

## **GROWTH MISMANAGEMENT, RESIDENTIAL OVERSUPPLY AND HOUSING CYCLES – THE MANIFESTATION OF UN-CONTAINMENT PLANNING POLICY IN ESTONIA**

Antti Roose<sup>1</sup>, Martin Gauk<sup>2</sup>

<sup>1</sup> University of Tartu, antti.roose@ut.ee

<sup>2</sup> University of Tartu, martingauk@gmail.com

*Urban sprawl remains a controversial issue in Estonia similarly to many Central and Eastern Europe countries in the spatio-temporal evolution of housing market. In the midst of the debate over flexibility in urban planning and joint-up territorial governance, neo-liberal planning framework coupled with the fact that 97% of the housing stock is owned by private sector has proven itself too weak for growth management, in particularly in urban fringe. This study carries out a comparative analysis of the spatio-temporal behaviour and magnitude of market shocks in uncertain macroeconomic fluctuations and residential development patterns between 2000 and 2013 in Tartu urban region. The results show that the speed and scope of planning cycles have been lagging behind real estate business cycles, having different delays and strengths of path-dependence across councils and spatial allocations. The mismatch between supply and demand amplified by the absence of strategic plans and housing policies has led to extensive detail planning which in turn manifests itself in massive ‘overbooking’ of residential land parcels as only one fifth of the planned development has been carried out in the suburbs and one third in the city. The discrepancy between issuing plans and the reality of urban development indicates that plans in an uncontrolled planning framework and volatile market are often too rigid respond to change, plus legal fixes as dynamism in national economy, housing market and population of urban region are often undermined by locality-specific local economic and political conditions. A profit-driven supply-side entrepreneurial intervention to planning during the growth years put too much emphasis on delivery of quantity, namely land supply, rather than the benefits of quality, allocation choices and social dimension, often overriding regulative frameworks.*

Keywords: land use, suburbanization, housing

### **1. Introduction**

Positioning residential land development and land use planning in changing cities, especially considering the conditions set by a massive economic growth and sudden recession in the last decade has been a challenge for urban planners. Rapid urbanization, along with socioeconomic changes and environmental concerns, rearranges the scene of urban sustainability, switching from business cycles to steady state economy. Uncertainty in financial markets, shifting economic growth drivers, changing demographics such as household size, social equity and e-democracy are just few crucial factors to consider in the discourse of neo-liberal planning (Sager, 2011). In the midst of the debate over flexibility in urban planning and multi-level governance, a neo-liberal planning framework has now proven itself to be unfit to manage urban complexities like never-ending suburban growth, fill-in at heritage areas, brownfield redevelopment and infrastructure provision (Allmendiger & Haughton, 2013). As built environment and urban problems expand and shift to rural surroundings both in physical, environmental and socio-economic aspects, urban dynamism and impacts should be explored as urban region. Among other themes, housing policy and the residential development should deliver a supply of dwellings that satisfies current and expected future demand while minimizing excess (Ford & March, 2012).

The latter, however has proven to be a difficult task, as real estate developments are cyclic in nature and usually lagging a little behind the real economic cycle. Depending on legislative context, planning system and practice, a rather slow public process relates to democratic accountability, participatory civil society and institutional efficiency. As economic growth starts, property developers usually react by initiating new developments in great volumes, and as growth lasts, it turns speculative in nature. So when a sudden decline hits the economy, these foreseen developments are often not fulfilled or can lead to high number of empty unsold dwellings. In a way, the housing market could be almost as

volatile as the stock market. Speculative land use planning in the deregulated neo-liberal conditions can create massive problems in multitude features and implications starting from undeveloped infrastructure with a decline in quality of life to just wasteful use of land as basic commodity. Therefore, it is essential to better understand these processes and develop policies to intervene to these failing market forces accordingly. A key issue for city regions is the ability to adjust to the new socio-demographic conditions, though even strongly economic situation. Tackling with strategic issues and wider, often global trends in local and urban context with flexibility and tolerance is expressed by mutual tension between statutory and non-statutory planning (Evers, 2008).

Urban areas in Central and Eastern Europe alike in Estonia are still sprawling and rapidly transforming. In a European context, Estonian planning system is characterized by comprehensive planning with very strong detail planning at municipality level, legally and strategically very weak regional levels and strong private interest (Roose & Kull 2012). During structural reforms and global economic recession the planning system in Estonia has not been changed though political reorientation towards more neo-liberal planning policies is notable with an increased tension between efficiency and legitimacy alike in the mature Nordic countries (Mäntysalo, Saglie, & Cars, 2011). Against this backdrop, this study takes upon a task to assess the complex inter-relations between economic growth, planning practice and housing development in the Tartu urban region (TUR), a second tier city and regional growth pole in southern Estonia. The aim is to explore complexities of land use and urban growth, how suburbanisation as a process has evolved through uncertain economic conditions and transforming planning practices by examining the spatiotemporal disparities of supply and demand for housing. The paper provides new dimension by focusing on housing market-driven outcomes, discussing what happens to regional city when housing markets respond to the rapid growth in monetary terms as well housing supply. Modelling exercise explores cyclic processes of urban development, physical, temporal and spatial barriers of planning depending on economic cycles, stability and accumulation. A particular emphasis is given to examining the time-to-plan and time-to-build, the reactions of development and planning processes to shocks in the real estate value chain.

## **2. Planning context and framework**

Many of the countries in Central and Eastern Europe have undertaken fundamental reforms to the body of planning law to enable changes in the elaboration and operation of their planning systems. In some countries, however, planning system and code have not kept pace with the reality of spatial development and housing market (Economic Commission for Europe, 2008, OECD 2013). Phasing out centralised planning systems and steadily introducing new decentralised systems with high degrees of complexity has been a challenge for all Baltic states (Adams et al 2013). Besides stable legal framework and credibility of public administration the cultural approach has gained the prominence as different 'values', 'truths', and 'interpretations' of discretionary planning decisions appear (Knieling & Othengrafen, 2009). The shift was more influential in terms of values and learning, less in spatial plans themselves. Approving new planning regulation in late 1990s and harmonising Estonian environmental legislation before entering European Union in 2004 did not automatically mean that these rules are immediately implemented across the society. It has meant gradual institutionalisation and empowering all major stakeholders in planning chain of strategic spatial planning from central government down to municipalities, agents, sectors and spatially aware consultancies. Europeanization for territorial cohesion and insights for balanced growth has embodied in major public infrastructure projects (Raagmaa & Stead 2014). In some European countries, land-use planning has changed significantly to make the planning system more strategic, faster and to provide more effective ways of engaging with governance agents and all sections of the society (Allmendinger & Haughton, 2009).

House-building industry in Estonia is very scattered. The building companies have to progress through multiple stages in the production of the built environment, involving land purchase; application for planning permission; development design, housing construction; and marketing and selling. If availability of land is non-restrictive alike in Estonia, the planning process is often most problematic due to time consuming, bureaucratic, public awareness matters. At these points developer or house-builders and the planning system come into direct conflict.

Land use planning in Estonia is organized hierarchically in the national Planning Act (2003). There are four types of plans in the Estonian planning system: national spatial plan, county plan, comprehensive plan and detailed plans. The latter three are essentially land use plans, while the national plan is a more general strategic development guidelines for the country. The new national plan, Estonia 2030+, was issued in 2013 and its main principles are safeguarding spatial accessibility of basic human needs by means of improved mobility, preserving the qualities of settlement pattern and landscape, spatial balancing of settlement structure, good spatial connection to the rest of Europe and preserving the good condition of the natural environment (Estonia 2030+, 2012). These give general development directions for the counties and local authorities for urban and rural development. The national plan declaring spatial diversity and poly-centricity promotes low-density urbanised territorial structures for integrating compact cities, suburbs and traditional villages, providing the human scale, keeping environmental values and urban networks. County plans deliver regional level planning by directing the territorial development and aiming to keep the specific character of regions. The county plans set the conditions for the development of settlement systems and the location of the major infrastructure for local authorities in a generalised manner. Nevertheless, county level planning has steadily contracted since the early 2000s and retreated to inspecting and supervising detailed plans of land use.

Instead, planning monopoly is given to local authorities, who primarily process detailed plans. Local councils are the focal decision makers for spatial development. Local comprehensive plans which determine functional zoning, general directions and conditions for the development of the territory were issued massively in the second half of the 2000s though due to residential development, facilitation of social and technical infrastructure have been out-dated in many cases. The instant framework for land use development is set by detailed plans or master plans which formally and physically operationalize urban development. Given extensive and excessive residential zoning on the general plans, the allocation of sites for residential development depends of private interest to convert agricultural land to residential one. *Ad hoc* planning practices which are based on masterplanning and focus on siting and speed tackling a specific growth issues are expressed in particular on the city region level and within suburbanisation processes (Roose & Kull, 2012). On the other hand, going beyond traditional land use planning to bring together and integrate policies for the development territorial policies and programmes linked strongly or even loosely to Europe influence the nature of places and how they function. The major public infrastructure projects co-funded by European Union frame other minor developments, including residential. The Europeanization of spatial planning has contributed progressively to the emergence of new discourse, concepts and insights of territorial cohesion in Estonia (Raagmaa & Stead, 2013).

### 3. Data and methods

This survey has mapped the issued master plans and developed a spatial database in order to analyze the residential land supply delivery in the TUR from 2000 to 2014. In order to assess the implications of mismatches between development outcomes and planning objectives, data on the new residential buildings were also added to the database. The planning records were gained from municipalities' planning authorities and the data for population and housing through national statistics databases. The database provides a comprehensive overview and enables to compare master-planned housing supply and actual demand along with the timeframe meet these demands from the initiation of the plan to a completed development both in the core city and in the fringe. In addition, there are around 270 binding local comprehensive land use plans at municipal level and thousands of master plans in Estonia. However, the local and regional governments are having setbacks of the cumulative outcomes, confronting impacts and unwanted synergies of separate residential plans. In temporal scale, the analysis covers the stages of rapid economic growth, following recession and recovery during 2000–2013.

Complementing the typically qualitative nature of spatial planning objectives, the approach quantifies the supply of master-planned residential land and the demand for actual construction characterized by the implementation of these plans, then uses common metrics to measure the duration and scope of

these developments to enable an assessment of the sustainability of the current approach in residential land use planning.

The university city of Tartu with its five fringe municipalities in Southern Estonia with an extent of 740 km<sup>2</sup> was chosen as a case study area. Tartu is the second largest city in Estonia which belongs to the group of medium-sized cities on the European scale with its population of 98,000, in addition 22,000 inhabitants in the fringe municipalities. As the regional pole of Southern Estonia it fulfils a central role as Estonia's leading research, educational, health-care, and administrative centre. Currently, the regional importance of the Tartu city has been growing supplemented by functional and demographic expansion of urban region. The extensive cyclical waves of urban development have been ongoing since the late 1990s which makes this mid-size regional case representative and appropriate for other Central and Eastern European countries.

#### 4. Results and discussion

Uneven geographies characterize urbanisation process in Estonia in 21st century. Housing development means also unbalanced demographic composition of urban communities: growing elderly population in 1960–80 built core city neighbourhoods versus growing young family population in 2000s built periurban neighbourhoods, high residential mobility in the centrally located neighbourhoods as well low fertility rates in particular in core city. New geographies delineate mismatching of structures, increasing fragmentation of settlement patterns and labour markets which affects directly mobility of labour market and service areas within urban region.

A new wave of urbanisation in Estonia began in the early 2000s driven by economic growth, characterized by extensive master planning and rapid construction of new housing. Between 2000 and 2014, 2360 new homes (4720 residents) were built in the core city out of 6897 planned homes compared to 2694 homes (8082 residents) in the fringe out of 11432 planned homes (Table 1). That is a 10% increase in the total number of housing stock in the core city and 41% in the suburban housing stock in a mere 12 years. In morphological terms, built-up areas enlarged by 93 ha in the city and 450 ha in the fringe, a 10 km transition zone between urban and rural areas establishing 111 km<sup>2</sup> urbanised mono-centric settlement pattern. 5 km periurban zone had been a principal locus for new house building attracted by a high quality rural environment within very near commuting distance of Tartu. The fringe development is characterised by parcel-wise low density housing without a clear strategic planning at urban region level (Figure 1,2). As a result, the land use pattern in the suburban zone has become fragmented and patchy, chaotically built-up with detached houses delivering an average residential density in the fringe 40–70 in/km<sup>2</sup>. The latter is irrational and inefficient in terms of utilities, urban infrastructure and public services.

Table 1. Implementation of adopted master plans of residential development in Tartu urban region, 2000–2014.

Municipality: urban/ suburban	Adopted master plans	Master plan area (ha)	Planned dwellings	Completed dwellings	Not developed
<b>Urban: Tartu city</b>	<b>237</b>	<b>333</b>	<b>6897</b>	<b>2360</b>	<b>4537</b>
Haaslava	58	357	1602	97	1505
Luunja	90	508	1947	524	1423
Tartu	110	667	4206	923	3283
Tähtvere	58	221	497	137	360
Ülenurme	128	542	3180	1013	2167
<b>Total suburban</b>	<b>444</b>	<b>2293</b>	<b>11432</b>	<b>2694</b>	<b>8738</b>



Figure 1. New residential plots in Tartu urban region, 2000–2013 (in black).



Figure 2. Sporadic development of new suburban dwellings in Jõeääre, a new suburban settlement in Haaslava parish.

There is constant oversupply of development projects in the form of issued master plans in the core city and surrounding fringe areas. During 2000–2014, every third planned swelling was actually developed. In comparison, the development/construction rate of master planned plots in urban fringe is about 24%. The pace of adopting master plans for residential development at local councils has remained constant in recent years, but the pressure of initiating the plan is once again on the rise since

the recession hit. 4537 dwellings in the core city and 8738 dwellings in fringe are to be developed. As a maximum limit of residential growth, the comprehensive plan of the Tartu city can theoretically in present densities accommodate more than 18000 dwellings which could increase the core city population from 98000 to 135000 inhabitants. Given the economic and demographic trends, it is highly unrealistic. As development rate as well processing speed of plans is higher in the fringe, the core city continues to fade away instead increasing compactness which dominates the political rhetoric. The renovation of inner city neighbourhoods steers gentrification and increasing densities.

Forms of suburban development differ significantly from place to place and vary from greater and rather autonomous new settlements to individual projects of separate single-family dwellings. Inevitably, there has been some dilution of sharply distinguished uses, to create a unique landscape, interfacing town and country, labelled the rural-urban fringe. These areas have been created more by accident than comprehensive planning and design: less favoured urban uses such as sewage works, processing units, wholesale centres have been pushed away from residential areas. Like in most other European suburban developments, there is a clearly distinctive feature affecting suburban development in its early stage – due to an ongoing land restitution process there is a spatially continuous suburbanization along roads. A highly urbanized landscape is actually more homogenous and better-connected than a rapidly urbanizing landscape in the case of Tartu. In-fill development, which can help reduce patchiness, has been rare, though the degree of fragmentation is expected to be reduced through bigger residential developments.

The impending economic recession since 2007 has opened up a phase of increased concern with environmental and social justice and equity in suburban planning. The shocking explosion of price bubble and the moves of financial sector to tighten mortgage lending have cooled the property market. Until 2013, many families were stuck in houses that are worth less than the mortgages on them. Slowing down of residential planning during the recession gave local councils time to reassess the housing trends and streamline planning practices with tightening national level supervision, the adoption of comprehensive plans, land consolidation and cross-municipality thematic planning. The present land management regime, allowing separate agreement of municipalities with developers, promotes further losses of productive farm land, and causes further deterioration of the green network and environment. The old pattern of rural settlement confronts the sprawl but, at the same time, municipalities would like to attract capital in housing investment.

At the operational scale, speed and scope of planning cycles have been lagging behind real estate business cycles, having different delays and strengths of path-dependence across councils and urban districts. In terms of planning process, in average, the getting planning permission has took 5-10 month longer in the city than in the suburb (Figure 3,4).

The housing market in Tartu has been relatively stable due to the growing student population and the dominating public sector. As the market is rather small, it could be volatile by segments, the issue of affordable housing becomes acute. Short-term fluctuations are induced by investors' sentiment, the limited purchasing / borrowing power and the completion of new dwellings. In latter case, the demand for new dwellings is saturated for 4–6 months. Up to one fifth of the new dwellings bought are buy-to-rent. The housing share of real estate market rose to a record 80% in 2013 which is explained by a weak entrepreneurship.

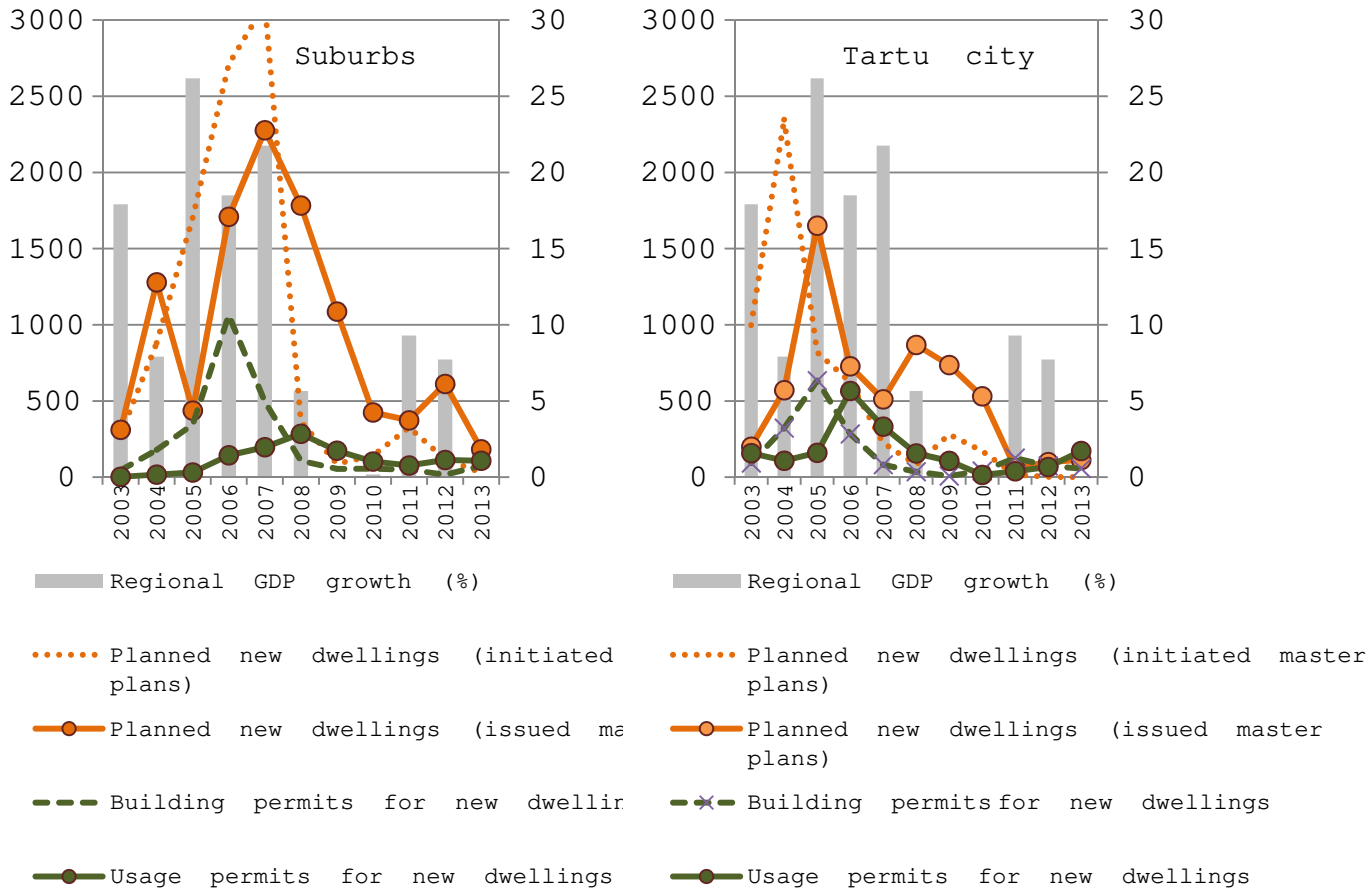


Figure 3. Building permits and completed dwellings in relation to regional GDP change in Tartu city and county (Data: Statistics Estonia 2014).

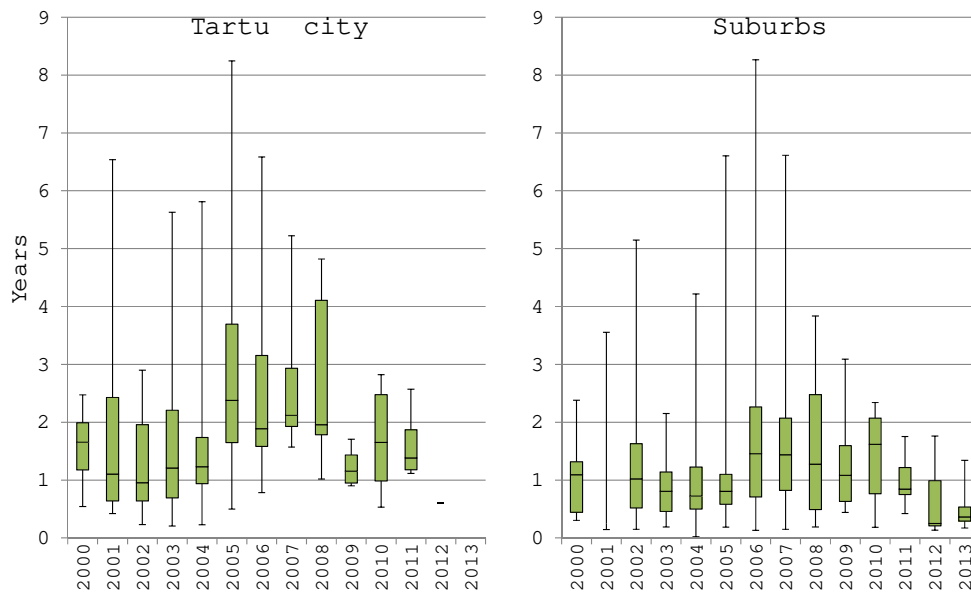


Figure 4. Short-run dynamics of detail planning.

## 5. Conclusions

The Estonian case study of cyclic oversupply of residential development exemplifies hectic and volatile real estate market with few policy and planning instruments. It can happen in the conditions of liberal-conservative market ideology with modest planning. Land management remains biased between aggressive development pressure or unsystematic use. The results show that having uncertain urban growth trajectory with conurbanisation pathologies of fragmented decision-making with no specific planning instruments for urban containment and choice preferences, its manifestation in the housing market and local planning practices, call for a more strategic, integrated and participatory planning between core city and fringe municipalities. The planning ‘problem is amplified by the economic recession in addition to inability and inexperience of central and local governments to buffer market fluctuations. The main reasons for excessive oversupply of residential developments are as follows:

- Legal framework is liberal in issuing planning and building permits.
- Moderate or non-existent intervention of central government and regional authorities.
- Long-term strategies and general plans are replaced by tactical and discretionary decisions of local politicians, pressurized by developers.

Developers, investors and decision-makers in both public and private institutions are increasingly under pressure to operate in short-term frameworks. The realization of planning projects becomes imperative. Masterplanning remains complex, bureaucratic, time consuming, and static. Aiming to increase the efficiency of planning, planning system attempts to streamline project-by-project decisions and to introduce the development ‘flow’, compromising quite often public interest. While adjusting legal and institutional framework for planning, adaptive role-setting for authorities as well as for plan-making expertise with a stronger emphasis on community and business needs is contemporary requirement.

To restrict further scattered residential development and plan-making for speculative purposes, the major step could be drafting a new comprehensive plan for the core city as well for fringe municipalities. The new plan should consider realistically demographic trends, declining student population, developments in education, health and service sectors dominating in Tartu labour market. The global economy means the urbanization and concentration of human capital. Tartu is faced with critical threshold in terms of its economic potential in globalisation processes. Within the drafting county plan for smart, sustainable and cohesive development of urban region as, the residential growth zones should be allocated by housing forecasts of residential market and site quality, preferably in-fill mode. The de-concentration of the central city is generally a favourable circumstance, apart from the fact that it poses a great challenge to the administrative and planning capacity of the local government. Land consolidation could be an integrated part of a urban fringe development policy for densification and necklace.

The recession since 2008 has changed sharply planning practice as quality of planning and legal enforcement has improved. Policymakers and developers demonstrate institutional learning and in developing and promoting land use planning capacities to intertwine the key actors of periurban development. The strengthening of urban region and dynamism in urban fringe is also another manifestation of soft planning as Allmendinger and Haughton (2009) discuss the new generation of “soft spaces” and “fuzzy boundaries” that characterize emerging political objectives within new relations, all of which are causing a changed agenda for planners and others charged with formulating territorial-based strategies.

Collaboration between municipalities of urban region is a key to strengthen and consolidate the implementation of county plans, as cases are to be solved on joint spatial developments instead of adopting a competitive approach to land allocations for residential development. A vertically organised political and financial system as well as eclectically designed legislation does not support

cooperation and joint action between neighbouring municipalities. In broader context, the political process is related to amalgamation of local authorities within urban region. On the local level, the major issue is empowering local authorities to implement their comprehensive plans. In the case of suburbanisation, comprehensive plans adopted in late 2000s are already outdated. The concern with the efficiency of the planning system, the appropriateness of procedures and institutional arrangements for decision making need to be continuously addressed (Raagmaa et. al., 2013). The 2000s express neo-liberal pragmatism and fragile inter-municipal cooperation on local level though there are signs of the transition from government-led to governance-led approach in spatial development policies and spatial planning.

### Acknowledgements

This survey was supported by Estonian Research Council (institutional research grant IUT2–17), the Tartu county government and local authorities of Tartu urban region.

### References

- Adams, N., Cotella, G. and Nunes, R., 2014. The engagement of territorial knowledge communities with European spatial planning and the territorial cohesion debate: A Baltic perspective, *European Planning Studies*, 22(4), pp. 712–734.
- Allmendinger, P. and Haughton, G., 2013. The Evolution and Trajectories of Neoliberal Spatial Governance: 'neoliberal' episodes in planning, *Planning Practice and Research*, 28 (1), pp. 6–26.
- Allmendinger, P. and Haughton, G., 2009. Soft spaces, fuzzy boundaries and metagovernance: The new spatial planning in the Thames Gateway, *Environment and Planning A*, 41 (3), pp. 617–633.
- Evers, D., 2008. Reflections on territorial cohesion and European spatial planning, *Tijdschrift voor economische en sociale geografie*, 99, pp. 303–315.
- Economic Commission for Europe 2008. Spatial planning: Key Instrument for Development and Effective Governance with Special Reference to Countries in Transition. United Nations: New York and Geneva. Available at: [http://www.unece.org/fileadmin/DAM/hlm/documents/Publications/spatial\\_planning\\_e.pdf](http://www.unece.org/fileadmin/DAM/hlm/documents/Publications/spatial_planning_e.pdf) [Accessed 4 September 2014]
- Estonia 2030+ 2012. National spatial plan Estonia 2030+. Available at [http://eesti2030.files.wordpress.com/2012/09/eesti-2030-tekst\\_120725.pdf](http://eesti2030.files.wordpress.com/2012/09/eesti-2030-tekst_120725.pdf) [Accessed 4 September 2014]
- Faludi, A. and Waterhout, B., 2006. Introducing Evidence-Based Planning, *disP*, 165, pp. 4–13.
- Kitchin, R., Perkins, C. and Dodge, M., 2009. Thinking about Maps, in *Rethinking Maps*. New Frontiers in Cartographic Theory. Routledge, London.
- Knieling, J. and Othengrafen, F., 2009. Spatial Planning and Culture – Symbiosis for a Better Understanding of Cultural Differences in Planning Systems, Traditions and Practices. In Knieling, J. and Othengrafen, F. (eds.) *Planning Cultures in Europe. Decoding Cultural Phenomena in Urban and Regional Planning*, pp. 23–35. Ashgate, Farnham.
- Mäntysalo, R., Saglie, I.-L. and Cars, G., 2011. Between Input Legitimacy and Output Efficiency: Defensive Routines and Agonistic Reflectivity in Nordic Land-Use Planning, *European Planning Studies*, 19 (12), pp. 2109–2126.
- OECD, 2013. *A Model of Housing Investment for the Major OECD Economies*.
- Raagmaa, G.; Kalvet, T. and Kasesalu, R., 2013. Europeanization and De-Europeanization of Estonian Regional Policy, *European Planning Studies*, 22 (4), pp. 775–795.
- Raagmaa, G. and Stead, D., 2013. Spatial planning in the Baltic States: Impacts of European policies, *European Planning Studies*, 22 (4), pp. 671–679.
- Roose, A. and Kull, A., 2012. Empowering Spatial Information in the Evolution of Planning Systems: Lessons of ad hoc Plans in Estonia, *Regional Studies*, 46 (4), pp. 493–508.
- Roose, A., Kull, A., Gauk, M., Tali, T., 2013. Land use policy shocks in the post-communist urban fringe: a case study of Estonia, *Land Use Policy*, 30 (1), pp. 76–83.
- Sager, T., 2011. Neo-liberal urban planning policies: A literature survey 1990–2010. *Progress in Planning*, 76 (4), pp. 147–199.