The Spatial Economy

Background Research Report for the
Integrated Urban Development Framework

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Professor Ivan Turok and Dr Jackie Borel-Saladin

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Introduction

During the last two or three decades there have been some remarkable geographical shifts in population and economic activity around the world. This has contributed to a burgeoning interest among policy-makers and researchers in the economic significance of cities. The purpose of this report is to review the latest thinking and evidence on the economic contribution of cities and towns in South Africa, with a view to identifying challenges and opportunities for urban policy. The context is one of increasing economic integration, both between cities and other places within South Africa, and between South African cities and other parts of the world. This creates opportunities for cities and towns to attract new forms of investment, secure new markets and to develop new economic roles and relationships with other places, but also pressures of intensified competition for capital, trade and other resources. Meanwhile, there are also countervailing arguments emerging for greater localisation of city and national economies in the interests of job protection, import substitution, food and energy security, and environmental sustainability, encapsulated in the notion of the ‘circular economy’ (Ellen MacArthur Foundation, 2012). The report is organised around three basic questions:

1. Has South Africa derived an economic dividend from urbanisation?
2. How well-placed are South African cities globally?
3. What is the relative performance of different cities and towns in South Africa?

These questions are underpinned by a more fundamental concern with (i) the overall efficiency of, and (ii) the extent of inequity in, the country’s current settlement hierarchy and its trajectory – is this helping or hindering growth and inclusion? The analysis starts by considering contemporary ideas and evidence about the economic effects of urbanisation. The second section presents leading ideas and evidence about the international standing of South African cities. Section three compares the performance of different types of cities and towns, based on their size, status and function. It also compares cities against conditions elsewhere in the country and considers how people are responding to the uneven growth of different places. The last two sections summarise the evidence and distil implications for government policy.

A recurring difficulty for this analysis is the lack of robust data for city-level analysis in South Africa. This applies to economic outcomes, such as output and employment, and to the underlying drivers, such as the industrial structure, investment, infrastructure and skills. Statistics South Africa provides extensive economic, labour market and household data for the nine provinces, but very little at the local/city level. Population census data is available for small area analysis, but it includes relatively few economic variables. We use data from the 2001 and 2011 censuses as far as possible. We also rely heavily on modelled data from the independent organisation, IHS Global Insight. Data to compare South African cities with their international counterparts is particularly scarce, hence the number of variables used for this exercise is restricted.

For most of the analysis, cities are defined on current municipal boundaries for pragmatic reasons of data availability. This is appropriate for the main cities because municipalities have generous boundaries which approximate to functional labour market areas or
commuting catchments. The unusual extent of municipal boundaries in South Africa reflects the political imperative when urban government was reorganised in 2000 to incorporate outlying suburbs and dormitory townships in order to create the spatial basis for effective strategic planning and redistribution of resources. Municipal boundaries are less satisfactory when analysing the performance of smaller cities and towns, because they encompass large rural areas as well. Section three includes some data based on more suitable boundaries for smaller cities and towns.

In much of the analysis a distinction is drawn between the eight metros and 22 ‘secondary cities’. The Appendix contains a map showing both areas. The metros have larger populations, bigger and more diverse local economies, and higher level administrative functions than the secondary cities. The metros are unitary (single tier) municipalities whereas the secondary cities share some responsibilities with larger district municipalities. There is no official or generally-agreed definition of secondary cities. We follow the convention set by the National Treasury’s Cities Support Programme, subsequently used in the SA Cities Network report Secondary Cities in South Africa: The start of a conversation (John, 2012). The 22 secondary cities were defined by the size of (i) their municipal budgets, (ii) their population and (iii) the local economy, measured by Gross Valued Added by Region (GVA-R). All the provincial capitals were also included to reflect their functional role.

1. Has South Africa derived an economic dividend from urbanisation?

South Africa is one of the most urbanised countries in sub-Saharan Africa. It is also one of the wealthiest. The current level of urbanisation varies between 62% and 78% depending on how ‘urban’ is defined (Statistics SA, 2012; CSIR, 2013). In most parts of the world the process of urbanisation (i.e. the increasing share of the population located in urban areas) has been associated with industrialisation and economic development. According to the World Bank, for example,

“No country has grown to middle income without industrialising and urbanising. None has grown to high income without vibrant cities. The rush to cities in developing countries seems chaotic, but it is necessary” (World Bank, 2009, p.24).

There are various theories and explanations for why urbanisation should contribute to economic growth. The central idea is that the growing spatial concentration of population generates efficiencies, which lower costs and promote increased economic activity (Turok and McGranahan, 2013). For example, concentration reduces the costs of shared infrastructure, expands the labour pool available to firms and lowers the costs of transporting goods to households. Concentrated populations also facilitate more learning and innovation because proximity permits face-to-face communication and sharing ideas and information. This fosters entrepreneurial dynamism. There may be cumulative effects at work as the advantages of growing populations spur increasing creativity, attract mobile investment and talent, and generate growth from within.

There is considerable evidence from around the world to support the proposition that urbanisation contributes to economic growth and development (World Bank, 2009; UN-
Habitat, 2010; Henderson, 2010). The three continents of the global South that are still urbanising are Asia, Latin America and Africa. The evidence from Asia and Latin America strongly suggests that they have been gaining an economic advantage from urbanisation because of the strong statistical relationship with rising national prosperity. Figures 1 and 2 present original evidence on the relationship between urbanisation and economic progress (defined as average income, or GDP per capita) for a sample of countries from Asia and Latin America. They show the change in the proportion of people living in urban areas and economic development over a 27 year period between 1985 and 2012. Figure 1 shows a consistent strong relationship for all Asian countries for which there is data available. China enjoyed the greatest increase in prosperity with average incomes rising by nearly 900%, while the level of urbanisation more than doubled from 23% to 52% (table A1 in the appendix gives the actual figures). Pakistan experienced the least economic improvement with average incomes rising by nearly 72%, while the rate of urbanisation increased from 29% to 37%.

Figure 2 shows a similar pattern for Latin America, except that levels of urbanisation are much higher than in Asia because the continent urbanised much earlier. Average incomes are higher too. Once again, in all cases continuing urbanisation is associated with rising average incomes. Chile enjoyed the greatest increase in prosperity over the period: average incomes increased by 191%, while the urbanisation level rose from 83% to 89%. Venezuela experienced the least economic improvement: average incomes increased by 21%, while the urbanisation level rose from 82% to 94%.

Figure 1: Urbanisation and economic development in Asia

Source: World Development Indicators
Note: The data correspond to changes between 1985 and 2012 for each country
Figure 2: Urbanisation and economic development in Latin America

Source: World Development Indicators
Note: The data correspond to changes between 1985 and 2012 for each country

Figure 3 shows a very mixed picture for Africa. Seven countries enjoyed a rise in average incomes, but five countries experienced a decline as economic growth failed to keep pace with population growth, or even experienced a reversal. Uganda experienced the biggest increase in prosperity between 1985 and 2012: average incomes rose by 119%, while its urbanisation level rose from 9% to 16% (table A1). Ghana was not far behind: average incomes rose by 111%, while its urbanisation level rose from 33% to 53%. Urbanisation increased at a slightly faster rate in Africa than in Asia, but it was clearly not associated with anything like the same level of economic improvement.

Figure 3: Urbanisation and economic development in Africa

Source: World Development Indicators
Note: The data correspond to changes between 1985 and 2012 for each country
In South Africa's case the level of urbanisation increased from 49% to 62%, but GDP per capita increased rather modestly - by 19% - from US$5,026 to US$6,003 (2005 prices). The country's economy clearly has not benefited as much as most other countries from the increasing concentration of population in cities and towns. In other words, the economic dividend from urbanisation has been limited.

There may be a variety of reasons for this. The lacklustre performance of the national economy may reflect a variety of factors that have little or nothing to do with spatial issues, such as its concentrated ownership structure, poor international competitiveness, low levels of innovation and poorly educated workforce. Yet it could also be that some aspects of urbanisation have acted as a drag on economic progress. For example, it is well known that South African cities have distorted urban forms, experience congestion, shortages of developable land, high property prices, and constraints on energy, water and other essential infrastructure (NPC, 2012). Rural-urban migration has been higher than it was under apartheid influx controls because of a rebound effect following their removal. Rural migrants moving into informal settlements do not appear to contribute to cities’ effective labour supply because of their peripheral location and low skills. Of course these are no more than tentative hypotheses at this stage. More detailed research is required to establish why the economic dividend from urbanisation appears to have been limited over the last two decades.

Before proceeding to the next theme, it is worth a brief further reflection on the inconsistent relationship between urbanisation and development in Africa. One possible explanation is that GDP per capita in some African countries does not reflect real improvements in living standards and well-being because it excludes the informal economy, which has been growing, sometimes at the expense of the formal sector. A more meaningful indicator of human development is life expectancy. Figures 4-6 present evidence on the relationship between urbanisation and life expectancy for the same group of countries over the period 1985-2011. In fact the result is broadly similar. Urbanisation is associated with rising life expectancy in Asia and Latin America, but the pattern is much more mixed in Africa. Life expectancy has fallen in four African countries and risen in eight countries. It appears that the absence of a consistent connection between urbanisation and development across Africa is a real phenomenon that warrants further research. In South Africa average life expectancy fell from 60 to 53, mainly because of HIV-Aids and associated illnesses. It has recently begun to recover again.
Figure 4: Urbanisation and life expectancy in Asia

Source: World Development Indicators
Note: The data correspond to changes between 1985 and 2011 for each country

Figure 5: Urbanisation and life expectancy in Latin America

Source: World Development Indicators
Note: The data correspond to changes between 1985 and 2011 for each country
2. The global economic role of South African cities

In the two decades post-apartheid, the context of the South African economy has been transformed from a position of relative isolation from the international economy to reinsertion and reintegration. Sanctions and exchange controls that prevented companies from investing abroad have been lifted. Many of the tariffs and other barriers that protected the domestic economy have been withdrawn or substantially reduced in order boost competitiveness and attract foreign investment. This has coincided with a bigger and broader wave of globalisation that has brought national economies closer together as a result of falling transport costs, more mobile capital and labour, technological changes, lower tariff protections and less regulated markets.

There has been much debate among academics about whether the improvements in communications and market access associated with ‘economic integration’ have tended to mean more spatially-concentrated activity, or dispersal to a ‘flatter’ economic landscape. Either way, the fact that the ‘world is getting smaller’ has created opportunities for South African cities to attract new forms of investment, to serve new markets and develop new economic functions. Against this, a more open and inter-connected economy has also meant greater competition for resources and trade, increased import penetration (particularly from China), more pressure to suppress business costs, and of course greater vulnerability to external shocks and instability. Since 1994 many of South Africa’s leading companies have shifted their focus from domestic activities to ‘go global’ by investing abroad in the belief that this was more profitable, such as SAB-Miller, BHP Billiton, Naspers, MTN, Anglo American, Old Mutual, Shoprite and Standard Bank. South African companies
have been less successful at developing local productive assets and exporting locally made goods. South Africa’s rich natural resource endowments still tend to be exported as raw materials with limited beneficiation and extraction of downstream value from processing and manufacturing.

There is a large body of research on the changing role of cities in the international economy. The most influential group of studies comes under the rubric of the ‘world cities’, ‘global cities’ or ‘world city networks’ literature. The key authors and their main texts are John Friedmann (1986), Saskia Sassen (2001) and Peter Taylor (2004). There are two bold propositions at the heart of this wide-ranging corpus of research:

i. Cities are tending to replace national territories as the key units or engines of economic growth and value creation, and

ii. The fortunes of cities are increasingly independent of national governments.

The basic argument is that globalisation and the spread of information and communications technologies (ICT) mean that successful cities are first and foremost those that are well integrated into global flows of finance, trade, talent and information. Cities develop these strong international connections by becoming organising nodes, or command and control centres, of global business networks. They function as primary locations for the headquarters of major multinational corporations, financial institutions and specialised business services. The performance of any particular city depends above all on its economic power and position in the overall hierarchy of world cities. Successful cities are sites of intense economic and social interactions involving the exchange of high-level knowledge and technical know-how. This enables them to capture a growing share of global resource flows.

This research emerged during a period when globalisation and lightly-regulated capitalism were on the ascendancy in Europe and North America. In some respects it is a contemporary version of the traditional export base model of urban growth, with manufactured exports replaced by specialised business services. One implication is that city authorities need to take on some of the traditional economic responsibilities of national governments. They need to become more responsive to external investment and trading opportunities, and more competitive about local business conditions. They need to strengthen their strategic capabilities and leadership because their fate lies increasingly within their own hands and depends less on national support.

The implications for a country like South Africa are that its cities need to be more energetic about positioning themselves in international networks relevant to their particular economic strengths in order to promote trade and investment. Some of the priorities may include improving their global connectivity through higher capacity broadband, having more international flights to more destinations, and hosting business conferences and other events that will put them ‘on the map’. It could mean encouraging the internationalisation of universities, specialised research and health facilities, and related institutions. It may require improving the general environment for business in their areas, including fewer unnecessary regulatory burdens. This will help to attract, retain and develop global
companies and highly skilled workers, and thereby secure a larger portion of capital and resource flows.

The Globalisation and World Cities (GAWC) research network has produced an index of connectedness that is intended to reflect the relative economic power of different cities. It essentially measures the strength of the links between the offices of 100 advanced producer service companies (lawyers, accountants, managing consultants, engineers, marketing, design companies etc) in 315 cities world-wide (Taylor, 2004). Cities that are strongly networked with other cities are considered to be leading global cities. The index was first produced in 2000 and updated in 2004, 2008 and 2010. There are three categories of cities, according to their power in the network. Alpha is defined as “very important world cities that link major economic regions and states into the world economy”. Beta is defined as “important world cities that are instrumental in linking their region or state into the world economy”. Gamma is defined as “world cities linking smaller regions or states into the world economy, or important world cities whose major global capacity is not in advanced producer services”.

Johannesburg is the only African city in the alpha category, according to the 2010 index. It is in 47th and final place in this division, ranked behind Philadelphia, Lisbon, Santiago, Taipai, Bangkok, Barcelona, Atlanta, Vienna and Dallas. The leading global cities according to the index are London, New York, Hong Kong, Paris, Singapore, Tokyo and Shanghai. There are 15 European cities in the alpha category, 12 from North America, 14 from Asia, three from South America and two from Australia. For Johannesburg to be the only African city in this division is notable and highly significant. It implies that the city is performing a unique role - a kind of gateway function - in connecting South Africa and indeed sub-Saharan Africa to the wider international economy. It may be a channel for all kinds of resources, people and information, with many different economic spin-offs and sources of dynamism for the wider region, the country and the sub-continent. No other African cities have this profile or reputation, and none can hope to replicate this function, which has been built up over decades.

Cape Town is situated in the second category of 64 beta cities, along with three other African cities, Cairo, Casablanca and Lagos. The leading beta cities (ranked just behind Johannesburg) are Dusseldorf, Stockholm, Prague, Montreal, Rome, Hamburg and Manila. Cape Town is in the middle of the range of beta cities: behind Lima, Karachi, Manchester and Bucharest, but ahead of Riyadh, Montevideo and Minneapolis. This also implies that Cape Town is performing a special role, both in South Africa and in the wider sub-continent, with all sorts of spillover benefits for the country. Its function is bound to differ in various ways from that of Johannesburg, since its economic structure is distinctive. For example, Cape Town airport is much smaller than OR Tambo, with far fewer international connections.

Durban is ranked towards the bottom of the third category of 67 gamma cities, along with three other African cities, Nairobi, Tunis and Accra. Durban is behind Muscat, Islamabad and Colombo, but ahead of Austin, Belfast and Turin. Durban’s position is relatively low considering it is not that much smaller that Johannesburg or Cape Town. This is presumably because it has a smaller financial and business services sector. Durban’s international
functions are more heavily oriented towards manufacturing and port-related logistics activities, which do not feature prominently in the GAWC analysis. Recent investment in the International Convention Centre, King Shaka airport and the Dube Trade Port are clearly aimed strengthening Durban’s international position.

Pretoria is in a separate category of cities that are not world cities as defined by GAWC. They are considered to have sufficient services of their own so as not to be dependent on world cities. Pretoria’s principal functions are domestic – the executive arm of government, the site of higher education, research organisations and the military – and diplomatic (international embassies).

The implication of this evidence is that most South African cities are not strongly integrated into the global economy, at least as far as specialised business services are concerned. Johannesburg is the principal exception, and the only African city in the premier league of highly-connected world cities. Cape Town is in the second division, but is not unimportant. Durban and Pretoria also feature on the list of world cities, but their global connections are far less significant. From this evidence, there may be a case for trying to strengthen the international profile of additional cities in South Africa besides Johannesburg and Cape Town. This would need to be part of a proper evidence-based strategy, not a gimmick to grab attention.

Comparing the four indices from 2000 to 2010 enables a simple analysis of the trajectory of South African cities over time. Have they become more or less integrated into the world economy during the last decade? One might have expected their integration to increase following the end of South Africa’s isolation and the withdrawal of protections during the 1990s. Table 1 and figure 7 show the ranking of South African cities in each period.

The picture is quite mixed overall and it is difficult to discern a clear trend. Johannesburg’s position has slipped slightly over the decade. This could be linked with the headquarters of several major corporations being transferred to the UK during this period, such as Anglo-American, although the city remains the headquarters of at least seven companies in the Mining Top 100 and the principal location for South Africa’s major banks and most insurance companies (Harrison and Zack, 2012). Cape Town’s position seems to have been quite volatile, with no clear increase or decline. Durban appeared to be slipping until the 2010 index suggested a recovery. Pretoria has move in and out of the index, with no consistent trend over time. Summing up, South Africa’s four main cities have broadly held their own over the last decade, with no general improvement or deterioration in their global standing.
Figure 7: Ranking of South African cities according to the GAWC index

![Graph showing the ranking of South African cities according to the GAWC index]

Source: Based on successive reports from GAWC, accessed at: www.lboro.ac.uk/gawc

Note: The dotted lines signify incomplete observations

Table 1: Ranking of South African cities according to the GAWC index

<table>
<thead>
<tr>
<th>City</th>
<th>2000</th>
<th>2004</th>
<th>2008</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johannesburg</td>
<td>43</td>
<td>42</td>
<td>44</td>
<td>47</td>
</tr>
<tr>
<td>Cape Town</td>
<td>94</td>
<td>81</td>
<td>96</td>
<td>79</td>
</tr>
<tr>
<td>Durban</td>
<td>165</td>
<td>173</td>
<td>194</td>
<td>167</td>
</tr>
<tr>
<td>Pretoria</td>
<td>n.a.</td>
<td>225</td>
<td>n.a.</td>
<td>187</td>
</tr>
<tr>
<td>Cairo</td>
<td>59</td>
<td>55</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>Nairobi</td>
<td>99</td>
<td>165</td>
<td>83</td>
<td>113</td>
</tr>
<tr>
<td>Casablanca</td>
<td>110</td>
<td>140</td>
<td>88</td>
<td>95</td>
</tr>
<tr>
<td>Lagos</td>
<td>123</td>
<td>150</td>
<td>111</td>
<td>104</td>
</tr>
<tr>
<td>Harare</td>
<td>133</td>
<td>194</td>
<td>212</td>
<td>288</td>
</tr>
<tr>
<td>Tunis</td>
<td>142</td>
<td>143</td>
<td>144</td>
<td>132</td>
</tr>
<tr>
<td>Accra</td>
<td>149</td>
<td>206</td>
<td>158</td>
<td>177</td>
</tr>
<tr>
<td>Lusaka</td>
<td>155</td>
<td>n.a.</td>
<td>191</td>
<td>255</td>
</tr>
</tbody>
</table>

Source: Based on successive reports from GAWC, accessed at: www.lboro.ac.uk/gawc

It is useful to compare South African cities to other leading cities in Africa. Cairo appears to have slipped slightly, rather like Johannesburg. Nairobi’s position has been very volatile, like Casablanca and Accra. Harare’s position has deteriorated badly, along with Lusaka. Lagos seems to have improved its position over time, along with Tunis. On balance, the relative international position of the leading African cities appears to have declined somewhat over
the last decade. This is perhaps surprising considering the relatively strong performance of many African economies over this period, including Ghana, Nigeria, Kenya, Angola, Mozambique and Ethiopia. It may be that the commodities-driven nature of the resurgence of many African economies has tended to by-pass their principal cities (Turok, 2013). This is the very opposite of the proposition at the heart of the global cities literature noted at the beginning of this section that cities are replacing national territories as the engines of economic growth.

It should be borne in mind that the global cities index is rather narrow in scope. It does not reflect the performance of cities in exporting manufactured goods, processed minerals or more routine services (such as business process outsourcing). Tourism is also excluded, as is the internationalisation of fast-growing sectors such as higher education. In addition, the emphasis on globalisation as the main driver of city success may obscure stronger trading patterns and business linkages between cities within the African continent but not beyond that. For example, major South African banks and retail corporations have expanded considerably into other African countries during the last decade. Third, the idea of cities having been decoupled from their domestic economic situation may be exaggerated, as is the supposed diminishing importance of the nation state. We show evidence for this in the next section. The continuing significance of nation states has become very apparent during the global crisis, with enormous bank bailouts and fiscal stimulus packages that no other sphere of government could contemplate (Therborn, 2011). Finally, in emphasising the economic flows between cities, insufficient recognition is given to the multi-dimensional character of cities. Cities are not just spaces where bundles of flows come together, but places with many different attributes that influence their economic development, including their built environments and social institutions.

3. The relative performance of different cities in South Africa

It has been established that the performance of cities is determined by a range of factors and forces beyond the movement of population into urban areas and the strength of their international connections. This section drills down more deeply into the dynamics of urban change in South Africa over the last two decades, both to describe the comparative performance of different places and to try and shed light on the reasons for these differences.

We situate this analysis in the context of a broad corpus of recent urban research that goes beyond the ‘global cities’ literature. This work is less easy to define, but can be summed up loosely under the notion of the ‘new spatial economics’ (Krugman, 2011; Storper, 2011; Glaeser, 2011), linked to the concept of ‘agglomeration economies’ (Duranton and Puga, 2004; Storper, 2010; Turok and McGranahan, 2013). Some of the ideas underpinning this research can be traced back over a century, but it has given a boost by the coincident resurgence of major cities in many countries with increasing economic integration of cities, regions and nations over recent decades (Scott, 2008; Krugman, 2011).

The revival and rediscovery of cities has contradicted the predictions of many economists that globalisation, falling transport costs, the spread of ICT and the deregulation of markets
would lead to the ‘end of geography’, the ‘death of distance’, and a ‘flat world’ (Friedman, 2006). In other words, the view was that economic activity would become more dispersed over time towards lower cost nations, regions and localities. Instead, it seems that the dynamic of economic concentration and agglomeration has generally become more rather than less important (Christopherson et al, 2008; Scott, 2008). One of the reasons why economic integration may promote the spatial agglomeration of economic activity rather than a geographically dispersed pattern is because many of the key factors that determine how value is produced are unevenly distributed among places. Mobile capital tends to seek out locations with positive attributes, and internally-generated growth tends to be most robust in places with the strongest assets. We analyse in the evidence that follows whether economic activity is becoming more concentrated or dispersed in the South African situation.

**Analytical framework**

This simple framework draws on ideas from contemporary spatial economics to identify some of the main determinants of local economic success and their interrelationships. The process whereby local economies grow is highly complex with multiple factors at work and many feedback mechanisms that are not easily captured in a simple diagram. The framework indicates that there are two fundamental determinants of durable economic outcomes (such as rising levels of output, employment and income). These are productivity and innovation. These fundamental qualities of a local economy influence the kinds of goods and services produced (whether they are relatively high or low value) and how efficiently they are produced.

Productivity and innovation are in turn influenced by several more tangible attributes of a locality: agglomeration advantages, human capabilities, connectivity, liveability and resource efficiency. Agglomeration advantages are derived from the scale, density and diversity of economic activity within a place. Human capabilities cover the skills, competencies, ingenuity and entrepreneurial qualities of local people. Connectivity is the strength and quality of physical and electronic connections between the locality and other localities. Liveability is the quality of life and attractiveness of the locality as a place to live and work. Resource efficiency is how effectively land, material resources and other inputs are used to meet economic needs while minimising waste. These attributes are in turn affected by underlying characteristics of the area and its institutions, identified along the bottom row of the diagram.
This framework recognises several economic benefits associated with city size, density and diversity:

1. A large labour pool gives firms more flexibility to match their workforce with their changing business needs. Workers also have more choice of employer and opportunities for career progression. A better match between employers and workers reduces labour turnover and raises productivity.

2. Firms benefit from a bigger choice of suppliers and service providers, including investors, training organisations, marketing agencies and research centres. Firms enjoy higher capacity infrastructure and better connectivity to external markets, suppliers and collaborators.

3. Firms can learn more from other firms and organisations through sharing ideas and information. Knowledge spillovers, networks and trust are enhanced by proximity and dense concentrations of economic agents.

4. Diverse metropolitan economies can adjust to shifting technologies, markets and products more easily than specialised local economies. Responsiveness and flexibility to adapt to a fast-changing economic environment are important. A bigger pool of highly skilled workers enables more permutations of skills to be assembled and ensures greater versatility.

These positive externalities are offset by negatives, which can deter investment and encourage dispersal to surrounding areas and towns. More intense demand for space and services means that property and labour costs are higher. There is more congestion and pressure on the supply of electricity and natural resources such as water and air quality. Higher levels of in-migration increase competition for housing and public services, resulting in possible overcrowding and insanitary living conditions. It is critical that cities can absorb migrant populations effectively so that they become productive and part of the labour supply or entrepreneurial grouping. Alternatively, an expanding community of excluded young adults may become demoralised and disaffected.
Economic outcomes – current conditions and past trends

The most important outcomes of economic development are the quantity and quality of output/production, average incomes and employment. They indicate the level of prosperity and well-being of the city’s population.

Economic output

Gross Value Added (GVA) is an important measure of economic production (or ‘net economic output’) at the city level. It is broadly equivalent to GDP used at national level and is a key measure to indicate the size of the local economy, its rate of growth, and average incomes. This is vital for comparing the performance of different areas. GVA is also available for individual sectors or components of the local economy, so it can be used to show the changing industrial composition of different areas.

Figure 8 shows the total value of economic output for the eight metros and 22 secondary cities in 1996 and 2013. Johannesburg is estimated to produce over R300 billion worth of output in 2013, nearly double the value it produced in 1996. Johannesburg’s economy is 50% bigger than Cape Town’s, which is followed fairly closely behind by eThekwini and Tshwane. Ekurhuleni is substantially smaller (about 40% of the size of Johannesburg) and Nelson Mandela Bay is about 20% of the size of Johannesburg. The five biggest metros clearly dominate the economic landscape of the country.

Figure 8: GVA for Metros and Secondary Cities, 1996 and 2013

![Graph showing GVA for Metros and Secondary Cities, 1996 and 2013](source: IHS Global Insight database)

Figure 9 shows the growth in output for the eight metros, 22 secondary cities and the rest of South Africa over the period 1996-2013. Most important, the metros grew at nearly twice the rate of the secondary cities and the rest of the country. This is a very striking disparity. The sluggish performance of the secondary cities is also very apparent. They have underperformed the towns and rural areas, particularly since the onset of the recession in 2008.
They have clearly failed to harness the potential agglomeration advantages associated with their size and density.

Figure 9: Index of GVA for the metros and secondary cities, 1996-2013

![Index of GVA for the metros and secondary cities, 1996-2013](source: IHS Global Insight database)

Figure 10 disaggregates the growth in output for the eight metros over the period 1996-2013. Tshwane experienced the strongest growth, followed by Johannesburg. Tshwane’s economy more than doubled in size over this period. Mangaung, Nelson Mandela Bay and Ekurhuleni have had the weakest growth. Mangaung’s growth was just over 50%. The recession in 2009 was a severe setback everywhere, and the recovery since then has been weaker than the preceding period of growth. Tshwane has been least affected, presumably because its economy is heavily reliant on the public sector, which has continued to grow more strongly than the private sector. As the administrative capital of the country, the strong presence of national government departments and related entities gives Tshwane something of a ‘recession-proof’ character. It also has four universities and the headquarters of two national research organisations.

Figure 10: Index of GVA for the individual metros, 1996-2013

![Index of GVA for the individual metros, 1996-2013](source: IHS Global Insight database)
Figure 11 disaggregates the growth in output for the 22 secondary cities over the same period. George experienced the strongest growth, followed by Rustenburg. George’s economy more than doubled in size over this period, reflecting its success as a small but thriving regional service centre and a tourism hub – the ‘gateway to the Garden Route’ – in the Western Cape. Rustenburg is situated in North West Province, 100km from Pretoria. Its growth is attributable to the expansion of platinum and chrome mining and associated processing activities. It has the four largest platinum mines in the world and the largest platinum refinery in the world.

The economies of Matlosana and Matjhabeng both contracted over the period. Matjhabeng (formerly Welkom) in the Free State grew rapidly as a gold mining area from the 1940s, but mine closures have caused it decline since the 1990s (John, 2012). In recent years Matjhabeng municipality has also been affected by serious staff shortages, mismanagement, political interference, instability, financial distress and allegations of fraud and corruption (Free State Province, 2013). Matlosana (formerly Klerksdorp) in North West Province has also suffered from the decline of gold mining. The municipality is currently under provincial administration because of poor financial management and weak leadership. Apart from these outliers, the general pattern is quite consolidated – most secondary cities have increased their economic output by between 50-80% since 1996.

Figure 11: Index of GVA for the secondary cities, 1996-2013

Source: IHS Global Insight database

**Average income**

GVA per capita (or head of population) is a measure of average income in an area, and reflects the level of productivity and the employment rate. Figure 12 shows that all the metros have much higher average incomes than the country as a whole (about 40% higher), indicating that their economies are more productive than other areas. The metros are also significantly more productive than the secondary cities. All areas have experienced rising levels of output per person since 1996, despite population growth. It should be noted that the fact that average incomes are higher in one area than another does not mean that most
people are better off. It depends on how the wealth generated in the area is distributed between different economic actors and interests, including the different spheres of government.

Figure 12: GVA per capita for the metros and secondary cities, 1996 and 2013

Figure 13 shows the GVA per person for the individual metros. Johannesburg is significantly more productive than the other major cities, partly perhaps because the composition of its economy is skewed more towards higher value activities, such as financial services. The smaller metros and Ekurhuleni have substantially lower levels of output per person than the larger metros. All the metros have experienced rising output per person since 1996, although Ekurhuleni has clearly lagged behind the others, perhaps because of the deindustrialisation it has experienced and the lack of any substantial presence in the area of provincial or national government functions.

Figure 13: GVA per capita for the individual metros, 1996 and 2013
Figure 14 shows the GVA per person for the secondary cities. A group of five stand out as significantly more productive than the others. Steve Tshwete (formerly Middleburg) is situated 150 km east of Pretoria on an important transport corridor in Mpumalanga. Its strong economic position is related to the fact that it houses a major stainless steel plant (John, 2012). It is also an area of active coal mining. Rustenburg experienced by far the largest increase in GVA per capita, linked with its platinum and chrome mining activities. Govan Mbeki is an active coal mining area in Mpumalanga 100 km east of Johannesburg with a major extraction refinery in Secunda built by Sasol that produces petrochemicals (oil from coal). Emalahleni (formerly Witbank) is a neighbouring municipality in Mpumalanga immediately to the north of Govan Mbeki and west of Steve Tshwete. It also has extensive underground and opencast coal mining and the largest concentration of power stations in the country. Sol Plaatje is in the Northern Cape province and includes the diamond mining city of Kimberley. All the secondary cities have experienced rising output per person since 1996, except Matlosana, which was discussed earlier.

Figure 14: GVA per capita for the individual secondary cities, 1996 and 2013

Employment

The availability of employment is a crucial indicator of the state of the local economy, including the general level of prosperity or poverty. Lack of paid work in an area forces households to rely on transfers from other family members (remittances), or from the state in the form of pensions or other social grants. Figure 15 shows the trends in employment for the metros, secondary cities and the rest of South Africa. The rate of employment growth in the metros was more than twice that of everywhere else. The secondary cities performed worse than the rest of the country for the first six years and then picked up slightly during the subsequent decade. This evidence reinforces the earlier point that the secondary cities have failed to reap the agglomeration advantages associated with their size.
The dominance of the metros in terms of employment growth in South Africa is very apparent in figure 16. They accounted for no less than three-quarters of all net job creation in the country between 1996 and 2012. The secondary cities accounted for just over 10% of new jobs between 1996 and 2012 and the towns and rural areas for nearly 15%.

Figure 16: Employment growth in South Africa between 1996 and 2012

Figure 17 disaggregates the growth in employment for the eight metros. Tshwane experienced the strongest growth, followed by Johannesburg. This is consistent with the output data shown in figure 10. Job growth in Cape Town was some way behind, followed closely by eThekwini. Ekurhuleni was next – it suffered particularly badly from the downturn. The employment performance of Mangaung, Buffalo City and Nelson Mandela Bay has been particularly poor. Buffalo City and Nelson Mandela Bay have experienced severe deindustrialisation since the 1990s (see below).
Figure 17: Index of employment for the individual metros, 1996-2012

Source: IHS Global Insight database

Figure 18 disaggregates the growth in employment for the secondary cities. Rustenburg experienced the strongest growth, followed a long way behind by George and uMlathuze. Rustenburg’s rate of job growth even exceeded that of Tshwane. The reasons for the growth of Rustenburg and George have already been mentioned. uMhlathuze is on the north-east coast of KwaZulu-Natal and covers Richards Bay, the largest deep-water port in the country. It has benefited from the growth in mineral exports, aluminium smelting, iron and steel manufacturing, tourism and port-related activities.

At the opposite end of the spectrum, Matjhabeng has lost almost half of its jobs, mainly because of the decline in gold mining, contributing to out-migration and consequential loss of consumer spending. Its problems were discussed earlier, along with Matlosana, which has also suffered from the decline in gold mining. Emfuleni’s employment trajectory has been highly volatile. The municipality lies to the south of Johannesburg and forms the heartland of what was formerly known as the Vaal Triangle (including Vereeniging and Vanderbijlpark). This area was renowned for its sizeable iron and steel industry, which has undergone major restructuring and concomitant job losses in recent years.

Figure 18: Index of employment for the individual secondary cities, 1996-2012

Source: IHS Global Insight database
Industrial composition

It is important to go beyond the aggregate indicators of output and employment to examine the changing composition of each local economy. This has a bearing on the durability or sustainability of the growth path of each area. Figure 19 unpacks overall employment into the four main categories: manufacturing, trade (wholesale and retail, garages, hotels and restaurants), finance (banks, insurance, real estate and business services) and community services (community, social and personal services such as health and education). These are based on the broad sectors of the Standard Industrial Classification using one digit categories. Agriculture, mining, electricity, construction, transport and domestic work are smaller sources of employment and are excluded. Manufacturing and finance can be considered ‘tradable’ sectors and therefore part of the economic base of a local economy. Trade and community services are more dependent on the local population and other economic activities.

Figure 19 shows big differences in the economic composition of the metros, secondary cities and rest of South Africa, although the direction of change between 1996 and 2012 is more similar. The extent of relative deindustrialisation in the metros is the first striking finding – their share of employment in industry fell by more than a third during this period. Manufacturing was the largest employment sector in the metros in 1996, but it is now the smallest of the four. Table 2 below shows that this was mainly because of the strong growth in employment in the other sectors, although there was still an absolute loss of 63,000 industrial jobs. Deindustrialisation appeared far less dramatic elsewhere because it was not compensated for by strong growth in finance and trade.

The second major difference is the trajectory of financial services, which grew far more strongly in the metros than elsewhere. It grew from the smallest of the four sectors in the metros in 1996 to the second largest by 2012, adding three-quarters of a million jobs in the process. The third key observation is the relatively strong growth of community services employment everywhere. This sector appears to have grown more strongly in the towns and
rural areas and the secondary cities than in the metros, although this is mainly because they enjoyed less growth in finance and trade (see table 3 for the absolute numbers and percentage changes). The community services sector now dominates the economies of the secondary cities, towns and rural areas. A burning question is how sustainable this is, bearing in mind that most jobs in this sector are financed by taxes on other sectors.

Table 2: Employment change by major sector, 1996-2012

<table>
<thead>
<tr>
<th>Employment change, 1996-2012</th>
<th>Manufacturing</th>
<th>Trade</th>
<th>Finance</th>
<th>Community services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Absolute Change</td>
<td>Percentage change</td>
<td>Absolute Change</td>
<td>Percentage change</td>
</tr>
<tr>
<td>Cape Town</td>
<td>-27,404</td>
<td>-13</td>
<td>105,099</td>
<td>73</td>
</tr>
<tr>
<td>Ethekwini</td>
<td>-21,581</td>
<td>-11</td>
<td>54,905</td>
<td>75</td>
</tr>
<tr>
<td>Ekurhuleni</td>
<td>-8,672</td>
<td>-5</td>
<td>56,169</td>
<td>62</td>
</tr>
<tr>
<td>Johannesburg</td>
<td>11,689</td>
<td>5</td>
<td>184,866</td>
<td>92</td>
</tr>
<tr>
<td>Nelson Mandela Bay</td>
<td>-19,381</td>
<td>-30</td>
<td>7,956</td>
<td>30</td>
</tr>
<tr>
<td>Tshwane</td>
<td>21,174</td>
<td>23</td>
<td>115,367</td>
<td>112</td>
</tr>
<tr>
<td>Mangaung</td>
<td>-6,740</td>
<td>-40</td>
<td>3,596</td>
<td>22</td>
</tr>
<tr>
<td>Buffalo City</td>
<td>-11,969</td>
<td>-30</td>
<td>7,877</td>
<td>35</td>
</tr>
<tr>
<td>Total Metros</td>
<td>-62,885</td>
<td>-6</td>
<td>535,835</td>
<td>79</td>
</tr>
<tr>
<td>Total Secondary Cities</td>
<td>-24,139</td>
<td>-11</td>
<td>80,482</td>
<td>48</td>
</tr>
<tr>
<td>Rest of South Africa</td>
<td>-36,827</td>
<td>-16</td>
<td>83,422</td>
<td>35</td>
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<tr>
<td>Total South Africa</td>
<td>-123,851</td>
<td>-8</td>
<td>699,739</td>
<td>64</td>
</tr>
<tr>
<td>Source: IHS Global Insight database</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 20 shows the changing economic composition of the four biggest metros. The significance of manufacturing in eThekwini in 1996 and its subsequent decline is particularly striking. Cape Town also experienced considerable deindustrialisation. Tshwane and Johannesburg had relatively small manufacturing sectors in 1996, but managed to expand them (table 2), although not relative to the growth they experienced in other sectors. The growth in financial services in Johannesburg is particularly noticeable. It dominates the city’s economy to an extent that was unimaginable in 1996, with more than a quarter of all jobs. Tshwane also grew surprisingly strongly in this sector, although starting from a much smaller base. A final observation from figure 20 is that the composition of each city’s economy remains quite different. Ignoring community services, trade is the largest sector in Cape Town, manufacturing is still the most important in eThekwini, and financial services is the most important in Johannesburg and Tshwane.
Figure 20: Employment change by major sector in the large metros, 1996-2012

Source: IHS Global Insight database

Figure 21 shows the changing economic composition of the four smaller metros. The significance of manufacturing in Nelson Mandela Bay, Buffalo City and Ekurhuleni in 1996 and its subsequent steep decline is very striking. Nelson Mandela Bay and Buffalo City lost nearly a third of their manufacturing jobs (table 2). Yet manufacturing has never been very important in Mangaung. The limited growth of financial services in the smaller metros is another important finding. Finance remains far less important in these cities than in Gauteng or Cape Town. Finally, community services dominate the economies of the smaller metros to a far greater extent than the larger metros, and to an extent that looks unbalanced. Community services were always very important, but they have become increasingly so because of the limited growth in other sectors. Mangaung’s economy is the most skewed in this respect. It houses the headquarters of the provincial government and is also the judicial capital of South Africa and home of the Supreme Court of Appeal. At the opposite end of the spectrum, Ekurhuleni has no national or provincial government functions to bolster its weak economy.

Figure 21: Employment change by major sector in the smaller metros, 1996-2012

Source: IHS Global Insight database
**Employment rate**

Economic and employment changes are translated into variable rates of employment and unemployment in different places. The rate of employment measures the proportion of the working age population (aged 15-64) with a paid formal job. The unemployment rate is the proportion of the economically active population aged 15-64 who are able, willing and actively looking for work. The employment rate is a more accurate measure of the state of the local economy than the unemployment rate because it doesn’t exclude people who have been discouraged from looking for work by the lack of jobs. Figures 22 and 23 compare the unemployment and employment rates for different places to show how much more sensitive the employment rate is to differences in underlying economic conditions. The employment rate in the metros is more than twice as high as it is in towns and rural areas, where only one in five adults have a job.

**Figure 22: Employment rates for different areas, 1996 and 2012**

![Employment rates for different areas, 1996 and 2012](Source: IHS Global Insight database)

**Figure 23: Unemployment rates for different areas, 1996 and 2012**

![Unemployment rates for different areas, 1996 and 2012](Source: IHS Global Insight database)
Figure 24 compares the employment rate across the metros. It is striking that Johannesburg’s employment rate is roughly double that of the smaller metros, and considerably higher than the other large metros. It is the only city with an employment rate that approaches common international levels, which are generally above 60%. Tshwane has experienced the biggest increase since 1996, presumably reflecting its strong job growth (figure 17). Ekurhuleni’s employment rate has declined, presumably because of its poor employment record since the 1990s.

![Figure 24: Employment rates for the metros, 1996 and 2012](Source: IHS Global Insight database)

Figure 25 compares the employment rate across the secondary cities. The wide range of values - from reasonably high to very low - is very striking. On the upper end, the relatively buoyant situation in Rustenburg, Steve Tshwete, George and Govan Mbeki have already been discussed (figures 11 and 14). At the lower end, the problems in Emfuleni and uMhlathuze have also been discussed. The sharpest declines in the employment rate have been in Matlosana and Matjhabeng. Their difficulties were outlined earlier (figure 11).

![Figure 25: Employment rates for the secondary cities, 1996 and 2012](Source: IHS Global Insight database)
The relationship between the population and economy

The extent to which the spatial distribution of productive activity corresponds to where people live is particularly important in South Africa because of the legacy of stringent controls on population movement. Millions of people were denied access to expanding economic opportunities in the cities. The result was a serious misalignment between areas where the economy was growing and the places where most poor communities lived (the former homelands or bantustans). This spatial legacy of apartheid is undoubtedly both inefficient and inequitable, and is probably environmentally damaging. The issue addressed in this section is whether the situation has improved in the last two decades through closer alignment of jobs and population.

We start the analysis by presenting the latest attempt to map the distribution of the population and economic activity across the country. The CSIR has developed a more detailed settlement typology than the metro/secondary city distinction used above (CSIR, 2013). It is based on the size of the settlement, its density and the functions it performs. Figure 26 compares the distribution of the population and economic activity (GVA) by each type of settlement to show the extent of alignment.

At the top of the settlement hierarchy, are the four city-regions: Gauteng, Cape Town, eThekwini and Nelson Mandela Bay. Figure 26 shows that these areas accommodate 42% of South Africa’s population, but 57% of formal economic activity. These are obviously the country’s main economic centres and they are 36% more productive per resident than the country as a whole. Put differently, people’s chances of getting a job are much higher here than elsewhere. They correspond to the six largest metros, but with somewhat larger boundaries in most cases because they are defined on a purely functional basis. The productivity of these places is apparent from the fact they occupy less than 2% of the country’s land mass altogether.

Beyond the city-regions there are seven free-standing cities, including Bloemfontein (Mangaung), Pietermaritzburg (Msunduzi) and East London (Buffalo City). These cities accommodate 7.5% of the country’s population, but 8.5% of formal economic activity. The disparity between the size of their local economies and their resident populations is less than in the city-regions. They occupy 0.7% of the country’s land mass.

Regional service centres are smaller urban settlements and have fewer government functions. They would typically be dominated by trade activities, consumer services and personal services, and may also have mining activities. There are 44 of them, including Welkom, Witbank, Klerksdorp and Tzaneen. They have 14% of the country’s population, but only 11% of formal economic activity. Hence they are not as productive per resident as the country as a whole and occupy 1.5% of the land mass. Job prospects will be poorer here than in the cities.

There are many more service towns and small towns scattered across the country, making a similar aggregate demographic and economic contribution to the regional service centres. Together they have 14% of the population and 10% of economic activity. They occupy 3% of the land mass. Job prospects will not be very good here either.
The remaining rural areas are far more significant in terms of demographics than economics. They have 23% of the population but only 14% of economic activity. Consequently, job prospects will be particularly poor here. They also occupy the bulk of the land mass (93%). The simple finding from this is that there remains a big discrepancy between the distribution of the population and economy across the country.

Figure 26: Population and economic activity by type of settlement, 2011

A crucial question arising is whether the discrepancy between jobs and population is growing or diminishing. The CSIR analysis cannot answer this fully without information on the rate of economic growth in each settlement category, but table 3 at least shows the rate of population growth. It reveals that the population of the city-regions has been growing more quickly than every other area except service towns over the last 15 years. In addition, the population of the rural areas has been growing more slowly than everywhere else. Consequently, the alignment between jobs and population may have improved, depending on what has happened to jobs. In effect, people have been ‘voting with their feet’ and moving to where the jobs are growing. This is a natural and healthy process of adjustment, although it contributes to social dislocation and complicates the provision of public services.

Table 3: Population and economic activity by type of settlement, 2011

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>City-regions</td>
<td>56.8</td>
<td>42.2</td>
<td>3.04</td>
</tr>
<tr>
<td>Free-standing cities</td>
<td>8.5</td>
<td>7.5</td>
<td>2.62</td>
</tr>
<tr>
<td>Regional service centres</td>
<td>11.0</td>
<td>14.1</td>
<td>1.89</td>
</tr>
<tr>
<td>Service towns</td>
<td>4.2</td>
<td>5.3</td>
<td>3.07</td>
</tr>
<tr>
<td>Small towns</td>
<td>6.0</td>
<td>8.7</td>
<td>1.81</td>
</tr>
<tr>
<td>Rural areas</td>
<td>13.5</td>
<td>22.2</td>
<td>0.58</td>
</tr>
</tbody>
</table>

Source: Derived from data in CSIR 2013
The spatial disconnect between the economy and population can also be analysed using the simpler typology of metros, secondary cities and the rest of the country. Figure 27 shows that in 1996 the metros accommodated 52% of all jobs in the country, but ‘only’ 34% of the population (table A2 in the appendix has the actual numbers). By 2012, their share of all jobs had increased to 58%, while their share of the population was up to 39%. In other words, the net shift in the population was lagging slightly behind the net shift in jobs. The opposite applied in the towns and rural areas. Their share of all jobs fell from 30% to 26%, while their share of the population fell from 51% to 45%. Overall, there has clearly been a big shift in jobs and population from the towns and rural areas to the big cities, i.e. a continuing process of economic and demographic concentration.

Figure 27: Population and economic activity by settlement category, 1996

![Figure 27: Population and economic activity by settlement category, 1996](source: IHS Global Insight database)

Figure 28: Population and economic activity by settlement category, 2012

![Figure 28: Population and economic activity by settlement category, 2012](source: IHS Global Insight database)
We can see this process in action more clearly by comparing individual places according to the extent of growth they have experienced in population and employment. Figure 29 shows a scatter-plot of the relationship between population and employment change for all the metros and secondary cities. It shows clearly that areas that have experienced strong growth in employment have also experienced strong growth in population. Rustenburg, Tshwane, George and uMhlathuze are obvious examples. At the opposite end of the spectrum, places that have experienced a decline in employment have also experienced a decline or slow growth in population, such as Matjhabeng, Matlosana and Emfuleni.

Figure 29: Change in jobs and population for all metros and secondary cities, 1996-2012

The same exercise was repeated using data from the 2001 and 2011 population censuses. Figure 30 plots the change in employment against the change in population, using the absolute numbers rather than the percentage change. The key message is that the growth in employment broadly kept pace with the growth in population. This is obviously a positive and in some ways quite surprising finding.

Figure 30: Change in jobs and population for the metros, 2001-2011

Source: IHS Global Insight database

Source: Population census for 2001 and 2011
Tentative explanations

It is beyond the scope of this report to provide a complete explanation for the uneven economic performance of different cities and towns over the last two decades. However, several simple ideas and propositions can be tested with the available evidence. It is apparent that Johannesburg and Gauteng have out-performed other parts of the country and seem to have functioned as the main generator of the economy. Therefore, it is possible that distance from Johannesburg may be a factor influencing the growth of other cities and towns. Figure 31 tests this by analysing the relationship between distance from Johannesburg and the percentage change in employment for every other metro and secondary city. The line of best fit suggests that there may be something in this suggestion, but the relationship is certainly not strong.

Figure 31: Change in employment and distance from Johannesburg, 1996-2012

Source: IHS Global Insight database and an online distance calculator (http://distancecalculator.co.za/Default.aspx)

Another possible explanation for the variable performance of different cities could be de-industrialisation. The proposition would be that places with a relatively large share of manufacturing jobs in 1996 would suffer disproportionate decline subsequently because of South Africa’s relatively rapid exposure to international competition following the withdrawal of tariff protections post-1994. Figure 32 tests this by analysing the relationship between each city’s share of employment in manufacturing in 1996 and the percentage change in employment thereafter. The distribution of the observations and the line of best fit clearly suggest that there is no relationship of this kind. It is also apparent that there is no relationship in the other direction either: manufacturing has not acted as a consistent driver of local economic growth through its multiplier effects.
Has financial services perhaps replaced manufacturing as a driver of local economic development? The proposition would be that places with a relatively large share of financial services jobs in 1996 would suffer disproportionate growth subsequently because this has become a ‘leading’ sector. Figure 33 tests this by analysing the relationship between each city’s share of employment in financial services in 1996 and the percentage change in employment thereafter. The distribution of the observations and the line of best fit suggest that there may be a relationship of this kind, but it is not strong. Other factors are also involved, such as the growth of mining (responsible for Rustenburg’s growth) and tourism (perhaps responsible for George’s growth).
4. Summary

This section summarises the main findings of the report, before the next section draws out the policy implications.

i. Compared with many other countries in Asia and Latin America, South Africa appears to have derived only a limited economic dividend from urbanisation. The level of urbanisation increased from 49% in 1985 to 62% in 2012, but GDP per capita increased by only 19%. The country could probably have done much better if urbanisation had been planned more carefully with a view to improving efficiency and equity.

ii. The reintegration of South Africa into the international economy has not brought about the benefits for most cities that might have been anticipated. Deindustrialisation has been a major problem for most places. The growth of financial services in the bigger cities has probably been one of the benefits. Johannesburg is the only well-connected world city in Africa and it performs a unique gateway role in this respect. Overall, the major cities seem to have broadly held their own over the last decade, with no real improvement or deterioration in their standing. Further evidence on international trade and direct investment is required for a more comprehensive analysis.

iii. South Africa’s major cities have clearly out-performed smaller cities, towns and rural areas over the last two decades. This applies to economic output, productivity and employment. This disparity between places is most apparent from the fact that three-quarters of all jobs created in the country since 1996 have been located in the metros. The largest five metros are clearly the economic locomotives of South Africa.

iv. The performance of the secondary cities has been lacklustre on the whole. The main exception has been mining towns growing rapidly because of their mineral resources. A few mining areas with depleted resources have experienced serious decline. The significant role of mining in shaping the performance of secondary cities signifies a deeper concern about the lack industrial diversification in these places. They remain heavily dependent on digging minerals out of the ground and sending it off to other places. There appears to be little reinvestment in alternative activities to broaden the local economy and make it more resilient.

v. People have responded to the uneven development of different cities and towns through migration. The closer alignment of population and economic opportunities that has resulted from the growing concentration of both in the major cities must generally be regarded as a positive process, although it involves considerable social dislocation and does not automatically mean that households are better-off. More could be done to accommodate migrant populations in better living conditions by planning ahead and preparing for urbanisation.

vi. There has been a major shift in the composition of urban economies from manufacturing to finance and community services. The growth of financial services has dominated the changing profile of the major metros. The growth of community services
has been much more significant elsewhere. There must be concerns about the sustainability of these trends, especially outside the big cities.

vii. More research is required to understand and explain the changing spatial economy of South Africa, including the variable performance of different places, the costs and benefits of uneven development, and the obstacles to accelerated economic growth and a more balanced pattern of development. There is still a great deal that we not know about fundamental issues concerning the degree of (in)efficiency and (in)equity in the country’s current pattern of spatial development and its trajectory. Closer inspection of the process of economic and demographic concentration would be a good place to start.

5. Policy implications

This section sets out the policy implications, once again in a simple, straightforward manner.

i. Urbanisation needs to be taken more seriously across the government if a stronger economic dividend is to be secured. South African cities are neither efficient nor equitable, and rectifying the situation is not simply a matter of rolling out more infrastructure and basic service delivery. The whole apparatus of government needs to be better prepared for continuing urbanisation, both to absorb the expanding population in decent conditions and to facilitate accelerated economic development. Treasury funding to municipalities should include some allowance for future population shifts (and not just fund them retrospectively) to allow the metros to anticipate growth more effectively.

ii. The unique international role of the major cities needs more explicit attention and support from the government. The special gateway functions of Johannesburg, Cape Town and Durban cannot be substituted by smaller cities. Some of this is symbolic – recognising and rewarding the distinctive responsibilities of the main cities for their surrounding territories. The large cities are the country’s main economic drivers and need to be supported to take that role just as seriously as their other functions.

iii. The under-performance of the secondary cities is a major concern. They have a vital complementary role to play in avoiding excessive concentration of population in the largest cities. The possibility of establishing a network of secondary cities should be explored for them to collaborate, share experience, support further analysis and generally promote the interests and performance of this important category of the country’s settlement hierarchy. An immediate issue concerns the possibility of promoting industrial diversification so they are less dependent on the extraction of primary commodities and better prepared for their inevitable extinction.

iv. The metros need to work more closely with the government’s economic cluster to chart a more sustainable economic trajectory ahead. They need a better understanding of the detailed make-up of their local economies and of their distinctive strengths and weaknesses. The dramatic shift from manufacturing to finance, trade and community
services looks unsustainable at first sight. Higher levels of productive investment and
greater creativity and innovation are vital to improve productivity, competitiveness and
employment growth. SMMEs are bound to have a major role to play in expanding
labour-absorbing growth.

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Appendix

Map of Metros and Secondary Cities
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<tr>
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<th>1985</th>
<th></th>
<th>2012</th>
<th></th>
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<tr>
<td></td>
<td>Level of urbanisation (%)</td>
<td>GDP per capita (constant 2005 US$)</td>
<td>Level of urbanisation (%)</td>
<td>GDP per capita (constant 2005 US$)</td>
</tr>
<tr>
<td><strong>Asia</strong></td>
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*Source: World Development Indicators*
### Table A2: Population and economic activity by settlement category, 1996

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### Table A3: Population and economic activity by settlement category, 2012

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