechanism under its control to accomplish this and is managing its exposure to the costs of providing public services to firms and residents. The city has shown previous successes in this regard through its earlier rehabilitation efforts in the city centre. Along with the new transportation upgrades, the city may very well be successful in attracting more residents to the urban core. However, this strategy alone is not enough. Even with investments in the urban core, there are ongoing processes of sub- and peri-urbanisation which undermine efforts to create more compact developments. In general, the current planning tools at the city's disposal are weak at managing its own spatial form; meanwhile, adjoining rural communities

compete with Łódź itself for residents are pursing expansionary policies – they are successfully attracting middle income residents who wish to reside in single detached homes. This matters in so much as suburban and peri-urban developments lead to negative externalities, such as traffic congestion on roads, air pollution, larger infrastructure and service delivery cost due to dispersed settlements and the reduction of high quality agricultural lands.

This paper has made several recommendations to improve the planning system and align fiscal instruments in order to help the municipality more effectively manage these issues. It is also critical that residents bear the true costs associated with their locational choices and relatedly, municipalities need to be smarter about recouping the investments that they make in infrastructure and amenities. Governance is perhaps the most critical part of the equation; there is no strategy for the functional urban area and this is turn undermines Łódź's efforts. There are few incentives for smaller municipalities to limit their development at present or to purse a development form that is nodal (a hub and spoke model that is easier to serve by infrastructure and services, one that protects agricultural land in the process). These solutions must come from the national government and in order for that to happen, it needs to be recognised that there is an unsustainable cost to peri-urbanisation which is compounded by a shrinking urban core.

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