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Smart specialisation and global competitiveness: Multinational enterprises and location-specific assets in Cape Town

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Multinational enterprises can play an important role in increasing the global competitiveness of cities through knowledge spillovers. The extent of spillovers depends on firm strategies, created assets and other local attributes. The paper focuses on six key sectors that account for a large share of the Cape Town metropolitan economy in South Africa. Forty -four lead firms were interviewed to assesses knowledge flows, capabilities of firms and other actors, and reliance on local assets. Firms had relatively strong absorptive capacities in all sectors, although they had to cope with human capital constraints. Inadequate infrastructure and city governance of the economy posed additional problems. Nonetheless, there was evidence of localised knowledge spillovers which differed across sectors. The combination of opportunities for “smart specialisation” as focus for an economic strategy, requisite assets, and the in-principle option to leverage political capital and invest the City’s capabilities are greater in some sectors than in others. Agro-processing, creative and design activities, retail, and tourism present more opportunities than oil and gas or construction for interventions to grow globally competitive activities in Cape Town.

Key words: City competitiveness, knowledge economy, MNE strategies, location-specific assets, smart specialisation, Cape Town.

INTRODUCTION

Multinational enterprises (MNEs) and leading domestic firms can enhance the global competitiveness of cities through access to knowledge, technology, skills, and markets. Whether and how this happens depends both on MNE strategies and on location-specific assets, namely whether economic and business conditions in a city make it an internationally attractive investment location or not. This paper analyses the role of lead firms in the global competitiveness of Cape Town, South Africa. It first reviews relevant literature on the role of knowledge in urban competitiveness and then gives a brief profile of Cape Town’s economy, followed by a presentation of data and methodology and of the findings.

The conclusion discusses the implications of the

analysis for a city economic policy in support of global competitiveness.

LITERATURE REVIEW

Knowledge is a key factor in global competition (Fagerberg and Verspagen, 2002; OECD, 1996). The competitiveness of entities, including cities, depends on the transfer and diffusion of knowledge, involving firms and other actors that may be geographically proximate or distant (cf. Feldman, 2000; Scott, 2001; Simmie, 2005; Storper, 1997). Knowledge flow can be incidental when they spill over from a more advanced to a follower firm, or they can be the outcome of cooperation between firms or between them and other actors. In the context of competitiveness, knowledge is often technological. Acquiring knowledge or mastering technology through a process of

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learning, relies on local capabilities which differ not just across firms but also across activities and sectors (Cohen and Levinthal, 1989). In the face of continuous technical change, new opportunities emerge that must be recognised, understood, and internalised (Bell and Pavitt, 1993; Cohen and Levinthal, 1990; Kim, 1997; Lall, 1992).

Since much global knowledge is controlled by MNEs, the relationship with these firms is an important arena for policy in support of economic development. This refers not just to attracting them -- and certainly does not mean that they should be attracted at all cost -- but also to ensuring that their presence benefits the local economy in view of an upgrading trajectory within which local firms improve their capabilities and develop new ones (Archibugi and Pietrobelli, 2003; Chudnovsky and Lopez, 2003; Seguino, 2007). A key issue is the quality of knowledge flows which in turn depends on the congruence between technological and other demands of foreign investors, and local capabilities (Chen and Chen, 2001; Lall, 1993; Mowery and Oxley, 1995; Narula and Dunning, 2009; Pack and Saggi, 1997; Rasiah, 2004). The interaction between global competition and local capabilities underlines the importance of localised knowledge spill-overs (Al-Mabrouk and Soar, 2009; Chandra, 2006; Kneller, 2005; Narula and Bellak, 2008; Radosevic, 1999). Where they are realised, a city will be more likely to be able to hold onto existing and gain new investments (Helmsing, 2001; OECD, 2007). In turn, such spill-overs are likely to emanate from the more important regional industries. The availability, accessibility, and quality of local assets influences knowledge spill-overs especially in activities characterised by location economies where geographic proximity plays a role for competitiveness (Blomström and Kokko, 1998; Görg and Greenaway, 2002).

Key local assets include human capital and infrastructure, plus other forms of the built environment, all of which are of course influenced by (local) policy and the quality of its implementation (Begg, 1999; Campbell, 2009; Cooke, 2004; Felker, 2003; Ivarsson, 2002). The challenge for public policy is not just to improve created assets but also to create the kinds of networks that help foster the integration of small and medium-sized firms (SMEs) into global value chains and thus, an inclusive growth trajectory (UNCTAD, 2005; Yeung et al., 2006). Since this is only possible in a focused way, "smart specialisation" which builds on evident local strengths and avoids unwinnable competition offers a promising way ahead (European Commission, 2008; Chen, 2007; Greunz, 2004; OECD, 2008).

The economy of the greater Cape Town region

The regional economy around Cape Town is rather diversified, with activities in the primary sector, manufacturing and services (Table 1). The service sector is predominant. Financial services and retail trade, catering

and accommodation alone make up almost one half of the local economy by value. The primary sector contributes only 3% to the regional economy, but is still the major exporter. Agriculture-related activities also provide inputs to manufacturing, especially agro-processing. Manufacturing still matters as well -- roughly one in six jobs in the regional economy is blue collar. The export composition of the province, much like that of the country at large, is in general concentrated on low-growth products with a declining share in world markets (Edwards and Alves, 2006). Innovation is therefore important to differentiate product portfolios in the traditional sectors and move them upmarket, and to open up and defend niches in newer, more dynamic activities (OECD, 2008; Western Cape Provincial Treasury, 2007; Chapter. 3).

But more important than such static assessments is the future potential of these activities, because an economy could of course be massively invested in the "wrong" kinds of specialisations. The Organisation for Economic Cooperation and Development (OECD, 2008) identified the following key value chains and emerging clusters in Cape Town: (i) agro-food, (ii) tourism and hospitality, (iii) wholesale and retail, (iv) construction and housing, (v) financial and business services, (vi) logistics, and (vii) creative and knowledge-intensive industries. This paper covers all of them -- albeit logistics only implicitly -- except financial and business services.

METHODOLOGY AND DATA

We define leading firms as those more likely to have the capabilities to resource, develop, and manage technological and other innovations, and thus focus on large firms with highly skilled staff, in-house innovation activities and preferably some presence in international markets (Huang et al., 2010). Lead firms within leading sectors are more likely to give rise to relevant knowledge flows, to possess advanced capabilities, and to have the possibility of generating networks that can in principle advance backward linkages. They are therefore instrumental to a discussion of global competitiveness. This paper is based on 44 key informant interviews with representatives of leading firms and other relevant entities, such as industry bodies and so-called special purpose vehicles (SPVs) aimed at lifting selected economic sectors onto a higher growth trajectory by providing certain public goods. The firm sample included in the paper is not statistically representative, nor are the firms "average"; on the contrary, as leaders they have capabilities that are well above those of an average firm in the respective sector. Their capabilities and strategies have implications not just for their own competitiveness but also for the larger metropolitan economy.

Data covered six of Cape Town's principal economic activities. We interviewed six entities in agro-processing, six in oil and gas, five retailers, eight in construction and property services, eight in the creative and design sector, and eleven in tourism. These sectors reflect the diversity of the urban and regional economy, spanning resource-based, manufacturing and service activities. The firms interviewed employ almost 17,000 people in Cape Town and its surrounds, about 1 percent of the 1.75 million formally employed labour force in the province (Statistics South Africa, 2010). Their South African headquarters are mostly in Cape Town but also other South African cities, notably Johannesburg and Durban. They all interact more or less intensely with the global economy either as

Table 1. The Western Cape (WC) regional economy around Cape Town, 2008.

Sector (Western Cape)	GVA* (R millions)	% of total WC GVA*	Employment (formal and informal)	% of total WC employment	Exports of goods (R millions)	% of total WC goods exports
Agriculture, forestry, fishing, food, beverages and tobacco	31 653	10.61	177 281	10.23	25 711	42.98
Construction and property services	12 887	4.32	131 395	7.58	N/A	N/A
Creative and design	N/A	N/A	47545**	2.74	N/A	N/A
Wholesale and retail trade	38 580	12.93	320 350	18.49	N/A	N/A
Catering and accommodation services	3 613	1.21	53 590	3.09	N/A	N/A
Manufacturing (including oil and gas; less food, beverages and tobacco).	45 041	15.10	211 475	12.20	32 505	54.34
Finance, insurance and business services	95 945	32.16	324 011	18.70	N/A	N/A
Government	29 966	10.05	211 919	12.23	N/A	N/A
Other	39 897	13.62	299 293	14.73	1602	2.68
Total	327 548	100	2 118 070	100	59 818	100

*GVA = Gross Value Added. ** = 2005. Source: Quantec EasyData (2010); van Graan (2005).

as exporters or because they absorb external knowledge flows.

Face-to-face interviews took place between January and April 2010, mostly in Cape Town and a few in Johannesburg and focused on factors that influence Cape Town's competitiveness, past, present and future, including questions about the basic profile of the firm (name, location(s), Group HQ, major activity, and size (workforce and turnover)), the nature of the firm's markets, reasons for (not) investing in Cape Town, knowledge absorption or technology transfer, strategies for learning and upgrading, and institutional and policy support.

FINDINGS

This study comprised domestically owned but globally exposed firms, some of whom were emerging MNEs in their own right, and subsidiaries of

foreign MNEs. Global sector dynamics, as well as the role the firms play in the national and regional economy are summarised in Table 2. The research focused on their capabilities and strategies, how the specific urban environment within which they pursued them influenced their performance, and what kind of localised knowledge spillovers this generated (Table 3). As was to be expected, strategies and capabilities vary between firms and sectors. Some focus on the local market whereas others at least in principle compete anywhere in the global economy. These are differences of degree; all firms interviewed are subject to some degree of global competition, either because they face foreign competitors in their home market or because they rely largely on exports or both. Time plays a role here, in that

especially domestically owned firms are at different phases of possibly similar globalisation trajectories that first see them compete primarily in the local market, then expand into surrounding Sub-Saharan African economies, and finally take on advanced economies, where their competitive advantages are more difficult to establish and defend (Morrison et al., 2008; Dakora et al., 2010). With respect to the absorption of global knowledge, there are more similarities than differences between the firms. To varying degrees, all try to tap into external knowledge and to internalise it in order to upgrade. This is a conscious effort, supported by the requisite resources, and thus different from learning-by-doing. The evidence shows that several firms in all sectors have the kinds of absorptive capacities

Table 2. Sector characteristics.

Sector	Competitive dynamics	Role in national economy	Role in regional economy around Cape Town	Entities interviewed
Agro-processing	Demand for highly specialised competencies, e.g. in bio- and nanotechnological materials and applications	10% of GDP, 5% of employment. Most developed food processing and manufacturing sector in SSA. Competitive horticultural sector. 17 MNEs and 9 large domestic firms.	Second most important manufacturing activity: 20% of output and employment. Second largest export sector.	2 subsidiaries of foreign MNEs, 4 domestic MNEs with 50-4,000 employees.
Oil and gas	Demand for specialised skills and technologies in offshore supply bases (OSB). Proximity to key logistics nodes. Africa predicted to be major oil and gas growth region in medium term.	Few first- and second-tier firms. Exploration, some production and refining. Growing offshore activities.	Mostly third-tier firms supplying upstream service providers to so-called super majors operating in West Africa and domestically. Refinery. Competence in maritime engineering. Base for standard upgrades and maintenance of offshore vessels. About 3,500 jobs in ship repair.	3 subsidiaries of foreign MNEs, 1 domestic MNE, 1 SPV with <100-several thousand employees
Construction and property services	Future growth likely to come from emerging markets. Green technologies: reduction in energy and resource use; more efficient building practices.	Six dominant domestic firms in the sector. Barriers to entry for international contractors except when local skills are insufficient. Massive public infrastructure programme.	Labour intense sector: relatively high absorption of unskilled labour.	4 large domestic firms, 2 domestic MNEs, 1 industry body, with <80-1,000 employees.
Creative and design	Convergence of multimedia and telecommunications technologies for production, distribution and consumption of creative content. Creative cities.	Relatively large online media market. One local company has a global presence, especially in emerging markets.	Cape Town hosts several creative industries and hubs, with some 750 firms.	1 MNE subsidiary, 1 domestic MNE, 3 local firms, 1 SPV, with 20-16,000 employees.
Retail	Concentration and centralisation of retailers. Specialisation and standardisation of wholesalers. E-commerce.	5 large retailers account for 80% of sales. High growth due to emerging black middle class, urbanisation, rising disposable income etc.	2 nd -highest per-capita retail density in SA.	5 local and foreign MNEs, with <600-10,000 employees.
Tourism	Concerns over terrorism, global financial crisis, fuel prices. Increased competition has led to more sophisticated destination choices. Online travel search and booking.	SA hosts 43% of Africa's business tourism.	Western Cape and Cape Town attract domestic, neighbouring-country, and international tourism.	5 local firms, 1 local and 1 foreign MNE, 3 SPVs, 1 industry body, with <500 employees.

SSA = Sub-Saharan Africa. Sources: Barnard (2008), Conradi (2009), Economist Intelligence Unit (2010), Florida (2002), Forbes et al. (2002), Norwegian Marine Technology Research Institute (2010), Simchi-Levi et al. (2003), Rogan et al. (2000), Wilkenon and Rocha (2008), World Travel and Tourism Council (2002).

Table 3. MNE strategies and location-specific assets.

Sector	Main MNE knowledge strategies	Problematic location-specific assets	Localised knowledge spillovers
Agro-processing	Investments in learning and upgrading; absorption of external knowledge through group, R&D alliances, equipment imports, or trade fairs.	Human capital: low and high skills. Infrastructure: cost of transport, inefficiency of seaport.	Research partnerships with local universities; backward linkages.
Oil and gas	Subsidiaries source knowledge primarily through group. Import of capital equipment. In-house innovation.	Human capital: especially low and artisan skills. Infrastructure (port): lifting equipment, warehousing facilities, spatial fragmentation. Government: lack of coordination between local, regional, and national.	Supplier upgrading through higher-tier firms. Generation of low-skill employment opportunities, especially in ship repair.
Construction and property services	Local firms, unlike their MNE counterparts, (are aware of but) do not yet use the latest building technologies: lack of demand and unsupportive regulatory environment.	Human capital: across skill levels, especially during booms. Infrastructure: inefficient and unsafe public transport. Urban sprawl: compromises service delivery. City bureaucracy: planning non-transparent, inefficient, and permits process very slow.	Suppliers learn from lead construction firms directly (through supplier development programmes) and indirectly. Lead contractors also learn from suppliers. Local legislation requires employment of local workers.
Creative and design	Intra-mural investment in innovation, absorption through global knowledge flows.	Human capital (film): animation and post-production skills. Infrastructure: bandwidth. Government: no vision for Cape Town as a creative city.	East City Design Initiative. Networks with higher education sector. Opportunities for entrepreneurship. Backward linkages.
Retail	Learning from practices of international retailers. Adoption of new IT systems.	Human capital: not all firms experience challenges.	Teaching and bursaries at local universities to recruit talent. Lessons from international suppliers passed on to local suppliers. Entrepreneurship.
Tourism	Investment in learning from competitors and suppliers. Technology absorption through import of equipment (IT software and hardware) and mobile knowledge workers.	Human capital: from low (front-of-house) to high (e.g. chefs) skills. Need global exposure. Infrastructure: bandwidth and connectivity. Efficient and safe public transport. Government: no vision or counter-seasonal event strategy for Cape Town. Other: social problems, crime, fragmentation of industry.	Teaching and recruitment links with local universities. Backward linkages for small suppliers.

that allow for high quality learning. For some firms, this learning is an individual process whereas for others it takes place in networks. This varies in terms of horizontal and vertical linkages and also between sectors. For example, in retail, learning involves knowledge passed on

from supermarkets to suppliers. In construction, it is suppliers that provide information which may induce large firms to invest in new techniques. At the same time, there is little learning along horizontal linkages between the firms involved in these sectors because they compete

against one another. Horizontal learning linkages do exist in the wine sector because the impossibility to replicate terroir means that sharing knowledge is not perceived as a zero-sum game. Sectorally, the evidence of networks varies. They seem more pronounced in the creative sector and in business tourism than most others. The sample contains no evidence of networks that provide disincentives to learning and thus to adaptation to change.

Ownership does not seem to make much difference to the strategic recognition, that learning is essential to (global) competitiveness. What differs is the ease with which such processes are managed. Subsidiaries of foreign MNEs have lower search costs in identifying relevant knowledge, and lower transaction costs in exploiting it. This is essentially because they can largely rely on internal sources of knowledge, which they acquire within their group. Much of this knowledge is intellectual property and thus not openly accessible to non-group firms. It also cannot always simply be bought. Individual firms which are not part of multinational groups must identify such knowledge elsewhere, including in networks where it is being co-developed by a number of actors that are not linked through equity. A key difference across sectors regards the relationship between learning and space. Firms in some sectors report that they absorb knowledge through distant or mobile sources, be they trade fairs, immigrant knowledge workers, or simply the import of capital goods. Firms in other sectors rely on geographically close interaction, mostly with their suppliers but occasionally also with their customers, in order to detect and exploit technological opportunities. There seems to be a virtuous cycle -- new ideas created in Cape Town provide more opportunities for learning which in turn leads again to new ideas that may eventually show up as innovations. Such dynamics especially describe activities where human capital and thus interaction matter strongly, for example in the creative sector where it has led to some clustering of activities.

Not all results of the research can be neatly attributed to either firms or sectors but rather to a set of generic capabilities that exist in the city. For example, many firms report that they run their back-office functions in Cape Town, even if they are headquartered elsewhere. Since this does not necessarily imply outsourcing to dedicated business process outsourcing (BPO) firms, it means that there are certain kinds of skills invested in the city that are significant for the broader economy and not just for specific economic activities. The research produced no evidence that knowledge controlled by foreign MNEs exists only in some kind of enclave in Cape Town, either because MNEs insist on a pure form of internalised technology transfer or because their investments are too sophisticated for local absorptive capacities to interact with them dynamically. In fact, in many instances it was clear that the activities of lead firms had benefits for the

local economy in the sense that, they generated backward linkages or helped suppliers to upgrade; this involved SMEs as well.

The research further underlines the importance of the availability, accessibility, and quality of locally created assets. Although in South Africa, the Western Cape as a whole and Cape Town more specifically are often described as knowledge-intensive, such assessments are at best inaccurate and at worst naive if -- as they often are -- based on comparisons with the rest of the country. They certainly do not contribute to understanding how the city can use external knowledge to lift the local economy onto a different growth trajectory, and what role Cape Town can play in the global knowledge economy. Many firms interviewed for this study regard human capital as a major constraint, and they do not spare high-level technical or managerial competences. Since skills and competences are created assets that must precede the formation of relational assets, Cape Town's education and skill problems are probably one reason why on the whole there is not much evidence of networked activity among firms or between firms and other actors, such as universities or research institutes.

An interesting finding with respect to human resources is not only that many firms identify specific skills gaps in the labour market, but that at least some are able to solve the attendant problems through in-house training, drawing on expatriates, and participating in curriculum design and delivery, as well as on-the-job training in partnerships with local universities. Some firms face problems of a magnitude they are unlikely to solve by themselves. A notable case is the absence of suitably qualified artisans, which is a bottleneck in boom periods and even more so should some of the sectors with above-average growth potential really take off. Also, no firm will be able to solve the widespread perception that Cape Town is not a welcoming environment for black people. But there is a large degree of heterogeneity with respect to the incidence of human resource problems. Thus, firms in the creative and design sectors have hardly any skill problems at all. Since development policy is easier when based on an economy's realised or incipient strengths, as opposed to targeting as yet unrealised opportunities, this makes these activities a prime candidate for consideration of "smart specialisation".

Firms interviewed for this study did not give the impression of being part of a local innovation system or a series of productive interactions between firms and other entities that are not merely ad-hoc but coordinated in the interest of a greater collective urban good (Berger and Revilla-Diez, 2006). The key question with respect to the city's role in the global knowledge economy is not whether one can do things in Cape Town, but whether one can do them better in Cape Town than elsewhere or ideally, whether one can do them *only* in Cape Town. Hence, a local innovation system would favour specialised local assets that by definition are specific,

hard to move or replicate, and hence conducive to anchoring foreign investments in a longer-term perspective. Specialisation, both in the country and globally, entails the advantage that, it reduces the number of (generic) competitors and thus, makes it easier to reach economies of scale, especially if the associated knowledge resources are sticky because they are co-specialised.

Many interviewees, including from publicly funded entities, remarked on the absence of a vision for the city which would allow for investments into tangible and intangible infrastructure, along with promoting specific activities. Such a vision would make Cape Town a relatively unique place for global knowledge investments. It is less important whether such a strategy would aim to accelerate the exploitation of global knowledge, intensify the interaction with MNE subsidiaries so as to generate knowledge spillovers, or participate in path-breaking global activities that push the technological frontier. What is important is that any such strategy relies on coordination by government because it involves the provision of public goods, such as dedicated spaces where technologically cognate firms can cluster, adequate dedicated or general infrastructure, and a properly trained workforce. The research also demonstrates the relationship between natural and created assets. The single most prominent non-created local asset of Cape Town is its natural beauty and the associated living environment. The mountain, the sea, and the hinterland of the city are its biggest draw card both nationally and globally. The spectacular setting attracts globally mobile knowledge workers who in turn provide a link to the city's created assets, from high-quality university education to innovative activities pursued by firms that have invested in the city. This is a virtuous cycle that currently contributes to the city's global competitiveness. Whether targeting newcomers or those who have been here for some time, cultivating rootedness and place identification is one way for the City to hold onto economic activities.

Whether this remains so in the future depends on the stewardship of this natural asset. Infrastructure in the city has been taking strain from population growth. Diseconomies from this growth in terms of congestion are problematic: urban sprawl, if not contained, is likely to affect the very elements that make the city an attractive place to live at present. It is clear from comments by industry that the public transport system is inefficient and that it prevents economic benefits accruing especially to those members of society who need them most. Existing building regulations effectively provide disincentives for investments into public transport. If buildings were allowed to be erected without or with fewer parking spaces, the relative cost of parking would rise, the relative attractiveness of public transport would consequently also increase, and that in turn would lead to more investment in public transport, which would then make it possible for more people to come to and work in

town.

DISCUSSION

The evidence produced here helps to shed light on the role MNEs play in enhancing Cape Town's global competitiveness through access to knowledge, technology, skills, and markets, and how this, in turn, is influenced by economic and business conditions in the city. The analysis differentiates between activities in which Cape Town is a more or less globally competitive location across sectors covered in the paper. The evidence presented earlier shows that specialisation is important. For economic policymaking, the next tasks then are to identify feasible specialisations and to support them. The first is the identification of a critical mass of relatively unique requisite firm capabilities, followed by an identification of the created assets and other local attributes that are required for global competitiveness to emerge or become stronger. In activities where localisation economies matter, it is further necessary to create conditions for knowledge spillovers so that network externalities can take hold. Such an assessment needs to take the capabilities of the public sector in assuming a facilitating or coordinating role into account. Although "smart specialisation" must be based first and foremost on firm capabilities, it is no good aiming to create co-specialised assets that exceed the capability of the policymakers and bureaucrats in the city and that stretch the sophistication of the local innovation system more generally.

The interviews show that across the sectors there are strong absorptive capacities. Firms have done well despite and possibly thanks to heightened global competition. Existing capabilities can be grown, especially if human resource bottlenecks are addressed. There is also evidence that the activities of MNE subsidiaries and other lead firms generate localised knowledge spillovers that help other, including small firms, to upgrade their activities and, occasionally, get directly involved in global competition. The research also shows that Cape Town has serious disadvantages in human capital, infrastructure, and governance. These factors affect different firms and sectors to a different degree. Some firms manage well with the existing stock of human capital but suffer from the lack of bandwidth. Others struggle with infrastructure. Some deal with what they perceive as an unhelpful city bureaucracy. Overall, the perception of the city is not as a business-friendly environment, or that it has built the created assets, that would allow its firms to compete successfully in the global knowledge economy. Many firms do so anyway, but despite these hindrances, and they do not exploit their full potential. The discussion that follows synthesises these issues in relation to the six sectors from which firms were interviewed. It relates

global competition to the opportunity for smart specialisation and identifies which created assets are most needed to achieve or sustain global competitiveness. It also identifies whether the city has leverage over the relevant issues, that is, whether local government has jurisdiction.

Finally, in light of these inputs, it suggests what capabilities the city has for addressing the identified problems. Global exposure is high in a number of sectors. In most cases smart specialisation is in principle an option, even if only for selected corporate functions. This obviously involves choices in that the city could by definition not be smartly specialised in a wide variety of activities. Where the sectors differ substantially is in the scope and scale of created assets that are currently problematic but at the same time crucial for their future success. For example, whereas in some sectors specific skills are amiss, in others human resources are lacking across the skill bands. It is clearly more difficult to address education and skill deficits comprehensively from basic to tertiary education, than merely to solve niche gaps. The city is also constitutionally not in the same position with respect to the shortcomings of the necessary created assets. For example, while it could design and implement a better public transport system and has indeed started doing so with dedicated bus and taxi lanes and a bus rapid-transport (BRT) system; it cannot do much directly about the seaport or the railways. Finally, even where it can intervene, the city has different and limited capabilities. It can solve some things better than others and certainly not all, at least not at once. In agro-processing, global orientation is high and smart specialisation is an option, especially with respect to headquarter location. Parts of this sector are linked to the tourism industry which can yield network effects. Key created assets include human capital and efficient infrastructure. With the exception of rail and seaport, the City has considerable leverage over and capabilities in infrastructure and can also intervene by facilitating a better match between training and skill supply and demand in select activities.

In oil and gas, global exposure is high. Opportunities for smart specialisation exist in logistics and regional supply (mainly for West African based operations) for oil companies, as well as major service providers. Among other things, this would require a major and urgent upgrade of port infrastructure. However, the City does not have much influence over the seaport, nor is it clear that it would master the organisationally very demanding task of working towards the establishment of some form of offshore supply base. Since the development of an offshore supply base clashes with other development priorities such as tourism, this would altogether be difficult.

In construction and property services, global exposure is low and opportunities for smart specialisation do not really exist. Johannesburg is overall the more attractive

location for these firms, with the exception of BPO-type activities. The City is not in a strong position to address artisan shortages, but it can improve the operation of the regulatory environment. Whether it manages to do so depends in part on its ability to fill vacancies in the planning department and elsewhere. The creative and design sector is highly oriented toward and exposed to global competition. Cape Town has a number of created assets that make the city attractive for creative firms. Exceptions include, prominently, IT bandwidth and the more strategic pursuit of opportunities for co-location of relevant firms to unlock network effects. In both areas, the City has a lot of leverage and also relatively high capabilities.

In retail, exposure to global competition is much lower than in the other sectors reviewed here, with the exception of construction and property services. It is possible for the City to make a case for locating select strategic retail functions in Cape Town, but there are weaknesses both with respect to skills and the regulatory environment. Although the City is in a good position to address the latter, it has less leverage and capability in helping to solve the scarcity in retail skills, especially in so far, as there is no guarantee that beneficiaries would necessarily opt to remain in the area, as opposed to moving to other parts of the country, especially Gauteng.

In tourism, local firms are very exposed to global competition and Cape Town has an opportunity to specialise in business tourism. Although as in other sectors, the City does not have leverage over the education and training system as a whole, it could support targeted activities in local education institution in order to address key bottlenecks, be they in marketing, senior management skills, or others. It could also build on recent improvements in public transport to create a truly attractive system, that largely obviates the reliance on individualised motor transport.

Conclusion

In conclusion, the data suggested that the combination of opportunities for smart specialisation, requisite assets, and the in-principle option to leverage political capital and invest the City's capabilities favoured agro-processing, creativity and design, retail, and tourism more than oil and gas or construction. It also became clear that some issues, such as IT bandwidth, have horizontal relevance across sectors. Local capabilities played a key role in facilitating spillovers. Without a threshold level of absorptive capacities, the internalisation of critical technology is likely to remain elusive.

Globalisation will bring decidedly fewer and possibly no benefits to regions that fail to develop an environment in which local firms upgrade through learning, which in turn unlocks relational assets that provide incentives for MNEs to stay for the long haul. The creation of networks

makes no sense, if the parties to such interaction have nothing to share that would positively impact on efficiency or productivity. Policies or strategies designed to advance competitiveness in the absence of a profound understanding of the differential intra- and inter-sectoral distribution of capabilities among firms and other economic actors are essentially a futile exercise.

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