



3S RECIPE - Smart Shrinkage Solutions Fostering Resilient Cities in Inner Peripheries of Europe

MAASTRICHT (NL) POLICY BRIEF #1 • RESILIENT URBAN ECONOMY & MUNICIPAL FINANCE

EXECUTIVE SUMMARY

This policy brief highlights the important role institutions of **higher education** can play in dampening the impacts of population decline. It does so based on a study of Maastricht, a medium-sized city in the south of the Netherlands, bordering Belgium and close to Germany. It draws on policy analysis, secondary quantitative data and stakeholder workshops to unravel necessary conditions for higher-education growth in the city. Among other things, it shows the importance of physical infrastructure, accommodating policies and urban attractiveness. Crucially, the Maastricht case demonstrates that the function of higher-education institutions in a city is not a given, but a product of state policies. This suggests redistributive state policies can play a role in dampening population decline or mitigate negative impacts.

INTRODUCTION

Maastricht is the capital and largest city of The Netherlands' most southern province, Limburg. The city is located in a region experiencing long-term population decline and further decline in the future is expected. The population of Maastricht itself is currently more or less stable at around 123,000 inhabitants,



and population prognoses suggest the population size to remain stable. Yet, even with a stable population size, the city is facing social, economic and spatial challenges that are typical for shrinking cities across the world. The key question addressed here, is **which urban-economic policies can help mitigate adverse impacts of population decline.**

Economically, Maastricht has a rather polarized employment structure. The city is home to a comparatively large unemployed and economically vulnerable population, although this is no anomaly for medium-sized cities. At the same time, an above-average share of the city's population is in highly skilled employment, typically requiring a higher-education degree. Large skilled-employment sectors are health, services and education. The city is a popular destination for leisure and business tourism, hosting events and conferences. It is for example the number two municipality in the Netherlands in terms of hotel night bookings, after Amsterdam.

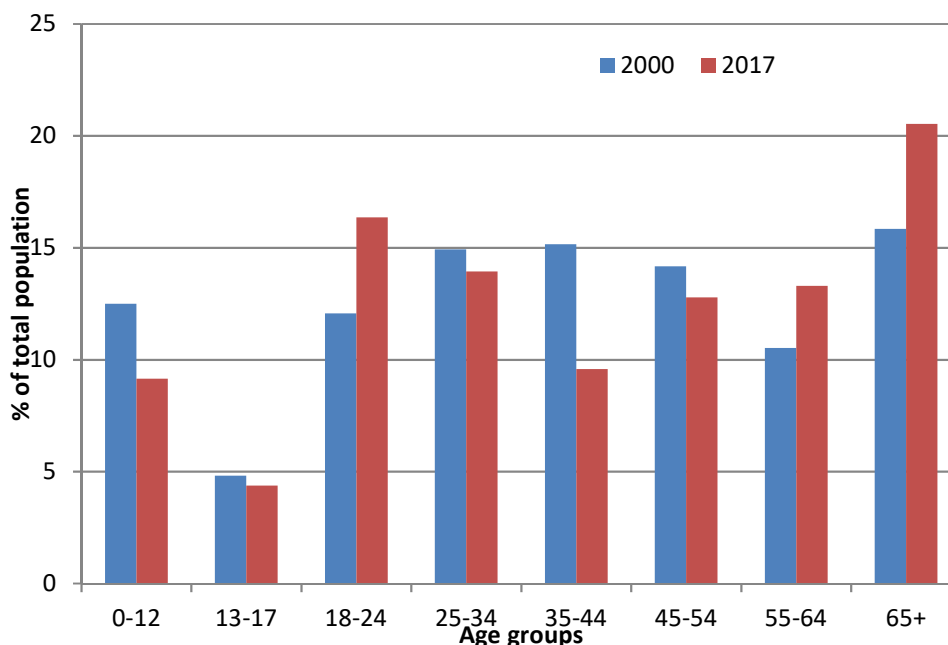
Demographically, the total population remained stable: there were 122,000 people living in Maastricht in 2000 and almost 123,000 in 2017. Yet, this apparent stability masks a substantial change in population composition (**Figure 1**).

That is, since 2000 the number of young adults in the city has rapidly increased, as well as 55+ populations. The share of young adults aged 18 to 24 years old increased from 12% (14,700 individuals) to 16% (20,100). The share of residents aged 65 and older increased from 16% (19,300) to 21% (25,200), as well as the share of residents aged 55 to 64 (from 11% to 13%). Conversely, the number of middle-aged residents and children has decreased in this time frame. The share of 35 to 44 year olds decreased from 15% (18,500) to less than 10% (11,800) and the share of children younger than 12 concomitantly decreased from 13% (15,300) to 9% (11,200).

The city's household structure has also changed over the period. The number of households increased from 60,000 to 68,700. The share of single-person households increased from 43% to 54%; while the share of households with children dropped from 28% to 21%. Thus, despite population stability changing household structures fuel increasing demand for (particular types of) housing in the city.

Maastricht's increase in young and highly-educated residents is different from the typical trajectory shrinking cities go through – which is often in part driven by the selective outmigration of young upwardly-mobile residents. A key factor in shaping this trajectory and preventing actual population decline is the increasingly prominent role played by **higher education**.

Figure 1: age composition of the Maastricht population in 2000 and 2017.



Source: Statistics Netherlands, own adaptation.

ENABLING THE UNIVERSITY GROWTH: A KEY MECHANISMS TO PROMOTE ECONOMIC VITALITY

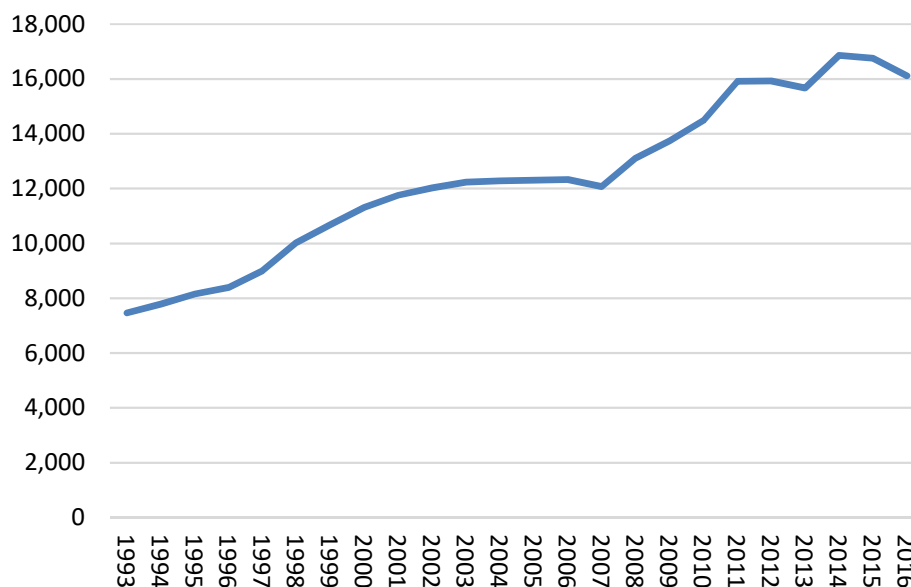
Maastricht is home to a range of higher-education institutions. Firstly, there is the Maastricht University and the associated University Medical Centre (UMC). Secondly, the Hogeschool Zuyd, a university of applied sciences, has various branches in Maastricht. Particularly their degrees in arts and hospitality services are popular.

Local stakeholders emphasize how higher education is an important policy instrument in steering urban development. Indeed, the very existence of the Maastricht University is the product of **state policies of spatial redistribution**. The decision to found the Maastricht University was taken in 1969, and the university officially opened in 1976. The national government did so to compensate the South Limburg region for the closure of the coalmines, and to dampen the negative economic impact of de-industrialisation. As such, the Maastricht University can thus be considered an early example of the national state addressing (envisioned) population and economic decline. Maastricht was not unique in this regard: national government initiated several policies of spatial redistribution, relocating public services from major urban centres in the *Randstad* to peripheral cities. Such policies of spatial redistribution are emblematic of that specific era. Over time, state spatial policies have increasingly developed entrepreneurial policies focus on

already successful regions instead, with the aim of generating agglomeration economies and trickle-down effects to less successful regions.

Nowadays, the university still plays a key role in mitigating population decline. For one, the number of students enrolled at the university increased from 7,500 in 1993 to 12,000 in 2007, and to over 16,000 in 2016 (**Figure 2**). More than half of this **student population** is from abroad. In addition, over 5,000 students are currently enrolled at the University of Applied Sciences in the city.

Figure 2. Number of students enrolled at the Maastricht University.



Sources: Statistics Netherlands (1993-2006) and Maastricht University (2007-2016).

In 2017, around half of these students, some 10,000 students, live independently (i.e. not in the parental home) in Maastricht, boosting population numbers. The number of students living independently in Maastricht, and elsewhere in the country, have gone down in recent years. A key explanation is the abolition of the student bursary scheme, leading more students to remain in the parental home during education to minimize cost of living. This change poses a threat to university cities like Maastricht, which now see a reduced inflow of domestic young adults. Many universities therefore now focus on attracting more students from abroad, who are not impacted by these policies, to compensate for the loss in domestic students.

Attracting students is one thing, retaining them another. It is a question among stakeholders to what extent retaining students is crucial. On the one hand, it is argued that also with their temporary presence students give the local economy a boost, although of course mostly particular economic segments. On the other hand, an alternative perspective is that they need to be retained to shape a sustainable support base for family-oriented facilities like schools and local shops. A longer presence would also enhance social cohesion, it is assumed.

The **university is also a large employer**, employing over 2000 academics, 1500 people in supportive staff, and 7000 academic-hospital personnel. These figures demonstrate the university's important role for the city's population and economy, even without taking into account indirect spill-over impacts. In 2013, around 10% of all employment in Maastricht was in education, with higher education playing an important part.

Apart from attracting students and staff, the Maastricht University is also seen to contribute to the city's image as a place "to visit, work, and meet in." Maastricht promotes itself as a city of leisure and culture, but also as an international knowledge city, a place for conferences and business tourism.

In sum, it is argued that higher education plays a key role in 1) mitigating population decline and 2) dampening negative economic effects. Stakeholders therefore emphasize the importance of enabling future university growth to continue mitigating population decline and its perceived negative effects.

A key aspect of our study is to understand what stakeholders consider the key conditions successfully to achieve future university growth. It is not our aim to test whether the potential benefits of university growth outweigh possible downsides. In a workshop setting, stakeholders collaboratively emphasized the following conditions for future university growth:

Outcome	What are the necessary conditions that make it happen?
Future university growth	1. University growth should be accommodated by providing the necessary physical infrastructure , i.e. university buildings and sufficient student housing
	2. State policies should encourage young adults to attend university and smooth the transition out of the parental home towards independence. This can be done by providing financial support, e.g. through a student bursary system.
	3. Internationalization can drive student growth. University, municipal and national policies should thus be welcoming of international students, implying open borders.
	4. The city itself should improve its attractiveness to both students and staff, especially those from abroad, by creating an attractive living environment and offering facilities that cater to their needs and preferences.
	5. Through targeted marketing the city and university should actively try to attract foreign students.

WHAT HAVE WE LEARNED FROM THE MAASTRICHT UNIVERSITY INITIATIVE? RECOMMENDATIONS

➤ **The positive contribution of Maastricht University to the city urge to reconsider spatial redistribution policies**

Such place-based policies should be multi-faceted and may include investment in employment, education, infrastructure and housing in distressed areas. Furthermore, our case also highlights the distribution of tax revenue. In the Netherlands, the vast majority of taxes is collected at the national level and subsequently distributed among municipalities. This would allow for the targeted redistribution of tax income towards struggling regions.

➤ **Growth in student numbers is not a panacea and may also have negative repercussions**

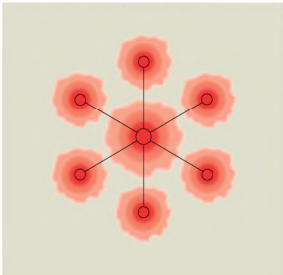

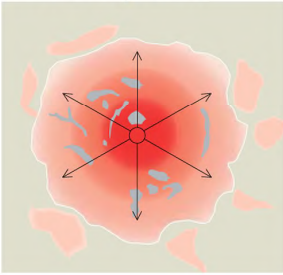
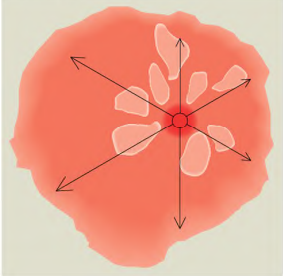
Students may displace or exclude other residents from the local housing market. They may also have a negative impact on neighbourhood liveability and cohesion, especially international students who stay only for a short period. A growing economic dependence on student numbers may make the local economy vulnerable. A slump in student numbers, for example due to changing demographics or exogenous shocks, would directly hurt the urban economy. Finally, an increase in student numbers furthermore does little to compensate for the decrease in family households when it comes to demand for schools and other children-oriented facilities. Cities therefore also develop policies to retain students. Nevertheless, our research shows higher education institutions can play an important role in mitigating population decline.

➤ **The function of higher-education institutions in a city is not a given, but a product of state policies**

Crucially, the opening of the Maastricht University was emblematic for the era of national spatial redistribution strategies during the 1960s and 1970s. Up to today, it has been crucial in preventing population decline and boosting the local economy. An interesting counter case is the nearby city of Heerlen, which lacking a university has suffered more from the consequences of de-industrialization. Recent policy focus, however, has shifted from spatial redistribution towards spatial policies that privilege winner regions – hoping for agglomeration economies and trickle down effects. This leads to increasing spatial disparities.

WOULD UNIVERSITY DELIVER THE SAME BENEFITS WHATEVER THE FUTURE BRINGS?

Through stakeholder workshops we tested whether the necessary conditions are “future proof”, using different future scenarios offered by the Urban Future methodology (see Lombardi *et. al.*, 2012). Four **plausible but distinct** future scenarios were included into our analysis (Lombardi *et. al.*, 2012: Table 2). A summary of these four global **urban future scenarios** is as follows:

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 <i>New Sustainability Paradigm</i> 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
Settlement pattern 	Description <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.	Philosophy 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
Settlement pattern 	Description <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.	Philosophy 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
Settlement pattern 	Description 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.	Philosophy 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.

More specifically, during this project, we have tested the likely future performance of each urban 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. Table below summarizes to what extent

stakeholders believed the necessary conditions to be in place in these four different futures. The implications of the results are as follows: the model of university growth requires some key conditions. It is argued that these conditions are most likely to be in place in futures resembling the market forces or policy reform scenarios. That is, in such future scenarios university growth seems most realistic. This is perhaps unsurprising: these models best capture the current situation in which university growth is also already an important goal. When we move to the more extreme scenarios of new sustainability paradigm (where localism and sustainability become more important and the logics of growth and competition dissipate) and fortress world (where a small elite retrenches and consolidates power) we see that future university growth becomes less realistic, either impossible or at odds with newly found ideals. **These insecurities raise questions about the university growth model, as it seems only possible within a system resembling the current one.** Moreover, even within the current system growth in student numbers has stalled.

Urban Futures Method applied to developing higher education in Maastricht to promote economic vitality				
Necessary Conditions	New Sustainability Paradigm	Policy Reform	Marker Forces	Fortress World
Physical infrastructure (buildings, student accommodation etc.)	Further growth is not actively pursued, but buildings will be provided	Policies will welcome education as engine of social mobility	Private parties will provide real estate for profit motives	Student enrolment will be restricted to elites
State policies (student bursary etc.)	Access to affordable education central element	State will actively accommodate student growth, e.g. through financial incentives	State will retrench, leaving the market to determine access to education	Student enrolment will be restricted to elites
Internationalisation	Central in this scenario is localization, which will likely reduce the number of international students	Internationalization may be a central element of state policies to foster economic growth. Assumption is that removing borders enhances individual liberties	Markets want the erosion of border to facilitate the free movement of populations and capital	This scenario assumes retrenchment and increasing borders, rather than their erosion
Branding	Growing market shares (a zero sum game) is no consideration anymore	Branding may be pursued as long as it fits within a framework of state redistribution	Marketing and branding are central elements of market competition	Retrenchment, not exposure to the outside world is central
Local qualities	A high quality living environment is central, and may especially fit the preferences of highly-educated knowledge workers	Strong public interventions can cater for housing, liveable neighbourhoods and high quality education for all.	Market parties have an interest in making the city attractive if this fits a growth model – but risk of inequalities (attractive for whom?)	Fortress world means high quality environments exist but only for small elite.

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

REFERENCES

- Breznitz S M (2014). *The Fountain of Knowledge: The Role of Universities in Economic Development*. Stanford, California: Stanford University Press.
- Hochstenbach, C (2019). The age dimensions of urban socio-spatial change. *Population, Space and Place*. 25:e2220, <https://doi.org/10.1002/psp.2220>
- Lombardi DR, Leach JM, Rogers CDF et. al. (2012). *Designing Resilient Cities: a Guide to Good Practice*. Bracknell, UK: IHS BRE Press.
- Moos M, Revington N, Wilkin T & Andrey J (2019). The knowledge economy city: Gentrification, studentification and youthification, and their connections to universities. *Urban Studies*, 56(6): 1075-1092.

CITE AS: Hochstenbach, Cody, Bontje, Marco & Mykhnenko, Vlad (2020). 3S RECIPE – Smart Shrinkage Solutions: Maastricht (NL) Policy Brief #1. Resilient Urban Economy & Municipal Finance. University of Amsterdam. Zenodo. [DOI: 10.5281/zenodo.3842036](https://doi.org/10.5281/zenodo.3842036).