

Making city lights shine brighter

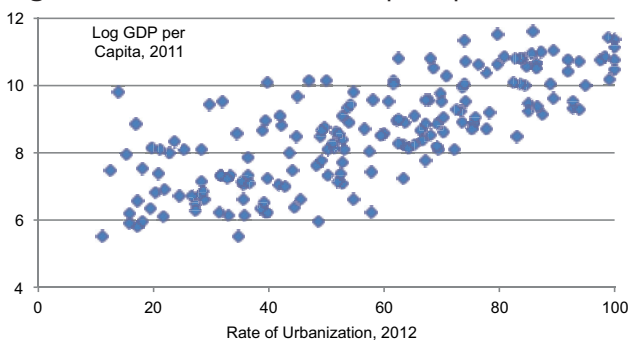
Shahid Yusuf and Danny Leipziger

Growth Dialogue

We see very few countries whose economic fortunes have dramatically improved without at the same time undergoing rapid urbanisation. Indeed, rapid growth and the development of cities seem to go hand-in-hand. A correlation between the rate of urbanisation and per capita GDP has been frequently noted.¹ According to a recent estimate by Gilles Duranton using cross-country data for 2012 (see Figure 1), each percentage point of urbanisation is associated with a 5 percentage-point increase in GDP per capita, with urbanisation apparently explaining 60% of the variation in incomes. However, establishing causation has proven difficult. Urbanisation could be a major outcome of the development process, or alternatively, rapid urbanisation could become a driver – or a facilitator – of growth.

increasing more modestly than in the past (Figure 2).² The growth-inducing effects of urbanisation are even weaker if only African countries are included (Figure 3). According to Glaeser (2013: 7), the slope coefficient derived when the log of per capita income is regressed on urbanisation is 5.3 for all countries in 2010, and 2.6 for low-income countries. This is by no means trivial, but the R-squared drops from 0.54 for all countries to 0.33, because the high rates of urbanisation are in poor countries. Hofman and Wan (2013) further qualify the contribution of urbanisation, noting that after controlling for education, industrialisation, and trade, the correlation between urbanisation and the level of GDP largely disappears. They maintain that industrialisation and education determine urbanisation.³

Figure 1 Urbanisation and GDP per capita



Past evidence – qualitative and quantitative – sends conflicting signals. It would appear from the experience of developed countries that urbanisation was growth-promoting. However, correlating data for Africa, Latin America, and South Asia alone suggests that on the contrary, urbanisation is more loosely coupled with growth. Developing countries are urbanising at rates of 2–3% per annum, but per capita incomes are

Why is urbanisation-inducing structural change not being matched by an increase in GDP comparable to what was achieved by industrialised countries in the past? Moreover, how can the ongoing and seemingly inexorable urbanisation in Africa and parts of developing Asia be rendered more growth-promoting?⁴ These were among the questions addressed at a symposium hosted by the Growth Dialogue in Washington, DC on 14 January 2014, and the answers that emerged provide clues as to why urbanisation can be more or less supportive of GDP growth.

1 Henderson (2002, 2010), United Nations Human Settlements Programme (2010). Hofman and Wan (2013) find that the causation runs from growth to urbanisation. See also Economist (2013).

2 The average increase of urban populations in less-developed countries is projected to be 2.02% per annum during 2011–2030, compared to 3.33% per annum during 1970–2011 (United Nations Population Division 2012).

3 This echoes an earlier finding by Black and Henderson (1999), who note that human capital accumulation and localised spillovers contribute to endogenous urban growth.

4 The rate of urbanisation rose in developing countries rose from 18% in 1950 to 47% in 2011. London's population increased from 1 million to 8 million over a period of 130 years – Bangkok matched that increase in 45 years, Dhaka in 37 years, and Seoul in just 25 years. See also Yusuf (2013a).

Figure 2 Urbanisation and GDP per capita in developing countries

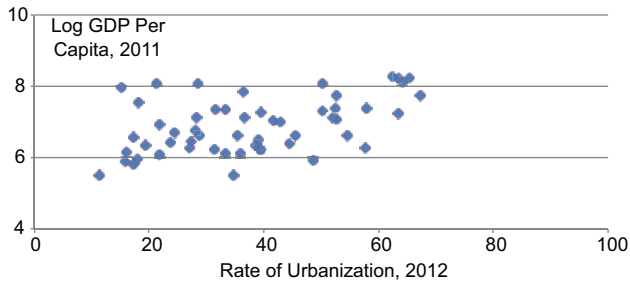
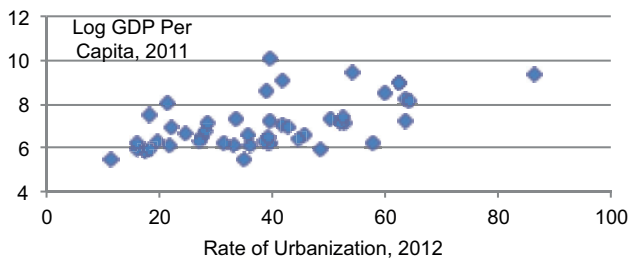


Figure 3 Urbanisation and GDP per capita in sub-Saharan Africa



Urbanisation 2.0: In the developing world

Perhaps the most striking difference between the urbanising experiences of industrialised countries and currently developing economies is that economic change in the latter is less focused on manufacturing than was the case in the former. Typically, manufacturing might account for less than 15% of GDP in medium and large cities in developing nations, and can be as little as 5% in many African cities (e.g. Lagos), whereas it could be a third or more of GDP in Western countries when urbanisation was in full swing.⁵ The manufacturing sector absorbed a substantial share of the expanding urban labour force, providing employment that added far more value than jobs in the rural economy. Due to technological change, learning, spillovers, and progressive improvements in the organisation of work, productivity in manufacturing rose steadily, pulling up per capita GDP. The share of manufacturing in GDP is still high in East Asia, at 29% – close to the norm for the industrialising world from around the mid-19th century until the second half of the 20th century, when urbanisation was gathering momentum (World Bank 2013). In comparison, the share of manufacturing in developing Africa and Asia is much lower and declining (Table 1). Excluding the productivity dividend arising from the spread

of manufacturing in cities, urbanisation has been associated with less GDP growth and fewer jobs.

Nevertheless, cities continue to attract migrants and to offer opportunities. However, the vast majority of the urban workforce is being absorbed into services – mostly of the non-tradable sort – and into a variety of informal activities. In fact, by some estimates, as much as one-half of the urban workforce in many African cities is engaged in informal work. While a number of tradable services (e.g. finance, insurance, engineering, architectural, IT-related) are as – if not more – productive than manufacturing, in developing countries, these account for a tiny fraction of service-sector jobs. Most urban workers in formal occupations end up in retail, hospitality, security, and other low-end occupations or in personal services. Many more are absorbed in even less productive informal jobs that marginally improve on their earnings in the rural sector.

Continuing rapid urbanisation juxtaposed with a slow increase in the number of ‘good jobs’ – whether in manufacturing or services – not only strains the absorptive capacity of cities, but also leads to negative externalities that can circumscribe the productivity-enhancing agglomeration economies associated with city size.⁶ A large literature points to the existence of a productivity bonus that cities can realise – especially in the earlier stages of development (Brülhart and Sbergami 2008), as they grow through economies of scale, scope, diversity, clustering, and specialisation (Duranton and Puga 2004, Glaeser and Gottlieb 2009, Brülhart 2009, Baldwin and Martin 2004). But these economies do not accrue automatically as a city expands – they are a function of the macroeconomic environment, and depend upon certain acquired urban attributes that can be undermined by dysfunctional trends.

Slow growth of productive activities dampens agglomeration economies and makes it harder for cities to generate the resources needed to provide housing, infrastructure, and services commensurate with rising demand. All too frequently, this results in the spread of informal activities and shantytowns, which can detract from the overall quality of the urban environment and discourage business investment. It can be argued that these developments are an inevitable consequence of a mismatch between the absorptive capacities of most cities and the pressure of demand for jobs, housing, services, and amenities. It can be further

⁵ The share of manufacturing in GDP in 2010 was 15% for South Asia and 13% for Africa (World Bank 2013).

⁶ Among the factors contributing to urbanisation are pressures on rural land that push people to migrate, the beckoning urban ‘bright lights’, and the natural increase of urban populations. The increasing population share of the largest cities in the major countries – a trend likely to continue – suggests that the potential gains from agglomeration could be substantial (Tabuchi 2013). Some of the world’s largest metro areas can expect to grow by 2–4% per annum until 2025 (Berkowitz 2013).

argued that cities in developing countries must inevitably come to terms with and exploit the energies latent in the informal sector, because it accounts for between one-third and one-half of economic activity, and cannot be wished away (see La Porta and Shleifer 2008, Marx et al. 2013).

As Mario Polese points out, informality is second-best and wasteful of resources. As is apparent from the plight of cities such as Rio de Janeiro, Cairo, Lagos, Karachi, and Mumbai, the burgeoning informal sector rooted in shantytowns undercuts the productivity of cities already handicapped by the smallness of their industrial sectors, and consumes services while evading taxes and user charges. Moreover, it can worsen crime, deepen the incidence of poverty and morbidity, and widen urban inequality. Reforms to city governance and institutions, and better infrastructure would render informal activities more effective, and contribute to the development of cities and national economies. Thus if cities are to 'cause' – or facilitate – growth, they need to work on a number of registers to develop traditional tradable sectors and complement these with non-traditional activities; to contain and possibly reverse the diseconomies arising from too-rapid urbanisation; and to harness the productivity potential inherent in agglomeration.

The dead hand: Location, design, and legacy institutions

No city starts out with a clean slate, and cities in developing countries have their fair share of inherited baggage. Many are advantageously located in coastal areas, river valleys, or transport junctions, but there are plenty in inland locations – some arid and subject to water scarcity and severe weather events. There are also coastal cities that will be imperilled by rising sea levels as the climate continues to warm. New transport and communication technologies, air conditioning, and expensive coastal defences have partially offset some – but by no means all – locational disadvantages. Water, weather, climate, excessive dependence on mining or a specific industry, and remoteness can impose enduring handicaps, which in some cases will force eventual abandonment.

The initial urban layout is another factor that can adversely affect the spatial evolution of a city and raise the cost of urbanisation in the absence of farsighted subsequent planning. Numerous African and some Asian cities were created by colonial administrations to

“Facilitate an extractive economic strategy. Transport infrastructure was designed to evacuate exports of primary commodities [and to expedite troop movements] rather than cultivate internal

exchange, and the development of manufacturing and industrial capacity was actively discouraged. Settlements were designed to accommodate a static population and not a growing one [and colonial rulers practiced racial segregation in urban areas and sought to minimise migration to cities]”. (Fox 2014: 195)

Thus the design and infrastructures of these ex-colonial cities left them “Physically and economically unprepared to absorb the massive influx of migrants” (ibid.). The problems of design could have been remedied were it not for legacy institutions and elite predispositions favouring the rural sector over expenditure on productivity-raising urban investments (Fox 2014).

Under colonial regimes, municipal authorities were weakly staffed and granted very little latitude to raise revenue, and in most African and Asian low-income countries, municipal organisational capabilities and revenue effort have improved little – if at all. Restrictive land-use ordinances and titling practices, tenancy rights, building codes, and archaic notions regarding urban planning that persisted far into the post-colonial era, ensured that urbanisation was seriously distorted – directly contributing to the highly inefficient use of space and to the emergence of slum settlements. The pernicious effects of outmoded codes and standards are widely apparent also in advanced countries, where they encourage sprawl and virtually rule out the construction of compact, diverse, ‘walkable’, and connected communities. Smart urbanisation is now clearly spelled out, cost-effective, and urgent, as delay only entrenches dysfunctional forms of urban development.

Institutional weaknesses affecting urban development have been exacerbated in most low-income countries by weak and/or predatory states, which have neglected to build robust legal systems, regulatory agencies, infrastructure, and quality public services that can enable cities to reinforce other sources of growth. These lapses – aside from undermining the business environment – have also contributed to the spread of informal activities. Moreover, in several African and Asian countries, the dominance of rural elites and tensions between them and populist urban parties has depressed investment in urban public goods. As pointed out by Richard Stren with regard to African cities, both the low level of revenue generated per urban resident and the scant investment in local services reflect governance problems with a long history.⁷ He sees no easy resolution in spite of ongoing decentralisation, which in principle should have empowered cities but is hampered by political

⁷ Note prepared for symposium. Governance issues illustrated by specific case studies are discussed in Ruble et al. (2009). See also Fox (2014) and Mario Polese's note prepared for symposium.

and fiscal constraints. The situation also suffers from the difficulty of coordinating the actions of administratively fragmented metropolitan regions and a governance hierarchy that does not correspond to the concerns of citizens. None of these institutional obstacles are immovable, however, as Acemoglu and Robinson (2012), Nathan Nunn and others have shown. Uprooting legacy institutions requires determined political leadership, and the organisational capacity at central and subnational levels to implement reforms and speedily begin to demonstrate widely shared results. As regards urbanisation, it calls for a clear recognition on the part of the ruling elites that well-planned and executed urban development can contribute substantially to income growth, and that a fast-changing ecological context makes it imperative that urban strategy be given the priority it deserves.⁸

Making cities promote growth: Necessary conditions

Symposium participants were of the view that reforming urban governance – and a deliberate redesign of urban institutions that impose third-best outcomes (e.g. those affecting land use and the provision of low-income housing) – needs to go hand-in-hand with four sets of reform measures. Hence priority should be given to:

- a. strengthening urban finances so that cities can address their deficits in housing, infrastructure, and services;
- b. embracing technologies that improve the design and performance of essential urban hardware and services;⁹
- c. increasing the supply of skills and improving quality; and
- d. stimulating private investment in tradable activities that will create a multitude of jobs in the formal sector, thereby gradually narrowing the compass of the informal economy.

This would begin to bridge the income gap separating in Allen Scott's words, the handsomely compensated 'cognitive-cultural workers' (the cognitariat) engaged in high-technology industries and advanced services, and an expanding

and marginalised 'new servile class'.¹⁰ This characterisation can apply to cities in many parts of the world, and is often associated with endemic crime and violence.

Macroeconomic conditions: Fulfilling the necessary conditions requires a multi-level effort with the central government playing a crucial role, starting with a stable macroeconomic environment and public investment that incentivises private investment in productive activities. Overvalued exchange rates, high and fluctuating rates of inflation, and policy uncertainty can easily negate local initiatives to stimulate business. The development orientation of the state and a conducive macroeconomic regime are necessary precludes to city-level efforts, starting with resource mobilisation by local authorities to fund infrastructure and services.

Urban finance: As Enid Slack pointed out, the property tax ought to be the principal source of fiscal revenue, but in fact because of its perceived regressivity and unfairness, and problems with updating land valuation and enforcing collection, developing countries raise only 0.7% of GDP from property taxes (developed countries raise 2.2%).¹¹ Grants and intergovernmental transfers from higher-level governments are the principal source of funding for most municipalities, but the amounts are often unpredictable, have attached strings, and accountability tends to be weaker. Thus a sound financial base for urban development requires municipalities to extract the maximum mileage from user charges to defray the costs of services, development charges and long-term borrowing to finance infrastructure (underpinned by local revenue streams), and possibly public-private partnerships when private financiers can bring sufficient equity and expertise to a project (see also Slack 2002). An amalgamated, regional governmental/administrative structure is needed to resolve transportation and environmental issues (Bird and Slack 2013). Where possible, specific taxes need to be earmarked for services, and tax policies clearly communicated to the public. Electronic collection technologies need to be used as appropriate, and municipalities need to collect data and compare their fiscal performance with those of benchmarks.

Digital technologies and big data can improve and organise urban life and bolster agglomeration economies. E-governance is just the beginning. New technologies can make traffic more manageable and reduce congestion, but beyond that they promise more efficient use of cars and public transport, and to minimise reliance on private

⁸ At the symposium, William Morrish observed that "Our urban theories are based on upon an ecological context that no longer exists and simply tinkering with technology and markets, social systems and urban forms will not address [the problems accumulating in an interconnected global system]". See Costanza et al. (2007).

⁹ Presentation by Alain Bertaud at the symposium and Bertaud (2002, 2004).

¹⁰ Note prepared for symposium. See Scott (2012). Scott (2011) perceives a third wave of capitalism that is fashioning a new urban environment in its own image.

¹¹ Note prepared for symposium. See Bird and Slack (2013).

cars and the vast infrastructure they demand.¹² This could transform urban design that is strongly influenced by the car-centric, spatially sprawling road network, and make it easier to realise the objective of a more compact city encompassing manufacturing, services, and residential mixed-use neighbourhoods. Design can become more flexible, conserving of resources, and performance-based with the help of the huge data streams being generated through myriad sensors. Moreover, the capacity to simulate urban designs can enlarge the menu of choices and lead to better solutions. Not only is the technology at hand, but also as Dennis Frenchman observed, the budding revolution in urban development could be enormously lucrative for companies that can package the entire process.¹³ For example, Emaar Properties, Samsung, Accenture, and IBM can bring together capital, professional expertise, technologies infrastructure, and sales, and in addition can manage public services once the development is completed.¹⁴ Leaf-frogging technologies are available, and to the extent that cities can avoid 'clay infrastructures', they can benefit greatly from fast-paced innovation.

Housing: Infrastructure and services must be complemented by an adequate supply of housing catering to the requirements and purchasing power of urban inhabitants. With urban populations growing by 200,000 per day, Janice Perlman estimates that more than 96,000 housing units need to be constructed each day – a number far in excess of current production which in any case is biased against affordable housing.¹⁵ Turning the tide against the spread of shantytowns and the many-sided environmental degradation that follows in their wake calls for a two-pronged strategy (Perlman et al. 1998, Marx et al. 2013). One prong should be aimed at the upgrading of selected existing slum developments (some of which have been imperceptibly gentrifying as in Brazil) through the provision of services and their integration into the fabric of the formal urban system. A second prong – most ambitiously being pursued in China – is the mobilisation and commitment of resources to the construction of low-cost housing and the provision of financing for buyers. This was the approach followed in Korea, Hong Kong, and Singapore, for example, yielding strong results in terms of urban life and also greater equality in the distribution of income. As noted by Wu, however,

12 Alain Bertaud, presentation at symposium. Gómez-Ibáñez and Núñez (2009: 3) describe the inefficient city as one where land use and infrastructure policies severely limit building density and the adequacy of transport services.

13 Note prepared for symposium. See also Frenchman et al. (2011).

14 Accenture and IBM offer a full suite of "smart city solutions, including software-asset-enabled services, strong domain and consulting capabilities as well as a strong partnership eco-system and local presence" (Belissent and Giron 2013: 16).

15 Note prepared for symposium. See Perlman (2013).

China's policy on migration and residency needs to be modified (and is being addressed) if the gains in poverty reduction are to be paralleled by an expansion of the middle class.¹⁶ Few developing countries can match China's rate of saving and investment, however. A persistent undersupply of housing will create major problems for cities in developing countries, and surely undermine both productivity and the quality of life.

Human capital and entrepreneurship: Each of these 'facilitators/necessary conditions' only provides traction for urban economies if existing businesses invest and expand production, and if new entry enlarges the ranks of the business sector, thickens the ecosystem of firms, and contributes to technological upgrading, diversification, and innovation (see Glaeser and Kerr 2010). It is the health and dynamism of the business sector that ultimately determines whether agglomeration economies are realised and the revenue base can bankroll the services, infrastructures, housing, and amenities that determine the economic success of cities. A wealth of research points to the concentration of human capital – created by good schools and training entities in a city and attracted from elsewhere – as the key to urban productivity, entrepreneurship, and innovation, especially in high-tech activities.¹⁷ As pointed out by Martin Kenney, creative cities exhibit numerous positive externalities, especially when they harness ICT.¹⁸ Hence near the top of the urban strategy agenda for ambitious and wired cities – such as Shanghai and Beijing – is the nurturing and retention of human capital through investment in the education system right up to the university level and research institutes, and investment in amenities that can make a city attractive for outsiders (e.g. Singapore and Dubai). The skilling of cities needs to be supplemented by measures that remove some of the roadblocks deterring entrepreneurship (Chatterji et al. 2013). Investment in human capital is one of the ways in which cities can remain competitive and achieve the shared growth that can reduce income inequality.

Concluding observations

Growth does not occur in a vacuum – between 65% and 80% of developing-country GDP is produced in cities. Therefore, how cities perform their facilitating functions affects the pace and quality of economic growth. Cities may not drive growth, but growth will be seriously constrained if cities are:

16 Note prepared for the symposium.

17 Entrepreneurship is the critical ingredient, and it is not necessarily correlated with human capital (Glaeser 2011). Larger cities could have an edge according to Behrens et al. (2013).

18 Note prepared by Martin Kenney for the symposium.

- unable to meet demand for infrastructure and services;
- unable to provide an attractive and secure business environment with an adequate supply of skills;
- unable to deal with problems posed by slums, congestion, and pollution; or
- slow at harnessing technologies that feed productivity and are critical to global connectivity.

The lessons of East Asian cities provide one strand of evidence. Their experiences have been well documented. In the case of China, for example, the growth of secondary cities into semi-mega-cities provides useful lessons, and Wu refers to the connection between residency in secondary cities and the issue of equality. The situation in Africa is quite distinct, however, as job creation and income generation have not followed the East Asian model, yet urbanisation is thriving (see Yusuf 2013b, Freire 2013, Freire et al. forthcoming). The key point made by Polese and others at the symposium is that early decisions can have lasting impact, so urban planning and decision-making deserves far closer attention than it is currently receiving. As in many decisions on economic management, short-termism is the enemy of long-term planning. One area where planners and economists can agree is that poor decisions on cities can vastly inhibit economic development. Given the speed of innovation and technical change, avoiding poor decisions while strengthening institutions is the right path to getting the most from cities in the search for economic growth.

References

- Acemoglu, D and J A Robinson (2012), *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*, Crown Business.
- Baldwin, R E and P Martin (2004), "Agglomeration and Regional Growth", in J V Henderson and J-F Thisse (eds), *Handbook of Regional and Urban Economics*, Vol. 4, pp. 2671–2711.
- Behrens, K, G Duranton and F Robert-Nicoud (2013), "Productive cities: Sorting, selection, and agglomeration", University of Geneva Department of Economics Research Paper 13111.
- Belissent, J and F Giron (2013), "Service Providers Accelerate Smart City Projects", Forrester Research, 30 July.
- Berkowitz, M (2013), "The Five Fastest Growing Cities", The Resilience Blog, 8 November.
- Bertaud, A (2002), "Note on Transportation and Urban Spatial Structure", paper presented at Annual Bank Conference on Development Economics, World Bank, Washington, DC, April.
- Bertaud, A (2004), "The Spatial Organization of Cities: Deliberate Outcome or Unforeseen Consequence", World Development Report 2003 Background Paper 27864.
- Bird, R M and E Slack (2013), "Metropolitan Finance: An Overview", in R W Bahl, J L Linn and D L Wetzel (eds), *Financing Metropolitan Governments in Developing Countries*, Cambridge, MA: Lincoln Institute of Land Policy.
- Black, D and V Henderson (1999), "A Theory of Urban Growth", *Journal of Political Economy* 107(2).
- Brülhart, M (2009), "Is the New Economic Geography Passé?", VoxEU.org, 7 January.
- Brülhart, M and F Sbergami (2009), "Agglomeration and Growth: Cross Country Evidence", *Journal of Urban Economics* 65(1).
- Chatterji, A, E L Glaeser, and W R Kerr (2013), "Clusters of Entrepreneurship and Innovation", NBER Working Paper 19013.
- Costanza, R, L Graumlich, W Steffen, C Crumley, J Dearing, K Hibbard, R Leemans, C Redman and D Schimel (2007), "Sustainability or Collapse: What Can we Learn from Integrating the History of Humans and the Rest of Nature", *Ambio* 36(7), pp. 522–527.
- Duranton, G and D Puga (2004), "Micro-Foundations of Urban Agglomeration Economies", in J V Henderson and J-F Thisse (eds), *Handbook of Regional and Urban Economics*, Vol. 4, pp. 2063–2117.
- Economist (2013), "Urbanisation and growth: City chickens and country eggs", Analects blog, 4 August.
- Fox, S (2014), "The Political Economy of Slums: Theory and Evidence from Sub-Saharan Africa", *World Development* 54, pp. 191–203.
- Freire, M E (2013), "Urbanization and Green Growth in Africa", Green Growth Series Report No. 1, The Growth Dialogue, May.
- Freire, M E, S Lall, and D Leipziger (forthcoming), "Africa's Urbanization: Challenges and Opportunities", in J Lin and C Monga (eds), *Oxford Handbook of Africa and Economics: Context and Concepts*, New York: Oxford University Press.

- Frenchman, D, M Joroff and A Albericci (2011), "Smart Cities as Engines of Sustainable Growth", paper prepared for the World Bank Institute, June.
- Glaeser, E L (2011), "Unleash the Entrepreneurs", *City Journal* 21(4).
- Glaeser, E L (2013), "A World of Cities: The Causes and Consequences of Urbanization in Poorer Countries", NBER Working Paper 19745.
- Glaeser, E L and J Gottlieb (2009), "The Wealth of Cities: Agglomeration Economies and Service Equilibriums in the United States", NBER Working Paper 14806.
- Glaeser, E L and W R Kerr (2010), "What Makes a City Entrepreneurial?", Policy Brief, Harvard Kennedy School, February.
- Gómez-Ibáñez, J A and F Ruiz Núñez (2009), "Inefficient Cities", Taubman Center Policy Brief, Harvard Kennedy School, March.
- Hofman, A and G Wan (2013), "Determinants of Urbanization", Asian Development Bank Economics Working Paper 355.
- La Porta, R and A Shleifer (2008), "The Unofficial Economy and Economic Development," NBER Working Paper 14520.
- Marx, B, T Stoker and T Suri (2013), "The Economics of Slums in the Developing World", *Journal of Economic Perspectives* 27(4), pp. 187–210.
- Perlman, J (2013), "Ecocities for all – Now is the Time?", working paper, The Mega-Cities Project.
- Perlman, J, E Hopkins and A Jonsson (1998), "Urban Solutions at the Poverty/Environment Intersection", The Mega-Cities Project Publication MCP-018.
- Ruble, B A, R E Stren, J S Tulchin and D H Varat, eds. (2009), *Urban Governance Around the World*, Woodrow Wilson International Center for Scholars.
- Scott, A (2011), "Emerging Cities of the Third Wave", *City* 15(3–4), pp. 289–321.
- Scott, A (2013), *A World in Emergence: Cities and Regions in the 21st Century*, Cheltenham: Edward Elgar.
- Slack, E (2002), "Municipal Finance and The Pattern of Urban Growth", C D Howe Institute Commentary, 160.
- Tabuchi, T (2013), "Historical trends of agglomeration to the capital region", VoxEU.org, 28 November.
- Tabuchi, T (2014), "Historical trends of agglomeration to the capital region and new economic geography", *Regional Science and Urban Economics* 44, pp. 50–59.
- United Nations Human Settlements Programme (2010), "Urban Trends: Urbanization and Economic Growth", March.
- United Nations Population Division (2012), *World Urbanization Prospects: The 2011 Revision*.
- World Bank (2013), *World Development Indicators 2012*, Washington, DC.
- Yusuf, S (2013a), "Metropolitan Cities: Their Rise, Role and Future", in Roy W Bahl, J L Linn and D L Wetzel (eds), *Financing Metropolitan Governments in Developing Countries*, Cambridge, MA: Lincoln Institute of Land Policy.
- Yusuf, S (2013b), "Will Cities Continue Driving Economic Growth", The Growth Dialogue Working Paper 6.

Shahid Yusuf is currently Chief Economist of The Growth Dialogue at the George Washington University School of Business in Washington DC. He holds a Ph.D. in Economics from Harvard University, and a BA in Economics from Cambridge University. Prior to joining the Growth Dialogue, Dr. Yusuf was on the staff of the World Bank. During his 35 year tenure at the World Bank, Dr. Yusuf was the team leader for the World Bank-Japan project on East Asia's Future Economy from 2000-2009. He was the Director of the *World Development Report 1999/2000, Entering the 21st Century*. Prior to that, he was Economic Adviser to the Senior Vice President and Chief Economist (1997-98), Lead Economist for the East Africa Department (1995-97) and Lead Economist for the China and Mongolia Department (1989-1993).

Dr. Yusuf has written extensively on development issues, with a special focus on East Asia and has also published widely in various academic journals. He has authored or edited 27 books on industrial and urban development, innovation systems and tertiary education which have been translated into a number of different languages.

Dr. Danny Leipziger is the Managing Director of the Growth Dialogue, a network that works to extend economic growth to as many places on the planet as possible. Driven by a passionate belief that without growth, sustainable development and improvements in people's lives are impossible, the Growth Dialogue seeks to connect high level policymakers and thought leaders with those whose policy decisions can benefit from practical experience and the latest work on economic growth. In addition to founding the Growth Dialogue, Dr. Leipziger holds a Professorship in International Business and International Affairs at George Washington University in the USA, where he has been on the faculty since 2009.

Dr. Leipziger formerly headed the World Bank's Poverty Reduction and Economic Management (PREM) Vice Presidency, a network of more than 700 economists and other professionals working on economic policy, lending, and analytic work for the World Bank's client countries. He led the repositioning of the World Bank on economic growth and launched the Bank's Gender Action Plan. He advised three World Bank Presidents and managed the Bank's overall interactions with key partner institutions – including the IMF, OECD, WTO, EU and the G8/G20. He was the Vice Chair of Spence Commission on Growth and Development. He is the author of numerous books in the fields of development and finance, has published extensively in scholarly journals, and is a frequent media commentator on global issues.

The **Centre for Economic Policy Research**, founded in 1983, is a network of over 800 researchers based mainly in universities throughout Europe, who collaborate through the Centre in research and its dissemination. The Centre's goal is to promote research excellence and policy relevance in European economics. Because it draws on such a large network of researchers, CEPR is able to produce a wide range of research which not only addresses key policy issues, but also reflects a broad spectrum of individual viewpoints and perspectives. CEPR has made key contributions to a wide range of European and global policy issues for almost three decades. CEPR research may include views on policy, but the Executive Committee of the Centre does not give prior review to its publications, and the Centre takes no institutional policy positions. The opinions expressed in this paper are those of the author and not necessarily those of the Centre for Economic Policy Research.