

Why size really doesn't matter: From megacity myths to place-sensitive prosperity

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by

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Abstract

This paper offers a critical review and synthesis of the literature on the relationship between urban agglomeration, density, and regional prosperity. Agglomeration and density have long been portrayed as the core drivers of urban and regional success. Yet the evidence remains stubbornly inconclusive: some large cities flourish while others stagnate, and many smaller cities quietly outperform their sprawling counterparts. If density were destiny, the world's largest cities would consistently lead in wealth and opportunity. However, they frequently do not. The paper argues that genuine sources of growth lie instead in institutional quality, the resilience of local ecosystems, and the strength of inter-territorial linkages. Conventional models have mostly dwelt on a narrow set of negative externalities —congestion, high rents, pollution— while overlooking deeper structural costs: territorial inequalities that erode trust, trigger discontent, and consign whole cities and regions to prolonged decline. As political and social fractures within countries widen, it is increasingly evident that prosperity hinges not on agglomeration itself but on the conditions of cities and their relationships with their hinterlands. The way forward requires a shift in policy and analysis towards place-sensitive strategies and robust institutions capable of promoting inclusive prosperity across all cities and regions, rather than privileging a select few.

Keywords: agglomeration economies, urban density, territorial inequality, institutions, regional development, geography of discontent, ecosystems, place-based policies

JEL Codes: R11, R12, O18, O43, P25

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1. Introduction: The promise and risks of urban concentration

For the better part of three decades, a powerful orthodoxy has gripped thinking about urban and regional economic development. Many academics and policymakers have placed their bets on a proposition as simple as it is seductive: bigger cities mean better outcomes. This intellectual wager, championed by the new economic geography (e.g., Krugman, 1991; Fujita & Krugman, 2004) and urban economics (e.g., Glaeser et al., 1992; Glaeser, 2011), has shaped development strategies in recent times from Washington and Brussels to Beijing and Brasilia.

The story's appeal is obvious. Concentrate economic activity in vast urban agglomerations, so the theory runs, and prosperity will surely follow. Pooled labour markets will match workers and jobs (Duranton & Puga, 2004); knowledge will spill over, brightening firms across the city and the country (Puga, 2010); and density itself will generate innovation on a national scale (Combes et al., 2012). The negative externalities of this model—traffic jams, punishing rents, pollution—will be decisively outweighed by the positive ones.

Yet, as with all orthodoxy, the real world is not as neat. The cracks in agglomeration's foundations are becoming hard to ignore. Consider the evidence. If density and agglomeration were golden tickets to prosperity, Lagos would now rival London for economic dynamism, Cairo would compete with Copenhagen for innovation, and Kinshasa would be bracketed with Zurich in financial circles. Reality, however, diverges sharply. Bloom et al. (2008: 772) are unequivocal: "there is no empirical evidence of a causal effect of the level of urban population share on the pace of economic growth." Although this finding ought to have prompted serious reflection within the urban development community, faith in urban concentration instead persists with near-religious fervour.

The gap between theory and reality grows wider on closer inspection. While some large cities in high-income countries enjoy growth and productivity advantages, in lower-income nations the relationship often turns negative. Frick & Rodríguez-Pose (2018), in a cross-national analysis of 113 countries, show that it is smaller agglomerations—those of up to three million inhabitants—that are more conducive to growth, with the advantages of scale often tapering off beyond that threshold. Europe offers a similar reality check. Since the early 2000s, economic dynamism in the EU15 has shifted away from the top of the urban hierarchy. Capital cities may continue to attract resources and headlines, yet many intermediate regions have matched or even outperformed them in driving growth (Dijkstra et al., 2013). Not what one might expect if size and density held the secret to prosperity.

Three core assumptions underpin this agglomeration-centric worldview:

- First, large urban agglomerations grow faster and more sustainably than their smaller peers.
- Second, the benefits of this growth inevitably trickle out from the urban core into the hinterlands, through knowledge spillovers and economic linkages.
- Third, labour mobility acts as a great leveller, with workers migrating to where they are most productive, thus spreading agglomeration's gains across society.

However, all of them are increasingly precarious.

Each of these pillars carries with it important tensions. The first overlooks the many cases of urban decline, from the long-term reversals of Detroit and Glasgow to the more gradual stagnation affecting numerous second-tier cities across the industrialised world. The second rests on the expectation that spread effects will consistently outweigh backwash effects, yet growing evidence suggests that thriving agglomerations can just as often draw resources, talent, and opportunities away from their peripheries (Paci et al., 2022; Deng et al., 2022). The third relies on an optimistic view of mobility, underestimating the deep-rooted factors that bind most people to place —family, culture, identity— and the practical difficulties of affording life in increasingly expensive urban cores (Rodríguez-Pose, 2018).

But perhaps the most glaring blind spot in the agglomeration narrative is its failure to grapple with the political economy of spatial inequality. New economic geography and urban economics have proved adept at tallying the familiar negatives —congestion, pollution, rents that price out the skilled— but remain curiously mute about the most consequential negative externality of all: the geography of discontent arising when prosperity clusters in a few favoured locations while most other territories are left behind (McCann, 2020; Rodríguez-Pose et al., 2023).

This discontent is not some regrettable side effect of urban success. It is a direct challenge to the viability of the prevailing development model. When regions perceive themselves as forgotten, when communities watch their young talent drain away never to return, when local economies wither as national statistics toast the success of superstar cities, the results are not just economic inefficiency, but social and political turmoil. The rise of populist and anti-system movements around the world can be traced, in no small part, to the inequalities that the agglomeration model has not only failed to address but has quietly deepened.

What follows is an attempt to recalibrate our understanding of what drives regional prosperity in the 21st century. Drawing on evidence from around the globe, this paper argues that the obsession with city size and urban density has obscured more fundamental determinants of economic success. *It is not how big your city is that matters, but what you put in it:* the quality of institutions, the strength of local

ecosystems, the connections between places, and the capacity to ensure that growth benefits the many rather than the few. As we shall see, the places that thrive are not necessarily the largest or the densest, but those that create the right conditions for economic activity to flourish while maintaining social cohesion and political stability.

The remainder of the paper is organised as follows. Section 2 examines how the twin theories of new economic geography and urban economics captured the development imagination and considers the assumptions underpinning their policy prescriptions. Section 3 confronts these theories with the empirical evidence, focusing in turn on the myths of monotonic urban success, the failure of spillovers to reach beyond city boundaries, and the immobility of labour that confounds the models. Section 4 turns to the hidden costs of agglomeration-centric strategies, with particular attention to the geography of discontent. Section 5 sketches the outlines of an alternative paradigm centred on ecosystems, institutions, and inclusive prosperity. Section 6 concludes.

2. Theoretical seduction: How agglomeration captured the development imagination

The 1990s marked a watershed in economic thinking about space and prosperity. Suddenly, the twin doctrines of new economic geography (NEG) and urban economics arrived with the zeal of revolutionaries, promising a theory explaining why economic activity clusters in some places and deserts others. Krugman, Fujita, Thisse, Venables, and later Glaeser, among others, became the architects of a fresh intellectual settlement, supplying the sort of robust theorisation that had long eluded regional economists.

The appeal was immediate. Krugman's (1991) core-periphery model, with its persuasive explanation of "how a country can endogenously become differentiated into an industrialized 'core' and an agricultural 'periphery'" (p. 483), seemed to square perfectly with observed reality. The story ran like this: cities emerge because of the tug-of-war between centripetal forces (pulling economic activity together) and centrifugal forces (pushing it apart). Reduce transport costs enough and the centripetal wins out, leading to urban concentration.

The mechanisms were clear and enticing. Firms cluster to enjoy linkages—reduced costs, greater efficiency—by staying close to suppliers and customers (Fujita & Thisse, 1996). Workers, lured by higher wages and greater opportunities, would gravitate to these clusters. Most seductively, knowledge would flow effortlessly between firms and employees in proximity, sparking the innovations on which economic growth depends (Duranton & Puga, 2004; Storper & Venables, 2004). Agglomeration was simply "the outcome of a trade-off between various forms of increasing returns and different types of mobility costs" (Ottaviano & Thisse, 2004: 2576). Density, for its part, delivered significant

productivity gains (Ciccone & Hall, 1996; Rosenthal & Strange, 2004; Koster & Thisse, 2024: 58), yielding cities where "the aggregate production function exhibits increasing returns to the city's population" (Abdel Rahman & Fujita, 1990: 169). Optimal city size became a matter of calculation, not speculation (p. 174).

The case for the benefits of density also received considerable attention. Urban economists, with Edward Glaeser at the vanguard, buttressed this theoretical edifice with empirical claims for the supremacy of large cities. "Technological changes and improved electronic communications seem, paradoxically, to be making cities more, rather than less, important" (Glaeser, 2011: 592) and "firms and workers are much more productive in large and dense urban environments" (Puga, 2010: 203), so the evidence went. Wages in big cities, even after accounting for the price of a cramped flat, reliably outpaced those in humbler towns. And "while there are sizeable benefits and costs associated with increases in density, the former exceed the latter for a typical large city (Ahlfeldt & Pietrostefani, 2019: 106). Cities, in this telling, became no longer just centres of production, but the great crucibles of innovation.

The theory was corroborated empirically. Ahlfeldt et al. (2015: 2185), exploiting Berlin's division and reunification as a natural experiment, found "substantial differences in productivity and amenities across locations within cities that are endogenous to the surrounding concentration of economic activity." Their study, however, also revealed an important qualification: both production and residential externalities proved "highly localized" and "decay rapidly with travel times" (p. 2130). This spatial decay has significant implications, for as cities expand geographically, increasing travel times attenuate the very agglomeration benefits that justify their growth.

Policy, inevitably, followed theory. The World Bank's 2009 World Development Report enshrined the idea: abandon outdated policies favouring lagging areas and embrace urban concentration as the high road to prosperity. "Leading areas fuel agglomeration economies, becoming centres for innovation and growth" (World Bank, 2009: 85). The recipe was to channel resources to major cities and put trust in two "automatic stabilisers" to spread the benefits across the land.

The first stabiliser? Knowledge spillovers, or the notion that innovations radiate outwards, lifting the rest of the country. The second? Migration, with workers voting with their feet, abandoning declining regions for thriving centres until wages reach equilibrium. In this view, investment in cities is not a zero-sum game but a rising tide lifting all boats. Critics at the time noted that the Report's approach amounted to a form of "geographical trickle-down" that risked exacerbating rather than ameliorating spatial inequalities (Bryceson et al., 2009; Rigg et al., 2009).

Yet even as this intellectual structure was being erected, cracks were there for anyone willing to notice. The models rest on heroic assumptions: Krugman's (1991: 488–490) own

framework assumes perfect labour mobility and zero moving costs (see also Abdel Rahman & Fujita, 1990; Fajgelbaum & Gaubert, 2025). These are absent conditions in the real world. Urban economics, for its part, glossed over the complexity within cities, often treating them as homogeneous entities, not the fractal ecosystems of advantage and disadvantage they are.

More awkwardly, the theories tripped over a series of inconvenient facts. Why did some big cities thrive while others withered? Why was the productivity bonus of size so variable? Koster and Thisse (2024) acknowledged that, while agglomeration can deliver productivity gains, "the wage-density elasticity is about twice as high for non-high income countries" (p. 62). This is hardly a universal law. Meanwhile, Duranton & Puga (2004) pointed out that real-life cities often grow well beyond their "efficient" size, hinting at market failures left out of the original blueprint.

Notably, the faith in agglomeration's magic missed a major detail: where exactly is innovation happening in the modern economy? Silicon Valley —shrine to all things digital— is not a dense urban core, but a sprawling patchwork of suburbia. Route 128, the cradle of Boston's technology industry, is equally dispersed. Taiwan's Hsinchu Science Park, home to TSMC and the heart of the global semiconductor industry, sits in a metropolitan area of barely two million (Saxenian & Hsu, 2001). These are cases of "productive sprawl" (Glaeser & Kahn, 2004), where innovation thrives in spite of — perhaps even thanks to— a lack of urban density.

The models also struggled with a stubborn reality: spatial inequalities refuse to fade. If knowledge spillovers and migration were truly the equilibrating forces theory claims, why do regional disparities persist or even widen in so many countries? Convergence proceeds (when it does) at a snail's pace, with lagging regions often waiting generations to catch up (Henderson et al., 2001). In practice, the stabilisers are anything but automatic.

A further, and deeply problematic, omission was the role of institutions. The models treated all cities as playing by the same rules. Yet, as Turok & McGranahan (2013: 478) point out, "the extent to which this potential is realized is likely to depend on how conducive the institutional setting is and how appropriate the investments in public infrastructure are." A badly governed megacity may squander its potential, while a smaller, nimbler city or region can easily punch above its weight. The Basque Country, with just 2.1 million inhabitants, raised its GDP per capita from 70.2 percent of the EU-15 average in 1980 to 97.5 percent by 2019, while simultaneously ranking among the regions with the lowest poverty rates in Europe (Aranguren et al., 2021). This transformation owes nothing to metropolitan scale and everything to institutional quality: fiscal autonomy, skills, and sustained public-private coordination.

If the models' foundations had wobbled before, the 2008 financial crisis exposed a structural fault. Capital cities, far from serving as resilient engines of national recovery, were often "central to the problems faced by national economies in Europe, and appear to have exacerbated the adverse effects of the crisis" (Dijkstra et al., 2015: 949). Urban regions shrank faster than intermediate or rural ones, casting doubt on the wisdom of concentrating economic resources.

In retrospect, the theoretical revolution of the 1990s overreached. Yes, agglomeration yields benefits; yes, knowledge spillovers are real; yes, cities matter for innovation. But, as so often with revolutions, the rhetoric ran ahead of the evidence, and the complexity of reality doggedly refused to fit the model.

As Puga (2010: 203) concluded, "despite recent progress, more work is needed to distinguish empirically between alternative causes" of urban advantage. The much-touted mechanisms —sharing, matching, learning— operate differently from place to place, shaped by institutions, infrastructure, and industrial structure in ways the models never really anticipated.

3. The reality check: When evidence meets theory

This section examines the empirical record on three fronts: the supposed dynamism of large cities, the reach of knowledge spillovers, and the equilibrating role of labour mobility. In each case, the evidence suggests that the theoretical promises have been oversold.

3.1 Urban dynamism: The myth of monotonic success

New economic geography and urban economics hold that big cities are dynamos whose sheer productive capacity powers entire economies forward. Yet the empirical evidence tells a far more nuanced story.

Start with the oft-repeated claim that large cities are inherently more productive. On the face of it, there is support: establishments in denser areas were "about 9.7 percent more productive than in less dense areas" (Combes et al., 2012: 2584). But averages deceive. The meta-analysis by Melo et al. (2009), drawing on 729 studies, found elasticities that ranged from negligible to over 0.10. Hardly the relationship one would expect if size guaranteed progress. More tellingly, Donovan et al. (2024), reviewing 6,684 estimates from 294 papers across 54 countries, found agglomeration elasticities clustered in the modest 0.015 to 0.04 range. Significant, perhaps, but not transformative. The synthesis by Ahlfeldt and Pietrostefani (2019) reinforces this scepticism: "studies that are more frequently cited, or use more rigorous methods, find less positive density effects" (p. 94).

The estimates, they caution, "often capture composition effects." Hence, what at first appears as a density advantage may simply reflect the sorting of more productive workers into cities.

Broadly, the supposed link between city size and economic performance has come under increasing scrutiny. Turok & McGranahan (2013: 478) are blunt: "there is no simple linear relationship between urbanization and economic growth, or between city size and productivity." This scepticism only deepens when one looks at specific regions. Europe, with its storied urban history and robust infrastructure, should be agglomeration's showcase. Yet since 2000, growth in the EU15 has decisively shifted away from its largest cities (Dijkstra et al., 2013). "Urban to rural shifts, and also in many cases shifts from large urban to smaller urban areas" are now the rule, not the exception (Dijkstra et al., 2013: 345). The supposedly inevitable triumph of the metropolis is, in fact, rather subdued.

The question of which cities drive national growth also gives pause for thought. Garcilazo and Oliveira Martins (2015) found that, while a handful of very large urban regions made outsized contributions to OECD growth in absolute terms, the majority (73%) came from the combined effort of smaller regions outside the top tier. As they note, "the role of the large agglomerations is unquestionable, but the cumulated power of many smaller regions cannot be ignored" (p. 212).

The experience of polycentric regions offers further food for thought. The Netherlands' Randstad —comprising Amsterdam, Rotterdam, The Hague, and Utrecht with a combined population of some seven million— functions not as a single metropolis but as a network of complementary cities, each specialising in distinct functions: finance in Amsterdam, logistics in Rotterdam, governance in The Hague, and research in Utrecht (Kloosterman & Musterd, 2001). This model of distributed urban prosperity contrasts sharply with the monocentric assumptions of agglomeration theory. As the Randstad's economic performance suggests, collections of medium-sized cities, properly connected, can compete effectively with giant capitals. Network externalities can complement rather than substitute for agglomeration externalities, with polycentric urban regions particularly benefiting from such network effects (Fratesi et al., 2025b).

Lower-income settings, meanwhile, present perhaps the starkest challenge to the "bigger is better" narrative (Rodríguez-Pose & Frick, 2016). Shaban et al. (2024: 1487) have cast considerable doubt about urbanisation-led growth, showing that the supposed growth effect of urbanisation is far from prevalent in low- and lower-middle-income countries. Urbanisation, they argue, may be "more of an indicator rather than a driving force of economic development" (Shaban et al., 2024: 1469). The critical distinction is between "production cities" born of industrialisation and "consumption cities" that bloat on resource rents (Gollin et al., 2016). The latter, common in much of Africa and Latin America, see urbanisation without productivity gains. Many "cities in resource-exporting countries are [...] 'consumption cities', with a larger fraction of workers in non-tradable

services" (Gollin et al., 2016: 37), lacking the industrial backbone that powered past urban prosperity.

This "urbanisation without growth" sits awkwardly with the predictions of agglomeration theory. Jedwab and Vollrath (2015) show that the historical correlation between city size and living standards, which stood at 0.6 in the pre-1910 period, has dropped to just 0.28 by 2010. "The largest mega-cities today are thus twice less likely to be the richest cities than in the past," they observe (p. 12).

What of resilience (or the capacity of cities to weather economic shocks)? Here, too, size does not always deliver. Martin and Gardiner (2019), covering 85 British cities over four recessions, report that "the regressions do not lend any firm statistical support to the notion that bigger cities should be more resilient to economic shocks" (p. 1819). In fact, density is often negatively associated with resilience. Italian evidence further shows that the industrial districts of the Third Italy have at times displayed remarkable adaptability during economic downturns, their flexible specialisation and embedded social capital providing buffers that large cities often lacked (Pyke et al., 1990; Becattini, 2002).

Even in cities that are superficially successful, the spoils are not evenly shared. Connor et al. (2025) find that while larger, denser US urban areas have higher average incomes, they also come with much lower intergenerational mobility. "A one standard deviation increase in the natural log of population density is associated with almost a half standard deviation reduction in intergenerational mobility" (Connor et al., 2025: 6). Success for some comes at a high cost for others.

The evidence on innovation, supposedly agglomeration's trump card, is no more reassuring. Pindado et al. (2023: 1) report an inverted U-shaped relationship between agglomeration and entrepreneurial innovativeness, with "both insufficient and excessive agglomeration [...] detrimental to entrepreneurial innovativeness" (p. 1). There is, it seems, an optimum size beyond which further growth becomes counterproductive.

Finally, time delivers its own verdict. City fortunes are not set in stone. As Glaeser (2022: 14) himself indicate, "out of the 10 largest American cities in 1950, eight of them have less population today." And London went through a deep process of decline which lasted the best of six decades, before staging a recovery from the late 1990s (Martin, 2013). Barcelona, which was economically stronger than Madrid four decades ago, has been unable to keep pace, a reversal attributable not to any inherent disadvantage of scale but to institutional and governance factors (Rodríguez-Pose & Hardy, 2021).

3.2 The spillover conundrum: When rising tides fail to lift all boats

The promise that prosperity would naturally seep from urban cores to the periphery has proven difficult to demonstrate in practice. Much like trickle-down economics, the notion

of spread effects offers —on paper, at least— a convenient justification for the concentration of resources. In reality, the evidence paints a far less generous picture.

According to the prevailing models, knowledge and productivity gains are supposed to radiate outward, diffusing the benefits of agglomeration to the hinterlands. Yet, time and again, empirical studies find these spillovers to be highly localised and with strong distance-decay effects (Rodríguez-Pose & Crescenzi, 2008; Sonn & Storper, 2008; Paci et al., 2014; Deng et al., 2022). Proximity plays a key role in determining spillover intensity (Fratesi et al., 2025a) and the geographical reach of spillovers is remarkably short. Ahlfeldt et al. (2015) show that in Berlin agglomeration externalities decay rapidly outside the city. And in the European case Bosker (2007: 100) finds that although some inter-regional spillovers exist, they are dwarfed by the negative effects of concentration within regions. Knowledge may cross hallways more easily than oceans, but it also struggles to cross county and regional lines (Glaeser et al., 1992). The implication is that pouring investment into a nation's largest city does little for places even modestly further afield.

The problem deepens when one considers the evidence that backwash effects —where successful cities siphon off resources— often overpower any positive spread. Instead of dispersing prosperity, thriving agglomerations can actively deplete surrounding regions. Growth poles often "drain the surrounding areas" of labour and capital, "restricting growth elsewhere" (McCann and van Oort, 2019: 10). The magnetic pull of successful cities can become a vicious circle: their very success attracts more talent and investment from the periphery, further widening the gulf.

China's high-speed rail experiment is a cautionary tale. Faber (2014: 1068) reports that "large-scale inter-regional transport infrastructure can lead to a reduction in industrial and total output growth among connected peripheral regions relative to non-connected ones, rather than diffusing production from metropolitan regions to the periphery." Improved links, instead of sharing the spoils, allowed core cities in China to extend their reach, extracting resources more efficiently from their hinterlands, and cementing the dominance of backwash over spread.

The European experience is especially damning for the idea of automatic spread. Decades of transport investment designed to connect lagging regions to leaders have failed to close the gap. In the UK, London's gravitational pull appears to bleed rather than nourish its neighbours: the pattern of recoverability "consistently declines with distance from London" (Martin & Gardiner, 2019: 1812), while most other large cities underperform (McCann, 2020, 263). In the US, business relocation from cities to rural areas is highly selective, favouring adjacent or higher-amenity counties; "Over 75% of the movers relocated in rural counties that are adjacent[...]to urban counties" (Rupasingha & Marré, 2020: 132). Persistent inequalities suggest that spillovers, far from being a cure-all, are no match for the centripetal forces of agglomeration (Gardiner et al., 2011). The first automatic stabiliser, it seems, is well and truly broken.

3.3 The migration mirage: Why workers don't follow the models

The assumption of perfect labour mobility is another pillar of agglomeration theory that has proven more divorced from reality than its proponents would care to admit. The models assumed workers would flow seamlessly to high-wage cities, ironing out spatial disparities in opportunity. This mechanism is essential as, without it, prosperity would remain stubbornly concentrated, and permanent inequalities would persist.

Yet the real world is far more unruly. Migration, far from acting as a fluid, balancing force, has become increasingly sticky. Internal migration in the United States, for example, "has sharply declined" since around 1980 (Kemeny & Storper, 2024: 4). Nor is this simply an American story; similar trends are found across the industrialised world. The great migrations that once fuelled industrialisation have, in many cases, slowed to a trickle.

When migration does occur, it is "highly spatially selective by level of education" (Kemeny & Storper, 2024: 4). It is the highly skilled who mostly follow economic opportunity, and they are a small fraction of the whole. For the majority, strong bonds—family, place attachment, and financial constraints—constitute formidable barriers to mobility.

Worse still, the costs of migration have soared. Housing costs in the most successful cities have escalated to heights that put relocation out of reach for many. Increasingly, lower-skilled workers are priced out of cores (Ganau & Rodríguez-Pose, 2022: 1283), even as the most qualified benefit from urban concentration. The very success of agglomerations, in other words, locks out much of the population.

Even when workers do manage to move, the outcomes are uneven. Children from lower-income households are more likely to remain "stuck in place" in dense urban areas (Connor et al., 2025: 9). For those who do escape, the apparent gains are often driven by "the low-income attainment of individuals who stay in their home areas" (pp. 8). Migration here becomes less a dash for opportunity, more an exit from failure.

The assumption that individuals behave as perfectly rational economic agents, maximising income regardless of ties to place or culture, has always been optimistic. Brexit areas in the UK were "the realm of the 'immobile'," while "more affordable housing in London is not going to suddenly make all people from Boston (Lincolnshire) more employable and move in search of greater opportunities" (Rodríguez-Pose, 2018: 201). The deep roots of identity, relationship, and habit run far deeper than economic models are equipped to recognise.

A further twist in the migration puzzle comes from the "urban push": in many lower-income countries, city growth is driven not by opportunity but by high fertility rates. This implies that "urbanization *per se* may not necessarily be conducive to further economic growth, as urban congestion effects might limit the benefits from agglomeration" (Jedwab

et al., 2017: 15). In these places, cities grow not as a result of income growth, but due to a shift in demographic behaviour, where cities swell through natural increase rather than productivity-driven migration. In these contexts, the presumed link between urbanisation and prosperity collapses.

Layered onto this are persistent inequalities of race, gender, and ethnic and caste origin. In many cases, greater density means wider wage gaps. In the United States, a 100-person per square mile increase in density is associated with a 32.9 cents greater Black-White wage gap, and a 27.5 cents greater female-male gap (Buchholz, 2025). The opportunities of city life, it turns out, are not distributed equally.

The consequences are profound. If migration fails to smooth the geography of opportunity, those unable or unwilling to move are left facing permanent disadvantage. The "left behind" are not those who made poor choices, but those whose choices have narrowed to almost nothing. As mobility stalls and spatial sorting by education intensifies, the geography of opportunity hardens into a geography of inequality.

4. The hidden costs: Negative externalities and the geography of discontent

Economic analysis of cities has long catalogued a set of familiar negative externalities — congestion, pollution, and high land rents— often considered unfortunate but manageable trade-offs. Yet this narrow accounting masks externalities of a different order; costs with the power not just to dent economic efficiency, but to unravel the social and political fabric itself.

Chief among these neglected costs is the rise of territorial inequality. Unlike congestion—which mainly afflicts those within successful agglomerations and rises with population (Duranton & Puga, 2000: 540)—territorial inequality cleaves a gulf between thriving urban cores and struggling surrounding and more distant areas, straining the social contract. "While high land rents, congestion and pollution can certainly be significant negative externalities, the real cost so far has not come from them, but from an entirely unexpected source: social and economic [...] distress in many non-agglomerated areas" (Rodríguez-Pose, 2018: 200).

The numbers are hard to ignore. The UK, for instance, has become "one of the most regionally unbalanced countries in the industrialized world" (McCann, 2020: 256), with regional productivity gaps more typical of lower-income economies. Two-thirds of its large cities lag behind the national average, their productivity growth having "almost completely stalled since the 2008 crisis" (p. 263).

It is a pattern repeated across the industrialised world. In the United States, as a handful of superstar cities raced ahead, "many small and medium-sized city-regions that were

once connected through subsidiary networks with leading global centers [...] have become disconnected from these global centers over time" (Bathelt et al., 2024: 363). The geography of prosperity has become ever more concentrated, leaving vast territories behind.

These territorial inequalities have political consequences. Rodríguez-Pose (2018) has described this as the "revenge of the places that don't matter": a backlash reshaping political landscapes. Brexit, the election of Donald Trump, the rise of populist parties across Europe, political stalemates in Thailand, or the ascent of left-wing populism — and their subsequent right-wing drift— in Latin America can all be traced, at least in part, to resentment in regions that feel discarded by a system that privileges the few. In both Europe and the US, economic decline coupled with a higher share of immigrants is a powerful predictor of populism (Rodríguez-Pose et al., 2023: 953). Even within mainstream economics, there is recognition that place-based policies involve important trade-offs, since they seek to shift investments and jobs from the most productive areas towards the least productive ones (Moretti, 2024) —a framing that itself reveals how deeply the assumption of agglomeration-as-efficiency has penetrated policy thinking. Indeed, regional policy now appears to be entering a new phase characterised by extended trade-offs, where policymakers must make explicit choices between conflicting objectives such as efficiency and spatial equity (Fratesi, 2025).

The concentration of prosperity in select cores has deepened not only economic but also social and cultural divides. These are not just gaps in income, but in life chances, perspectives, and political outlooks. The "geography of discontent" is not an accidental side effect; it is the direct outcome of a model that accumulates opportunity in ever-fewer places (Rodríguez-Pose et al., 2024).

The social consequences are equally serious. As density rises, so too does the erosion of social capital. In the US, density correlates with reduced community engagement and friendship networks, higher crime, family instability, and lower school completion rates (Connor et al., 2025: 8-9). The churn and anonymity that supposedly make cities productive also seem to unravel the social bonds that make communities resilient.

Institutional weakness in large agglomerations is yet another hidden cost. "People in cities need good government much more than people living in low-density areas" (Glaeser, 2011: 593), yet governance often lags far behind urban growth. In many lower-income countries, the mismatch is acute. Many African countries where the necessary urban infrastructure is not in place see concentration become growth-inhibiting (Turok & McGranahan, 2013). Evidence from Ethiopia suggests that urban expansion in rural areas and small towns may be more impactful for household welfare than similar expansion in major cities (Abay et al., 2023), challenging the assumption that development resources should flow to the largest agglomerations.

Then there are the "consumption cities" of lower-income economies (Gollin et al., 2016): cities that swell in population, but become, in practice, repositories of poverty, not engines of progress. Slum prevalence and poor welfare outcomes are their hallmark, in stark contrast to the industrial cities of the past. Chile's mining regions offer a parallel caution: despite generating over half of national mining output, the Antofagasta Region resembles "more an extractive enclave than a cluster" (Atienza et al., 2021), its wealth flowing to Santiago rather than supporting local development.

Environmental costs, meanwhile, are often understated. The carbon footprint of wealthy urbanites can rival or surpass the environmental savings of density. "Evidence mounts that the consumption-heavy lifestyles of these wealthy urban residents produce an amount of carbon pollution comparable with the carbon savings of the walkable and energy-efficient downtown landscapes they inhabit" (Angelo & Wachsmuth, 2020: 2213).

Perhaps most insidiously, the concentration of economic activity generates systemic vulnerabilities that become apparent in crisis. The COVID-19 pandemic laid bare how the very features that fuel productivity—density, face-to-face contact, global connectivity—also make cities fragile. When economic power is concentrated in a handful of places, it creates single points of failure that can ripple through entire economies. Research on pandemic resilience found that urban governance capacity mattered more than city size for tackling the crisis effectively (Ouyang et al., 2021). Yet another indication that institutional quality trumps scale.

In sum, "the real cost so far has not come" mainly from congestion or rents "but from [...] distress in many non-agglomerated areas" (Rodríguez Pose, 2018: 200). The political economy of agglomeration introduces additional, often invisible costs that standard models overlook. Economic concentration also becomes political concentration, enabling favoured regions to shape national policy. Henderson et al. (2001) put it plainly: "the national government can choose to favor one (or two) cities over others. Typically such cities are national capitals" (p. 94). This self-reinforcing cycle ensures political favour breeds economic advantage, while large swathes of territory with significant potential are neglected.

The human costs are perhaps the most profound, if least measured. The despair of declining regions manifests as discontent and protest (Bourdin & Torre, 2023), and even public health crises (Case & Deaton, 2020) directly linked to territorial inequality. The loss of meaning and identity that follows economic abandonment cannot be compensated by the theoretical prospect of migrating to a city often hundreds of kilometres away and/or where the social bonds for the newcomer are lacking. As Castells Quintana & Royuela (2014: 343) remind us, "increasing agglomeration is associated with lower growth when income distribution is particularly unequal," and such inequality weakens the social fabric on which agglomeration depends.

Failure to reckon with these hidden costs and with the fact that policy effectiveness "varies across different territorial contexts, among but also within countries" (Bachtrögl, Fratesi, & Perucca, 2020: 21) is more than an analytical lapse. It is a fundamental misunderstanding of what makes economic systems sustainable. A model that delivers prosperity to a select few by draining the rest, sacrificing cohesion for headline productivity, is simply not built to last. The externalities ignored are not minor irritants, but existential threats to the current spatial economic order.

Urban efficiency is a minor factor in regional disparities when set against the weight of human capital and infrastructure quality (Capello and Cerisola, 2020). Equalising city sizes, they argue, would reduce inequality by a mere 7%; institutional and human capital reforms could do much more. The implication is clear: the costs of concentration outweigh the benefits and new paths to prosperity, in which "trade-offs become inescapable" (Fratesi, 2025: 14), are urgently required.

5. Toward a new paradigm: Ecosystems, institutions, and inclusive prosperity

On balance, it seems that size and density do not matter nearly as much as proponents of new economic geography and urban economics would have us believe. If anything, the field stands at a crossroads, demanding a recalibration of how we approach urban and regional development. The path ahead means abandoning the comforting simplicity that bigger and denser cities automatically yield better outcomes for all and instead embracing a more nuanced understanding of what truly shapes territorial prosperity and dynamism.

This section outlines four pillars of an alternative approach: ecosystems over scale, institutions as the foundation of prosperity, connectivity that empowers rather than extracts, and the political economy of inclusion.

5.1 Ecosystems over scale

The first step in this rethink is to recognise that success is not a question of scale but of ecosystem. Singapore—a city-state of barely six million—outperforms megacities many times its size. Zurich, with just 1.5 million in its metropolitan area, stands as a global innovation hub. Helsinki, smaller still, is a centre for technology and design. Even Tallinn, with fewer than half a million inhabitants, consistently punches above its weight. What these places share is not brute size, but sophistication and complexity: each hosts a carefully nurtured ecosystem (Stam & van de Ven, 2021) that weaves together human capital, institutional quality, infrastructure, and industrial specialisation to create sustainable prosperity.

The evidence extends well beyond Northern Europe. Japan's Hamamatsu and Kyoto demonstrate how historical legacy and regional culture shape entrepreneurship even in new economic sectors, allowing smaller cities to maintain competitive advantages through distinct regional identities rather than scale (Aoyama, 2009). In Brazil, Campinas—with a metropolitan population of some three million—has emerged as a major technology hub, its success anchored by UNICAMP and a dense network of knowledge-intensive firms (Fischer et al., 2018). In Italy's Third Italy, the industrial districts of Emilia-Romagna, Veneto, and Tuscany, characterised by networks of small and medium-sized enterprises, flexible specialisation, and embedded social capital, have achieved prosperity through cooperation and trust rather than metropolitan concentration (Bagnasco, 1977; Brusco, 1982; Becattini, 2002).

This "ecosystems" approach moves us well beyond the mechanical view of cities as mere production functions: inputs go in, outputs come out. Instead, places must be understood as complex adaptive systems, where success is forged through the interaction of many moving parts. "Larger cities [...] can indeed be drivers of growth, but only if the context is favourable" (Frick & Rodríguez-Pose, 2018: 19). That context—the ecosystem—is what separates the thriving from the struggling, regardless of population size.

5.2 Institutions as foundation

Institutions are central here. The same density that underpins productivity in Copenhagen may only produce congestion and dysfunction in Cairo. The difference lies not in physical concentration, but in the institutional capacity to manage it. The negative externalities of cities "require competent governments to manage human waste and traffic" (Glaeser, 2011: 594). Without that competence, agglomeration quickly curdles into curse.

Institutional quality shapes everything from infrastructure and contract enforcement to trust among economic actors. McCann (2020: 257) found that the UK's "highly centralized, top-down, largely space-blind and sectorally dominated governance system is almost uniquely ill-equipped" to deal with regional disparities. By contrast, countries with more decentralised institutions frequently display more balanced spatial outcomes. Institutional architecture, then, is not an afterthought but a first-order determinant.

The experience of successful smaller cities only reinforces this point. They generally benefit from responsive local government, tight public-private links, and high social capital. Agile in adapting to change and more inclusive in spreading the benefits of growth, they can often outperform megacities on social and economic grounds (Rodríguez-Pose & Griffiths, 2021). Secondary towns typically deliver stronger poverty reduction than megacities, precisely because their growth is more inclusive

(Christiaensen & Kanbur, 2017). Put simply, "regions and countries that have more efficient institutions [...] are superior in both the generation and diffusion of knowledge" (McCann & van Oort, 2019: 14).

The Basque Country again illustrates this point. Its transformation from a declining industrial region to one of Europe's most prosperous territories was achieved not through metropolitan expansion but through institutional innovation: fiscal autonomy, cluster policies coordinated across public and private sectors, and sustained investment in vocational training and R&D (Aranguren et al., 2021; Gray, 2022).

The importance of institutions extends to policy effectiveness. Research has consistently shown that the impacts of regional policy interventions are highly differentiated, depending on regional characteristics including institutional capacity, human capital, and governance quality (Bachtrögl et al., 2020; Fratesi, 2023). The problem is that the endowment of these conditioning factors is, on average, lower in places more in need — those with lower GDP per capita or lower growth rates (Fratesi, 2025)— creating a fundamental challenge for regional development.

5.3 Connectivity that empowers

The second ingredient in this new paradigm is to see that prosperity hinges not only on what happens within successful places, but also on how they relate to those left behind. The prevailing model —concentrate resources and wait for spread effects that rarely materialise— is not only economically inefficient, but politically unsustainable. As Rodríguez-Pose (2018: 205) insists, "the solution needs to be place-sensitive [...] respond to the structural opportunities, potential and constraints of each place."

This means leaving behind the spatially-blind policies that have dominated development thinking. The World Bank's (2009) prescription to focus on "institutions, infrastructure, and interventions" was not wrong, but it was incomplete. Institutions must be spatially aware; infrastructure must connect lagging to leading regions in ways that enable development rather than mere extraction; and interventions must be tailored to context, not rolled out in one-size-fits-all fashion. "A space-neutral sectoral approach is regarded as inappropriate; what are apparently space-neutral policies will always have explicit spatial effects" (Barca et al., 2012: 139).

The concept of "borrowed size" offers a more promising framework than the binary choice between metropolitan concentration and peripheral isolation. Meijers and Burger (2017) show how smaller cities in proximity to larger centres can access agglomeration benefits without themselves achieving metropolitan scale, provided the connections are right and the institutional frameworks support complementarity rather than extraction. The Randstad's success, such as it is, depends precisely on this logic: its constituent cities

maintain distinct specialisations while functioning as an integrated labour and housing market (Kloosterman & Musterd, 2001). Similarly, research on Chinese urban agglomerations finds that polycentric distribution of population and economic activity positively affects regional economic resilience, with smaller cities "borrowing" functions from nearby metropolitan centres (Liang & Wang, 2025).

The evidence from many successful countries bears this out. Germany's strength comes not from a dominant Berlin or Munich, but from a network of small and medium-sized cities, each with its own specialisation. The *Mittelstand* and the hidden champions (Simon, 2009)—those mid-sized firms that anchor German manufacturing and, in some cases, lead the world in their sectors—are dotted across the country, bringing jobs and innovation to places agglomeration theory would dismiss as too small to matter.

5.4 The political economy of inclusion

Any serious attempt at reform must confront the political economy of spatial inequality directly. The present trajectory, with a handful of superstar cities capturing most of the gains and vast territories left to decline, is stoking a backlash that imperils democratic stability. Economic decline in left- and falling-behind places directly breeds discontent and fuels populism, triggering a vicious cycle in which political instability only deepens economic woes (Rodríguez-Pose et al., 2023; 2024) and *vice versa*.

Breaking this cycle will take more than economic fixes; it requires rebuilding the social contract between thriving and struggling places. All territories must have access to quality public services, and all citizens, regardless of address, must see genuine opportunities for progress. If not, the politics of resentment will ultimately consume the fruits of prosperity for everyone.

Encouragingly, successful spatial strategies offer a blueprint. South Korea's investment in secondary cities represents a deliberate attempt to counteract Seoul's primacy, though evidence on effectiveness remains mixed (Park et al., 2021; Kim et al., 2022). Denmark's focus on regional specialisation, Switzerland's federalism, each shows that innovation, national prosperity, and territorial balance are not mutually exclusive (Lee, 2024). These countries have managed to be globally competitive while maintaining internal balance, making the supposed trade-off between efficiency and equity look decidedly flimsy.

Yet it would be naïve to ignore that genuine trade-offs do exist and will increasingly need to be confronted explicitly. The evolution of regional policy thinking—from the post-war focus on disparities, through the competitiveness phase of the 1980s–2000s, to the more recent emphasis on untapped potentials—has brought us to a new juncture where multiple objectives compete for limited resources (Fratesi, 2025). The incoming "trade-

offs" phase will require transparent political choices between objectives, with advanced and less advanced regions needing to collaborate rather than compete (Fratesi, 2023, 2025).

6. Conclusion: Reimagining regional prosperity for the 21st century

We stand at a crossroads in the understanding of spatial economics and development. The once-unshakeable certainties —that bigger cities yield better outcomes, that agglomeration inevitably breeds prosperity, and that the benefits of growth will somehow trickle down to all— are now facing a wall of evidence difficult to surmount. The case for returning to first principles in urban and regional policy grows stronger by the day.

The message is that territorial prosperity depends less on how big or dense a city is, and far more on what conditions —what ecosystem— exist in each place, and how those prosperous spaces connect to the rest of the country. Lagos, Cairo, Kinshasa —despite their vast populations and density— remain mired in dysfunction. Meanwhile, Zurich, Helsinki, Campinas, and the Basque Country show that prosperity is possible at any scale, provided the right conditions are in place.

The real negative externalities in the current model —institutional weaknesses and the rise of territorial inequality— are not unfortunate side effects. They are fatal structural faults, trapping regions in self-perpetuating cycles of stagnation and neglect. When whole swathes of the map are left behind, when communities watch their futures shrink as near or distant metropolises prosper, when the geography of opportunity becomes a geography of despair, the effects reach well beyond GDP: trust is eroded, public goods decay, and the country's latent potential is simply wasted.

The politics of ignoring these realities is now plain to see. Brexit sums up the dynamic perfectly: it has hurt London, hurt the rest of the UK, and hurt the country as a whole. The surge in populism, the growing chasm between urban and rural, and the crumbling of social cohesion all represent the invoice for decades of spatially-blind policies that worshipped at the altar of agglomeration.

But the diagnosis, fortunately, also suggests a cure. Examples abound —from Germany's distributed manufacturing, to South Korea's investment in secondary cities, to the Basque Country's institutional transformation— that alternative models are not only possible, but successful (Lee, 2024). What unites these cases? Strong local institutions; smart public investment; human capital nurtured and living everywhere, not just in capitals; and governance structures that empower, not abandon, lagging- or falling-behind regions.

What matters, ultimately, is not size or density but what you put in your city. The places that thrive are those that manage to build the right ecosystem: where talent, capital,

infrastructure, and robust institutions come together to let ideas blossom and productivity flourish. Sometimes that happens in a metropolis, but just as often in an unlikely small city: Tallinn, with under half a million people, is a clear example of this; Taiwan's Hsinchu Science Park, sprawling and suburban, also outpaces many traditional urban cores in innovation. These are not triumphs of scale, but of the sophistication of the local environment.

The path forward requires a fundamental recalibration of spatial economic analysis and policy. This involves:

- a) Abandoning the fetish of city size and adopting place-sensitive strategies that build on local strengths (Iammarino et al., 2019), rather than chasing the mirage of Silicon Valley everywhere. As Dijkstra et al. (2013: 348) put it, "a policy just focusing on large urban areas [...] will likely miss its target in terms of maximizing aggregate growth."
- b) The focus must turn to institutional capacity in all territories, not just the metropolises. Governance, the rule of law, efficient public services, and social trust matter far more for development than sheer population numbers. Weak institutions can easily turn the supposed blessing of agglomeration into a curse.
- c) "There will be a need for the advanced and less advanced regions to collaborate" (Fratesi, 2025: 13). This implies creating real connections that do far more than extract talent and resources. This means infrastructure that serves, not just connects; value chains that include, not bypass; and governance that gives every territory a voice in its own development.
- d) We must recognise that human capital development cannot remain the preserve of a few. The evidence is overwhelming: equalising human capital across regions would do far more to reduce inequality than any adjustment in city size. Education, healthcare, and quality public services must reach every corner, not just remain confined to the main cities.
- e) Finally, the political economy of spatial inequality must be confronted head-on. Concentrating economic and political power in ever-fewer locations is a recipe for division and decline. Decentralisation —of both opportunity and authority— is essential for democratic legitimacy and social cohesion.

The stakes are high. This is not a choice between economic efficiency and territorial equity. That, as evidence shows, is a false dichotomy. The real choice is between a sustainable model that unlocks the potential of all places and an unsustainable one that breeds prosperity for the few while resentment festers among the many. Countries can

be globally competitive without megacities; innovation can thrive in unexpected places; and balance is both possible and necessary.

The COVID-19 pandemic and rise of remote work have opened the door to a reimagining of spatial economics. Productivity is no longer always tied to physical proximity. This shift, technological and social, points to a future where prosperity can be distributed, where talent contributes from anywhere, where quality of life, not just scale, becomes the measure of success, and where the knowledge economy's benefits reach far beyond the superstars.

In the end, the lesson is that size really doesn't matter. What matters is crafting the conditions where economic activity can flourish and people can prosper, wherever they happen to live. The cities and regions that will thrive are not necessarily the biggest, but the best prepared. Those that combine dynamism with cohesion, prosperity with identity, and success that does not come at the expense of others.

This recalibration is not just an academic imperative. It is a practical one. The dominating model has run its course, creating islands of wealth in oceans of decline, stoking political backlash, and leaving vast reserves of potential untapped. A new model —rooted in ecosystems, institutions, and inclusion— offers a future where prosperity is not the privilege of the favoured few, but the birthright of all who are willing to build for it.

For scholars and policymakers, it is high time to look beyond a creedal faith in agglomeration and adopt a more nuanced, evidence-based approach to territorial development. The future will favour not the largest conurbations but the most intelligent places: those that thrive on exchange, renewal and connection, and that grow by lifting others rather than by hoarding activity. In this reimagined map, every place counts. Our task is to ensure it does.

References

- Abdel-Rahman, H., & Fujita, M. (1990). Product variety, Marshallian externalities, and city sizes. *Journal of Regional Science*, 30(2), 165-183.
- Abay, K. A., Tiberti, L., Woldemichael, A., Mezgebo, T. G., & Endale, M. (2023). Can urbanisation improve household welfare? Evidence from Ethiopia. *Journal of African Economies*, 32(1), 81-109.
- Ahlfeldt, G. M., & Pietrostefani, E. (2019). The economic effects of density: A synthesis. *Journal of Urban Economics*, 111, 93-107.
- Ahlfeldt, G. M., Redding, S. J., Sturm, D. M., & Wolf, N. (2015). The economics of density: Evidence from the Berlin Wall. *Econometrica*, 83(6), 2127-2189.
- Angelo, H., & Wachsmuth, D. (2020). Why does everyone think cities can save the planet? *Urban Studies*, 57(11), 2201-2221.
- Aoyama, Y. (2009). Entrepreneurship and regional culture: The case of Hamamatsu and Kyoto, Japan. *Regional Studies*, 43(3), 495-512.
- Aranguren, M. J., Canto, P., Magro, E., Navarro, M., Wilson, J. R., & Valdaliso, J. M. (2021). Long-term regional strategy for inclusive competitiveness: The Basque Country case, 2008-2020. *Cuadernos Orkestra*, 05/2021.
- Atienza, M., Fleming-Muñoz, D., & Aroca, P. (2021). Territorial development and mining: Insights and challenges from the Chilean case. *Resources Policy*, 70, 101812.
- Bachtrögler, J., Fratesi, U., & Perucca, G. (2020). The influence of the local context on the implementation and impact of EU Cohesion Policy. *Regional Studies*, 54(1), 21-34.
- Bagnasco, A. (1977). *Tre Italie. La problematica territoriale dello sviluppo italiano*. Bologna: Il Mulino.
- Barca, F., McCann, P., & Rodríguez-Pose, A. (2012). The case for regional development intervention: Place-based versus place-neutral approaches. *Journal of Regional Science*, 52(1), 134-152.
- Bathelt, H., Buchholz, M., & Storper, M. (2024). The nature, causes, and consequences of inter-regional inequality. *Journal of Economic Geography*, 24(3), 353-374.
- Becattini, G. (2002). From Marshall's to the Italian 'Industrial Districts': A brief critical reconstruction. In A. Q. Curzio & M. Fortis (Eds.), *Complexity and industrial clusters* (pp. 83-106). Physica-Verlag.
- Bloom, D. E., Canning, D., & Fink, G. (2008). Urbanization and the wealth of nations. *Science*, 319(5864), 772-775.

- Bond-Smith, S. (2024). Combining agglomeration economies and endogenous growth without scale effects. *Spatial Economic Analysis*, 19(3), 287-308.
- Bosker, M. (2007). Growth, agglomeration and convergence: A space-time analysis for European regions. *Spatial Economic Analysis*, 2(1), 91-100.
- Bourdin, S., & Torre, A. (2023). Geography of contestation: A study on the Yellow Vest movement and the rise of populism in France. *Journal of Regional Science*, 63(1), 214-235.
- Brusco, S. (1982). The Emilian model: Productive decentralisation and social integration. *Cambridge Journal of Economics*, 6, 167-184.
- Bryceson, D. F., Gough, K. V., Rigg, J., & Agergaard, J. (2009). Critical commentary: The World Development Report 2009. *Urban Studies*, 46(4), 723-738.
- Buchholz, M. (2025). Does urbanization increase inequality? Race, gender, and the urban wage premium. *Journal of Urban Affairs*, 47(6), 1923-1941.
- Capello, R., & Cerisola, S. (2020). Concentrated versus diffused growth assets: Agglomeration economies and regional cohesion. *Growth and Change*, 51(4), 1440-1453.
- Case, A., & Deaton, A. (2020). *Deaths of despair and the future of capitalism*. Princeton University Press.
- Castells-Quintana, D., & Royuela, V. (2014). Agglomeration, inequality and economic growth. *The Annals of Regional Science*, 52(2), 343-366.
- Christiaensen, L., & Kanbur, R. (2017). Secondary towns and poverty reduction: Refocusing the urbanization agenda. *Annual Review of Resource Economics*, 9(1), 405-419.
- Ciccone, A., & Hall, R. E. (1996). Productivity and the density of economic activity. *American Economic Review*, 86(1), 54-70.
- Combes, P.-P., Duranton, G., Gobillon, L., Puga, D., & Roux, S. (2012). The productivity advantages of large cities: Distinguishing agglomeration from firm selection. *Econometrica*, 80(6), 2543-2594.
- Connor, D. S., Xie, S., Jang, J., Frazier, A. E., Kedron, P., Jain, G., Yu, Y., & Kemeny, T. (2025). Big cities fuel inequality within and across generations. *PNAS Nexus*, 4(2), pgae587.
- Deng, N., Feng, B., & Partridge, M. D. (2022). A blessing or curse: the spillover effects of city-county consolidation on local economies. *Regional Studies*, 56(9), 1571-1588.
- Dijkstra, L., Garcilazo, E., & McCann, P. (2013). The economic performance of European cities and city regions: Myths and realities. *European Planning Studies*, 21(3), 334-354.

- Dijkstra, L., Garcilazo, E., & McCann, P. (2015). The effects of the global financial crisis on European regions and cities. *Journal of Economic Geography*, 15(5), 935-949.
- Donovan, K., Lu, W., & Schoellman, T. (2024). The abundance of agglomeration elasticities. *Journal of Urban Economics*, 139, 103524.
- Duranton, G., & Puga, D. (2000). Diversity and specialisation in cities: Why, where and when does it matter? *Urban Studies*, 37(3), 533-555.
- Duranton, G., & Puga, D. (2004). Micro-foundations of urban agglomeration economies. In J. V. Henderson & J.-F. Thisse (Eds.), *Handbook of regional and urban economics* (Vol. 4, pp. 2063-2117). Elsevier.
- Faber, B. (2014). Trade integration, market size, and industrialization: Evidence from China's National Trunk Highway System. *Review of Economic Studies*, 81(3), 1046-1070.
- Fajgelbaum, P. D., & Gaubert, C. (2025). Optimal spatial policies. NBER Working Paper No. 33493. National Bureau of Economic Research.
- Fischer, B. B., Schaeffer, P. R., & Silveira, J. P. (2018). Universities' gravitational effects on the location of knowledge-intensive investments in Brazil. *Science and Public Policy*, 45(5), 692-707.
- Fratesi, U. (2023). *Regional policy: Theory and practice*. London: Routledge.
- Fratesi, U. (2025). The four waves of regional policy: towards an era of trade-offs? *Regional Studies*, 59(1), 2436538. <https://doi.org/10.1080/00343404.2024.2436538>
- Fratesi, U., Abreu, M., Bond-Smith, S., Corrado, L., Ditzen, J., Felsenstein, D., Fuerst, F., Ioramashvili, C., Kopczewska, K., Monastiriotis, V., Piras, G., Quatraro, F., Ravazzolo, F., Tranos, E., Tsiotas, D., & Yu, J. (2025a). Spillovers and small spatial scale analyses: contributions from spatial economics. *Spatial Economic Analysis*, 20(1), 1-7. <https://doi.org/10.1080/17421772.2025.2466304>
- Fratesi, U., Abreu, M., Bond-Smith, S., Corrado, L., Ditzen, J., Felsenstein, D., Fuerst, F., Ioramashvili, C., Kopczewska, K., Monastiriotis, V., Piras, G., Quatraro, F., Ravazzolo, F., Tranos, E., Tsiotas, D., & Yu, J. (2025b). The urban dimension in spatial development: contributions from spatial economics. *Spatial Economic Analysis*, 20(2), 169-174. <https://doi.org/10.1080/17421772.2025.2501859>
- Frick, S. A., & Rodríguez-Pose, A. (2016). Average city size and economic growth. *Cambridge Journal of Regions, Economy and Society*, 9(2), 301-318.
- Frick, S. A., & Rodríguez-Pose, A. (2018). Big or small cities? On city size and economic growth. *Growth and Change*, 49(1), 4-32.
- Fujita, M., & Krugman, P. (2004). The new economic geography: Past, present and the future. *Papers in Regional Science*, 83(1), 139-164.

- Fujita, M., & Thisse, J.-F. (1996). Economics of agglomeration. *Journal of the Japanese and International Economies*, 10(4), 339-378.
- Ganau, R., & Rodríguez-Pose, A. (2022). Does urban concentration matter for changes in country economic performance? *Urban Studies*, 59(6), 1275-1299.
- Garcilazo, E., & Oliveira Martins, J. (2015). The contribution of regions to aggregate growth in the OECD. *Economic Geography*, 91(2), 205-221.
- Gardiner, B., Martin, R., & Tyler, P. (2011). Does spatial agglomeration increase national growth? Some evidence from Europe. *Journal of Economic Geography*, 11(6), 979-1006.
- Glaeser, E. L. (2011). Cities, productivity, and quality of life. *Science*, 333(6042), 592-594.
- Glaeser, E. L. (2014). A world of cities: The causes and consequences of urbanization in poorer countries. *Journal of the European Economic Association*, 12(5), 1154-1199.
- Glaeser, E. L. (2022). Urban resilience. *Urban Studies*, 59(1), 3-35.
- Glaeser, E. L., & Kahn, M. E. (2004). Sprawl and urban growth. In J. V. Henderson & J. F. Thisse (Eds.), *Handbook of regional and urban economics* (Vol. 4, pp. 2481-2527). Elsevier.
- Glaeser, E. L., Kallal, H. D., Scheinkman, J. A., & Shleifer, A. (1992). Growth in cities. *Journal of Political Economy*, 100(6), 1126-1152.
- Gollin, D., Jedwab, R., & Vollrath, D. (2016). Urbanization with and without industrialization. *Journal of Economic Growth*, 21(1), 35-70.
- Gray, C. (2022). The role of multi-level governance in shaping regional growth and competitiveness in the Basque Country. *The Political Quarterly*, 93(4), 628-636.
- Henderson, J. V., Shalizi, Z., & Venables, A. J. (2001). Geography and development. *Journal of Economic Geography*, 1(1), 81-105.
- Iammarino, S., Rodríguez-Pose, A., & Storper, M. (2019). Regional inequality in Europe: evidence, theory and policy implications. *Journal of Economic Geography*, 19(2), 273-298.
- Jedwab, R., & Vollrath, D. (2015). Urbanization without growth in historical perspective. *Explorations in Economic History*, 58, 1-21.
- Jedwab, R., Christiaensen, L., & Gindelsky, M. (2017). Demography, urbanization and development: Rural push, urban pull and... urban push? *Journal of Urban Economics*, 98, 6-16.
- Kemeny, T., & Storper, M. (2024). The changing shape of spatial income disparities in the United States. *Economic Geography*, 100(1), 1-30.

- Kim, S. J., Kim, E. J., Choi, J., & Lee, D. (2022). Effects of top-down balanced development strategies on regional balance: Evidence from public big data in Korea. *Sustainability*, 14(23), 16221.
- Kloosterman, R. C., & Musterd, S. (2001). The polycentric urban region: Towards a research agenda. *Urban Studies*, 38(4), 623-633.
- Koster, H. R. A., & Thisse, J.-F. (2024). Understanding spatial agglomeration: Increasing returns, land, and transportation costs. *Annual Review of Economics*, 16, 55-78.
- Krugman, P. (1991). Increasing returns and economic geography. *Journal of Political Economy*, 99(3), 483-499.
- Lee, N. (2024). *Innovation for the masses: How to share the benefits of the high-tech economy*. Oakland: University of California Press.
- Liang, W., & Wang, D. (2025). Study on the impact of China's urban agglomerations' tiered spatial structure on regional economic resilience. *PLOS One*, 20(1), e0315692.
- Martin, R. (2013). London's economy: from resurgence to recession to rebalancing. In *The planning imagination* (pp. 67-84). Routledge.
- Martin, R., & Gardiner, B. (2019). The resilience of cities to economic shocks: A tale of four recessions (and the challenge of Brexit). *Papers in Regional Science*, 98(4), 1801-1832.
- McCann, P. (2020). Perceptions of regional inequality and the geography of discontent: Insights from the UK. *Regional Studies*, 54(2), 256-267.
- McCann, P., & van Oort, F. (2019). Theories of agglomeration and regional economic growth: A historical review. In R. Capello & P. Nijkamp (Eds.), *Handbook of regional growth and development theories* (pp. 6-23). Edward Elgar Publishing.
- Meijers, E. J., & Burger, M. J. (2017). Stretching the concept of 'borrowed size'. *Urban Studies*, 54(1), 269-291.
- Melo, P. C., Graham, D. J., & Noland, R. B. (2009). A meta-analysis of estimates of urban agglomeration economies. *Regional Science and Urban Economics*, 39(3), 332-342.
- Moretti, E. (2024). Place-based policies and geographical inequalities. *Oxford Open Economics*, 3(Supplement_1), i625-i633.
- Ottaviano, G., & Thisse, J. F. (2004). Agglomeration and economic geography. In J. V. Henderson & J. F. Thisse (Eds.), *Handbook of regional and urban economics* (Vol. 4, pp. 2563-2608). Elsevier.
- Ouyang, M., Liu, Y., Huang, J., & Yin, C. (2021). What determines urban resilience against COVID-19: City size or governance capacity? *Sustainable Cities and Society*, 75, 103304.

- Paci, R., Marrocu, E., & Usai, S. (2014). The complementary effects of proximity dimensions on knowledge spillovers. *Spatial Economic Analysis*, 9(1), 9-30.
- Park, S., Lee, J., & Kim, D. (2021). Impact of Innovation City projects on national balanced development in South Korea. *ISPRS International Journal of Geo-Information*, 10(3), 169.
- Pindado, E., Sánchez, M., & García Martínez, M. (2023). Entrepreneurial innovativeness: When too little or too much agglomeration hurts. *Research Policy*, 52(1), 104625.
- Puga, D. (2010). The magnitude and causes of agglomeration economies. *Journal of Regional Science*, 50(1), 203-219.
- Pyke, F., Becattini, G., & Sengenberger, W. (1990). *Industrial districts and inter-firm co-operation in Italy*. Geneva: International Institute for Labour Studies.
- Rodríguez-Pose, A. (2018). The revenge of the places that don't matter (and what to do about it). *Cambridge Journal of Regions, Economy and Society*, 11(1), 189-209.
- Rodríguez-Pose, A., & Crescenzi, R. (2008). Research and development, spillovers, innovation systems, and the genesis of regional growth in Europe. *Regional Studies*, 42(1), 51-67.
- Rodríguez-Pose, A., Dijkstra, L., & Poelman, H. (2024). The geography of EU discontent and the regional development trap. *Economic Geography*, 100(3), 213-245.
- Rodríguez-Pose, A., & Griffiths, J. (2021). Developing intermediate cities. *Regional Science Policy & Practice*, 13(3), 441-457.
- Rodríguez-Pose, A., & Hardy, D. (2021). Reversal of economic fortunes: Institutions and the changing ascendancy of Barcelona and Madrid as economic hubs. *Growth and Change*, 52(1), 143-158.
- Rigg, J., Bebbington, A., Gough, K. V., Bryceson, D. F., Agergaard, J., Fold, N., & Tacoli, C. (2009). The World Development Report 2009 'reshapes economic geography': Geographical reflections. *Transactions of the Institute of British Geographers*, 34(2), 128-136.
- Rodríguez-Pose, A., Terrero-Dávila, J., & Lee, N. (2023). Left-behind versus unequal places: Interpersonal inequality, economic decline and the rise of populism in the USA and Europe. *Journal of Economic Geography*, 23(5), 951-977.
- Rosenthal, S. S., & Strange, W. C. (2004). Evidence on the nature and sources of agglomeration economies. In J. V. Henderson & J.-F. Thisse (Eds.), *Handbook of regional and urban economics* (Vol. 4, pp. 2119-2171). Elsevier.
- Rupasingha, A., & Marré, A. W. (2020). Moving to the hinterlands: Agglomeration, search costs and urban to rural business migration. *Journal of Economic Geography*, 20(1), 123-153.

- Saxenian, A., & Hsu, J. Y. (2001). The Silicon Valley-Hsinchu connection: Technical communities and industrial upgrading. *Industrial and Corporate Change*, 10(4), 893-920.
- Shaban, A., Kourtiti, K., & Nijkamp, P. (2024). Reverse causality between urbanization and economic growth: A global test on the validity of urbanization-led economic growth. *The Annals of Regional Science*, 73, 1469-1496.
- Simon, H. (2009). *Hidden champions of the twenty-first century: The success strategies of unknown world market leaders*. Dordrecht: Springer.
- Sonn, J. W., & Storper, M. (2008). The increasing importance of geographical proximity in knowledge production: an analysis of US patent citations, 1975–1997. *Environment and Planning A*, 40(5), 1020-1039.
- Stam, E., & Van de Ven, A. (2021). Entrepreneurial ecosystem elements. *Small Business Economics*, 56(2), 809-832.
- Storper, M., & Venables, A. J. (2004). Buzz: face-to-face contact and the urban economy. *Journal of Economic Geography*, 4(4), 351-370.
- Turok, I., & McGranahan, G. (2013). Urbanization and economic growth: The arguments and evidence for Africa and Asia. *Environment and Urbanization*, 25(2), 465-482.
- World Bank. (2009). *World Development Report 2009: Reshaping economic geography*. Washington, DC: The World Bank.