



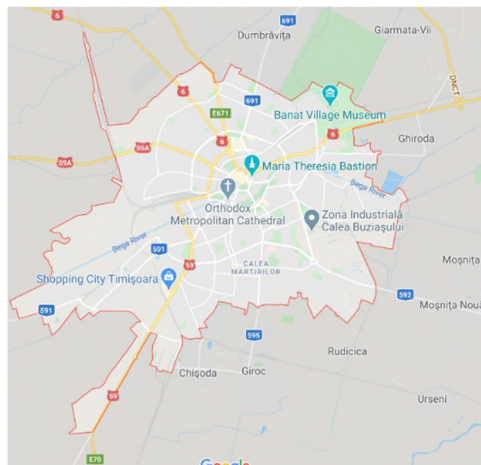
# 3S RECIPE - Smart Shrinkage Solutions

## Fostering Resilient Cities in Inner Peripheries of Europe

### TIMIȘOARA (RO) POLICY BRIEF #1 • Resilient Urban Economy & Municipal Finance

#### EXECUTIVE SUMMARY

Timișoara is the third-largest city in Romania, located at the crossroads of the Bucharest–Budapest–Vienna–Belgrade transport corridor of the major European capitals. For two decades following the collapse of state socialism, the city had been shrinking, losing 50,000 inhabitants (14%) by 2008. Since then, **Timișoara has bounced back**. To confront future depopulation trends,

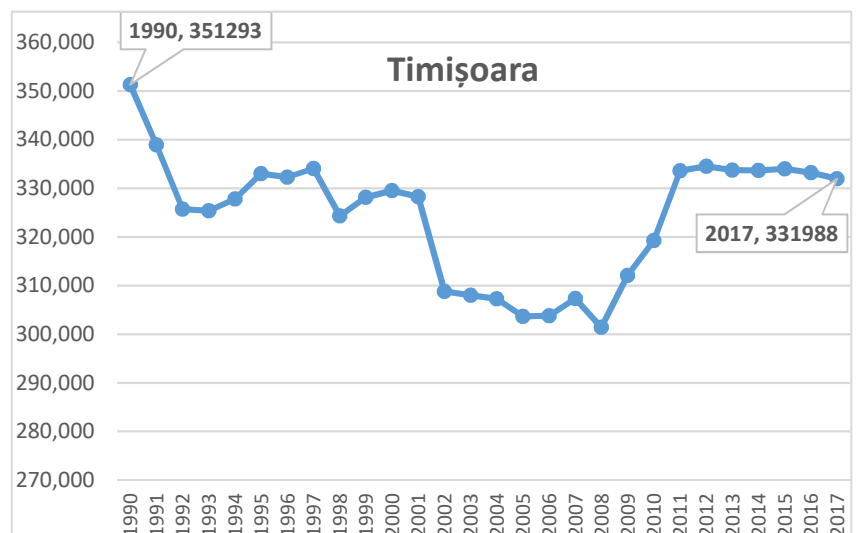


the city has prioritised economic

development by **attracting strategic foreign direct investment (FDI)**. This policy brief showcases one of the successful solutions to foster urban resilience and propel sustainable development of the city of Timișoara as a **growth pole** of West Romania and a **smart specialisation pioneer** across the *Danube–Criș–Mureș–Tisa* Euro region (DKMT, formerly known as the *Banat*). Building on local knowledge and the stakeholders' experience in implementing a strategic investor-driven smart specialisation strategy, the brief demonstrates how to develop a solid evidence base, design, and build a public policy for attracting new business investors, thus, contributing to a sustainable and diverse urban economy, with direct impact upon the broader metropolitan development.

#### INTRODUCTION

After the Romanian Revolution of December 1989, the entire country has undergone a fundamental post-communist transformation of its political, economic, social, cultural, and legal systems. In particular, the central process of economic transformation has involved three **fundamental, revolutionary, systemic changes**, including liberalisation, macroeconomic stabilisation, and structural adjustment through commodification, marketisation, privatisation, and the reduction of the role of the state. Under the





Communist party-rule, Timișoara, like other cities in the Soviet bloc, had to follow a very different developmental path,

**A fenced off brownfield site on Bulevardul Antenei, central Timișoara, 2019**

comparatively with Western Europe, which was based on *accelerated* or **forced industrialisation** (Kornai, 1992).

With the bulk of capital investment devoted to heavy industries, larger cities in the Eastern bloc were overcrowded, with poor housing and social infrastructure, and lacking many typical urban services and utilities. Hence, one of the biggest structural changes experienced across the region at the urban scale has concerned the privatisation of the formerly state-owned industry.

The collapse of Soviet-style centrally planned economies across the region has led to a rapid closure of uncompetitive state-owned industrial enterprises and a prolonged economic depression (Voiculescu & Jucu, 2016). By 1993, Romania's gross domestic product (GDP) had declined by 30% of its pre-transition level. Indeed, the country's 1989 level of economic output (in constant prices) was only reached fifteen years later by the mid-2000s. Because of the often-substandard quality of Soviet bloc production, the real welfare-reducing impact of the post-communist depression was lower than the official GDP figures seemed to indicate. Yet the collapse of production also meant the end of employment, and the resultant job losses were massive. Large proportions of the redundant labour force had to withdraw from economic activity altogether, either migrating abroad or relying on informal survival strategies at home (Mykhnenko, 2009). Whilst in 1990, Romania recorded 8.2 million employees, by 2002, the total number of employees shrunk to 4.6 million. Unemployment levels reached double digits in most transition economies, peaking in Romania in 1994 at 11% of the total labour force. Abandoned industrial estates have gradually turned into vast brownfield sites.

## ATTRACTING NEW STRATEGIC INVESTORS: A KEY ACTION FOR SUSTAINABLE ECONOMIC DEVELOPMENT

Following the transitional depression of the early 1990s, Romania has achieved a **remarkable economic recovery**, registering on average 4.9% of annual GDP growth in the 2000s, followed by an even faster growth rate of 5.3% per year during the 2010s.



Attracting large-scale **foreign direct investment** has been the key to the country's economic success under post-communism (Drahokoupil & Myant, 2010). Furthermore, in 2007, Romania finally joined the European Union (EU), thus, gaining access to a single market of 500 million customers. Overall, FDI projects by multinational enterprises, combined with the **EU regional development funds**, have propelled comprehensive urban restructuring across the country, strengthened municipal fiscal capacity, and fuelled private-sector job growth. By 2020, Romania's unemployment rate decreased to 3.9% of the total labour force.



The policy of attracting new investors to Timișoara has been particularly successful in the context of metropolitan development of a famous medieval centre of the historical Banat region, possessing significant intellectual assets and architectural heritage. Symbolic heritage has mattered, too, ranging from the lasting legend of Timișoara as a multicultural melting pot to the city being the first place in Romania freed from the communist dictatorship. The local economic actors have emphasised the importance of the **knowledge-based economy**



for urban development and the need for Timișoara to attract particularly those foreign investors, who are reliant on a highly skilled workforce. Amongst its most recent flagship developments, the city can boast of the *Continental AG* manufacturing facility – a €460 million investment that created the world's first fully automated tyre factory with 2,500 high-skilled jobs – and of the *Nokia Technology Centre*, a €73 million telecommunications research & development (R&D) campus (see two images above). Furthermore, since the early 2000s, a vast brownfield site on the edge of city centre has been transformed into a mixed-

use real estate development called *Iulius Town*. This includes a 64,215 m<sup>2</sup> (691,200 sq. ft.) shopping and entertainment centre, a street art gallery, public gardens, a congress hall, and a brand new business district with over 100,000 m<sup>2</sup> (1,080,000 sq. ft.) of commercial office space (see three images here; for more details, see *Iulius Town*<sup>1</sup>). As a result, Timișoara has been transformed into a vibrant city with a **municipal budget of €300 million** (2019) and a modern local economy built on the new smart specialisation<sup>2</sup> pillars of the **automotive industry, information and communications technology (ICT), and commerce.**



<sup>1</sup> Attrius Developments Srl (2020). 'Iulius Town', <https://iuliustown.ro/>.

<sup>2</sup> *Smart specialisation* is a regional policy approach that aims to boost growth and jobs by enabling each region to identify and develop its own competitive advantages. Within the EU, through its partnership and bottom-up approach, smart specialisation



## TURNING IDEAS INTO ECONOMIC SUCCESS: TIMIȘOARA AS A EUROPEAN SUCCESS STORY

The city's success with designing and implementing an FDI-driven smart specialisation policy has been recognised internationally. The West Romania region, centred on Timișoara, has become **one**

**amongst only five regions across the EU** to feature in the European Commission's *Factsheet – What is Smart specialisation?*: "In the West region, the smart specialisation strategy highlights the role of incubators and other business support structures in enhancing entrepreneurship and the creation of innovative companies in the digital sector – where the region retains a competitive advantage. The European Regional Development Fund has supported the reconversion of a decaying industrial area into a centre encouraging digital development and creativity. A start-up incubator was created in Timișoara, dedicated to young graduates who wish to start a business in digital technologies. Young entrepreneurs receive logistical support, as well as services such as consultancy and accounting. This project is integrated into the growing IT industry in the West region of Romania" (EC 2020).

To identify the practical mechanisms, helping to attract new strategic investors to the city, we have used a distinctive in-house **Urban Futures Method** designed to facilitate stakeholders' collective reflection on and learning about this solution, its benefits, and necessary conditions for effective urban regeneration and smart shrinkage practices (Lombardi *et al*, 2012). During a special workshop on 19 April 2018, hosted by West University of Timișoara, we have applied the method with several local and regional stakeholders involved in the city's economic and financial development, including the City Hall, Court of Accounts, Intercommunity Development Association, West Regional Development Agency, and Intercultural Institute of Timișoara. In the course of the workshop, the local stakeholders collectively stressed the following **seven intended benefits** of FDI and long-term national private investors, including: (1) new employment opportunities, leading to an increase in job offers; (2) an increase in revenue to the local authority budget; (3) creation and development of a new competitive and dynamic local economy; (4) making the city attractive to talented newcomers, thus, enlarging population and improving the local labour pool; (5) higher income levels, better living standards and housing conditions; (6) better connectivity and transport links between the inner city and its outskirts and

brings together local authorities, academia, business spheres, and the civil society, working for the implementation of long-term growth strategies supported by EU funds (see <https://s3platform.jrc.ec.europa.eu/what-is-smart-specialisation->).

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### ► Strengthening Innovation in Europe's Regions



#### ► SMART

Identify the region's own strengths and comparative assets



#### ► SPECIALISED

Prioritise research and innovation investment in competitive area



#### ► STRATEGIC

Define a shared vision for regional innovation

### **Iulius Town Timișoara: construction of a 155-metre-tall (509 ft.) 29-storey building, October 2019**



nearby countryside; and, (7) new investment in social and technical infrastructure and public services. Yet what are the **necessary conditions that make it happen?**

Outcomes	Necessary conditions for attracting new strategic investors
<b>1. Increasing job offers</b>	Availability of an adequately qualified workforce, especially, university graduates. Availability of housing stock for the incoming workers.
<b>2. Raising revenue to the municipal budget</b>	Existence of a dynamic, diverse, and competitive urban economy. Continuous attractiveness of the city for new waves of investment with higher value added.
<b>3. Creating a competitive and dynamic local economy</b>	Implementation of a local smart knowledge-based economic development strategy. Facilitation of the know-how, innovation, and technology transfer. Digitalisation, better access to and wider usage of the ICT in the local economy. Adoption of smart specialisation approach by local stakeholders.
<b>4. Attracting new labour force and inhabitants to the city</b>	Existence of a favourable perception of the city in the broader region and internationally. Attractive 'open city' branding, emphasising the good quality of life, educational opportunities, Western work ethic, and multiculturalism (with multiple synergy effects).
<b>5. Improving the quality of life</b>	The local authority maintains higher revenue levels than in other regions, capable of investing in public amenities, living conditions, accessibility, urban services, arts, and leisure facilities.
<b>6. Better connectivity and transport links between the inner city, its outskirts and nearby countryside</b>	Extension of the city's sustainable transport system towards the hinterland. Development of urban and extra-urban road transport infrastructure for internal and external connectivity.
<b>7. New investment in technical and social infrastructure, utilities, and public services</b>	Willingness and ability of the public authorities – local, national, and supranational (EU) – to finance improvements in the city's infrastructure, education, health, and urban services.

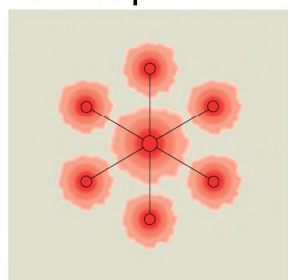
## WOULD ATTRACTING STRATEGIC INVESTORS DELIVER THE SAME BENEFITS WHATEVER THE FUTURE BRINGS?

A smart shrinkage solution may be strategic (as a principle) or detailed (focus on a specific target). Whatever the short-term effect of a given solution, policy-makers must adopt a longer-term perspective to ensure **continued performance** throughout its intended lifespan, **despite changing conditions**. The question to ask is, thus: Will today's smart shrinkage solutions deliver their intended benefits over a 40-year regeneration cycle, typically used for planning investment and development proposals? During this project, we have tested the likely future performance of each urban development and regeneration-related 'smart shrinkage solution-benefit pair' – that is, actions taken today in the name of sustainable urban development – in a series of possible future scenarios for the year 2060. If a proposed solution delivers a positive legacy, regardless of the future against which it is tested, then it can be adopted with confidence. Four **plausible but distinct** future scenarios were included into our analysis (see Lombardi *et. al.*, 2012: Table 2). A summary of these four global **urban future scenarios** is provided below:

### New Sustainability Paradigm (NSP)

### Key driver: Equity and sustainability

#### Settlement pattern




#### Description

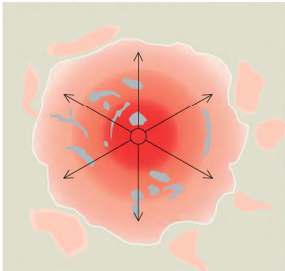
An ethos of 'one planet living' facilitates a shared vision for more sustainable living and a much improved quality of life. New socio-economic arrangements result in changes to the character of urban industrial civilisation. Local is valued but global links also play a role. A sustainable and more equitable future is emerging from new values, a revised model of development and the active engagement of civil society.

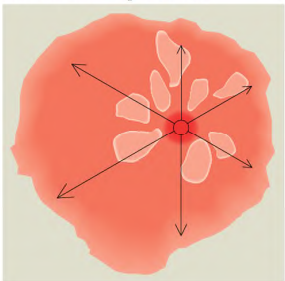
#### Philosophy

The worldview of the *New Sustainability Paradigm* has few historical precedents, although John Stuart Mill, the nineteenth century political economist, was prescient in theorising a post-industrial and post-scarcity social arrangement based on human development rather than material acquisition (Mill, 1848).



Policy Reform (PR)		Key driver: Economic growth with greater equity
<b>Settlement pattern</b> 	<b>Description</b> <i>Policy Reform</i> depends on comprehensive and coordinated government action for poverty reduction and environmental sustainability, negating trends toward high inequality. The values of consumerism and individualism persist, creating a tension with policies that prioritise sustainability.	<b>Philosophy</b> In <i>Policy Reform</i> , the belief is that markets require strong policy guidance to address inherent tendencies toward economic crisis, social conflict and environmental degradation. John Maynard Keynes, influenced by the Great Depression, is an important predecessor of those who hold that it is necessary to manage capitalism in order to temper its crises (Keynes, 1936).

Market Forces (MF)		Key driver: Competitive, open global markets
<b>Settlement pattern</b> 	<b>Description</b> <i>Market Forces</i> relies on the self-correcting logic of competitive markets. Current demographic, economic, environmental, and technological trends unfold without major surprise. Competitive, open and integrated markets drive world development. Social and environmental concerns are secondary.	<b>Philosophy</b> The <i>Market Forces</i> bias is one of market optimism, the faith that the hidden hand of well-functioning markets is the key to resolving social, economic and environmental problems. An important philosophic antecedent is Adam Smith (1776), while contemporary representatives include many neo-classical economists and free market enthusiasts.

Fortress World (FW)		Key driver: Protection and control of resources
<b>Settlement pattern</b> 	<b>Description</b> Powerful individuals, groups and organisations develop an authoritarian response to the threats of resource scarcity and social breakdown by forming alliances to protect their own interests. Security and defensibility of resources are paramount for these privileged rich elites. An impoverished majority exists outside the fortress. Policy and regulation exist but enforcement may be limited. Armed forces act to impose order, protect the environment and prevent a societal collapse.	<b>Philosophy</b> The <i>Fortress World</i> mindset was foreshadowed by the philosophy of Thomas Hobbes (1651), who held a pessimistic view of the nature of man and saw the need for powerful leadership. While it is rare to find modern Hobbesians, many people believe, in their resignation and anguish, that some kind of a <i>Fortress World</i> is the logical outcome of the unattended social polarisation and environmental degradation they observe.

The **Urban Future Method** does not favour any particular scenario. Indeed, for a solution to be determined to be robust and resilient to future change, the necessary conditions to support intended benefits being achieved over time must exist in all scenarios. Drawing on expertise, experience, and **knowledge of the local context**, we have graded the likely performance of every necessary conditions in the future as follows:

Urban Futures Method applied to a strategic investor-driven development model				
Necessary Conditions	New Sustainability Paradigm	Policy Reform	Market Forces	Fortress World
Availability of <b>adequately qualified workforce, esp. university graduates</b>	One planet living promotes the optimal use of social resources, including the balance between supply and demand in the local labour market	A broader public access to further and higher education is promoted, supported and funded by sub-national and central governments	A free competitive educational market should quickly respond to demand for particular qualifications. High quality university education, however, hinges on effective large-scale capital investment into R&D infrastructure and	<b>Access to formal education is highly restrictive to those inside the fortress. Outside the fortress, informal labour markets are filled with unskilled and poorly skilled workers</b>

Urban Futures Method applied to a strategic investor-driven development model				
Necessary Conditions	New Sustainability Paradigm	Policy Reform	Market Forces	Fortress World
			academic staff, which may not be locally available	
<b>Affordable and diverse housing stock</b> to fulfil the needs of in-migrant workers and newcomers	Provision of affordable housing for newcomers is well planned for and supported by the local community. But the availability of luxurious, carbon- and natural resource-intensive residences for strategic investors and management executives is non-existent or extremely limited	Policy strongly discourages housing from being turned into a financial asset. Social housing is publicly funded for low-income residents. Private rent controls and subsidised mortgages ensure affordability for other newcomers	The housing stock is a financial asset, the supply of which is restricted to maintain high demand. The construction of high-end luxurious residences is prioritised by the private sector to ensure high returns on investment. Private landlords dominate the rest of the market	Inside the fortress, the rich can afford high quality housing. Outside the fortress, the destitute masses dwell in slum conditions
<b>A dynamic, diverse &amp; competitive local economy</b>	Small, localised firms, social enterprises, and co-operatives are prioritised to ensure diversity and resilience. The abundant supply of highly educated workforce helps maintain dynamism and promote innovation	Policy favours social integration through a full employment economy. Enough diversity in the economy is introduced to maintain overall competitiveness and long-term viability	Unregulated free market competition drives the economy through the incessant boom and bust cycles of business activity. Corporate monopolies abound, gradually degrading capacity for innovation	Rich/poor division of space, combined with destitution outside the fortress, inhibit the operation of economies of scope and scale, hindering local economic expansion
Attractiveness of the city for <b>new waves of high valued-added investment</b>	Having reached a desirable and socially acceptable level of economic development, each local community would aim for the steady state / zero growth, prioritising sustainability, protection of the natural environment, and conservation of finite resources	Party-political support clearly depends on new visible / tangible investment. Moreover, any new investment into the city is regarded as yet another supplementary prospect for social integration	This is strongly context dependent. Party-political support depends on achieving economic growth, but getting attractive to inward investment inevitably results in the race to the bottom. Typically, low wage – low tax locations are not conducive to high technology- or knowledge-intensive economic activities	High value-adding investors serving the needs of the powerful elite are welcome inside wealthy enclaves. However, any economic expansion is constrained by the small size of the market inside the fortress, for destitute masses outside the fortress cannot afford to consume high quality goods and services
An effective strategy to develop a <b>smart knowledge-based economy</b>	Decarbonisation and a fundamental transition towards a green new economy is the key policy priority. Multiple strategies to replace industrial farming and heavily-polluting, fossil-fuel-dependent industries with sustainable economic activities are pursued at every scale, from the local to the global	Having a strategic perspective is the key to any policy reform. The implementation of national and supra-national 'smart growth' strategies is cascaded down to the local level, alongside the required funding	Generally, any public intervention into the workings of the free market is strongly resisted. Focus is on short-term socio-economic gain, unlikely to support public investment for such strategy to be effectively implemented	Destitute masses outside the fortress constitute a vast reserve army of labour, hence no need to shift to a different production model. Some technological upgrading in niche markets inside the fortress may be planned and supported
Facilitation of the know-how, innovation, and <b>technology transfer</b>	Societal sustainability relies on open access to information, community learning, and best practice transfer	Strong governance models encourage knowledge exchange within the public sector. Knowledge transfer to small and medium-sized private sector firms is also supported	Intellectual property rights are strictly enforced to maximise monopoly rent seeking. Commercially sensitive knowledge and innovative technologies are closely guarded by each firm to ensure competitive advantage. Knowledge spill-overs are accidental	Knowledge and technology are closely guarded secrets, secured for the usage exclusively inside the fortress
<b>Digitalisation:</b> expansion of ICT	Digitalisation and the local uptake of ICT are encouraged as efficient	Strong governance models promote digitalisation as a	Digitalisation is propelled by giant multinational ICT enterprises, establishing	Information, communication, and digital technologies proliferate



Urban Futures Method applied to a strategic investor-driven development model				
Necessary Conditions	New Sustainability Paradigm	Policy Reform	Market Forces	Fortress World
throughout the local economy	tools for saving and sustainably using finite resources	growth-boosting strategy. Digital literacy also represents an integrative tool for citizenry and marginalised communities	new markets online to maximise their profit-making opportunities and put an end to traditional 'analogue' competitors	inside the fortress. Their usage, however, is primarily geared towards public safety, security, and defence needs. Outside the fortress, digitalisation cannot take off for the lack of necessary infrastructure and human capital
The city embraces <b>smart specialisation</b>	Identifying the city's own strengths and comparative assets is key to a viable long-term economic future. However, diversification remains a societal priority as a means of building resilience against sudden shocks	Smart specialisation is a government priority enforced through strong governance models and promoted through public funding	A specialised firm maximise profits and maintain competitiveness in the market by tapping into its comparative advantage. When a cluster of specialised firms is formed, the host city benefits in many ways	There is no policy to promote smart specialisation. For the rich, protection and use of the already available resources inside the fortress is primary concern. For the poor, barter may become a necessity, but self-reliance remains the prevailing survival strategy
<b>An attractive 'open city' branding</b>	A widely recognised perception of the city as welcoming, attractive, and open to newcomers helps reward the local community efforts in creating an inclusive and diverse living environment	A welcoming open city brand helps ensure a positive perception of the locality and generate a strong sense of civic responsibility amongst its residents. It also facilitates social integration of marginalised communities and vulnerable groups	Having a welcoming city brand may be necessary, but not a sufficient condition to ensure prosperity. Market forces favour any profitable locality in the short run, however inhabitable it might be(come)	The fortress city is protected against the newcomers and walled to fend them off
A relatively affluent local authority with <b>stronger municipal finance than elsewhere</b>	Depending on local circumstances, a city may become much more prosperous than its neighbours. Yet egalitarian principles of inter-communal and international solidarity oblige the local authority to dispense its fiscal surplus to outsiders in need	<b>Strong governance models and national budgetary policy ensure redistribution of public finance from donor- to recipient- cities and regions via inter-budgetary transfers</b>	Laissez-faire policy allows any city to keep (most of) its revenues. However, the strength of municipal finance depends solely on the ability of local authority to raise income through taxes, charges, and user fees. If local firms and residents consider taxation levels too high, they may vote with their feet	Global competition for resources between different localities is the key feature of the fortress world. Rich enclaves do everything to protect their income from outsiders and keep municipal revenues exclusively for their own benefit
<b>A well-developed sustainable transport system</b> extended towards the hinterland for better connectivity	A sustainable city must assure a high level of interconnectivity, using various alternative means of public and non-motorised green transportation	Building, expanding, and maintaining transport infrastructure is a governmental priority and is enforced through policy. Connectivity is as a major tool for accelerating economic growth as well as achieving regional equalisation and social cohesion	Limited public funding is available for public infrastructure unless there is a direct economic benefit. If market forces do not require a higher level of mobility and connectivity, this investment is not regarded as worthwhile	In a disconnected world, the transport system is not a real priority. Better connectivity jeopardises the security of the rich
<b>New public investment</b> into urban infrastructure,	Sustainable development is geared towards a comprehensive long-term upgrade of urban infrastructure and public services. Local community	Large-scale investment into urban infrastructure and services is publicly funded and supported by policy to boost demand, accelerate	Public infrastructure investment is limited by conservative fiscal policy and strong budgetary constraints. Maintenance is provided for	Rich have good access to high-quality local facilities and amenities; poor may be lacking even the most basic local facilities, services, and amenities.





Urban Futures Method applied to a strategic investor-driven development model				
Necessary Conditions	New Sustainability Paradigm	Policy Reform	Market Forces	Fortress World
local services, and amenities	engagement ensures cost-effective use of public funds	economic growth, and help maintain party-political support	representative public spaces. Limited or no investment is made available to small places, depending on the financial situation of local authorities	None are provided by the state

Key: ■ condition highly unlikely to continue in the future ■ condition is at risk in the future ■ condition highly likely to continue in the future

## POLICY IMPLICATIONS

Attracting new strategic investors to a shrinking city might appear a proverbial win-win for everyone – a smart shrinkage solution to fix almost any economic problem the city faces. However, as this policy brief testifies, this solution is very hard to achieve in practice and, in itself, FDI does not guarantee a more resilient future for the city. From the community perspective, to attract new strategic investors, the shrinking city must first put in place a set of complex and costly necessary conditions. Consequently, to benefit fully from the new strategic investment, and to ensure a continuous delivery of smart shrinkage and urban resilience over time, this solution has to be highly compatible with the city's socio-economic and cultural profile. For example, a shrinking city with rich symbolic heritage, a legacy of multiculturalism, and renowned higher education institutions could become very successful by tying in its new strategic investors with a smart specialisation strategy that exploits the city's most promising assets in ICT, technology, and international commerce. According to the Urban Futures methodology results reported above, **strategic investor-driven smart specialisation** works best as a smart shrinkage solution in the Policy Reform and New Sustainability Paradigm scenarios, having a 9 in 10 and an 8 in 10 chance for success, respectively. If the city finds itself in the Market Forces scenario, many of its underlying necessary conditions will be exposed to considerable risk in the future, reducing the probability of success to about 54%. In the Fortress World scenario, a strategic investor-driven local economic development model is highly unlikely to succeed.

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***Wanna electrify your career? A job advert for Everseen, Cork, Ireland-based firm specialising in advanced machine learning, computer vision, and neural networks driving artificial intelligence automation. Continental Hotel North Star Resort, central Timișoara, 2019***

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