

Chapter 8 Economic Foundations for Sustainable Urbanization: The link with Competitiveness

Marco Kamiya

UN-Habitat's priority is to support city leaders to achieve sustainable urbanization by providing urban planning methods and systems to address current urbanization challenges such as population growth, urban sprawl, poverty, inequality, pollution, congestion, as well as urban biodiversity, urban mobility, and energy.

This work is done with cities, as urban economies generate more than 90% of global gross value added (Gutman 2007). This chapter explains what are the fundamentals needed to design urbanization policies and what is the link with competitiveness. We sustain that competitiveness is an expression of productivity, and from a city approach, both are strongly linked to the spatial dimension and urban layout¹. In this chapter we explain urban productivity and competitiveness; the components of the integrated approach to urbanization (The Three-Pronged Approach); the layers of government that govern cities, and finally provide thoughts on competitiveness and cities.

8.1 Urban productivity and competitiveness

Productivity is traditionally defined as the best use of labour and capital given a state of technology, it is usually measured as a rate of output by units of inputs, where the main inputs are labour and capital. The urban productivity is labour and capital, plus land, material, energy and information, all the spatial features that increase the value-added output of a city.

One of the criticisms of the concept of productivity is that it does not properly include land as a major component (Ryan-Collies et al. 2017) and so it is difficult to model the urban economy when a spatial analysis that comes with land and properties is needed.

Productivity is the base for competitiveness, as higher productivity means that a nation or city can produce goods that are demanded by global markets. Competitiveness is ultimately a revealed productivity of the city. Cities are the result of multi-variable and integrated factors working together and impacting on productivity and competitiveness².

Different theories seek to explain why and under which conditions urban development is accompanied by rising productivity levels. These include the theory of agglomeration economies, economies of scale and scope and different variations of both.

The theory of economies of scale states that the greater the quantity of a good produced, the lower are the average costs per product unit. Economies of scale may also lead to a reduction in the variable costs per product unit due to operational efficiencies and synergies. Producing a high volume of one product type allows firms and workers to specialize in specific tasks and thereby achieve a high productivity level³. This concept can be transferred to the relationship between city size and productivity level, however, for cities this link is not mechanical since there are also diseconomies of scale due to governance and planning of large cities or metropolises that must be considered.

The theory of economies of scope states that production costs can be reduced by producing a range of goods of a similar type together instead of producing each one of them on its own. Transferred to the macro level, this theory explains the existence and growth of urban agglomerations with the opportunities they offer for businesses to utilize the interrelations between the production processes of their

1 This chapter incorporates recent developments from UN-Habitat operational and normative work, and relies on UN-Habitat & Morphologie Institute Paris (2017), Salat, Serge; Bourdic Loeiz & Marco Kamiya. "Economic Foundations for Sustainable Urbanization: The Three-Pronged Approach, Urban Planning, Legal Framework, and Municipal Finance", 2nd Edition, March 2017. Nairobi, Kenya.

2 See the Global Competitiveness Report [<http://www.weforum.org/>], on urban competitiveness (Ni, Kresl and Liu 2013), and the analytical chapter of the Global Urban Competitiveness Report 2017 (Ni, Kamiya and Ding).

3 Lobo et al. (2014) from the Santa Fe Institute demonstrate empirically that in a typical city in the US Total Factor Productivity increases 11% with each doubling in population.

goods with those of other businesses. Cities enable businesses to share centralized functions in procurement, production and sale processes.

Urbanization economies seek to explain the relationship between city size and productivity level. This suggests that urban diversity and large city sizes generate productivity advantages for any business locating in an urban agglomeration. It argues that the urban environment creates positive externalities which benefit different industries. This theory is especially suitable for explaining high and growing productivity levels in cities with no single dominant industry. Firms locating in a large city can benefit from common physical resources, such as roads, buildings, and power supply, and from access to a large, diverse labour pool, regardless of their industry.

Localization economies, on the other hand, discuss how the size of an industry in a city affects the productivity level of a particular activity. The productivity advantages of cities are seen to relate primarily to higher levels of activity in an industry, with the benefits accruing to that industry. (Jofre-Money, Marín-López, Viladecans-Marsal 2012)

Agglomeration economies unify ideas from the theories presented above. This states that urban economies offer a diversified and extended market for the purchase of inputs on the one hand and for selling finished goods on the other. In the literature on economies of agglomeration, different factors are argued to cause productivity advantages in urban agglomerations. Higher concentration and scale of people, activities, and resources in urban areas foster economic growth (V. Henderson, et al 1995; Fujita and Thisse 1996; Duranton and Puga 2004; Puga 2010), innovation (Feldman and Audretsch 1999; Bettencourt et al. 2007; Arbesman et al 2009), and increase efficiency (Kahn 2009; Glaeser and Kahn 2010). The agglomeration economies made possible by the concentration of individuals and firms make cities ideal settings for innovation, job and wealth creation (Rosenthal and Strange 2004; Carlino et al. 2007; Knudsen et al. 2008; Puga 2010).

Larger urban areas are the most productive since they allow for greater specialization in labour use, better matching of skills and jobs, and a wider array of consumption choices for workers and ancillary services for producers. It is also in large cities where the vast majority of substantial innovations

emerge. As long as this greater productivity outweighs higher costs for land, labour, housing, and other necessities, the city can thrive. (World Bank 2003, and 2009).

An emerging approach linking urbanization and productivity comes by linking value chain and supply chains. The urban setting is the place where goods are produced and when those goods are the result of several inputs, goods, and services, then the urban forms and the infrastructure that offer highways, roads, and information technology are as important as human capital in the production of finished goods. The supply chains which determine the channels through which inputs are delivered to a production hub impact efficiency, competitiveness and ultimately productivity⁴.

But, cities not only have the potential to provide productivity advantages, there are also negative externalities being generated in urban agglomerations, and the most relevant is related to land. Land in urban areas is scarce; this leads to higher land prices in urban compared to rural areas and leaves room for speculation. Especially in case of a lack of public and private transport networks, urbanization is accompanied by rising congestion, security, noise, pollution levels and environmental effects.

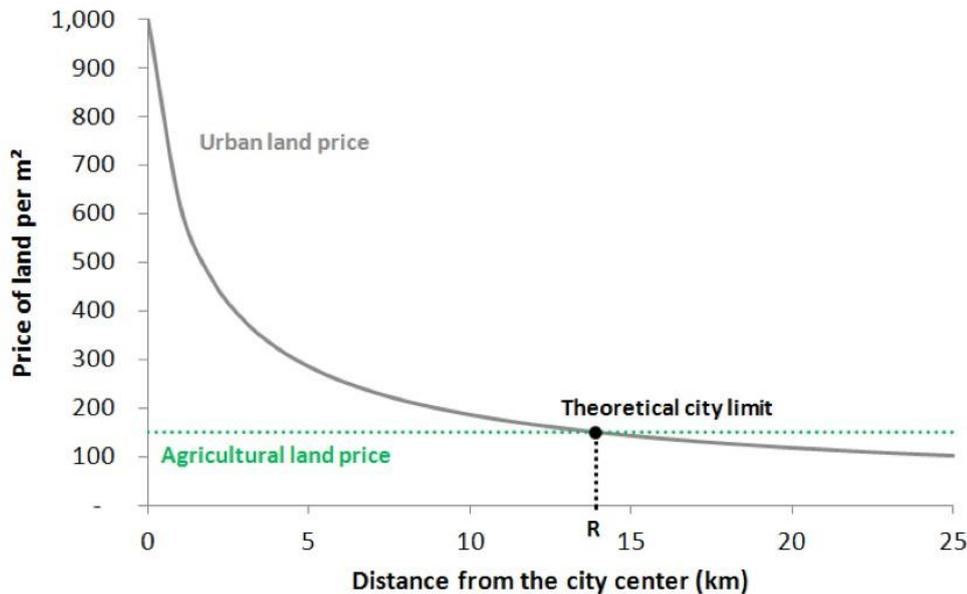
A city has to generate more positive than negative externalities, meaning the factors causing productivity advantages have to be supported to create positive effects on the local economy; the negative externalities of urban agglomerations, on the other hand, have to be rooted out to the greatest extent possible.

8.2 Productivity and Land

The standard model of land prices in mono-centric cities is originally designed to make theoretical predictions on how far a city will extend. This theory is based on how much the urban population is willing to pay for a piece of land, depending on the accessibility to the urban centre. The willingness to pay increases with accessibility to the centre, since people and companies prefer locations with better access to the economic opportunities in the centres and are willing to pay more for them (Ottensmann 1977; Alonso 1964, Salat 2014a, 2014b). As shown in the following chart, this translates into a decreasing gradient of land value as the distance from the city centre rises.

⁴ Roads and productivity are a potential link (see Fernald, 1999). Another is proximity and access to jobs (see Bertaud 2002).

Figure 1 Urban land price and agricultural land price define the city size



Source: Urban Morphology Institute

The price of agricultural land, on the other hand, is assumed to be constant in this model. The outer radius R of potential built-up urban area is then defined as the intersection between the two curves. The theoretical city limit is thus the result of a trade-off between urban land price and agricultural land price.

This concept cannot only be used to make theoretical predictions on the spatial limits of urban extension; the decreasing gradient of land value with increasing distance to the city centre also offers an indicator for the quality of urban development, as well as the density at a certain distance from the centre. It reflects the desirability and feasibility of a city on the one hand and the quality of its infrastructure on the other. The desirability and profitability of a city are reflected in the prices people and businesses are willing to pay, displaying the economic and commercial benefits of settling close to the urban centre. The difference between land value in the city centre and in the surrounding rural areas gives an idea of the economic opportunities, the livability and attractiveness of the city compared to rural areas: The more economic advantages a city promises for workers and businesses and the more liveable it is, the higher is the willingness to pay for land in the urban area. This gives an indication of the opportunity costs of living in the city. By also integrating the regional agricultural land price, this indicator becomes comparable among different regions of different economic development levels.

The gradient of decreasing land value reflects how fast

the accessibility decreases with distance to the urban centre: The better developed the public transport and street network in a city, the slower the accessibility of the urban centre degrades with increasing distance.

Besides analysing the decrease of land value with rising inaccessibility to the urban centre, the productivity per km^2 can be examined, depending on the distance to the city centre. Urban productivity per km^2 can be defined as the Gross Value Added (GVA) per km^2 less the infrastructure costs per km^2 . Beyond a certain distance from the city centre (or the centre where production is mostly concentrated), this indicator for urban productivity becomes negative. This indicator reflects how fast the urban productivity advantages decrease with distance to the centre. Again, the value of the gradient indicates the quality of the urban infrastructure. For example, as certain activities require proximity, agglomeration of activities provides higher productive areas, and in those areas, better and more sophisticated infrastructure is located.

Limited land-use specialization. Reduced amount of single function blocks or neighbourhoods. Single function blocks should cover less than 10 per cent of any neighbourhood.

The proportion of urban space dedicated to public use and the features of the network of streets, commercial corridors and sidewalks determine the walkability of a city; they thereby determine a city's quality and intensity of street life and interaction between its citizens. The amount of space dedicated to streets and transport infrastructure also shapes the city regarding connectivity and accessibility, thereby affecting the level of congestion and the air quality. A city's street network, moreover, functions as the layout for the provision of urban basic services. Its quality determines the affordability of these urban services. The positive effect of sufficiently high-quality public space on a city's liveability, moreover, causes potential buyers to be willing to pay more for urban land, and also allows local authorities to plan for future cities by making easier reordering and reorganization of the plotting areas and roads. To ensure a development of quality street patterns and public space, spontaneous growth must be prevented through urban planning from the initial stage of urban expansion.

To prevent urban sprawl and promote sustainable urban extension, it is necessary to achieve high density of residents as well as economic activity. Compared with low density, high density has economic, social and environmental benefits as follows. Efficient land use slows down urban sprawl because high-density neighbourhoods can accommodate more people per area. Through high-density development, costs for public services, such as police and emergency response, school transport, roads, water and sewage, can be reduced. High-density development leads to high walkability and accessibility, thereby reducing car dependency and parking demand, and facilitating the provision of an efficient public transport network. This increases energy efficiency and decreases pollution.

In the planning process, it is crucial to match efforts to increase urban density with the needs for public space discussed above. Therefore, the general plan of the urban layout has to integrate considerations on the present and future transportation and street infrastructure needs. Urban density must not overwhelm infrastructure at the risk of congestion. Reciprocally, under-using infrastructure because of low-density levels is not economically efficient. Public transport hubs should be located in an advantageous place for capturing the peaks of urban density, services and urban amenities. It is therefore important that densities be articulated across the metropolitan area and strategically increased along key infrastructure (i.e., transit) corridors.

Recent literature on urban planning proposes a general plan combined with rules and regulations rather than a detailed master plan that is conceptualized in the early stage of a development programme. A PCE based on a general plan with supplementing rules and regulations allows for evolution and adaptation to changes in economic or environmental circumstances. The definition of the street network is the key element of a general plan, since the street network, as the backbone of a city, determines the layout thereof.

The development of productive urban extensions relies on the capacity of stakeholders to integrate spatial planning and all essential urban infrastructure policies on different levels, from those conceptualized on a metropolitan scale to neighbourhood-scaled development policies. Very often in fast-urbanizing countries, master plans focus on the large scale but lack the fine grain level of detail that is essential to urban productivity. The diversity of land plot sizes is essential to support a vibrant and sustainable land market. Plots are constitutive of land sale processes and structure land property. As such, they are one of the basic bricks on which urban economic markets rely. Because of the lack of human and technical resources, or due to different artistic and design concepts, most of the current urbanization in developing countries and emerging economies is based on massive plots: the superblocks which result in an urban fabric lacking density and diversity.

To avoid these problems, new urbanism theories promote the core concept of mixed land-use. Mixed land-use requires some combination of residential, commercial, industrial, office, or other land-use. To mix different economic and residential activities in one neighbourhood, they have to be made compatible and be integrated in a well-balanced manner by careful design and management.

8.5 Financial framework and governance

The second essential pillar for successful PCE is a sound financial plan, meaning proper budgeting, revenue generation and expenditure management. Municipal finance authorities must be able to translate urban development policies into a sound financial plan and to generate the income required for their implementation. Careful budgeting is essential to guarantee the maintenance and development of public institutions' programmes and infrastructure. Municipal finance activities should aim at preventing liquidity risks and reducing the dependency on transfers from the central government⁷.

For the successful implementation of a PCE programme, adequate fiscal frameworks and governance schemes must be in place, including:

- The fiscal capacity of the municipality to finance and deliver infrastructures and plans
- The fiscal know-how of the municipality to implement and monitor infrastructure delivery and plans
- Effective institutions with clear roles and adequate human and fiscal capacity to perform them
- Fiscal capacity of the municipality to raise revenues, e.g., through land and property taxes
- High degree of freedom of municipalities with regard to central governments

Throughout history the role of governments has been extensively discussed, how much responsibility they have to take is the big question, and it is a question that has not yet been solved, and will probably never be solved because it is a matter of preferences. However, in terms of local government responsibilities, the path has been narrowed; according to the Guide to Municipal Finance (2009), the major role assigned to local governments is to provide goods and services within a geographic area to residents who are willing to pay for them. They should not implement stabilization policy, because they do not have access to monetary instruments and they should not carry out redistribution as a primary focus, because it will result in a non-general equilibrium policy, with people moving from one place to another.

There are two useful principles that have to be taken into consideration for municipal finance. The subsidiarity principle (Barnett, 1977), states that the efficient provision of services requires that decision-making be carried out by the level of government that is closest to the individual citizen. The second has to do with fiscal decentralization; it is a concept developed for transferring fiscal responsibility from central governments to local authorities, forcing local governments to deliver and fund an increasing number of services.

⁷ See UN-Habitat 2009 and UN-Habitat 2017 Finance for City Leaders Handbook.

8.6 The legal framework

Rules and regulations have the power to shape the form and character of the city by playing an essential role in the implementation of urban plans. Depending on the quality of rules and regulations supporting the general plan of a PCE and the quality of the local legal framework, the rules and regulation accompanying an urban plan can either support or hinder its implementation and evolution. A design following all the best practice of urban planning cannot be implemented if it does not comply with the local legal framework. First and foremost, particular attention must, therefore, be given to legal feasibility and implementation of all components of an urban plan. Possible rules and regulations to support the implementation of an urban plan are: Floor Area Ratio regulations, setback rules, mixed-use regulations, as well as regulations on plot sizes, the maximum distance between intersections, street design, etc.

The different areas of knowledge consider diverse elements to determine whether or not a law is a good law. But there are values that characterize a good law or a good legal framework, those elements according to Mousmouti and Crispi (2015) are: efficiency, effectiveness, efficiency and simplicity. Even though different views seek to prevail regarding the characteristics mentioned above, there is one on which everyone agrees and it is: effectiveness. In the particular case of the legislation related to urbanization, eight pillars have to be achieved for a law to be effective. These pillars according to the authors mentioned above are:

- Law has to be consistent with the urban realities
- Law has to be developed according to evidence
- Affected people should have a voice to express their position
- Legislation has to be simple and easy to comply with
- Legislation has to be easily accessible
- The law has to be coherent and consistent
- Legislation must have the capacity to deliver results
- Make legislative quality a guiding value in the process of developing and implementing legislation

Even though it is desirable for the laws to be established at the most immediate territorial level, and for the norms to

be easily modified according to the context, this may not always happen. It is inevitable for factors to be considered that could allocate some particular norms at a level that do not fulfil the expectations established by the subsidiarity principle. Those factors could be economies of scale, development of local institutions in comparison to national institutions, a desirable level of flexibility for the norms, among others (Berrisford 2017). To give a practical example, the establishment of a physical and complete cadastre, with an efficient, up-to-date and publicly available information system, would be desirable at a local level, but the technological and physical infrastructure to fulfil this objective could be costly if each local government acquired it individually, that is why it is usually maintained on a national level, because it represents efficiency in terms of specialization and savings for the country.

8.7 Scales of urban assessment

When dealing with urban parameters, the scale of observation and analysis is essential. Cities and urban environments are by nature highly heterogeneous areas, with intense concentrations and peaks of activities, and a long tail of sectors with a medium to low intensity. Average figures have thus to be handled with care, as they can hide very complex patterns of urban development. This study differentiates three scales on which a city can be assessed:

On the metropolitan scale, urban assessment addresses the spatial extension of the city. Analyses on this scale give an indication of the spatial layout of a city (by differentiating rural and urban land use) and of human activities (industries, offices, housing) and the way they are organized and distributed in the territory.

On the district scale, urban assessment addresses how streets and transportation networks are organized, as well as how urban amenities such as parks, hospitals or schools are distributed within the city.

On the neighbourhood scale, urban assessment considers the form and the size of urban blocks and the way they are divided into plots.

The metrics and indexes proposed in this study are intended to be implemented at the very local scale: For measuring urban design matters, this means the neighbourhood scale and the block scale. Thus the issue of city- or district-wide average values obscuring trends and the existence of spatial mismatch can be circumvented.

A systematic approach for assessing a government's performance with regard to urban design should be based on data with all parameters being measured on the same scale; therefore, the urban area could, for example, be gridded to cells of 500m by 500m which can be considered as the neighbourhood scale. In the case studies provided in this report, the layout used is either based on a 500x500m gridding (Johannesburg), or a more detailed gridding (200x200m gridding in Paris, Census Output Areas in London).

To assess a government's performance with regard to fiscal management and the efficiency of the legal framework, acquiring data on a neighbourhood scale is not always possible or useful. Normally, rules and regulations do not differ between neighbourhoods; there might, however, be differences between city districts. Municipal fiscal activities are also often conducted on a higher than neighbourhood level. The guiding principle, therefore, should be to acquire data for the lowest possible and sensible scale. The indicators provided seek to assess how well a PCE is funded. Therefore, they not only capture characteristics of the conceptualization and implementation of a PCE but also those components which constitute the framework for the PCE; this again explains why some concepts of the areas of fiscal management and the legal framework are measured on a higher than neighbourhood scale.

The different roles of governments are shown in Table 1, with investments that correspond to the central or federal government, metropolitan or regional government, and municipal governments. Planned City Extensions and Planned City Infill correspond to a neighbourhood level whereas airports, basic infrastructure for water, electricity, energy, and national highway networks belong to the central government.

Table 1 Investment and Responsibilities according to Layers of Government

Investment	Central Government	Metropolitan/ Regional	Municipal Government
Large-Scale transport infrastructure			
National road network (outside city)	▲	△	
National road network (crossing city)	△		△
Local road networks			▲
Airport	△	△	
Fluids protection			
Potable water		▲	△
Electricity		▲	△
Sanitation			
Solid waste landfill		△	△
Purification station		△	△
Smaller-scale infrastructure			
Roadways			▲
Electricity, drainage, sewerage, and water distribution		△	△
Public lighting			△
Public facilities			
Major facility (for example, hospital)		▲	△
Commercial facility (for example, market)			▲
Social services facility (for example, school)			▲
Development			
Industrial and commercial zones		△	△
Housing extension		▲	▲
Neighbourhood development			▲

8.8 Competitiveness and Implications for Policy

The concept of productivity is the basis for competitiveness. Competitiveness is the means for a country or city to achieve a higher level of productivity, and that is reflected in higher income. But productivity is the optimal combination of labour and capital, and therefore to make the concept operational, it should incorporate land and real estate markets. The land is already present in spatial and urban economics, as there is literature on agglomerations, urban layout and value chains/supply chains, that is incorporated in productivity analysis.

Land and real estate markets have two dimensions, the central government is in charge of the large macro planning of economic poles and large-scale infrastructure, but it is at a provincial and municipal level that the decisions on planned city extension and planned city infill are made. So, land and local properties also become the largest source of 'endogenous' finance for local governments.

For policy reasons, cities need to build and strengthen the core conditions for sustainable urbanization, and those are the rules and regulations, municipal finance and urban planning and design. Planning, Finance, and Regulations are the basis for the Three-Pronged Approach.

Once this is present as technical resources and city assets, local government can build stronger urban systems and provide basic services, water, energy, electricity, at a local level, and eventually take care of more complex tasks such as job creation by linking urban layout, making it friendlier for productive activity and enhancing the mobility of people and goods.

References

- Alonso, William, and others. 1964. "Location and Land Use. Toward a General Theory of Land Rent." *Location and Land Use. Toward a General Theory of Land Rent*. <http://www.cab-direct.org/abstracts/19641802976.html>.
- Arbesman, Samuel, Jon M. Kleinberg, and Steven H. Strogatz. 2009. "Superlinear Scaling for Innovation in Cities." *Physical Review E* 79 (1): 016115. doi:10.1103/PhysRevE.79.016115.
- Barnett, Richard. 1996. "Subsidiarity, enabling government and local governance" In *Urban governance and finance - Montreal: Institute for Research on Public Policy, 1997*.
- Bertaud, Alain. 2002. "Note on Urban Transport and Cities Spatial Structures". ABDCE Conference April 2002.
- Berrisford, Stephen. 2017. "Reforming Urban Laws in Africa", UN-Habitat, Cities Alliance, African Center for Cities, and Urban LandMark.
- Bettencourt, Luís M. A., José Lobo, Dirk Helbing, Christian Kühnert, and Geoffrey B. West. 2007. "Growth, Innovation, Scaling, and the Pace of Life in Cities." *Proceedings of the National Academy of Sciences* 104 (17): 7301–6. doi:10.1073/pnas.0610172104.
- Bourdic, Loeiz. 2011. "Urban Density and Private Transport Energy Consumption - From Global Trends to Local Solutions." Center for Environmental Policy. London: Imperial College.
- Carlino, Gerald A., Satyajit Chatterjee, and Robert M. Hunt. 2007. "Urban Density and the Rate of Invention." *Journal of Urban Economics* 61 (3): 389–419. doi:10.1016/j.jue.2006.08.003.
- Cohen, Michael. 2009. "Aid, Density, and Urban Form: Anticipating Dakar." In *Urban Land Markets*, edited by Somik V. Lall, Mila Freire, Belinda Yuen, Robin Rajack, and Jean-Jacques Helluin, 385–97. Springer Netherlands. http://link.springer.com/chapter/10.1007/978-1-4020-8862-9_15.
- Duranton, Gilles, and Diego Puga. 2004. "Micro-Foundations of Urban Agglomeration Economies." In *Handbook of Regional and Urban Economics*, edited by J. Vernon Henderson and Jacques-François Thisse 4:2063–2117. Elsevier.
- Fernald, John (1999) Roads to Prosperity? Assessing the Link between Public Capital and Productivity. *The American Economic Review*. Vol. 89, No. 3 (Jun., 1999), pp. 619-638
- Fujita, M., and J.-F. Thisse 1996. "Economics of Agglomeration." *Journal of the Japanese and International Economies* 10 (4): 339–78. doi:10.1006/jjie.1996.0021.
- Gutman, Pablo. 2007. "Ecosystem Services: Foundations for a New Rural–urban Compact." *Ecological Economics* 62 (3-4): 383–87. doi:10.1016/j.ecolecon.2007.02.027.
- Henderson, Vernon, Ari Kuncoro, and Matt Turner. 1995. "Industrial Development in Cities." *Journal of Political Economy* 103 (5): 1067–90. doi:10.1086/262013.
- Jacobs, Jane, 1961. "The Death and Life of Great American Cities". Vintage Books, New York.
- Jofre-Monseny, Jordi; Marín-López, Raquel; Viladecans-Marsal, Elisabet 2012. What underlies localization and urbanization economies? Evidence from the location of new firms Universitat de Barcelona & Institut d’Economia de Barcelona (IEB)
- Kahn, Matthew E. 2009. "Urban Growth and Climate Change." *Annual Review of Resource Economics* 1 (1): 333–50. doi:10.1146/annurev.resource.050708.144249.
- Knudsen, Brian, Richard Florida, Kevin Stolarick, and Gary Gates. 2008. "Density and Creativity in U.S. Regions." *Annals of the Association of American Geographers* 98 (2): 461–78. doi:10.1080/00045600701851150.
- Lobo, José; Bettencourt, Luis; Strumsky, Deborah & Geoffrey B. West. 2011. "The Economic Productivity of Urban Areas: Disentangling General Scale Efficiency from Local Exceptionality" SFI Working Paper: September 2011. California US.
- Mousmoti, Maria and Crispi, Gianluca. 2015. "Good" Legislation as a Means of Ensuring Voice, Accountability, and the Delivery of Results in Urban Development". *The World Bank Legal Review Volume 6 Improving Delivery in Development: The Role of Voice, Social Contract, and Accountability.*: 257- 269.
- Ni, Pengfei; Kamiya, Marco & Ruxi Ding (2017) "The Global Urban Competitiveness Report 2017". Springer, Singapore, and Chinese Social Science Press, Beijing.

- Ni, Pengfei; Kresl, Peter & Wei Liu (2013) "The Global Urban Competitiveness Report 2013". Edward Elgard. Cheltenham, UK.
- Ottensmann, John R. 1977. "Urban Sprawl, Land Values and the Density of Development." *Land Economics*, 389–400.
- Puga, Diego. 2010. "The Magnitude and Causes of Agglomeration Economies." *Journal of Regional Science* 50 (1): 203–19. doi:10.1111/j.1467-9787.2009.00657.x.
- Rodriguez, Daniel A., and Carlos H. Mojica. 2008. "Land Value Impacts of Bus Rapid Transit: The Case of Bogota's TransMilenio." *Land Lines*, April. <http://trid.trb.org/view.aspx?id=850940>.
- Rosenthal, Stuart S., and William C. Strange. 2004. "Evidence on the Nature and Sources of Agglomeration Economies." In *Handbook of Regional and Urban Economics*, edited by J. Vernon Henderson and Jacques-François Thisse 4:2119–71. Amsterdam; New York: North-Holland; New York, N.Y., U.S.A.: Elsevier. <http://linkinghub.elsevier.com/retrieve/pii/S1574008004800063>.
- Ryan-Collies, Josh; Lloyd, Toby & Laurie Macfarlane. 2017. "Rethinking the Economics of Land and Housing" Zed Books, London, UK.
- Salat, S, and L Bourdic. 2014a. "Land Use Intensification in Fine Grain Cities." Urban Morphology Institute Working Paper.
- Salat, S, and L Bourdic 2014b. "Transforming Johannesburg." Urban Morphology Institute.
- Spence, Michael, Patricia Clarke Annez, and Robert M. Buckley, eds. 2008. *Urbanization and Growth*. Washington, DC: World Bank Publications.
- UN-Habitat & Morphologie Institute Paris (2017) Salat, Serge; Kamiya, Marco & Loëiz Bourdic. "Economic Foundations for Sustainable Urbanization: The Three-Pronged Approach, Urban Planning, Legal Framework, and Municipal Finance", 2nd Edition, March 2017.
- UN-Habitat, 2017. Kamiya, Marco & Zhang, Le-Yin; eds. "Finance for City Leaders: Improving Municipal Finance to Deliver Better Services" Nairobi, Kenya.
- UN-Habitat, 2015 "Planned City Extensions: Analysis of Historical Examples." Nairobi, Kenya. <http://unhabitat.org/books/planned-city-extensions-analysis-of-historical-examples/>
- UN-Habitat, 2014. "A New Strategy of Sustainable Neighbourhood Planning: Five principles" Urban Planning Discussion Note 3. Nairobi, Kenya. <http://unhabitat.org/a-new-strategy-of-sustainable-neighbourhood-planning-five-principles/>
- UN-Habitat, 2009. Slack, Eni. "Guide to Municipal Finance" Nairobi, Kenya.
- World Bank. 2003. "World Development Report 2003: Sustainable Development in a Dynamic World - Transforming Institutions, Growth, and Quality of Life - Overview." 24711. The World Bank.
- World Bank. 2009. "World Development Report 2009: Reshaping Economic Geography." World Development Report. Washington, D.C.: World Bank.
- World Bank. 2013a. "Planning, Connecting, and Financing Cities--Now: Priorities for City Leaders." Washington, DC: World Bank.
- World Bank. 2013b. "Urbanization beyond Municipal Boundaries: Nurturing Metropolitan Economies and Connecting Peri-Urban Areas in India," February. <https://openknowledge.worldbank.org/handle/10986/13105>.
- World Economic Forum (2015) Global Competitiveness Report. Davos, Switzerland. [<http://www.weforum.org/>]