

**POLICY
HIGHLIGHTS**

**SHRINKING SMARTLY
IN ESTONIA**

**PREPARING REGIONS
FOR DEMOGRAPHIC CHANGE**



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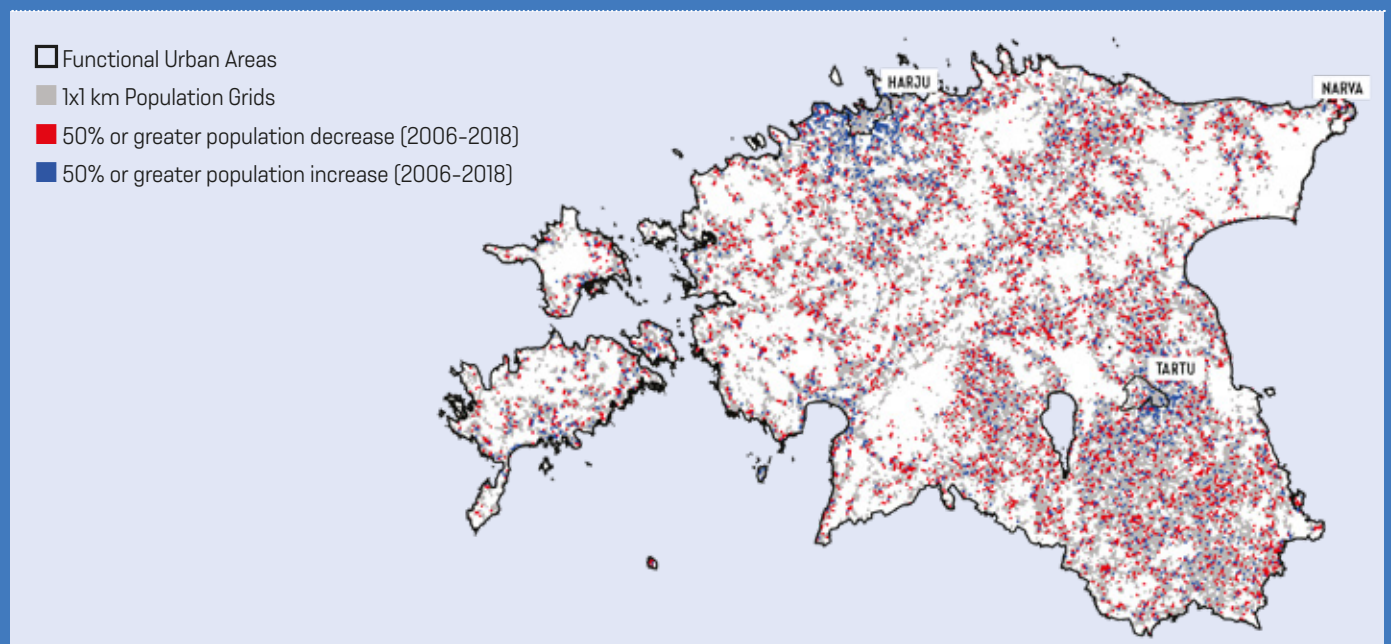
SHRINKAGE REQUIRES A PLACE-BASED APPROACH, COORDINATED ACROSS LEVELS OF GOVERNMENT AND POLICY SECTORS

Estonia's population, 1.33 million in 2020, has shrunk by 15% since 1991, and all available projections indicate that this trend will continue. Importantly, shrinkage has been uneven. While the larger urban areas of Tallinn and Tartu grew, the population in the majority of Estonia's rural and remote counties shrank by more than a quarter. Shrinkage results in increased per-capita service and infrastructure provision costs. It also results in housing vacancies, deteriorating built environments, and ageing, issues requiring additional resources in the face of declining tax revenues.

Tackling such challenges smartly and sustainably requires place-based policies coordinated across municipalities, national and local governments, and different policy areas. Spatial development should be reformed to make land-use more efficient and spatial planning more coherent. Governance frameworks and the municipal finance system should be remodelled to boost cooperation between municipalities, streamline the transfer system, and strengthen the municipal revenue base. Education services, by far municipalities' largest spending responsibility, should be adapted to consolidate school networks while still ensuring universal access to high-quality education.



UNEVEN SHRINKAGE IN ESTONIA (2006 – 2018)



Note: Blue indicates 1 square kilometre grids where population increased by 50% or more. Red indicates 1 square kilometre grids where population decreased by 50% or more.
Source: Batista e Silva, F., L. Dijkstra and H. Poelman (2021), "The JRC-GEOSTAT 2018 population grid", JRC Technical Report. Forthcoming.

DESPITE DEPOPULATION, THE AMOUNT OF DEVELOPED LAND IN ESTONIA IS INCREASING

From 2000 to 2014, Estonia had one of the highest amounts of growth in built-up area per capita among OECD countries even while its population decreased by 5%. This suggests that land-use in Estonia is becoming increasingly inefficient.

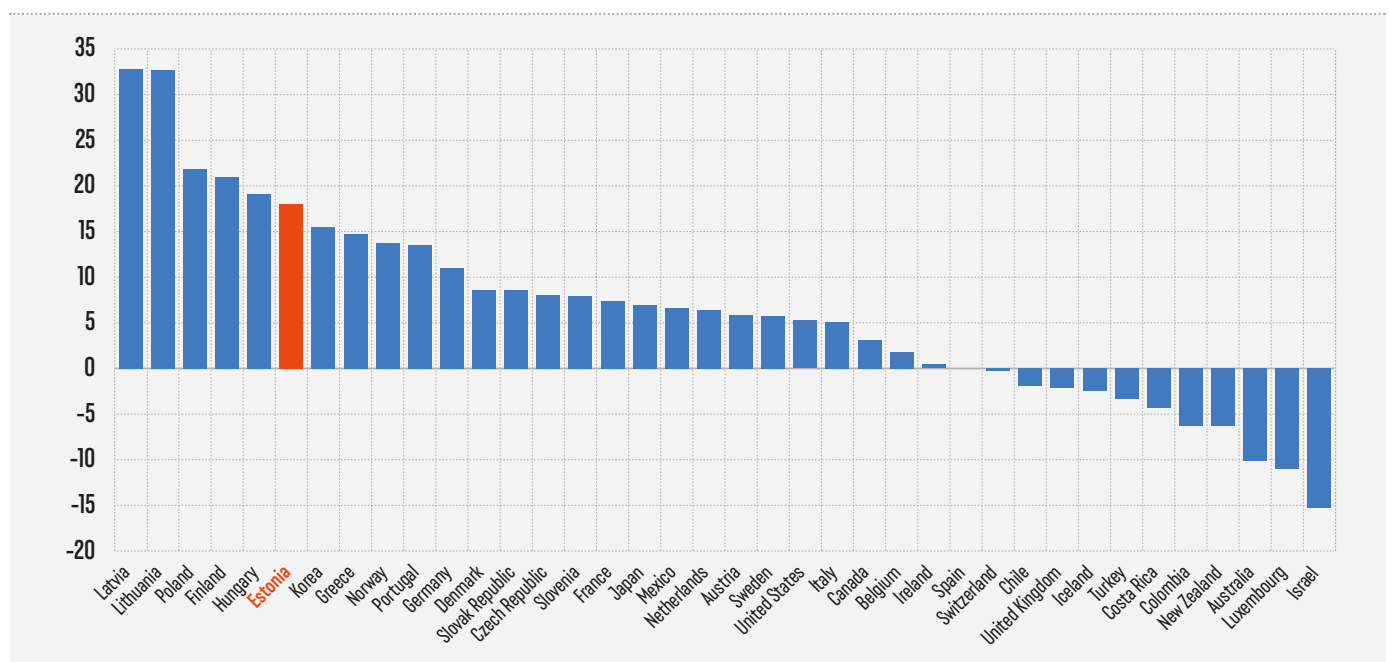
An inefficient pattern of land use increases the per-capita costs of providing services, infrastructure, and amenities across a broader area, which leads to fiscal strain for governments. Such patterns also have adverse environmental effects, as extensive artificial surface cover diminishes biodiversity and deteriorates soil quality. Already, Estonia is the most carbon-intensive economy in the OECD, and is sixth among OECD countries in greenhouse gas emissions per capita. It is also first in the residential sector's share of total final consumption of energy, partly due to sparse land use and an old and energy-inefficient building stock. Inefficient spatial development contributes to Estonia's poor environmental performance.

Comprehensive Plans are the primary instrument for spatial planning at the municipal level in Estonia. Nonetheless, Comprehensive Plans rarely incorporate population projections in an effective way. As a result, land-use plans tend to

overestimate the future demand for land. In order to encourage efficient land use, Comprehensive Plans should incorporate the population guidelines set in County-wide Spatial Plans, encouraging densification of core areas. Municipal level population projections, possibly published by Statistics Estonia, should be used as the basis for land use planning at the municipal level. A strategy of proposing settlement boundaries and service limits while providing various incentives for investments within those boundaries should be used to deter spread-out development. Instruments such as growth boundaries, service boundaries, and greenbelts could be used to set temporary limits on expansion.

In addition, zoning should be sufficiently flexible to allow changes according to evolving population patterns and housing demand. This can increase density and improve environmental sustainability, while reducing the burden on infrastructure. Flexibility also ensures efficient patterns of spatial development, especially in low-density areas and along public transport corridors. Importantly, none of the zones should be strictly single-use in principle. Density regulations should be upwardly flexible to allow gradual densification in line with infrastructure capacity.

BUILT-UP AREA PER CAPITA CHANGE (percent, 2000-2014)



Source: OECD (2021), OECD.Stat (database), <https://stats.oecd.org/> (accessed 8 July 2021).

PLANNING AND LEGAL FRAMEWORKS ARE NOT PREPARED FOR SHRINKAGE

LOCAL PLANS DO NOT STEER DEVELOPMENT

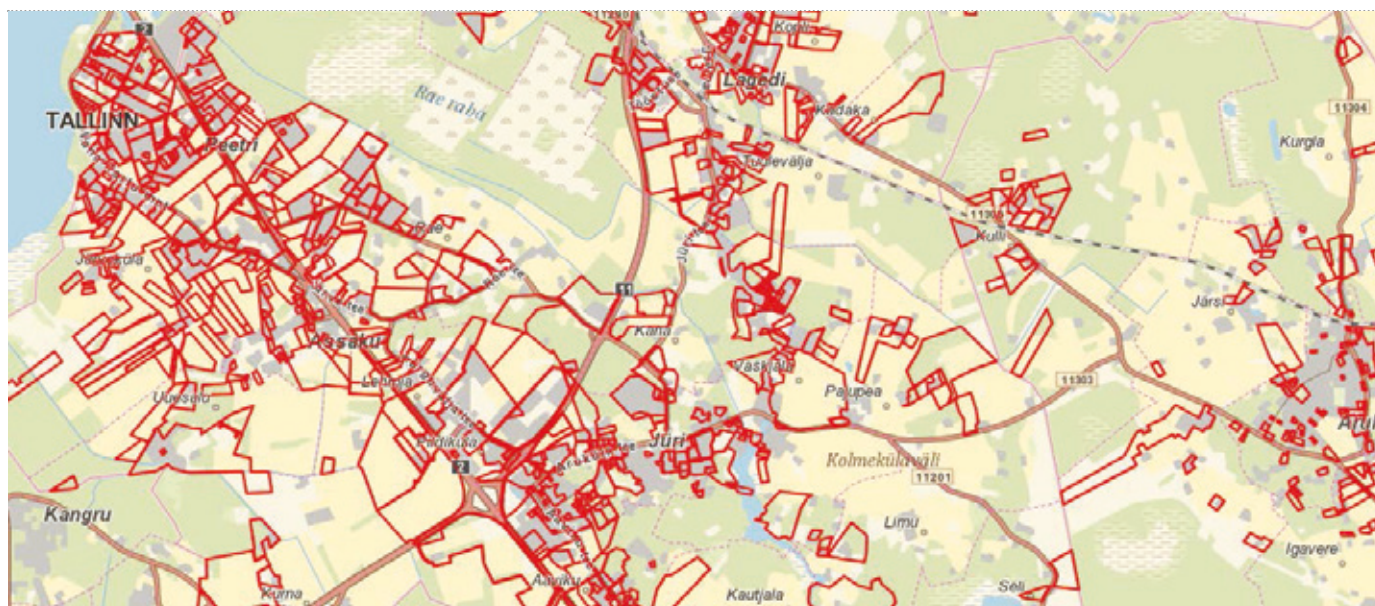
A broader issue is that spatial planning at the municipal level is still relatively new in Estonia. This has led to a lack of capacity in devising coherent land-use and spatial plans, with plans often being influenced by local actors pursuing private interests. In practice, development is mainly determined by Detailed Spatial Plans, which are smaller scale plans that are intended to implement municipal level Comprehensive Plans. The problem is that these Detailed Spatial Plans are most often private-developer initiated, and adopted in random order with little consideration of spatial planning outcomes. Detailed Spatial Plans also have the legal authority to override Comprehensive Plans, and this happens quite often in practice. As a result, Comprehensive Plans struggle to promote coherent spatial development.

Comprehensive Plans need to confirm their role as the higher order plan that sets out strategic initiatives for land use and development, while Detailed Spatial Plans and building codes need to conform to the Comprehensive Plan. Alterations to the Comprehensive Plan by subordinate plans should be allowed only in exceptional circumstances. In return, Comprehensive Plans should refrain from “over planning” by moving away from setting detailed building codes and specific uses. This would ease the burden of developing Comprehensive Plans and shorten approval processes.

LOCAL-LEVEL SPATIAL PLANS ARE OFTEN OVERRIDDEN AND STRUGGLE TO PROMOTE COHERENT DEVELOPMENT.



A PATCHWORK OF DETAILED SPATIAL PLANS



Note: Red borders indicate boundaries of DSPs in the rural municipalities of Rae and Raasiku

Source: Sooväli-Sepping, H. (ed.) [2020[12]], Estonian Human Development Report 2019/2020: Spatial choices for an urbanised society, Estonian Cooperation Assembly.

EXPROPRIATION IS LIMITED, TIME CONSUMING, AND LEGALLY CHALLENGING

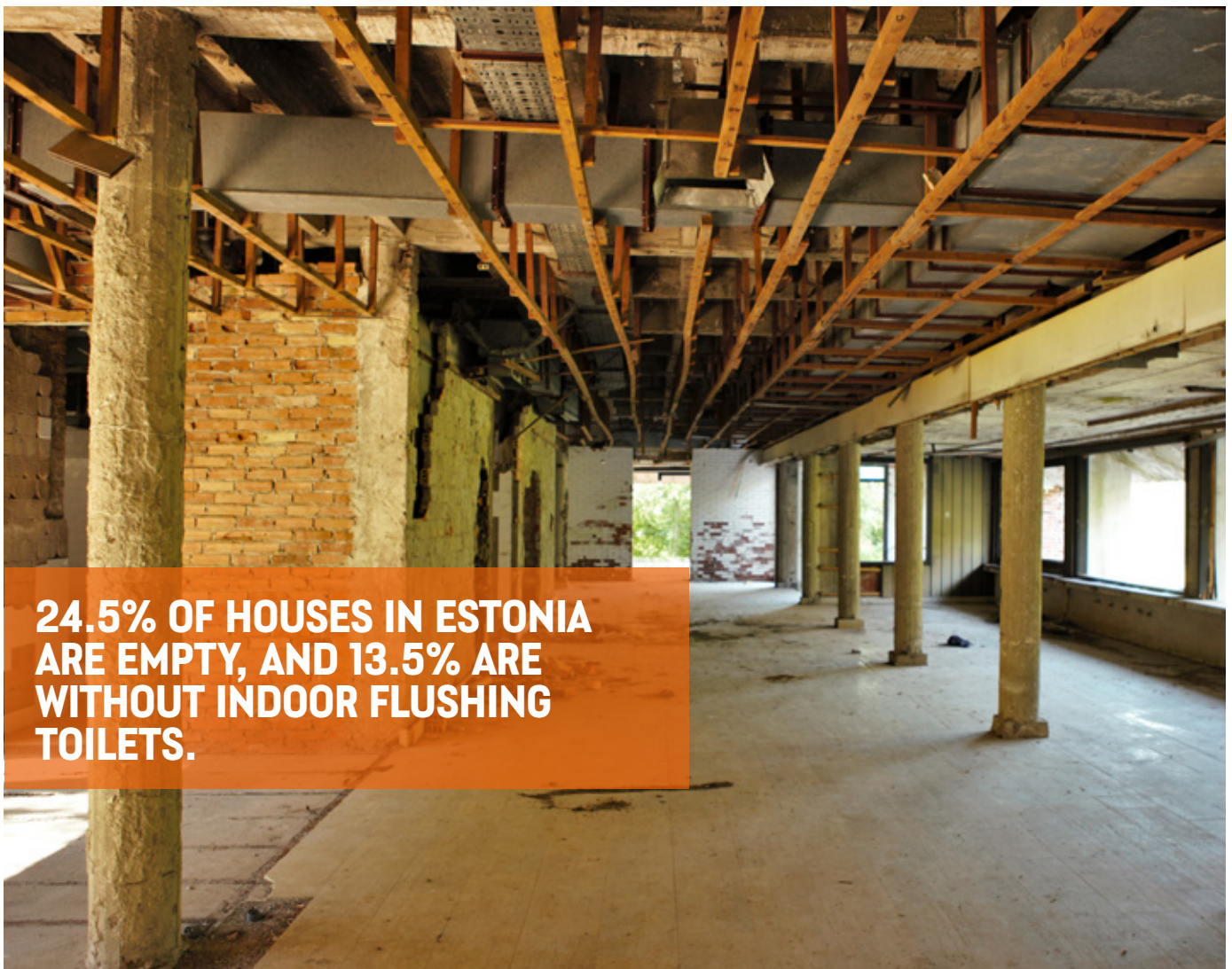
Estonia's overall housing vacancy rate was already at 24.5% in 2018. The apartment stock also consists mainly of old buildings, with 13.5% of houses still without indoor flushing toilets. As a result, by 2050, there will be an estimated 5 300 apartment buildings in need of being demolished and 14 000 in need of renovation, with total costs estimated at EUR 22 billion. Furthermore, these figures do not consider apartments that also need to be demolished or renovated due to very low energy efficiency. Lower efficiency results in higher heating costs, greater energy usage, and more greenhouse gas emissions. Dealing with these issues will require additional apartment buildings to be demolished or renovated.

Despite this, legal barriers regarding expropriation hamper demolition efforts. Expropriations are allowed only under strict conditions, and agreement procedures for expropriation are arduous. Even today, expropriation of abandoned detached housing is not allowed. Demolition and renovation efforts are also hampered by a lack of experience with implementing such projects, and a lack of a steady funding source.

A system where demolition and renovation projects can be implemented at a larger scale within the spatial planning

framework is needed to address shrinkage. This would not only improve efficiency, but also better align regeneration efforts with strategic objectives. County-wide Spatial Plans (the regional level spatial planning instrument in Estonia) need to outline areas for demolition and renovation based on population projections and spatial development trajectories. Building upon the County-wide Spatial Plan, specific settlement boundaries, land uses, and development densities can be set by Comprehensive Plans. Demolition and renovation projects should encourage 'shrinking from the outside in', where the building stock in the periphery is reduced and renovation efforts are concentrated in town centres. The central government should prepare a stable financing mechanism and increase annual investment scales for demolition and renovation projects.

Legislation for expropriation should be revised to allow for the easier demolition of vacant buildings, including empty detached housing. Expropriation should be integrated with the County-wide Spatial Plan and Comprehensive Plan, allowing expropriations to be based on population projections and settlement boundaries. When expropriation proves difficult, strategies such as land readjustment or land banking could be utilised.



24.5% OF HOUSES IN ESTONIA ARE EMPTY, AND 13.5% ARE WITHOUT INDOOR FLUSHING TOILETS.

LACK OF REGIONAL GOVERNANCE REINFORCES DISPARITIES

REGIONAL GOVERNANCE IS FRAGMENTED AND CO-OPERATION BETWEEN MUNICIPALITIES IS LIMITED

County-wide Spatial Plans do not cover important policy sectors such as health, education, or socioeconomic development. Instead, these aspects of development are delegated in piecemeal fashion to various sectoral policies such as the Regional Policy Program and Regional Policy Action Plan. Spatial planning through the County-wide Spatial Plans and strategic planning through County Development Strategies is functionally separated. Recent reforms to the Planning Act have also weakened the power of County-wide Spatial Plans even further.

This makes coordination of regional spatial planning difficult. County-wide Spatial Plans struggle to guide spatial development and promote local cooperation. As a result, local plans are not well-aligned with regional or national objectives.

Municipal finances also lack coordination with regional and national objectives.

Only 14% of municipal revenue comes from own revenue sources, with the rest coming from central government transfers. As most of these transfers are targeted towards municipalities and not inter-municipal bodies, municipalities' incentives for engaging in voluntary cooperation are weak. In addition, these transfers do not encourage cost savings, further dampening incentives for co-operation. Shrinkage coupled with declining revenues in remote areas pressures the central government to further intervene in service delivery, especially if cooperation between municipalities continues to be limited. Without effective co-operation between the central government and municipalities, this could lead to further inefficiencies and misalignment of policy objectives.



A FRAGMENTED REGIONAL GOVERNANCE FRAMEWORK LEADS TO INEFFICIENCIES AND MISALIGNMENT OF POLICIES

THIS LEADS TO DISPARITIES ACROSS MULTIPLE DOMAINS

Such governance structures reinforce regional inequalities. Differences in income levels across regions in Estonia, for example, are high compared to other EU countries, despite Estonia's relatively small size. In 2019, GDP per capita in Tallinn was EUR 36 000, compared to only EUR 9 000 in the rural county of Põlva. Such gaps accelerate migration to better-off regions, resulting in severe disparities in house prices. As a result, new construction and renovation activities concentrate in urban centres and their periphery, while real estate markets fail to function in remote regions. This further widens regional disparities in the housing market and makes it difficult for people to move between regions.

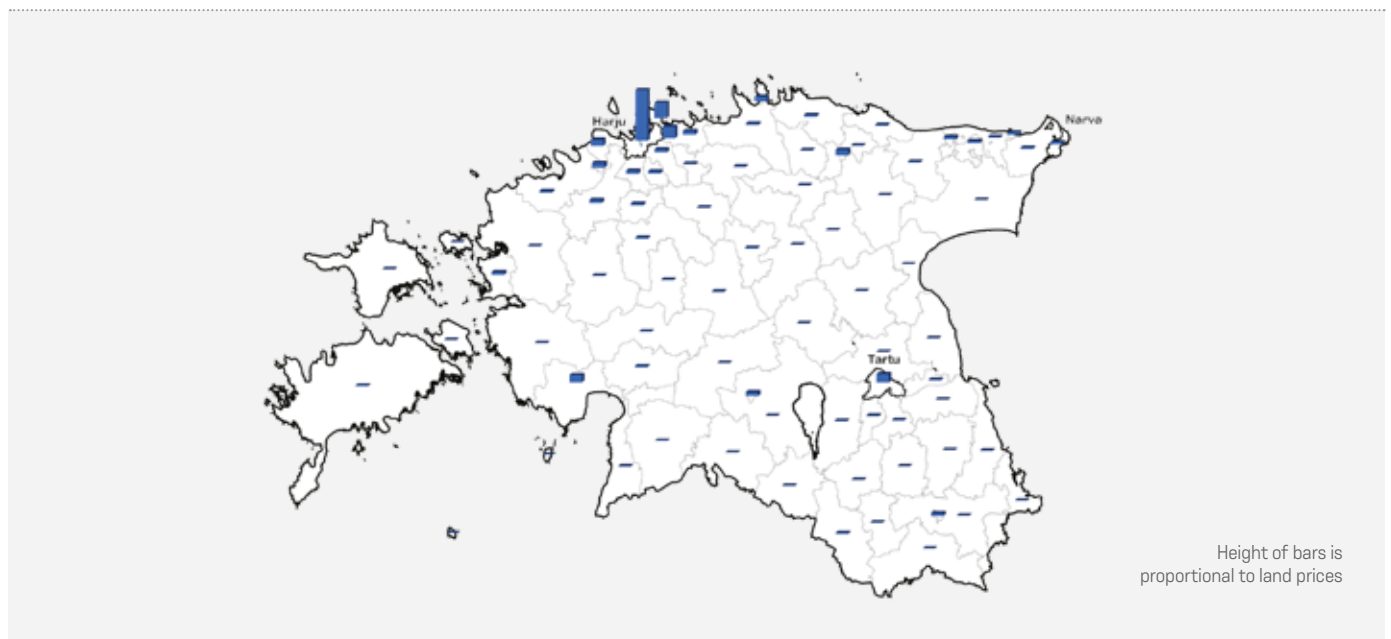
As a result of disparities in income levels and poor economic conditions in rural and remote areas, the distribution of personal income taxes (making up 56% of total municipal revenues) is also highly uneven across municipalities. Small and sparsely-populated municipalities are at a disadvantage compared to more populated areas in terms of municipal per-head revenues, which leads to widening gaps in services, infrastructure, and the quality of built environments.



This gap in the quality of municipal services between regions is most noticeable for education and transportation. While student numbers will remain steady or even increase in towns, suburbs and cities, sparse rural areas and villages are expected to see student numbers decline substantially. While small and sparsely-populated municipalities are consolidating their schools, they also need to retain small schools in remote regions to ensure some access to basic education for all. Thus, they face large unavoidable per-capita costs, estimated to be roughly 30% greater compared to cities. These areas also face the challenge of having to attract talented teachers.

Similar challenges are present for public transport. The adoption of demand-responsive transport (DRT) is progressing at a slow pace. Rural areas are more dependent on cars, which results in high unit costs for public transport as small populations and low density make it increasingly difficult and costly to provide quality transport infrastructure.

RESIDENTIAL LAND PRICES ACROSS ESTONIAN MUNICIPALITIES



Source: Estonia Land Board [2021[11]], Cadastral Units: Land Board, <https://geoportaal.maaamet.ee/eng/Spatial-Data/Cadastral-Data-p310.html> [accessed on 8 July 2021].

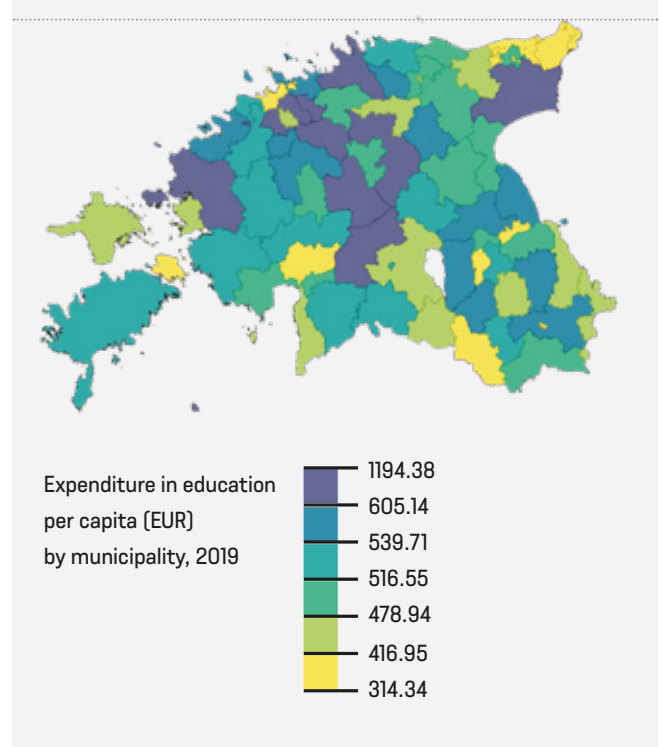
STRENGTHENING THE SPATIAL PLANNING FRAMEWORK IS CRITICAL IN ADDRESSING REGIONAL DISPARITIES

As County-wide Spatial Plans are designed to formally express planning interests that transcend local municipal boundaries and to balance national and local interests, they are the ideal platform to address regional issues. To tackle policy fragmentation, County-wide Spatial Plans should be the de facto platform for which regional issues relating to spatial development are outlined, integrating strategic planning and sectoral policies. They should outline a clear division of roles between the central government and municipalities.

Without formal regional governments, Estonia should strengthen inter-municipal cooperation especially for services and infrastructure requiring a larger catchment. Clarifying the base for voluntary inter-municipal cooperation within County-wide Spatial Plans can help municipalities utilise economies of scale and streamline administrative processes. Furthermore, certain fiscal transfers could be targeted to inter-municipal bodies rather than municipalities to incentivise voluntary cooperation.

Regional education centres can help co-ordinate stakeholders in providing vocational training, while rural school clusters could aid in increasing resource sharing. The potential obstacles that students in rural remote areas will face due to consolidation, such as longer distances and limited educational offerings, can be tackled through a strategic use of digital education provision in combination with school clusters. Beyond education, it is imperative to integrate services in a coherent manner across sectors. This allows for taking advantage of potential synergies and reduces inefficiencies in the use of fiscal resources. The network of service centres outlined in County-wide Spatial Plans should be better utilised to consolidate municipal services.

EXPENDITURE IN EDUCATION PER CAPITA BY MUNICIPALITY



Note: Values for 2019. Expenditure in nominal values. Values binned by quantiles.
Source: Author's elaboration based on Estonian education information system (EHIS) database, Estonian Ministry of Education and Research (2021).



INTER-MUNICIPAL CO-OPERATION AND COHERENT SPATIAL PLANNING IS CRITICAL TO CONSOLIDATE SERVICES AND BRING DOWN COSTS

THE SYSTEM OF MUNICIPAL FINANCES ENCOURAGES INEFFICIENCY

EARMARKED GRANTS ARE RIGID AND DISINCENTIVISE EFFICIENCY GAINS

Municipal own revenue makes up only 14% of total revenue. Earmarked grants (funds strictly designated for specific purposes) make up 80% of all transfers in Estonia, weakening municipalities' decision-making power. Earmarked grants disallow savings to be used in another sector, discouraging efficiency improvements. Rather, cost savings automatically result in cuts in such earmarked transfers. Furthermore, the transfer system rewards municipalities with greater population dispersion and smaller schools. While well-intended, these indicators disincentivise municipalities away from efficient land-use and service delivery.

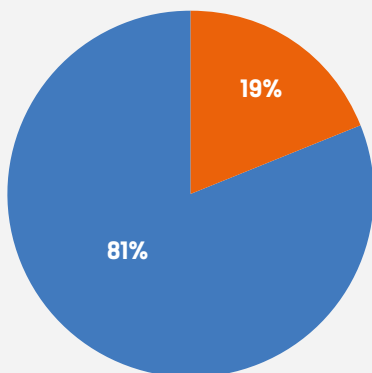
80% OF ALL CENTRAL GOVERNMENT TRANSFERS ARE EARMARKED, DISCOURAGING EFFICIENCY GAINS IN SERVICE PROVISION

Earmarked grants should be abolished, or at least their amount considerably reduced. The money should instead be used to strengthen the equalisation system. All municipalities should benefit from such a reform as they could better allocate financing according to local needs. Remoteness factors should be taken into account using a maximum of one or two criteria in the transfer system, as these measures often inadvertently foster inefficient development patterns. Instead, indicators such as population density could be used to deter manipulation while encouraging efficient settlement structures. In addition, demographic shifts should be taken into account more explicitly in the equalisation system, for example with a specific indicator for population change.

ESTONIA'S TRANSFER SYSTEM

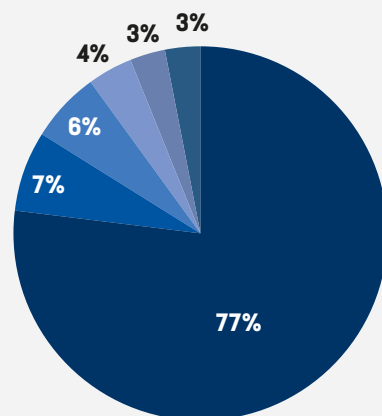
A. OVERVIEW

■ Earmarked grants total ■ Equalisation system



B. BREAKDOWN OF EARMARKED GRANTS

■ General education ■ Support for youth
 ■ Local roads ■ Subsistence allowance
 ■ Labor costs for pre-school teachers ■ Other



Note: The left panel describes the main components of the transfer system and the right panel shows the distribution of block grants.

Source: Statistics Estonia (2021[26]), Local Budgets Expenditure by Region/Administrative Unit [Statistical database], https://andmed.stat.ee/en/stat/Lepetatud_tabelid__Majandus.Arhiiv__Rahandus.Arhiiv/RR301 (accessed on 1 February 2021).

LAND TAX LEGISLATION ENCOURAGES SPREAD-OUT DEVELOPMENT

Land taxes account for just 2.9% of total municipal revenues, amounting to 0.3% of GDP, well below the OECD average of 1.1%. This is in part because the land values that taxes are based on have not been re-evaluated since 2001. As higher land taxes generally encourage a more efficient use of land, the current regime in effect incentivises spread-out development.

Land tax exemptions also encourage spread-out development by awarding greater exemptions for rural areas. This coupled with low land prices in these areas incentivises land owners to locate in the periphery. Impact fees, which force land owners to bear a portion of the costs related to providing infrastructure and services in their vicinity, generally only apply to urban areas. This makes living in

the periphery cheaper, further encouraging spread-out development. As a consequence, many remote homes in Estonia are secondary residences inhabited only during certain months of the year.

Land tax rate limits should be relaxed to allow municipalities greater autonomy in collecting revenues, and to encourage efficient land use. Tax exemption for residential land in remote areas should be abolished, or at least considerably reduced, while exemptions in denser areas within rural municipalities could be relaxed further. Importantly, these measures would need to come hand-in-hand with the re-evaluation of taxable land values. Impact fees should be more actively utilised to internalise the additional costs related to service and infrastructure delivery. The additional revenues collected from land taxes and impact fees should be reinvested towards improving amenities in shrinking regions.

LAND TAX REVENUES ARE ONLY A QUARTER OF THE OECD AVERAGE, AND TAX EXEMPTIONS INCENTIVISE SPREAD-OUT DEVELOPMENT



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