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Research Report
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When Manufacturing Matters:
A Review of the (regional and local) State Economic Policies for a Gauteng Global City Region (2006-2011)

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Abstract

The 'global city' (and the related concept of global city-regions) is presently hegemonic in South Africa's urban reconstruction discourse. It has come to constitute, especially for cities like Johannesburg and its urban region of Gauteng, a prototypical image of city-ness; the ultimate barometer for advanced development. This is so even as its origins can be traced to a small sample of cities in the North (most prominently New York, and London), and its applicability to, relevance or usefulness for cities in developing countries has been questioned. City Development Strategies anchored on this discourse, and their related economic policies, promote an economic development trajectory in which finance and services are the main drivers.

This research adopts the Kaldorian proposition that manufacturing is the sector better positioned to drive economic growth and development. It argues that developing countries, and their cities and urban regions, are riddled with the catch-up problem; which requires the deliberate reallocation of resources from low-productivity diminishing returns activity sectors (e.g. agriculture and other extractive activities) to higher productivity, increasing returns activity sectors (especially manufacture). It argues that this change in the dynamics of production structures of these economies will be brought about by technology capability building whose realisation might require a developmental state that drives selective industrial policy. As such, neither a swift shift to finance and services (which in most of developing country economy cases entails a degree of premature deindustrialisation), nor mere clustering and agglomeration as envisaged in the global city and new regionalism literature respectively suffices in such contexts.

Reviewing a select set of policy documents and strategies (of both the Gauteng Provincial Government and of its three metropolitan municipalities) adopted between 2006 and 2011; the research assesses how manufacturing is accounted for in the global city region agenda proposed for the Gauteng urban region, and the implications of such for that region's future economic trajectory. It finds that at inception, the City Region Strategy was premised on an uncritical acceptance of neoliberal globalisation as a given, necessitating the adoption of an entrepreneurial approach to governance, and of finance and services as the most strategic sectors for connectivity and competitiveness in the global economy. These assumptions continue to dominate thinking in later years, despite the fact that manufacturing remains the most critical sector in international trade, output and productivity growth, and gross domestic fixed investment. This even as reference is made to the importance of manufacturing for the Gauteng economy, and interventions such as the automotive industry development in areas like Tshwane are being rolled out.

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Declaration

I, **Moses Nzama Khaizen Metileni,** declare that this research is my own, unaided work. It is submitted in partial fulfillment of the requirements for the Degree of Master of Commerce in Development Theory and Policy at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Signature: 

Date: 10 June 2015

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Dedication

*For **Ndzhaka Nzama Mtileni***

The threads are incomplete, the puzzle confused and confusing, the in-betweens are end-states, beginnings, and elsewheres – we search for meaning, to evade the paralysis of dogma, and to imagine alternates and counterpoints…

Acronyms

BBBEE	Broad based Black Economic Empowerment (BBBEE)
CAD	Comparative-advantage-defying strategies
CAF	Comparative-advantage-following strategies
CoJ	City of Johannesburg
CoT	City of Tshwane
CSIR	The Council for Scientific and Industrial Research
DFID	Department for International Development, UK
EMM	Ekurhuleni Metropolitan Municipality
EPWP	Expanded Public Works Programme
GCR	Global City Region
GCRA	Global City Region Academy
GCRO	Gauteng City Region Observatory
GDED	Gauteng Department of Economic Development
GDoF	Gauteng Department of Finance
GDP	Gross Domestic Product
GDPR	Gross Domestic Product by Region
GDS	Growth and Development Strategy
GEGDS	Gauteng Employment, Growth and Development Strategy
GIPF	Gauteng Industrial Policy Framework
GNP	Gross National Product
GPG	Gauteng Provincial Government
GSDP	Gauteng Spatial Development Perspective
GTI	Gauteng Tooling Initiative
GVA	Gross Value Added
ICT	Information and communications technology
IDC	Industrial Development Corporation
IPAPs	Industrial Policy Action Plans
NIPF	National Industrial Policy Framework
NSE	New Structural Economics
OECD	The Organisation for Economic Co-operation and Development
SARB	South African Reserve Bank
SMMEs	Small Medium and Micro Enterprises
UNIDO	United Nations Industrial Development Organization

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Chapter 01: Preliminary Notes: What is at issue?

1.1. Introduction

The 'global city' (and the related concept of global city-regions) is presently hegemonic in South Africa's urban reconstruction discourse (see for example Pillay, 2004; McDonald, 2008; Cornelissen, 2008; Murray, 2008). It has come to constitute especially for cities like Johannesburg and its urban region of Gauteng, a prototypical image of city-ness; the ultimate barometer for advanced development (City of Johannesburg, 2002; Gauteng Provincial Government, 2006a and 2006b). As Friedmann (1995a: 36) puts it, '[t]he golden phrase [i.e. world city]' has 'become a badge of status'. This is so even as its origins can be traced to a small sample of cities in the North (most prominently New York, and London) (Sassen, 2001), and its applicability to, relevance or usefulness for cities in developing countries is questioned (Gugler, 2004; Metileni, 2006; Robinson, 2006).

City Development Strategies anchored in this discourse, and their related economic policies, promote an economic development trajectory in which finance and services are the main drivers. This research adopts the Kaldorian proposition that manufacturing is the sector better positioned to drive economic growth and development (see Kaldor, 1966; Thirwall, 2002). It assesses how manufacturing is accounted for in the global city region agenda proposed for the Gauteng urban region.

1.2. Research Problem/Question

Following the recent economic crisis, the Brookings Institution's Global Metro Monitor December 2010 report, which is a preliminary overview of 150 metropolitan economies[1], concludes that: 'the Johannesburg metropolitan region holds the unfortunate distinction of being among the few metros outside Europe and the United States that were hit hardest by the recession' (Brookings Institution: 2010: 44). Metropolitan performance, the report argues, is reflective of 'intrinsic factors such as…industrial base, and the impact of national fiscal, monetary, and trade policies' (*ibid*: 5).

Sassen (2011: 56) argues that the specific economic histories of those cities that are now classified as global cities is very important to understanding their current performance, and (it may be added) their future performance in the global economy. If global cities are redefined as high performers in terms of sustainable growth rates, living standards, and employment (among other indicators); a different understanding of critical economic sectors and policies that produce global cities emerges. If it is no longer the finance and service centres of New York and London that after the crisis are the high performers in the global economy, and cities like Mumbai, Sao Paolo and Beijing come to feature

[1] Measuring employment and gross value added (GVA), per capita growth pre-, during, and post-recession

prominently in global rankings (see for example Knight Frank Research, 2014); an understanding of how these cities rose to the top thus matters.

Is it possible to 'support the city' through some kind of 'economic patriotism'[2] (Morgan, 2012) that could enable governments to actively shape the economic development trajectories of their cities and urban regions? Does the economic history of the Gauteng urban region incorporate an industrial base strong enough to propel it to the status of a high performer? What kind of economic development trajectory emerges for Gauteng, since the adoption of its Global City-Region Strategic Perspective in 2006? Is it premised on a strategy that will not only reverse the region's vulnerability to global shocks, but also launch it onto a sustainable high-growth path that will catapult it to the status of high global performers as a metropolitan region? The research does not purport to provide answers to these important questions, but utilises them to frame the following primary research question:

> *What is the location and positioning of industrialisation in the development agenda for Gauteng (2006-2011)?*

Industrialisation is the change in the production structure – industrial structure and related endowment structure – of the economy, resulting from and amounting to the reallocation of resources from low-productivity, diminishing returns activity sectors (e.g. agriculture, and other extractive sectors) to higher productivity, increasing returns activity sectors (especially manufacture). Economic development 'is a process of continuous industrial and technological upgrading' (Lin, 2012: 114), and as UNIDO (2009: xiii) argues 'only in circumstances such as extraordinary abundance of land or resources have countries succeeded in developing without industrializing'. Such that the increased share in manufacturing output, employment, value-add, and exports; and the specific policies and institutions supporting such structural change are critical for economic development. For Khan (2009: 9), the challenge for developing countries like South Africa is 'catching up', by emulating economic structures of rich countries.

1.3. Hypothesis

In the period under review (2006 - 2011), there have been changes in political leadership at both provincial and local government levels, and several policies have since been adopted (see for example City of Johannesburg (CoJ), 2011; Gauteng Provincial Government (GPG), 2009). Some of the strategies, in particular the *Gauteng Industrial Policy Framework (2010-2014)* (Gauteng Department of Economic Development (GDED), 2010), emphasising manufacturing. This arguably goes beyond a narrow focus on advanced services and finance as the main sectors for the envisaged future economy. The future economic development trajectory of the Gauteng urban region will depend on a number of related factors, including (a) how these strategies are to be aligned; (b) what

[2]

policy levers are proposed and prioritised for intervening to direct economic development; (c) how the frictions of implementation unfold, and (d) the extent to which the regional and local states can (and choose to) direct investment choices and decisions. These combined factors could potentially determine whether the province continues on a path of 'premature de-industrialisation' (Palma, 2005), or could alter the current trends so as to launch a sustainable development path.

1.4. Research Aims/Objectives

The research intends to illuminate the meaning, materiality and potential impact of the Gauteng Global City Region agenda on the character and trajectory of Gauteng's future economy. It focuses more specifically on the concept (what is entailed), character (sectors, industries, policy levers), and role (in economic growth and development) of industrialisation in the transition to that future economy. Within the ambits of this broader aim, the research is underpinned by the following objectives:

(a) To analyse how industrialisation is accounted for in the emerging development trajectory; and in doing so:
(b) To explore what the existing analysis is of the economic development level, trends and patterns;
(c) To analyse the 'theory' of economic development (system of accumulation) emerging from the selected body of local and regional strategies; and
(d) To delineate the envisaged role of the regional and local states in economic development in the urban region.

The outcome will be an improved understanding of the *concept* (what is entailed), *character* (sectors, industries, policy levers), and *role* (in economic growth and development) of industrialisation in the transition to the urban region's future economy. Gauteng is the economic hub of the country; and the course of development it charts has implications for the country's transition to a future economy; its place in the global economy, and the region's own capacity to deal with the development challenges that beset it.

1.5. Preliminary Literature Survey and Core Sources

The study will draw from a varied set of literature, primarily the following:

- *World cities/Global cities*: an emerging hierarchy of elite cities and their characteristics (Friedmann, 1995a; Knox, 1995a; Sassen, 2001). It will be important here to track the evolution of the concept, as the economics it proposes has narrowed with its evolution (see Hall, 2002). The debates within the literature have equally pointed to the limitations of the literature with respect to (a) its relevance for urban regions and cities of the South (see for example Robinson, 2006; Metileni; 2006); (b) the inadequacies of hierarchies for explaining specific

city dynamics (Sassen, 2009c; 2011); and (c) the omission of other economic activities beyond finance and services in such schemas (Kratke, 2012).

- *Competitive city-regionalism*: the elevation of the sub-national scale, the urban region more specifically, as a locus and focus of economic activity and political control following the post-1970s of state territoriality (Scott, 2002; 2003; 2007; Storper, 1995; Pike *et al*., 2006; see Brenner, 1998a on denationalisation). This elevation of the region as a critical player in its own right in the global economy (termed new regionalism), shifts emphasis away from diversionary central state policies whose intention was to balance development between different regions in a given country (old regionalism) (see Rogerson, 2009 for a detailed review; and Lovering, 1999; McLeod, 2001; Ward and Jonas, 2004). Under new regionalism, redistribution is only secondary, after all economic opportunity, across all scales (subnational, national, and supranational), locates unevenly across space, producing prosperous regions and lagging ones (The World Bank, 2009). It is the notion of the competitive global city region (Scott, 2010), and arguments about the economic development of these regions anchored in the works of Scott and Storper in particular (see for example Scott and Storper, 1987; 1990; 1992; 2003) that will be analysed here. This analysis is critical for a region (the Gauteng city-region) which is arguably the most prosperous in the country, and is a target of experimentation with policy propositions linked with new regionalism.

- *Late-comer industrialisation*: the role of the state in development, forms of intervention beyond the 'getting prices right' logic, and 'bringing production back-in'. Although much of the research around this has focused mainly on the national scale (for example, Amsden, 2001; Chang, 2010), there are limited efforts to apply the developmental state lens to the city scale in relation to the global city literature (Haila, 2000; Hill and Kim, 2000; Yeung and Olds, 2001). Given this limitation, *this literature will be explored not to explain city development processes more specifically, but to locate the role of industrialisation in development, and the role of the state in that process*.

1.6. Research Approach and Method

The research approach will be exploratory and qualitative. Qualitative research 'involves looking at characteristics or qualities that cannot easily be reduced to numerical values' and 'typically aims to examine the many nuances and complexities of a particular phenomenon' (Leedy and Ormrod, 2010: 94). An exploration of the location and positioning of industrialisation of the Gauteng city region's development path, especially if done through a review of state economic policies, cannot be reduced to numerical values if richer insights are to be generated.

It will apply discourse analysis to deconstruct public (economic) policies adopted in Gauteng in the period since the adoption of the Gauteng Global City Region Strategy

(2006-2011). This will entail 'a detailed and systematic examination of the contents of a particular body of material for the purpose of identifying patterns, themes, or biases' (Leedy and Ormrod, 2010: 144).The particular body of material comprises an array of policies, strategies, plans and reports that relate directly to economic development in the Gauteng Provincial Government and its three Metropolitan municipalities. Semi-structured interviews will be conducted with select officials and politicians within the local and provincial spheres[3], their respective agencies[4], and a number of experts in the field. Judgment sampling or purposeful sampling will be used to select the interviewees. This is a form of qualitative sampling where the researcher 'actively selects the most productive sample to answer the research question' (Marshall, 1996:523).

1.7. Structure

Chapter one introduces the research. It outlines the research question, aim and objectives, approach and method, and research report structure. The remainder of the research report is organised into three sections, which can be summed up more generically as literature review (A), the Gauteng case (B), and conclusions (C).

Section A, comprising of three chapters, unravels the theoretical scaffolding upon which the rest of the research report is constructed, on the relationship between global cities, urban regions and the catch up problem for developing countries (and their urban regions).

Chapter two (the first in this section) explores the concepts of world/global cities, their contribution to and limitations as analytical devices in urban studies of the role of cities in the global economy.

Chapter three is an exposition of the features and fissures of competitive regionalism - that body of literature from which the notion of global city regions emerged.

Chapter four concludes the section, focusing on the centrality of industrialisation in structural transformation for developing countries, generating a kind of competitiveness that the global cities (and regions) literature omits to theorise.

Section B, chapter five, explores the GCR case study. It does so through an analysis of the emergence and evolution of the concept of global cities (and global city region) within the specific context of Gauteng. The path taken by Johannesburg (most prominent local economy) and Ekurhuleni (the manufacturing centre) metropolitan municipalities, culminating in the adoption of the Global City Region agenda in 2006 are traced. The economic policy package emerging between 2006 and 2011 will be outlined. The detailed picture of development thinking (in relation to industrialisation) in Gauteng provides material basis for the analysis in chapter four.

[3] From the Economic Development Departments, the Strategy Offices (e.g. Office of the Premier, the Central Strategy Unit in CoJ)
[4] Gauteng Growth and Development Agency (GGDA), Gauteng City-Region Observatory (GCRO)

Section C, concludes the research report, with summative notes and pointers for policy and research.

> The State's role in favour of foreign or transnational capital heightens the uneven development of capitalism within each country in which foreign capital is reproduced. It does this most notably by designating particular regions as 'development areas' to the detriment of certain others—a process which […] produces fissures in the national unity underpinning the bourgeois State. (Poulantzas, 1978: 213).

The economic crisis of the 1970s triggered a series of restructuring moments and processes in the organisation and content - spatial, scalar, institutional, socio-political and economic - of global capitalism. These moments and processes, contested in their nature, are argued to have amounted to the (a) *denationalization* of state territoriality, in a new scalar rule-regime where 'no single scale serves as the primary pivot for accumulation, regulation, or sociopolitical struggle' (Brenner and Theodore, 2002: 16); (b) resurgence of cities and urban regions as the preferred *spatial fixes* for the latest round of capital accumulation (Brenner, 1999); (c) emergence of the *post-Keynesian competition states* which at a local level have ushered in an entrepreneurial as opposed to managerial approach to urban governance (Harvey, 1989; Leitner, 1990; Jessop and Sum, 2000; Ward, 2003); (d) the rise of finance (or *financialisation*) and producer services as the primary sectors driving economic growth and development (Sassen, 2001; 2009a; Palley, 2007; Lapavitsas, 2011); and relatedly (e) the dominance of *neoliberalism* as the prevalent tendency patterning restructuring (Arestis and Sawyer, 2004; Harvey, 2005; Fine, 2009; Brenner *et al.*, 2010).

The first has to do with rescaling; the second with the privileging of specific spaces within the national space economy; the third the form, degree and content of state 'intervention'; the fourth the shifting composition and organisation of economic activity; and the fifth the political ideas underpinning the restructuring. Central and foundational to these developments has been the rapid globalisation of production facilities; the 'transnationalization in the ownership and control of major corporations through foreign direct investment, mergers and acquisitions, and joint ventures' (Sassen, 2001: 26); and the rise of information and communication technologies which increased the scale, pace and (concomitantly the) complexity of transactions globally. Cities and urbanized regions more generally are implicated as central arenas in the unfolding, enabling, constraining, and/or patterning of these developments; making them prominent architects in and products of the latest round of capitalist development.

Drawing from the literature on world cities, global cities, and global city regions as entry points; the section argues that the various developments summed above (i.e. denationalization, cities and urban regions as preferred spatial fixes, competitiveness as the new rule system, financialisation (as) neoliberalism) are in fact interlinked and constitutive of each other. And that it is in drawing the sometimes disjunctive literature dedicated to explorations of each theme into relations that the policy practices and research agendas emerging from world/global city (regions) literature can be analyzed more systematically.

This *section*, comprised of three chapters, unravels the theoretical scaffolding upon which the rest of the research report will be assembled, on the relationship between urban regions and the catch up problem for developing countries (and their urban regions). *Chapter two* explores the concepts of world/global cities, their contribution to and limitations as analytical devices in urban studies of the role of cities in the global economy. *Chapter three* is an exposition of the features and fissures of competitive regionalism - that body of literature from which the notion of global city regions emerged. *Chapter four* focuses on the centrality of industrialisation in structural transformation for developing countries, generating a kind of competitiveness that the global cities (and regions) literature omits to theorise.

Chapter 02: From World (Global) Cities to Worlding (Globalising) Cities

2.1. Introduction

The term 'world city' has been deployed historically to designate those cities that served as nerve centers of the world economy at a given point in the evolution of global capitalism (Hall, 1966; Braudel, 1984; King, 1990). The development of such cities is best studied in its *longue duree* context (Taylor, 1995). As will be seen below, the paradox is that as research on the world city gained currency over the years (see Hall, 1966), the *contemporary* has come to dominate, and the *attributes* argued to distinguish world cities have narrowed (more so in theory than in policy).

The vast and diverse literature can be roughly clustered into five approaches (Beaverstock *et al.*, 2000; Hall, 2002) in accordance with the primary object of study central to determining world/global cities, namely (a) the role and locational preferences of multinational corporations (MNCs) in the developed world (Hall, 1996; Hymer, 1972); (b) MNCs, in particular their decision-making corporate activities and powers, in the late-1970s new international division of labour (NIDL) (Friedmann and Wolff, 2006; Friedmann, 1995a); (c) financial centers (Reed, 1981); (d) producer services, their internationalization, concentration, and intensity in the world economy (here MNCs headquarters are no longer critical) (Sassen, 1991, 2000a); and (e) relationships, as opposed to attributes – from hierarchies to networks (Beaverstock *et al.*, 2000; Globalisation and World Cities Study Group: www.lboro.ac.uk/gawc/). In all these, however delineated, world cities are argued to be the command centers and basing points of the global economy.

This chapter does not attempt a comprehensive review of this burgeoning and multifaceted literature (see Friedmann, 1995a; Keil and Brenner, 2006 for generous reviews), but isolates the second (world city hypothesis) and forth (global city) strands for closer scrutiny. These two are arguably the most influential in the literature, precisely because of their extensive circulation as models shaping research (around the relations between the cities and the global economy), and city development policy across the globe (Robinson, 2006). Reflections on the key elements, hypotheses, and arguments distinguishing these selected strands are the focus of the next two sections. The discussion is followed by a brief critique of this literature, in a section that posits that its focus on a limited set of economic activities occludes a critical analysis of other aspects, activities and phases of economic development. Cities are better studied as simultaneously globalising and global, as both processes and end-states. The fourth section reflects on some of Sassen's post-2008 crisis writings, which (convincingly) argue that the specialised differences of cities matter in today's global economy, and that such specialised differences are largely a product of each cities deep complex economic history. The chapter concludes with an argument that globalising cities (including their rise and fall) cannot be understood outside of the dynamics of their production structures, and the specific policies and institutions supporting them.

2.2.1. The World City Hypothesis

The study of urbanisation was revolutionarised when urban studies began to draw linkages between urbanisation and industrial capitalism (Friedmann, 1995a) - simultaneously embedding the global economy into actual spatial contexts, and economic relations and dynamics into urban change (Castells, 1972; Harvey, 1973).The work of these neo-Marxists, and of world system theories, and other radical readings of global capitalism, provided analytical foundations for scholarship on world cities emerging in later years (Brenner and Keil, 2006), with Friedmann's (1995a) world city hypothesis a foundational paper (also see Hall, 1966).

For Friedmann (1995a: 21-22), the *world city hypothesis* is experimental, both as 'a way of asking questions about cities in general' and 'a statement about a class of particular cities'. In general guise, it refers to cities and their integration into the world economy, and it is specific to a class of cities in so far as it elevates for scrutiny those cities whose integration into world economy is sufficient to qualify them as 'commanding nodes of the global system'.

According to this hypothesis, the differences between and among cities can be attributed primarily to their mode of integration into the global economy. Accordingly, cities are *assigned* functions in the new international division of labour (and by extension a place in the hierarchy of cities). This new international division of labour is a precondition for and an outcome of the post-Fordist accumulation regime. Functions refer more specifically to the composition and concentration of economic activities in a given city, discernible from the 'structure and dynamics of the production sectors and employment' (Friedmann, 1995b: 322). They do not only determine the *nature* and *depth* and *duration* of a city's integration into the global economy, they also shape the structural changes - spatial and socio-economic (e.g. industry structure, spatial form, capital flows) - unfolding within the given city. In fact, urban change largely results from adaptations to external forces (Friedmann, 1995b).

With production, circulation and exchange variously fixed in the spatialities of cities, it is possible to map a spatial hierarchy of cities according 'to the economic power they command' (Friedmann, 1995a: 23). Even then, volatilities in the world economy do not allow for fixed stable hierarchies (*ibid*, 23). Hence, those cities assigned more command and control functions[5] constitute the apex of this hierarchy, defined as world cities for their centrality to the global space of accumulation (*ibid*). It is these functions, external to cities, which cities must strive to attract into their localities. For the *ability to attract global investments* (read command and control functions) is the ultimate determinant of the rank a city comes to occupy in the spatial hierarchy of cities (Friedmann, 1995a).

[5] Command and control functions, termed by Friedmann and Wolff (2006: 61) the 'chief economic functions of the world city', refers here to management; banking and finance; legal services; accounting; technical consulting; telecommunications and computing; international transportation; research; and higher education.

The world city hierarchy's selection criteria (attributes) has not always been confined to command and control functions; 'world cities' have in an earlier endeavor (Friedmann,1995b: 320) included: 'major financial centre; headquarters for TNCs (including regional headquarters); international institutions; rapid growth and development of business services sector; important manufacturing centre; major transportation node; population size'. However, it is finance, transnational corporations' headquarters, and business services that were to later generate a substantial body of research (Globalization and World Cities, www.lboro.ac.uk/gawc). Drawing from the world-systems theory, the hierarchy generated departs from a core-periphery delimitation of cities; arguing that world city formation is limited only to the core and semi-periphery (Friedmann and Wolff, 2006).

This treatment of cities here as simply passive recipients of some functions - *assigned* to them by the latest round of global capitalism - owes to the declaration that 'we [must be] talking about *places* and *sites* rather than *actors*' (Friedmann, 1995a: 22; original emphasis). It is not the cities that are actors, but rather 'transnational corporations' who are 'themselves in bitter and cannibalistic conflict for the control of economic space' (Friedmann and Wolff, 2006: 58).

Although Friedmann did not proceed to build on this experimental hypothesis, it was pioneering in mapping a research agenda that has since dominated urban studies. One of the critical threads is the 'global city' to which the chapter now turns.

2.2.2. Global City

It was Saskia Sassen (2000a) who invested extensively into reading the emergent city of the post-Fordist regime. She coins the concept of 'global city' to describe and analyse the rise of some cities as sites of production, marketing, servicing, and innovation of a type critical for a transformed, services and finance-led global economy (Sassen, 2001). A key feature of the present phase in the history of the world economy - the increased mobility and liquidity of capital associated with rise in information technologies (Sassen, 2005) - the global cities research originates from a concern with analysing the 'territorial moment' in the digitization and globalisation of the operations of firms and markets (Sassen, 2009a).

2.2.2.1. Evicting 'the narrative of eviction'

Such an analysis departs necessarily from a systematic critique of mainstream conceptions of globalisation and the information economy, which argue that developments in information and communications technology have rendered territory, place and borders irrelevant (Sassen, 2007). Dubbing this mainstream conception the 'narrative of eviction'; she argues that celebrating global transmissions ignores the material infrastructure upon which the transmissions are premised; and that it is workers located in place that produce information outputs that are said to be placeless (Sassen, 2000).

While increased capital mobility and liquidity plus digitization do reconfigure in significant ways the geographic organisation of manufacturing, finance and services and their respective markets, there are material infrastructures, processes, and activities upon which dispersal (i.e. the multiplication of production sites and finance markets) is premised. These material infrastructures represent new concentrations required to debug, manage, service (and by extension enable) such dispersal. In essence, while the compression of space-time ushered in by the advances in telecommunications technology have facilitated the rapid globalisation of firms and their production facilities; the speeds and complexities that result necessitate the spatial fixing of command and control functions for these firms.

Thus, she posits that the central logic in the formation of the global city is that the added speed, uncertainties, and changeability of operations of digitised and globalised firms and markets require agglomerations of highly specialised capabilities designed to handle them (Sassen, 2004). Contending thus that place (or at least specific types of places) matters. This, geographical/spatial stickiness, is the most 'crucial logic in the formation of global cities', whose 'economic function' 'has to do with the capabilities to manage, implement, innovate, debug and service the global operations of firms and markets' (*ibid*: 1).

2.2.2.2. Command and control

The implementation and management of the global economic system require organisational commodities, found in finance and corporate producer services (Sassen, 2006a). The latter are the highly specialized capabilities referred to above. The outsourcing by producer firms of complex command and control corporate functions (MacDonald, 2008); and the growth of producer services and expansion of services companies have over time amounted to a 'new economic regime', an ascending specialised services-led economy (Sassen, 2006a: 85). This is a 'new economic regime' because these sectors impose themselves upon the rest of the economy, in the process devalorising manufacturing and other low value-added services (Sassen, 2001); services and finance are argued to constitute the dominant ensemble in the latest round of global capitalism.

These (finance and producer) services are 'overvalorised' - celebrated for their 'super-profit making capacity' (Sassen, 2000b: 84). This capacity evolves from a combination of (a) developments in technology that have enabled capital to be hypermobile; (b) the deregulation of markets that have multiplied the number of outlets for this hypermobile capital; (c) the proliferation of financial instruments that can now be traded in the market; (d) the demand for services by growing numbers of producing firms that have otherwise outsourced their own command and control functions; and (e) the increased complexity and resultant specialization in the nature of producer services (Sassen, 2006a).

The production of producer services is not dependent much on buyers (like consumer services) as it in on proximity to a series of other services. This is strategic for access to critical inputs and possibilities for joint ventures. The networks that emerge when service firms locate in close proximity allow each firm to attain and maintain a competitive position

in the market. As McDonald (2008, 20) sums it, to be 'outside of this spatial loop is to create inherent inefficiencies in productivity, to risk missing out on crucial information, or to be shut out altogether from lucrative business opportunities with correlated firms'. Consequently, agglomerations of producer service firms arise. The logic for the formation of these agglomerations is increasing speed, as opposed to minimizing the costs of weight and frictions distance (Sassen, 2004).

Similarly, while acknowledging the importance of a strong manufacturing sector for the growth of producer services, Sassen (2006b) contends that (a) the location of manufacturing firms is of secondary importance as they still require the specialised producer services wherever they are located; and (b) a substantial part of the producer services sector is independent of (e.g. financial business transactions) and/or only marginally/incidentally engaged with manufacturing (e.g. mergers and acquisitions). The producer services[6] sector must thus be conceived not as a 'residual category' but as an important sector in its own right (Sassen, 2000a). The hitherto dismissal of services as a residual category, an error made by both neoclassical and Keynesian economics (Sassen, 2000a: 92), is premised on a problematic assumption that services are 'non-stockable, nontransportable, and not subject to mass production or scale economies' (*ibid*: 96).

But the growth of and increased specialization in the services sector starting in the 1980s has meant that the producer services industry is freestanding, and contributes to rising shares of GNP [Gross National Product] (Sassen, 2000a). A number of factors contribute to the growth in the demand for the specialised intermediate inputs that are producer services. They include growth in the size, complexity and diversification of firms; mergers and acquisitions and the resultant separation of functions and geographical dispersal of economic activity; product differentiation and the resulting market differentiation; the dynamism and complexity of the business environment; and the growth in multinational corporations. Producer services as a result have become tradable, and subject to scale economies; coming to constitute a very critical sector in their own right.

2.2.2.3. Specialisation and hierarchy

New York, London and Tokyo constitute the apex in the global hierarchy of the 'postindustrial production sites' that are global cities. They represent huge concentrations of financial and producer services, having a high share of transactions and markets, of producer services firms, top global banks, and securities houses (Sassen, 2000a, 190-191). The various ensembles of producer services located in cities do not only operate at the level of intra-city networks within local agglomerations, but also embed themselves within networks of similar ensembles in other cities - producing the 'nodal points that function as control centers for the interdependent skein of material, financial, and cultural flows which, together, support and sustain globalization' (Knox, 1995a: 236). The connectivities emerging entail a degree of

[6] So termed to distinguish them from consumer services (which are produced for individualized consumption), and to specify them as services produced for firms and organisations as intermediate inputs into the production process (from manufacturing to agriculture to services) (Sassen, 2000a)

cooperation (as opposed to competition) among these ensembles. These firms, and the markets spawned by them, require a state of the art infrastructures not located in a single city, but instead in a network of cities. It is the complexity of command and control functions, necessitating specialization in a division of these functions between different cities that allow more cities to play an increasingly important role as finance and services centres.

2.3. Worlding Cities[7]

'Worlding' is a call for studying the laws of motion – for studying the world-in-formation, and the diverse projects and practices that allow cities (in their own way) to participate in such formation (Ong, 2011: 11). It is these laws of motion that are lacking in the literature, reducing global cities and their hierarchies to fixed categories of appearance. The focus (especially in the global city concept) on finance and producer services ignores other aspects (health, education, etc), activities (e.g. mining, manufacturing), and phases (e.g. agrarian transformation, industrialisation) of economic development. Given the limited geographical purchase (their concentration in few cities) and detrimental socio-economic consequences of finance and producer services (unemployment and widening inequality for instance), this omission from the global city analytical framework is indeed a critical one.

The mechanisms of economic dynamism need to be correctly diagnosed, including identifying the growth characteristics and potentialities embodied in the different types of economic activities. These potentialities relate to their ability to generate increasing returns, generate and/or exploit technological change and produce synergies; and consequently their contribution to cumulative causations and structural change for a given economy (Reinert, 2007). As a result, the specific economic histories of cities and the path-dependence of their trajectories cannot be ignored. Financialisation and the increasing service-orientation, processes at the heart of the command and control functions that make up global cities, have for example been in several cases coupled with and/or premised on premature de-industrialisation in cases (see for example Palma, 2005).

In a context of uneven development, countries and their cities are differentially positioned in global commodity chains and investment flows, with varying contributions in value and volume to global trade. Hierarchies based solely on concentrations of producer services and finance drop many cities and regions off the map of the global economy, 'consigning substantial areas of the globe to structural irrelevance' (Robinson, 2002: 536). As if development were a frozen end-state (as opposed to a dynamic process), Knox (1995a: 15, emphasis added) writes of 'a phase of world development in which the mega-cities of the periphery will fare no better than the catatonic agrarian societies that have fuelled their (demographic) growth, and in which both will *lapse decisively and irretrievably* into a "slow" economic time zone'.

[7] *Worlding Cities: Asian Experiments and the Art of Being Global* is the title of a critical book on Asian global city experiments and the implications for theory (Roy and Ong, 2011).

But cities outside the core have emerged over the past decade or two as critical players in the global economy (see Hill and Kim, 2000; Burdett and Sudjic, 2011; Roy and Ong, 2011), each with production structures distinct from those of London and New York. Their prominence is explicated by processes other than financialisation, for example by industrialisation that explain much of late-comer catch up (Hill and Kim, 2000; Amsden, 2001). Even concentrations of producer services and finance cannot in these cities be celebrated apart from latecomer industrialisation (and industrial policy plus finance embedded in a developmental state) and the resultant economic base (Hill and Kim, 2000). Such a conclusion brings the state back into analysis of world city formation and the global economy, a glaring omission in the world cities literature.

That the literature on global cities does not address the role of the state and of national interest in world city formation (*ibid*, 2187) might be accounted for by the fact that even 'globalisation' itself remains a poorly defined and inadequately problematised in the literature (McDonald, 2008; but see Sassen, 2007). Consequently, the focus on the success and dynamism of a (few sectors in a) few cities of the North circumscribes the explanatory power of the world city/global city concepts, in that they cannot account for development experiments (failed or successful) of cities elsewhere. As Ong (2011: 3) correctly argues, the 2008 crisis exposed the fact that 'the political economic focus on city functions cannot account for the sudden economic collapse of heretofore global cities or for the rapid rise of major Asian cities of global significance'.

2.4. From Cities to Circuits: A partial rejoinder

Cautious and reflective, Sassen (2009a; 2009c; 2011) writes post-2008 about cities in the global age, whose specialised differences and economic histories matter. She argues that the types of global cities emerging differ because of the differences in the preferences of firms and in levels of specialisation and chosen product markets. Such differences mediate against competition between cities, and allow for development of alliances between those cities operating within similar global circuits. After all, there is no such an object as 'the global economy', only global (inter-city) circuits (of firms and markets) connecting particular cities in very specific ways – producing 'inter-city geographies' (Sassen, 2009c).

It is possible then to generate not just a map of global cities, but different maps of different circuits and cities, dislodging earlier hierarchies privileging (specific aspects of) finance and producer services. Indeed, '[s]pecialized circuits in gold, coffee, oil, and other commodities involve particular places, which vary depending on whether they are production circuits, trading circuits, or financial circuits' (Sassen, 2009a: 6). Even within the same circuits, places are responsible for different segments. For example, it is Chicago (and not New York and London) that dominates in the trading of futures, despite the dominance of the latter as the leading financial centers of the world. Sao Paulo, Johannesburg and Sydney dominate in the wholesale trade of gold as a metal; while New York, Chicago and Zurich dominate in global circuits of gold as a financial instrument.

Consequently, each city is located on some of many circuits, different and specific (Sassen, 2009a). Each city's particular and highly specialised capabilities are what matters in the global economy, such that the economic history of each city becomes a critical determinant of the kind of role it plays in the so-called knowledge economy. The deep economic history of a city is 'one key source of its competitive advantage' (*ibid*: 24), and as such global city Shanghai can never be the same as global city London. A multipolar world is emerging, and firms and markets require diverse capabilities located in different circuits and cities. And because no single city can provide all these capabilities across circuits and segments, no city ranks at the top of all circuits. There is no perfect global city, only many global cities anchoring the global economy differentially and specifically. Global firms, therefore, are most likely to find the resources they require for navigating the specificities of national economies in global cities, different and particular.

2.5. Concluding Notes: Towards Dialectical Urbanism

In the end, each city is 'at once a *thing* and a *process'*, an *experience* and its *production*, and cannot be conceptualized as either/or, but as '*both simultaneously*' (Merrifield, 2002: 159, original emphasis). The study of the role of cities in the global economy must necessarily commence with an understanding that cities have their specialised differences and histories (Sassen, 2009c). Such an understanding dislodges global city hierarchies in favour of investigating the deep complex economic histories of cities, and how such histories pattern their current role in the global space of accumulation.

Cities everywhere, and not just a few elite cities in the North, become critical archives for generating theories about the role of cities in the world economy, and models for development beyond the limiting post-industrial city vision of producer services and finance. The various aspects, activities and phases of economic development are brought into lucid view. The measure of a global city status ceases to be concentrations of finance and producer services firms, shifting focus instead to unravelling factors that ignite and sustain economic development. These factors, which differ in some measure within developing countries and those of developed countries (and their cities respectively), relate to 'the dynamics of production structures' and 'the specific policies and institutions created to support' them (Ocampo, 2005: 4)[8].

While Johannesburg has featured prominently in the restricted and restrictive maps of world and global cities emerging (Friedmann, 1995a; Beaverstock *et al*., 1999; Sassen, 2009), its global city status has yet to be investigated within the context of its deep complex economic history, and the implications of its current trajectory for catch up. Building on this and the two subsequent chapters (on global city-regions and on the catch up problem), this study intends to partially close this critical gap.

[8] See *Chapter four* for a detailed discussion

Chapter 03: Competitive City-Regionalism: Features and Fissures
3.1. Introduction

Old regionalism is a product of the 1950s Western Europe, concerned with balanced development across the national space economy (Rogerson, 2009). Redistributive and diversionary policies - including infrastructure investments, grants and tax incentives, and physical controls - were adopted by national governments in pursuit of balanced development to divert investment into lagging regions. But the expected economic returns following these interventions were not realized. The nation state's command over macro-economic policy and other instruments for intervention, and the increasing questioning of industrialisation as a driver of modernization for lagging regions combined to undermine the project of old regionalism starting in the 1970s.

New regionalism is a response to changes in the global economy, where the region is the primary actor, and national scale directing and planning policies are reduced in significance (*ibid*). The region thus anchors economic and social life, embodies political authority and economic regulation, and is an asset for learning-based competitive advantage and associational economies (McLeod, 2001). Here the focus is building the competitiveness of already thriving regions and not balanced development, it is in the global economy and not the nation-state that provides the parameters and capabilities for regional development (Rogerson, 2009).

Although there are different strands and thematic foci in the new regionalism literature (see McLeod, 2001; Rogerson, 2009, for reviews), and substantial criticism levelled against it; the focus of this chapter is literature focused on the global economic competitiveness of regions. More specifically the numerous interventions by Scott and Stopper (see for example: Scott and Storper, 1987; 1990; 1992; 2003; Scott: 2001; 2006; Storper: 1995; 1998; 2010), reflecting jointly and individually on the flexible accumulation regime and its spatial dynamics, at the centre of which is the region as a foundational territorial platform for competitiveness. It is the features and fissures of the 'competitive city-regionalism' espoused by this literature that is the subject of the remainder of the chapter.

In the next section, this chapter delineates the literature's point of departure, an analysis of capitalism and its evolution as a series of regimes of accumulation and associated but differentiated modes of social regulation. The current accumulation regime, the literature suggests, is a post-Fordist regime characterised as flexible accumulation, which is the focus of the subsequent section. The leading industrial ensembles, spatial dynamics (clustering and agglomeration tendencies), institutions and conventions, and policy implications of flexible accumulation as an accumulation regime and its associated modes of social regulation are briefly outlined. This section, the third in the chapter, is basically an attempt at a summary of competitive city-regionalism's most salient features. The fourth section turns to the limitations of competitive city-regionalism, exposing its fissures as a theoretical device and analytical tool, and as a policy agenda.

3.2. The point of departure: on regimes and modes

The institution of commodity production (and its logic of accumulation)[9] - at the centre of capitalism as a mode of production - assumes different concrete shapes at different moments in history (Scott, 2004). These concrete shapes, are manifestations of geographically-, historically-specific combinations of 'sociotechnical relations through which commodity outputs are secured, the economic surplus appropriated, and new investments ploughed back into the sphere of production' (*ibid*: 126). The particular sociotechnical combinations and the concrete shapes of the institution of commodity production; constitute in Regulationist theory 'regimes of accumulation'[10] and their underpinning 'modes of social regulation'[11]. These technological-institutional systems are comprised in (a) an evolving technological and organizational structure of production; (b) labour markets and industrial relations; managerial cultures and norms; (c) market structures and forms of competition; and (d) regulatory institutions at various levels (sectoral, regional, national and international) (Scott and Storper: 1990; 1992).

The internal tensions and contradictions characteristic of capitalism as a mode of production, and the restructurings ushered in as crisis–displacement resolution mechanisms; largely account for the dissolution (even if partial) of the old and the emergence of new accumulation regimes and modes of social regulation. Whereas the modes of social regulation may differ for any given regime of accumulation, and although there are inevitably continuities and discontinuities as the old dissolves and the new emerges; different technological-institutional systems can be distinguished through the peculiarities of the specific 'ensembles of leading industries' and the complementary but differentiated quasi-political arrangements steering the economy (Scott and Storper, 1992). An ensemble is dominant when its component industries (a) account (directly and indirectly) for a disproportionately higher share of total employment; (b) have very high growth rates of output and/or employment; (c) are the significant focus of innovation and new investment; (d) have propulsive effects in upstream sectors; and (e) generate technological organisational and/or managerial practices that soon become the desired actual norm in the rest of the economy (Scott and Storper, 1987; 1990).

As each regime of accumulation and mode of social regulation is premised on a specific geography of production, transitions from one to the next involve some 'radical switch in the spatial bases of production from one set of core regions to another' (Scott and Storper,

[9] As Karl Marx (Marx, 2011 [1906], 41) sums it in the first volume of *Capital*: 'The wealth of those societies in which the capitalist mode of production prevails, presents itself as 'an immense accumulation of commodities'.

[10] A *regime of accumulation* refers to 'a systematic and long-term allocation of the product in such a way as to ensure a certain adequation between transformations of conditions of production and transformations of conditions of consumption' (Lipietz, 1987: 32)

[11] The *mode of regulation* refers to the 'institutional forms, procedures and habits which either coerce or persuade private agents to conform to' an accumulation regime's 'schemas of social reproduction' (Lipietz, 1987: 33)

1992:6). This switch is evidenced most visibly in 'cases where the ascending leading sectors of the new system are free of any dependence on the immobile resources of the old'[12].

3.3. The Post-Fordist Regime: Flexible Accumulation

On the back of this theoretical scaffolding of changing accumulation regimes and associated modes of regulation, embodied in dominant ensembles and related territorial structures; Scott and Storper (1990; 1992; 2004; Scott, 2004) argue that *flexible accumulation* has emerged since the 1960s as the dominant regime of accumulation. At its core, the new regime is founded on forms of productive activity[13] that are distinguished by their unprecedented ability to reconfigure processes and products, including upwards/downwards adjustment in output quantities while retaining high levels of productivity (Scott and Storper, 1990; Scott, 2004).

In the long crisis of Fordism, technologies have evolved and market conditions for particular products and services have altered, introducing uncertainty, contestability and complexity. Firms came to prefer building cost-reducing relations outside the boundaries of the firm (i.e. to externalize), leading to the proliferation of smaller specialized plants focused on small batch outputs, moving rapidly in and out of particular niche markets (Scott and Storper, 1990). This 'evident propensity' of flexible production ensembles to 'disintegrate into extended social divisions of labour [and in the process] giving rise to many specialized subsectors' is a 'reflection of the tendency of internal economies to give way before a progressive externalization of the structure of production under conditions of rising flexibility' (Storper, 2004: 129). What emerge are network production structures imbued with external economies of scale and scope (Scott and Garofoli, 2007), marked by tendencies to spatial convergence and reagglomeration (Scott, 2004). Potent agglomeration economies evolve as these networks are locked into a dynamic framework where they 'interact and evolve' together with 'local labour market structures' and 'innovation processes' in 'logic of circular and cumulative causation' (Scott and Garofoli: 2007: 5).

3.3.1. …its leading ensembles

The ensembles (with their firms, sectors, and industries) dominant in the contemporary flexible accumulation regime are (a) artisanal, craft-based, and design–intensive (e.g. clothing, textiles, furniture, jewelry, ceramics); (b) high-technology industries, dependent on advanced engineering/scientific knowledge (pharmaceuticals, bioengineering, advanced metallurgical industries, electronics, military and space hardware production); and (c) advanced producer and financial services (Scott and Storper, 1990;1992; Scott, 2004). Their transactional activities are intensive, extensive and non-standardised; local labour markets are fluid and flexible; and the producers involved are multiple, small- and medium–sized, and highly specialized (Scott and Storper, 1990:24). Their outputs are films, semiconductors,

[12] See also Brenner and Theodore (2002: 7) on spatio-temporal fixes above
[13] Notwithstanding variations in the technologies, labour processes and outputs

banking and financial services, fashion, jewelry, and furniture production, inter alia (Scott *et al.*, 2001).

3.3.2. … its clustering and agglomeration tendencies

New major products, processes and technologies emerging require sharing, matching and learning (Storper, 2010); and thus necessitate agglomeration, which lowers costs and widens opportunities for producers constantly matching needs and capabilities (Scott and Storper, 1990). Clustering allows firms to navigate challenges by increasing their operational flexibility and bolstering their innovative capacities (Scott *et al*., 2001). This as a result of the rapid movement of changing information about technologies, markets, processes and product designs between the different firms in a given cluster (*ibid*).

3.3.3. The institutions and conventions to sustain it

The spatial proximity of firms, materialising through expanding clusters at the heart of specialised regional production systems or value chains, allow for critical product and/or process improvements that propel economies forward. But factors of production assembled in a physical space do not alone amount to economic development (Rogerson, 2009); and the efficiencies and dynamism of clusters therefore can only be realised and sustained if harnessed through institutions[14] and conventions. These routines and untraded dependencies (of trust and reciprocity) allow for exploitation by firms of knowledge spillovers and externalities, in the process deepening sharing, matching and learning (Storper, 1995). These conventions and rules are necessary to counter market failures including externalities, imperfect information, free-rider problems inter alia in areas as varied as inter-firm transactions, technological innovation and transfer, local labour markets (skills and training), and community development and planning (Scott and Storper, 1990; 1992). Consequently, the conventions 'must be *coherent*, not only so that what is produced embodies endogenous learning, but also so that the resulting product passes external tests of competitiveness by being sold at prices and quantities sufficient to reproduce the system' (Scott, 1998: 16, original emphasis).

3.3.4. Its policy implications

The policy threads emerging from this emphasis on institution building and conventions are summed in Storper (1998: 26-27) as (a) support for inter-establishment and inter-firm relations and networks; (b) establishment of publicly funded innovation and technology transfer centers 'to enhance the adoption of new technologies' and 'stimulate convergence in user-producer relations', so as to allow for rapid incremental innovation; (c) strategic public training; (d) industry-specific, precompetitive research and development (R&D) to stimulate infant industries in 'risky new technology products'; (e) entrepreneurship policies to help

[14] Defined by Storper (1998: 22) as consisting of 'persistent and connected sets of rules, formal and informal, that prescribe behavioural roles, constrain activity, and shape expectations'

potential entrepreneurs overcome difficulties such as limited access to capital; and (f) industry service centers providing resources such as systematic market research, foreign marketing, technology research, technology sharing and on-line networking opportunities. This 'new heterodox policy paradigm' has the twin goals of 'ongoing adaptation of products and processes, especially through product differentiation or moves up the price-quality curve so as to respond to the ongoing and inevitable entry by competitors' (applicable to traditional or small-scale intermediate products); and 'movement along the technological frontier, where the frontier is unknown or unknowable' (for scale-intensive or new technology products) (Storper, 1998: 29-30).

3.3.5. Its regional motors

In a context where locational proximity is coupled with conventions and institutions that generate learning and innovation, clustering leads to increased growth which, in turn, leads to further clustering, amounting to cumulative causation (Rogerson, 2009). It is city-regions, 'with their complex internal structures comprising multiple urban cores, extended suburban appendages and widely-ranging hinterland areas' that represent for Scott and Storper (2003: S193) the 'most striking forms of agglomerations in evidence today'. The varied networks that constitute the clusters and agglomerations at the heart of these regions are linked to networks in other regions of the world through trade and capital flows and value chains. Consequently, city-regions are located variously in the division of labour that comprises the territorial and political-economic architecture of the flexible accumulation regime.

The emerging geography of the flexible accumulation regime is constituted by densely urbanised regional economic agglomerations (contra the national scale core-periphery arrangement of the Fordist regime). The dynamism of national economies depend largely on these regional agglomerations, because they are imbued with possibilities for learning and innovation, dense local labour markets and localized relational assets generated by the reagglomeration of production. They constitute a critical means to militate against the threats of globalisation while exploiting the opportunities it presents. In sum, the region has become a critical basing point, relational asset, and a source of learning-based competitive advantage, (MacLeod, 2001).

3.4. Fissures: Limits to competitive city-regionalism

Beyond the focus on agglomerations, their traded and untraded dependencies, and their assumed attendant innovation, learning and economic dynamism (i.e. high productivity and performance); new regionalism fails to engage with actual drivers of regional economic development (Ward and Jonas, 2004). The political and economic processes accounting for the resurgence of any given city-region as a motor in the global economy must necessarily be studied in their contingent and specific forms.

Whereas city-regions are important sites of exchange and innovation and platform for development and competitiveness; redistribution, conflict, counter-strategies, and politics

remain critical (*ibid*). City-regions are thus not delinked from the political interests and alliances and conflicts within their national space economies, even as regional change is usually delinked in the literature from a wider political economy, which is marked by fiscal restraint and welfare retrenchment (MacLeod, 2001).

The absence of a theorisation around politics of space and scale in new regionalism leads to the location of resurgent regions in some post-national state territoriality, where the national state is said to have been hollowed out to a point where (sub-national) regions grapple directly with the challenges of globalisation. Omitted from this perspective is the argument advanced by Brenner and Theodore (2002b) that the post-1970s rescaling has produced a new 'scalar fix' which concentrates political control and economic activity variously within different scales (sub-, supra-, national). The restructured relations within the new hierarchy are such that the national might be dislodged as the primary state territorial container of capital accumulation, but there is '*no single scale serves as the primary pivot for accumulation, regulation, or sociopolitical struggle*' (*ibid*: 16, emphasis added).

The national state therefore, and its scale and scope of intervention remains critical, including it adopting policies that privilege specific regions within their national space-economy, even as 'national economic autarchy becomes less significant than it once was' (Scott and Garofoli, 2007: 4). There are many forces shaping the emergence and sustenance of city-regions, conflicted and conflicting, such that they cannot be assumed to be 'functionally integrated economic territories' built solely on cooperation and association (Ward and Jonas, 2004: 2121, see also Greenberg, 2010).

The map of the global economy, despite allusions to one dominated by an archipelago of inter-dependent regions, is dominated by a few urban nodes in charge of globalised currencies, trade patterns, and investment flows (Ward and Jonas, 2004). Consequently, lagging regions are likely to be further relegated, remaining trapped in low value-added production (Greenberg, 2010). Competitive city-regionalism is a politics of space, ongoing, conflicted, and dynamic; and not simply a functional response to the competition dictates of the global economy (Ward and Jonas, 2004).

Claims of a flexible accumulation regime founded on a knowledge economy are flawed in suggesting that these amount to displacement of standardised mass production, for these remain a central aspect of capitalist production and flexibilities and knowledge are used simply to improve them (Greenberg, 2010). The divergent trajectories of city-regions beg the question of whether economic success is an outcome of knowledge-intensity or knowledge-intensity is an outcome of economic success (*ibid*).

3.5. Conclusion

While new regionalism is embedded within some analysis of the flexible accumulation regime, its leading industrial ensembles, spatial dynamics and architecture, and the need for institutions and conventions that generate and sustain learning; new regionalism fails to

engage with actual drivers of regional economic development. While helpful in expanding the scope of critical sectors beyond finance and producer services to include artisanal, craft-based, and design–intensive; and high-technology industries; standardised mass production remains equally critical. Besides, higher quality and technology intensive products that will make regions competitive require technology acquisition and learning, a complex process different from that envisaged by Storper (1998), and better theorized by Khan (2009), where learning rents are higher and loss-financing periods are longer; and where a different set of institutions and conventions are required. Technology acquisition and learning as central factors in generating and sustaining higher levels of growth and competitiveness is the focus of the next chapter.

Because each region represents unique configurations of social and political life, they are each caught up in a unique develop trajectory (Scott 2004). Even if departing from a different premise, Scott and Garofoli (2007:6) agree that 'path dependency means that lock-in of the regional economy to suboptimal outcomes is an open possibility', and 'that some sort of collective steering mechanism may also be required in order to avoid the worst pitfalls of this condition'. Learning as a central ingredient for competitiveness - and institutions and policy as critical steering mechanisms to ensure such learning occurs - have to be analysed in relation to their capacity to assist regions in developing countries, to build the necessary and right capabilities for sustainable economic development.

And as Rogerson (2009: 112) contends, 'strategic planning for the building of Gauteng as a globally competitive city region is the most significant imprint of new regionalism on the South African policy landscape'. The fifth and sixth chapters will explore these features and fissures of competitive city-regionalism in the context of the Gauteng city region, against the need for catch-up, and for anchoring the city-region in a set of global cities whose economic trajectories are sophisticated and sustainable.

Chapter 04: Development as Structural Change, Competitiveness and the Catch-up problem

4.1. Introduction

Economic growth, contra Ricardo, is activity specific, with only certain types of economic activities and structures embodying the special ability to introduce (and induce) dynamism into a given economy (Reinert, 2007). Economic activities are qualitatively different: with some characterised by intensive and extensive diminishing returns and others by increasing returns; some embodying potentialities for technical change and innovation, and others that do not; and some with capacity to generate synergy effects and those without (Ocampo, 2005). Increasing returns (economies of scale), technical change (expanded knowledge intensity), and cumulative causations associated with some economic activities are the mutually reinforcing factors that combine to produce structural change. Structural change therefore, the essence of economic development, is about a shift in the sectoral composition of production and international specialisation from (low-productivity) diminishing returns activities to (high-productivity) increasing returns activities (Thirwall, 2002; Reinert, 2007).

At the heart of economic development, therefore, is the ability to consistently generate new and dynamic economic activities (Ocampo, 2005). It is about a constant search for different products of different levels of sophistication, and for quality-price combinations that allow for upward movement from low- to high- value-adding parts of the value chain within the same products or across different products (Khan, 2009). Innovations – i.e. finding 'new combinations' that include new activities, industrial structures, sectors, product qualities, production methods, sources and markets – and their full realisation, and diffusion through the system; are central engines of growth. These, together with complementarities, linkages, networks (between firms and activities), and the institutions allowing enabling such networks, account for the dynamism and efficiency of a given economic system (Ocampo, 2005). These are the dynamics of production structures propelling structural change.

For developing countries, innovations entails spreading new products, technologies, and organisational or commercial strategies previously developed elsewhere (Ocampo, 2005), in essence emulating rich countries' economic structures (Reinert, 2007). This is what prompted Khan (2009: 9) to surmise that developing countries are beset with 'the catching up problem', defined as

a) achieving the minimum quality that allows entry into globally competitive production for a variety of products even if initial entry quality is low;
b) spreading basic manufacturing and productive capabilities broadly across the working population; and
c) systematically moving up the ladder across product categories.

This chapter argues that development as structural change is path dependent, where production experience (and its lack or loss), and short-term macroeconomic performance have long-term effects on growth and the presence of economies of scale (Ocampo, 2005).

Consequently, the pursuit of global city status or competitive regionalism, for cities of developing countries beset with the catch-up problem, must not be at the expense of industrialisation and building technological capabilities that will launch their countries on a sustainable path.

The first section highlights the prospects and implications of different production structures, arguing that manufacturing remains a special sector, despite financialisation and allusions to the emergence of services as an additional engine of growth. Financialisation, and a rapid move to services, can signal for developing countries premature deindustrialisation, with strategies (competitive regionalism) blindly mimicking developed countries wherein deindustrialisation represents a logical phase in their structural change.

The next section unravels divergent routes to economic development, highlighting differences between mainstream and heterodox (specifically the developmental state paradigm) approaches to economic development. It is the heterodox path that is seen as most sustainable for developing countries and their cities, characterised here as technological capability building, developmental states and selective industrial policy. The chapter concludes with some notes on competitiveness and the role of cities; arguing that cities in developing countries are critical to ushering in structural change and that their competitiveness will depend largely on the extent to which they launch their countries onto a sustainable path.

4.2. Production Structures: Prospects and Implications

4.2.1. Manufacturing as a special sector

If economic development is about moving from simple, low quality, low cost, labour intensive products to complex, high quality, and high cost products; and a concomitant transit from basic to mature to evolving technologies; then manufacturing is its engine (Amsden, 2001). Increases in the global share of manufacturing value-added and manufacturing exports are arguably at the heart of the global competitiveness of countries, creating new comparative advantages in international trade that help dislocate the deteriorating terms of trade of extractive economies.

Take the automobile, a complex product comprised in roughly 3000 parts and components, evolved through varied production processes (carried out under different conditions) which each require different degrees and forms of specialization. Specialisations evident in the production of the various parts and components, in a series of independent firms in rubber, plastics, glass, textiles, electronics, steel and other metals (Abdulsomad, 1999). The cross-pollination between these various independent firms, if properly and systematically coordinated, do not only generate considerable employment, but also generate technology and skills transfer, and thus contribute to building capacity in the economy as a whole.

It is possible to argue then, that there is a ‘close association across countries between the level of per capita income and the degree of industrialization, and there also seems to be a

close association across countries between the growth of GDP and the growth of manufacturing industry' (Thirwall, 2002: 40). Nicholas Kaldor, pioneering in advocating for a sectoral approach to the study of growth and development, developed three growth laws (and subsidiary propositions) that corroborate this assertion (Kaldor, 1966).

The first law, states that 'there is a close relationship between the growth of manufacturing output and the growth of the GDP' (Thirwall, 2002: 41). This first correlation is based on the impact of manufacturing on productivity growth in the economy, where growth in manufacturing output leads to growth in productivity in manufacturing owing to static and dynamic returns to scale. This correlation between manufacturing output growth and manufacturing productivity growth represents Kaldor's second law (also known as Verdoon's law). The third law points to the positive causal relation between the rate of expansion in manufacturing activity, output and employment and productivity growth rate in the rest of the economy (outside of manufacturing). This correlation is based on the fact that expanding manufacturing transfers labour from low productivity sectors (such as agriculture and petty service activities) to the high productivity sector that is manufacturing (Thirlwall, 2002; Libanio and Moro, 2009).

4.2.2. Financialisation, Services and Premature Deindustrialisation

The concept of financialisation emerges from radical political economy, intended to designate 'a historical change in the nature of accumulation in the world economy towards one that has become increasingly finance-led' (Newman, 2009: 542). Although based on different theories of finance, and yielding different definitions and analyses (see Lapavitsas, 2011 for a generous review), financialisation is broadly defined by Epstein (2005: 3) as 'the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies'.

Since the 1970s, there has been massive expansion and proliferation of financial markets, speculative assets, financial instruments and services, and actors and institutions, radically altering the character, functioning and performance of the economy at both micro and macro-level (Palley, 2007). The collapse of the Bretton Woods and the abandonment of fixed exchange rates, expanded appropriation avenues for the financial sector, setting in motion profoundly altered patterns of accumulation in favour of finance (Newman, 2009). The (structure and operations of) financial markets, corporate behaviour, and economic policy serve as the primary conduits for financialisation (Palley, 2007).

Financialisation has produced (a) an explosion in the ratio of global financial assets relative to global GDP; (b) increased profit extraction from finance as opposed to productive activities; (c) dominance of finance over industry; (d) poor performance in the real economy; (e) increased financial fragility, and (f) deepening income inequality and wage stagnation (Palley, 2007; Fine, 2009). Combined with the resulting decoupling of wage growth from productivity growth, these outcomes consolidate the international balance of power as

evidenced in the various global commodity chains and concentrated market structure (Ocampo, 2005; Newman, 2009).

In addition to finance, there is the rise of advanced producer services (Sassen, 2001). References to a services economy and a post-industrial society are very much based on the argument that services have overtaken manufacturing as an engine of growth patterning structural change (Cohen, 2009). As a theory of economic development, the 'service thesis' basically posits that 'services have replaced goods as the principal *output* of the economy and service jobs have replaced industrial jobs as the principal *occupation* of workers' (Walker, 2004: 98, original emphasis).

In the normal course of economic development, economies reach a point (at least at a certain per capita income level), where there is a decline in the share of manufacturing employment and output (and possibly manufacturing exports), and the surge of services as the fastest growing sector of the economy (Palma, 2005). This is deindustrialisation (see Wells, 1994), wherein advanced economies resources are reallocated from industry into services. In addition to this upward deindustrialisation (continental Europe), three types of deindustrialisation are discernible from the varied experiences of economies, namely: normal Dutch disease (Netherlands); downward Dutch disease (Latin America), and reverse de-industrialisation (Sub-Saharan Africa) (Palma, 2005).

Countries suddenly discover commodities; generate a trade surplus from services (in particular tourism and finance), or introduce a drastic switch in the economic policy regime. Despite differences in resource endowment, and production structures, these countries suddenly become locked into a growth strategy content with generating a trade deficit in manufacturing as opposed to one aimed at generating a trade surplus in manufacturing (through industrialisation). For those among these countries that have not yet reached mature levels of industrialisation, this dramatic shift means degenerating into their original Ricardian comparative advantage levels (downward Dutch disease).

4.3. Divergent routes to economic development

4.3.1. Comparative advantage, facilitating states and efficient markets

The endowment structures of economies (i.e. relative abundance of natural resources, human capital and physical capital), *given* (produced by market forces) at any stage of a country's development (evolving from one stage to the next); represent each country's *latent comparative advantage* (Lin, 2012). They are the primary (if not the sole) endogenous determinants of an economy's relative factor prices and optimal industrial structure[15]. Optimal industrial structures therefore inevitably conform to (and evolve together with) the existing endowment structure. Thus, a 'low-income country with abundant labour or natural

[15] Reflected in levels of capital-intensity; viz. resource/labour intensity, optimal firm sizes, production scale, market range, transaction complexity, nature of risks (Lin, 2010: 3)

resources and scarce capital will have comparative advantage and be competitive in labour- or resource-intensive industries' (Lin and Monga, 2012: 147).

Consequently, developing countries should strive to build industries that conform to their latent comparative advantage, and benchmark themselves against growing economies with similar endowments structures but higher per capita incomes. Structural transformation here does not result from selective industrial policy (Chang, 1994), but from efficient markets that determine factor market prices and allocate resources in a manner consistent with a country's comparative advantage (Lin and Monga, 2012). The role of the state is facilitation, with its interventions restricted to reducing information asymmetries, coordination failures, and externalities (Lin and Chang, 2009).

Open economies are said to exhibit strong convergence tendencies than closed ones. Import-substitution is therefore regarded as comparative-advantage defying, and is faulted for its inevitable detrimental outcome of reduced import trade, suppressed export trade, and (most importantly) for reallocating resources away from comparative advantage industries ((Lin, 2012: 304). While acknowledging the potential for firms to achieve a high ratio of exports to foreign markets and fast technology upgrade through import-substitution, it is said that these exports will not be profitable, such that countries will 'have poor external accounts, accumulate foreign debt, and be easily affected by external shocks' (Lin and Monga, 2012: 305).

Technology transfer, an important ingredient in any industrialisation effort, is also argued to be based on the economy's endowment structure. If this endowment structure is respected in attempts towards technology upgrade, the costs of learning for firms will be lower precisely 'because the distance between the new industry/technology and the old industry/technology is smaller' (*ibid*, 303). It is highly likely too that the patent protections for these mature technologies will have expired, or that the license fees will be much lower, bolstering the argument that technology upgrade under comparative-advantage-following strategies will be cheaper (*ibid*).

In this framework, new structural economics (NSE), the 'mystery of diverging economic performances' lie in the relation between economic development strategy and its relation to each given country's latent comparative advantage (*ibid*). Comparative-advantage-following (CAF) strategies (facilitating states and efficient markets) generate 'virtuous cycles' of growth, and comparative-advantage-defying (CAD) strategies generate 'vicious cycles' (developmental states applying selective industrial policy) of low and unsustainable growth.

The policy recommendation emerging here is one of outward-orientated trade regimes, distinguished for the 'low or negligible impediments to imports, relatively uniform incentives for different production activities, and incentives for export sale equal to the incentives for domestic sale' (Wade, 1990: 11).

4.3.2. Technological capability building, developmental states and selective industrial policy

Heterodox approaches contend that accelerated growth results from high rates of new physical capital, and deliberately broadening and deepening technological capabilities (Rasiah and Jomo, 1999). As opposed to comparative advantage; long-run differences in industrial development are largely attributable to differences in the accumulation of technological capabilities (*ibid*).

There are three generic categories of these capabilities, namely (a) production capabilities; (b) project execution capabilities; and (c) innovation capabilities (Amsden, 2001). These capabilities are a combination of the formal education of workers and managers of firms, and the tacit knowledge (uncodifiable) (Khan, 2009: 7). The latter can only be acquired in a process of learning-by-doing – in the routines of production, which in itself requires expanded investment to enable such learning, over time and at lower returns on investment (ibid). Competitiveness depends primarily on the existence, intensity and spread of these capacities across various industries and firms in a given economy; critical for determining the pace with (and extent to) which firms can access, borrow, master and improve upon existing technologies (Lall, 2004; Khan, 2009).

These capabilities - acquired through costly, risky and uncertain trial-and-error - are the main sources of productivity, wage and profit growth. But such growth largely results from upward movement across the product quality ladder (high-ends of same product or alternative higher quality products), an outcome of (and amounting to) movement in the technology path from 'mature' technologies to 'evolving' ones (Khan, 2009). Although it might prove relatively easier to enter lower quality indices of a given product (or lower quality products) where technologies are mature, there is a real threat of competition from other developing countries entering the global market simultaneously, and the possibility of these products (and technologies) becoming obsolete in the short- to medium-term (*ibid*). On the other end, there is potential for future productivity growth and quality improvements in products embodying *evolving* technologies (*ibid*).

But complexity and scale of technology involved in the production of high-quality products, coupled with the level of backwardness of the given economy, combine to increase the cost and duration of learning, i.e. of technological capability building (Lall, 2004). Private firms are unlikely to invest in learning beyond a particular point, since the process involves operating at a loss for a while. Hence, there are market failures[16] constraining learning and technology acquisition (Khan, 2009). One of the key interventions relates to loss-financing, 'measured as a per unit "subsidy" […] which brings the domestic cost of production […] into line with the global price' (*ibid*, 14). If learning is financed and the learning effort is

[16]These include appropriability problems facing investment in skills, innovators, and discovery; failures of coordination, and institutional problems in ensuring effort during learning

accordingly enforced, a breakeven point of competitiveness must be reached at which loss-financing can be withdrawn.

In East Asia, loss-financing came in the form of inter alia, subsidized long-term credit, import protection, and export subsidies (Khan, 2009). These subsidies did distort relative factor prices, reconfiguring the incentive structure of the economy in favour of industries, firms, activities and technologies that were targeted as strategic (Shapiro, 2007). To enforce effort, reciprocal control mechanisms (RCMs) were adopted, including export targets, local-content requirements, technology transfer and upgrade obligations, and use of domestic raw materials. As Amsden (2001) sums it, a control mechanism identifies the process to be controlled, detects what is *given* (has a *sensor*), compares what is with what should be (has an *assessor*), changes behavior (has an *effector*), and transmits information between functions (has a *communications network*). Selective industrial policy, at the centre of these interventions, was indeed itself designed as a control mechanism to deliberately redirect economic behavior towards the industrial structures desired.

From this perspective, the 'catching up problem' is not about building facilitating states for efficient markets that allocate resources accordingly to build industry-technology structures that follow (not transform) the endowment structure. Capital formation and capital accumulation (as opposed to efficient allocation of resources), is the central mechanism generating industrial competitiveness (Wade, 1990). At the heart of such capital formation and accumulation is a developmental state that performs development banking, local content management, selective seclusion, and national firm formation in a manner that imposes discipline in the market and facilitates industrial and technology upgrade towards dynamic comparative advantage.

Here, the question is not whether or not to design and implement industrial policy in a bid to impart a 'directional thrust' to the economy (Wade, 2014); the question is what constitutes such a policy in a context of changing international rules of the game, rapid technical change, changing geographies of production (Lall, 2004).

4.4. Conclusion: Competitiveness and the role of cities

Inter-locality competition is a state project, and particular cities and regions within national territories are as critical to economic development as major firms, technological infrastructure and labour force (Brenner, 2004). The state reconcentrates 'socioeconomic assets and advanced infrastructural investments within the most globally competitive city regions' (*ibid*, 2004: 176). After all, it is said that geographic unevenness is an inevitable outcome of economic development (The World Bank, 2009). Rising concentration of economic activity, as reinforced by the strategy of reconcentration, will in a market-led economic development process, lead geographical convergence in living standards as the benefits of growth spillover (*ibid*).

City competitiveness is defined here as '*the set of institutions, policies, and factors that determine the level of productivity* of a city or a region' (The World Bank, 2010: 2, original emphasis). Critical factors accounting for local competitiveness include, inter alia, a legacy of agglomeration economies (generating productivity gains associated with localisation and urbanisation economies); innovation (produced by knowledge spillovers transmitted through learning by observation, meeting and leaving); human capital (higher levels of formal education and tacit knowledge); a competitive environment; infrastructure and private investment; and quality of local governance (reduced cost of doing business and favourable local investment climate) (*ibid*).

These factors, primary concerns for local administrations, are at the centre of what Harvey (1989) termed 'a shift to entrepreneurialism in urban governance'. The modes of intervention that local states adopt in pursuit of these critical factors, and in particular lowering the cost of doing business include the dismantling of constraints (laissez-faire, relaxing regulations viewed to increase the cost of doing business, from land use to taxes to environmental regulations, for example); retrenching welfare (shifting public spending away from areas of social need to areas of return on investment), assembling and rolling out of enablers (aidez-faire, flagship projects, and incentives for example), and disciplining deviants (Purcell, 2008). Combined, these modes of local state intervention elevate the market as 'the inner regulator of the state, rather than the state as an external regulator of the market' (Leitner *et al*., 2007: 3). Such is the essence of the post-Keynesian competition states, and of neoliberalisation, characteristic of cities and urban regions trapped in the competitiveness logic advanced by the World Bank above.

In contrast, Hill and Kim (2000) have persuasively argued that the assumption of convergence in the economic base, social structure, and spatial structure in the global city literature is a flawed one. The rise of cities like Seoul and Tokyo cannot be delinked from the experience of late industrialisation, and, in particular, from 'the relationship between industrial policy and finance institutionalized in a developmental state' (Hill and Kim, 2000: 2167).

Cities in these contexts remain very critical to ushering structural change, given that the 'assets of cities are central for economic competitiveness and economic dynamism in general' (Amin, 2003: 115). Although developmental state capacities may be weak at urban and regional levels in certain contexts (see Turok, 2010 on South Africa), it remains important that trade, industrial, fiscal and monetary policy converge with the priorities, interventions and investments aimed at economic development at these levels.

Section B: Quick Notes on South Africa's Global City Region

Chapter 05: Africa's first global city-region

5.1. Introduction

For the ex-premier of Gauteng, Mbhazima Shilowa, the only mechanism to propelling the country onto a higher growth path was to position Gauteng as a globally competitive city-region (Shilowa, 2006). Positioned thus, Gauteng's role in the global economy would be enhanced, and the socio-economic challenges that beset it - most notably poverty, unemployment and underdevelopment – would be resolved.

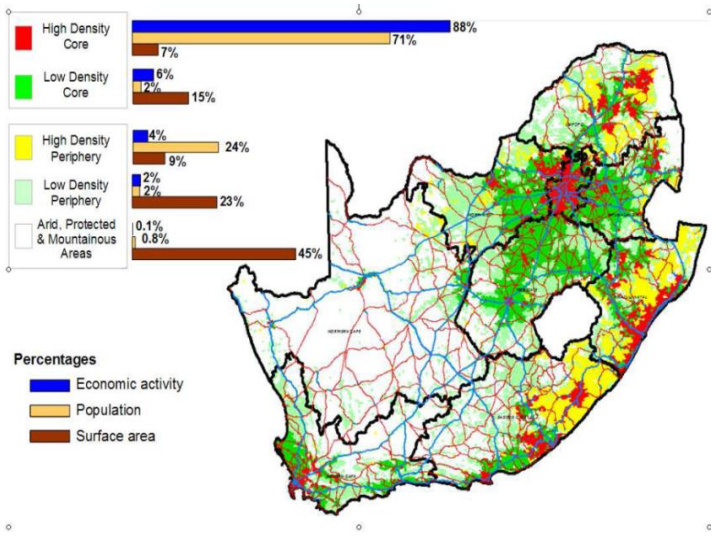
Johannesburg, for its part, has long positioned itself as a world class African city (CoJ, 1999; CoJ, 2006; CoJ, 2011), and has the rare distinction of being the most cited global city in Africa in global rankings (Beaverstock *et al*., 1999; Sassen, 2009a; Knight Frank Research, 2014). Ekurhuleni and Tshwane are critical economies nationally (SACN, 2006), and together with Johannesburg, and the province's secondary cities make Gauteng the most urbanized and economically dynamic province in the country.

The concentrations of economic activities, opportunities and potential; the predominantly urban nature of the province; concentration of people; and the extensive economic flows and networks that link the province with secondary cities in neighbouring municipalities are cited as some of the reasons for Gauteng to function as a global city region (GPG, 2006). If it succeeds, it will become Africa's first global city region – one of those competitive urban agglomerations Scott and Storper write about (see chapter 03). This chapter explores Gauteng's current economic trajectory; explores the emergence of the city region agenda; and enunciates on the economic policy package for the city region emerging in the years 2006-2011.

5.2. The Gauteng economy

5.2.1. South Africa's economic engine

The country's space economy is marked by concentrations of people and economic activity in certain areas; largely in cities emerging and advanced (see **map 5.1**). Only 16 percent of the country's land account for 92 percent of the formal economy, and 95 percent of the population (van Huyssteen and Botha, 2008). Taken together, the country's five largest cities - Johannesburg, Cape Town, Tshwane, eThekwini, and Ekurhuleni - collectively account for 55.7 percent of the national Gross Value Added (GVA) in manufacturing; 75.33 percent in financial, intermediation, insurance, real estate and business services; and 52.98 percent in community, social and personal services; and about 44.1 percent of the national number of jobs (SACN, 2006).



Map 5.1: Concentrations (economic activity and population), South Africa (Source: van Huyssteen and Botha, 2008)

Three of these largest cities are in Gauteng, making it not only the largest urban conurbation in the country, but also the most important local economy in the sub-continent (The Organisation for Economic Co-operation and Development (OECD), 2011). The City of Johannesburg (CoJ) contributed 47.6 percent, City of Tshwane (CoT) 26 percent and Ekurhuleni 19 percent to the Gross Domestic Product by Region (GDPR) in 2010; while Gauteng itself contributed about 35 percent (some R640 billion) to the national economy (GDoF, 2010).

5.2.2. A Services Economy?

In terms of sectoral composition, the Gauteng economy mirrored that of the national economy, a not so surprising fact given its dominance (see **figure 5.1.**). It is finance and business services; government, social and personal services; and manufacturing that are the three biggest contributors in both cases.

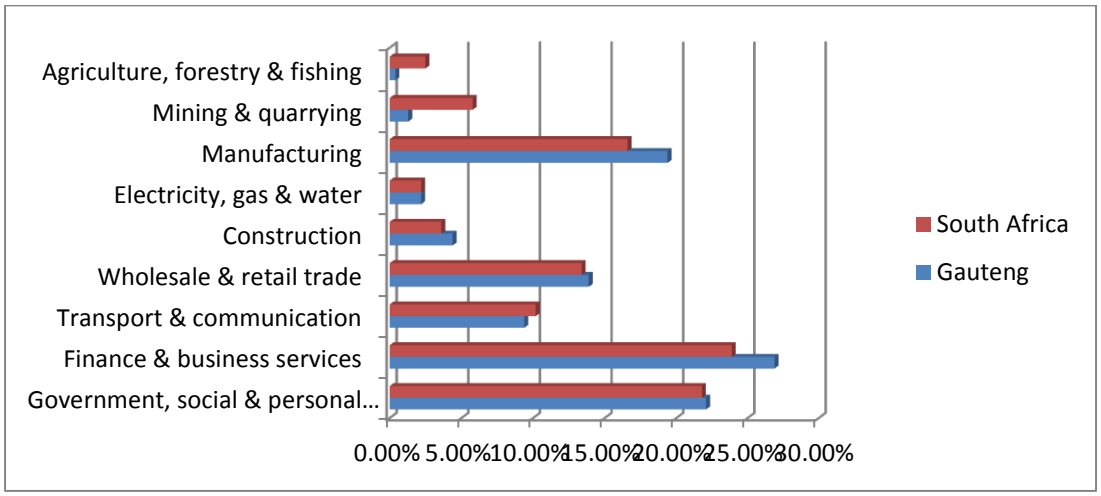


Figure 5.1: Sectoral Composition, Gauteng and South Africa, 2009 (Source: GPG, 2010)

While these three sectors still emerge as the dominant sectors for all Gauteng municipalities; a nuanced picture emerges when the sectoral composition of the Gauteng economy is disaggregated to metropolitan and district levels (see **figure 5.2.** below). Only Johannesburg has finance and business services as the highest contributor to its local economy at 29.4 percent, with Tshwane and Metsweding[17] specialising in government, social and personal services at 29.9 percent and 19.7 percent respectively. Finance and business services however, was the second most important contributor to both Tshwane and Ekurhuleni's economies.

Manufacturing remains the biggest contributor to the Ekurhuleni and Sedibeng municipalities, with Sedibeng highest at 35 percent. Sedibeng has comparative advantage in the areas of food and beverages, non-metallic products, and metals, machinery and equipment; while Ekurhuleni has a broader industrial base, with comparative advantage in a number of industries with the exception of textile and clothing, and electronic appliances. In manufacturing, Johannesburg specialised in textile and clothing, wood and paper, and electronic appliances; Tshwane in metals, machinery and equipment, and transport equipment; Metsweding in transport equipment, petroleum and chemicals, and wood and paper; and the West Rand in non-metallic products.

It is interesting to note that although Gauteng means 'the place of gold', given that province's mining history; mining and quarrying makes up the lowest contribution to that province's economy. However, it still makes up about 13 percent of Sedibeng's economy and 19.3 percent of the West Rand's economy; making it the fourth largest contributor in both instances.

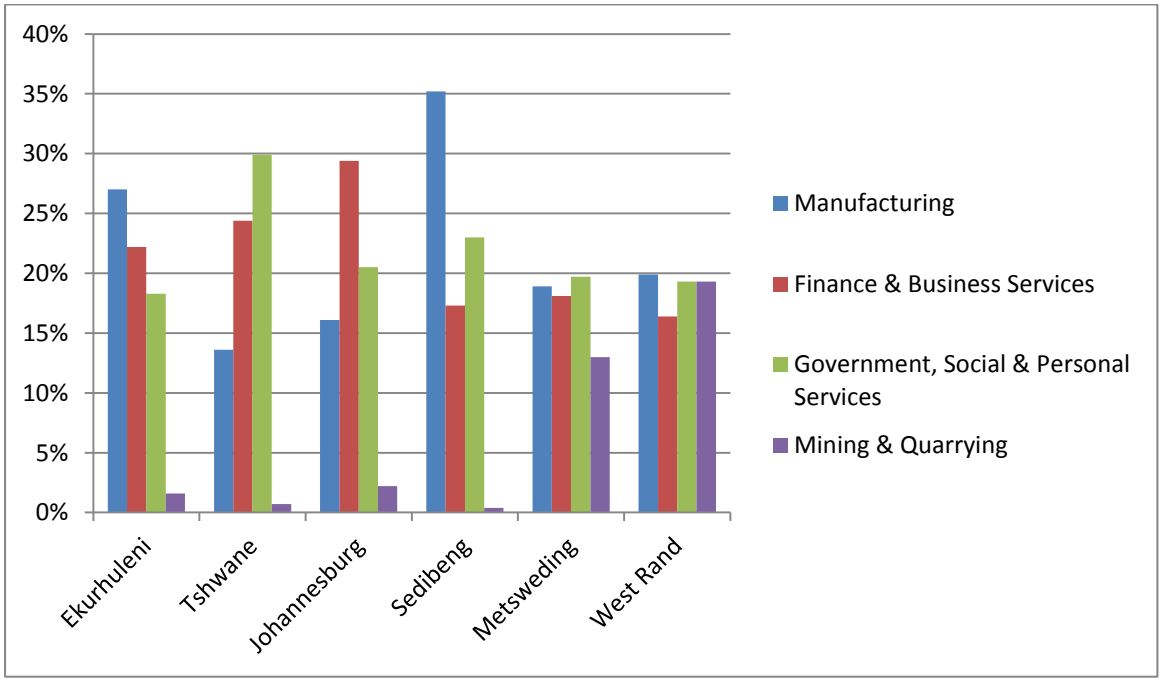


Figure 5.2: Top-3 Contributors (per municipality) + Mining and Quarrying (Data Source: GPG, 2010)

[17] Metsweding was merged into Tshwane just before the 2011 local government elections, and as such no longer exists as an independent district municipality

5.2.3. Manufacturing matters

The province's share of imports was around 59 percent in 2009 (making up some R316 billion), while its share of exports stood at around 67 percent (total value of R337.6 billion) (GPG, 2010). Mineral products, machinery and electrical equipment, and transport equipment accounted for a combined 59.61 percent of imports in 2009 (with mainly China, Germany and the U.S contributing most to imports); mineral products and precious or semi-precious stones and metals together make up 58.79 percent of the exports. Manufacturing was the highest contributor to both imports and exports in the province, at 86.8 and 74.6 percent respectively (*ibid*). Manufacturing thus remains important, accounting also for substantial output, and gross domestic fixed investment (GDFI) (see **table 5.1**).

Table 5.1: Manufacturing Key Economic Indicators, Gauteng, 2002-2009 (Source: GPG, 2010)

Indicator	2002	2003	2004	2005	2006	2007	2008	2009
Output	22.6%	22.3%	23.4%	25.0%	26.7%	28.0%	28.9%	25.8%
Employment	14.9%	14.9%	14.9%	14.9%	14.8%	14.7%	14.4%	14.3%
Exports	77.8%	83.8%	85.3%	79.7%	82.2%	82.4%	74.5%	74.5%
Imports	95.0%	95.3%	90.9%	91.0%	89.6%	90.2%	88.2%	86.7%
GDFI	26.1%	24.3%	24.5%	24.1%	24.6%	23.4%	23.0%	19.7%
Labour Productivity	0.20	0.19	0.20	0.21	0.21	0.22	0.23	0.21

The highest contributions to gross value add (GVA) are from petroleum and chemicals (at 25.3% in 2009), metals, machinery and equipment (at 24.7%), and food and beverages (at 12.8%) (GPG, 2010). The two, with the exception of metals, machinery and equipment, were also highest in labour productivity, together with electronic appliances (*ibid*). Textiles and clothing saw the biggest decline in employment, steepest in 2005 and 2009; while furniture and other manufacturing saw an increase in employment. Metals, machinery and equipment had the highest percentages of all skills levels (high-, semi-, and unskilled) (*ibid*).

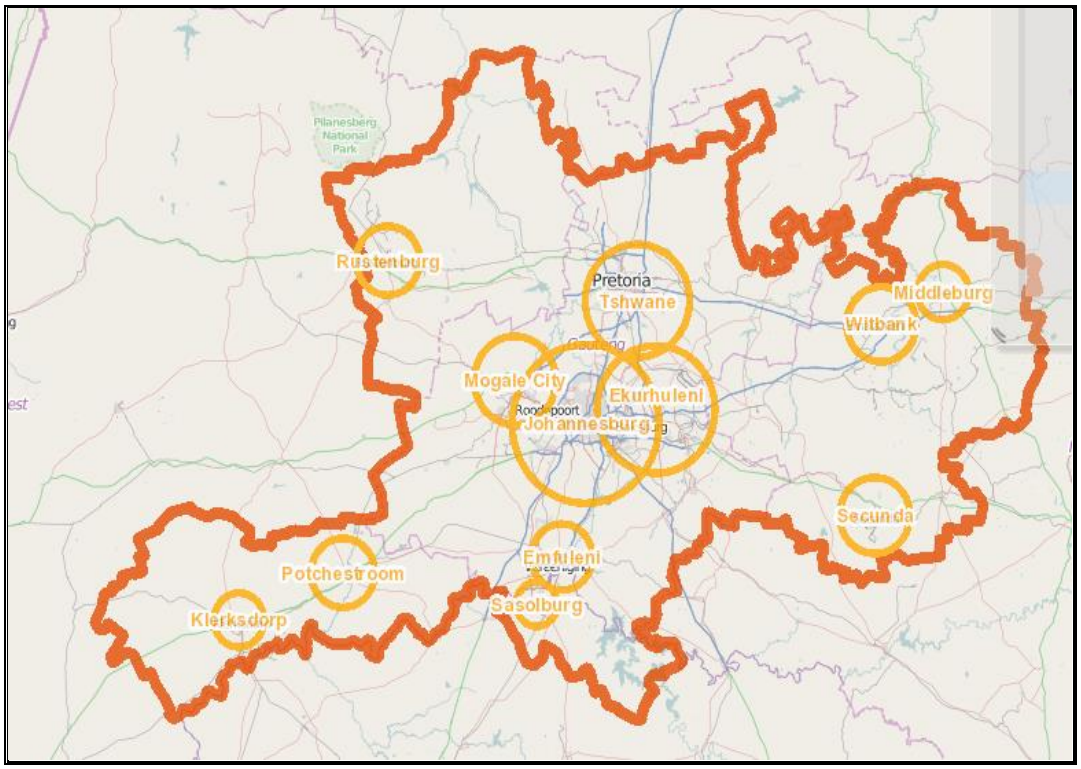
5.3. The envisaged future Gauteng economy

5.3.1. Towards a globally competitive city-region

The vision for a Gauteng globally competitive city region is elaborated in a Gauteng City Region Perspective document adopted in August 2006 (GPG, 2006). Gauteng is a critical player in both the national and international space economies, its functional economic geography too important to be suffocated by administrative boundaries that separate the different municipal spaces making up that province. The comparative and competitive advantages of the component municipal spaces; flows of capital, labour, goods and services, extra-local linkages shaping the regional economy constitute region's functional economic geography. Harnessing this functional economic geography requires (in the first instance) aligning interventions and investments (*ibid*).

Assets identified for building the Gauteng city region include leadership, vision and strategy; successful cities and an established system of metropolitan government; growing economic sectors (notably services and finance); strategic economic infrastructure; and political and territorial cohesion (*ibid*). Challenges include infrastructure under strain; social problems and environmental pressures; weak intergovernmental relations; inadequate municipal capacity; and growing new economic sectors. The latter relates to unspecified supply-side constraints blocking the emergence and growth of new sectors, more specifically knowledge-based activities of the 'new economy'; and skills deficits for the growth of these activities (*ibid*). The creative industries sector is said to have substantial potential for employment and enterprise development.

The GCR footprint includes the three metros and secondary cities in Gauteng, together with adjacent secondary cities (**map 5.2**). A Gauteng Spatial Development Perspective (GSDP) providing a spatial vision for GCR, and a Gauteng City Region Coalition that would serve to embed the vision. Flagship projects included a Global City Region Observatory (GCRO), a Global City Region Academy (GCRA), and reorienting development agencies, provincial and local, to focus on economic growth.



Map 5.2: Schematic Footprint of the Gauteng City-Region (Source: GCRO, 2009)

This GCR vision for Gauteng has become the golden thread for visioning and policy in the GPG. A GCR Roadmap, developed in 2008, outlined eleven strategic pathways for implementation, and references to the vision have prefaced most of the GPG policy documents since (e.g. GPG, 2014). Only the first and second pathways make direct reference to the economy; alluding to positioning the economy globally, through building a knowledge-based economy. (GPG, 2008). The latter will result from establishing a GCR development

agency; understanding the GCR economy content and footprint; building extra-local linkages and facilitating clustering of knowledge and innovation (*ibid*).

5.3.2. Metropolitan aspirations

For their part, the metros have referred (largely in passing) to the importance of contributing to the GCR vision in their respective growth and development strategies, but adopted visions of their own with little cross-referencing (CoJ, 2006; CoT, 2006; EMM, 2006).

Tshwane's vision to be the 'leading international African capital of excellence' was to be premised on high-impact, fast track interventions to accelerate shared growth, and halve unemployment by 2014 (CoT, 2006: 6). The City intends to transit from traditional heavy industry input markets and low value-added production towards sophisticated, high value-added production, including value-add activities in mining and agriculture (*ibid*). Motor vehicles, parts and accessories contributed most to export value and trade, employment generation and skills development (*ibid*). On the overall, Tshwane saw the highest annual percentage growth rates in both exports and imports in the period 1995-2004, when compared with the other four largest cities in the country (*ibid*).

Ekurhuleni is 'Africa's workshop', with high concentrations of manufacturing plants and activity (EMM, 2006). Its vision is to be smart, creative and developmental (*ibid*). The manufacturing industry in Ekurhuleni is primarily machinery and equipment, metals, chemicals, and the plastic products subsectors. The decline in the sector's performance is attributed to adjustments in the global economy (*ibid*). Opportunities identified for the industry include a national casting technology centre, and an aerospace network; and the logistics and transport infrastructure in the area. Economic sectors and industries identified for support include manufacturing (both technology intensive and labour intensive), construction, services (in particular business tourism, sports and culture, and smart services), and finance; and agriculture (given good agricultural land), and mining.

Johannesburg, despite its economic history of gold mining and related manufacturing (Harrison and Zack, 2012), is 'the finance, trade and business services hub of the country' (CoJ, 2006: 25), a world class African city. It is a basing point for the global economy, a postindustrial production site and marketplace (Metileni, 2011). The GDS calls for diversification of the local economy by forming new industries at speed, and simultaneously regenerating older ones. The strategic interventions linked to this include, inter alia: targeting and supporting sectors with high growth and labour absorption potential; assisting established sectors to focus on value add across the value chain; and facilitating the restructure of manufacturing and related sunset industries (*ibid*). Strong linkages with the national, regional and global economy will be achieved through harnessing the city's comparative and competitive advantages in finance, business services and trade. Lowering the cost of doing business will continue to be central in promoting economic growth, by reducing regulatory burdens, providing appropriate, high-quality, and affordable economic infrastructure and services; and by reducing crime, and ensuring an appropriate mix of skills.

3.3 Provincial frameworks

Smart industries (ICT, pharmaceuticals), trade and services (finance, film), tourism, agriculture (agro-processing and biotech), infrastructure expansion and investment, and manufacturing (steel related industries, automotive parts and components, beer and malt) are the sectors targeted for support and investment (GPG, 2005). These are selected on the basis of potential and opportunities for growth in nominal and real investment, value added, productivity and employment (*ibid*). The kind of targeted support and investment, however, is not specified. Other mechanisms related to the economy include Small Medium and Micro Enterprises (SMMEs) support; skills development; broad based black economic empowerment (BBBEE); and expanded public works programme (EPWP) (*ibid*). These efforts will contribute to the GDS's ten year target of 8% economic growth rate, resulting in a decline in unemployment from the 25.7% in 2005 to 12.8% in 2014.

The Gauteng Employment, Growth and Development Strategy (GEGDS) outlines the strategic choices and programmes for 'a strong and sustainable Gauteng economy' (GDED, 2009: 4). The structural change it proposes is one based on 'an *endogenous* growth trajectory that is based primarily on "*innovation*", "*green growth*" and "*inclusivity*"' (*ibid*, 5; original emphasis). The first, innovation, refers to productive use of existing resources, and the consolidation of a knowledge-based economy; the second entails investment in green products and processes; while the last refers to expansion in access to economic opportunities for those hitherto marginalised and excluded.

The Gauteng Industrial Policy Framework (GIPF) provides an analysis of Gauteng's industrial structure (including its spatial dimensions), sectoral composition, an input-output analysis (for backward and forward linkages, and employment multipliers), and how sectors are inserted into specific supply chains (GDED, 2010). The main conclusion emerging from the input-output analysis is that manufacturing is the engine of growth; more backwardly linked to other sectors, its demand stimulating economy wide growth in intermediate output than services. The latter is also said to rely heavily on manufacturing than vice versa.

The input-output analysis reveals the sectors in **Table 5.2** as the most strategic for policy targeting. These sectors, more specifically food and beverages, furniture, textiles and clothing, construction, machinery and equipment, and automotives and components have high backward and forward linkages with other sector; high employment multipliers, and low entry and learning costs.

Table 5.2: Potential sectors for policy targeting in Gauteng (Source: GDED, 2010)

Potential sectors for policy targeting based on backward linkages and employment multipliers	
• **Transport equipment** • **Wood and paper, publishing and printing** • **Textiles, clothing and leather** • **Food, beverages and tobacco** • **Other non-metal mineral** • **Construction**	• Metals, metal products, machinery and equipment • Transport services • Catering and accommodation • Electrical machinery and apparatus • Radio, TV, instruments, watches and clocks • Furniture and other manufactures

With references to the National Industrial Policy Framework (NIPF) and the Industrial Policy Action Plans (IPAPs), the GIPF outlines strategic programmes for Gauteng, namely: sector strategies; strategic infrastructure investment; strategic procurement; SMME support; trade and investment facilitation; reducing the cost of doing business; BBBEE strategy; Green Economy Strategy; and the Gauteng Tooling Initiative (GTI).

Key among the outcomes that sector strategies should achieve includes non-exploitative profitability; increased output, employment generation, and capital investment; as well as increased sector export performance, and long-term sector viability and sustainability.

5.3. Concluding notes

Interestingly, even as finance and business services has become the most critical sector in the Johannesburg, Gauteng and national economies; manufacturing remains a critical sector as evidenced in its dominance in international trade (imports and exports) and higher productivity levels, despite shedding jobs over the years under review. Despite allusions to deepening the economy's penetration into finance and business services and a dematerialized knowledge economy (as opposed to the old industrial economy); the provincial government recognises the strategic importance of manufacturing as an engine of growth (see GPG, 2010). Both the GEGDS and the GIPF of the province identify sectors and industries for strategic policy support; selected on the basis of potential and opportunities for extent and intensity of backward and forward linkages, and growth in nominal and real investment, value added, productivity and employment. The sector strategies developed in line with the GIPF will hopefully help reorientate public expenditure, in the area of economic infrastructure. Of the four industries (namely business tourism, high value-added manufacturing, logistics and information and communications technology (ICT)) that the Blue IQ mega-projects were concentrated, half the initial budget allocated (R1.7 billion in 2001) went into business tourism (Rogerson, 2004). Some of the remaining half was crucial in cementing the automotive industry in Tshwane.

Arguably, the argument for competitive regionalism contained in the City region perspective is premised on a series of assumptions. The first is that to be successful, Gauteng has to accept that neoliberal globalisation as a given; and that regional success depends on a kind of competitiveness whose terms conform to its logics (GPG, 2006, see Greenberg, 2010). The second assumption is that Gauteng cities and the region itself have to adopt an entrepreneurial approach to governance, geared primarily towards investment attraction, retention and expansion (of largely foreign investment) (*ibid*). The third is that advanced producer services and finance are the most important measure of a regions global capacity, connectivity and competitiveness (*ibid*). The fourth that this connectivity and competitiveness is to be enhanced through additional measures including the presence of multinational corporations, and the staging of international cultural and sporting events. As already alluded to in earlier chapters, these assumptions have detrimental implications for an urban region of the South, such as Gauteng is.

Section C: Conclusion

Even in a context of neoliberal globalisation, changing international rules, rapid technical change, and changing geographies of production; it is still possible to support the city (Morgan, 2012), and to support manufacture through selective industrial policy (Chang, 2005). National policy and investments and lobbying, remain important in shaping the economic trajectories of cities, even as these cities and urban regions are said to have ascended as critical actors in their own right in the global economy.

The National Spatial Development Perspective (NSDP), in advocating for concentration of fixed investments in areas of economic potential, is basically redirecting development into South Africa's largest cities, which is where the highest concentrations of economic activity, output, opportunities and potential exist. It is a case of state spatial selectivity, the priviledging not only of specific areas (thereby ignoring possibilities for change in the economic fortunes of other regions), but also of specific economic activities (latent potential in activities beyond those already thriving is ignored).

The Gauteng city region is one such privileged space, whose economic performance is of national interest. As it declares in its own GCR strategic perspective, the GCR vision is a national project. It is a vision launched on the back of tertiarisation – a business services and finance sector-led economic trajectory – which is celebrated as a critical comparative and competitive advantage (GPG, 2006). If Gauteng is to be a globally competitive city region, this sector must be nurtured, and efforts be made to build a knowledge-based economy (*ibid*). To do so, cities within the city-region must become entrepreneurial in their approach to governance (*ibid*).

But even in the context of neoliberal urbanism, and internationalisation projects modelled on buzzwords like global cities/global city regions; it is possible to adopt development paths that do not conform narrowly to the dictates of financialisation. For in a context like Johannesburg and Gauteng, where the rise of finance and services is celebrated (see CoJ, 2002; GPG, 2006), a development trajectory anchored on these sectors undermines chances for catch up, and are better off with the kind of structural change that has industrialisation as its core strategy.

The causal relations between 'successful' city-regions and the knowledge economy is a complex one, and evidence in ascending global cities of the South demonstrates amply that those cities are post-industrial sites and market places with thriving knowledge economies because they are successful, not vice versa. It is because of Sao Paolo, Seoul and Shanghai's economic histories of heavy manufacturing that they are now thriving command and control centres (Sassen, 2009a). The knowledge economy (to which information technologies, finance and services are central) is not delinked from older material economies of cities. If anything, the varied forms of linkages between components of the knowledge economy and

older material economies is vital for understanding the differences in the economic bases of cities, and how these differences are continuously reproduced (Sassen, 2011).

The deep complex histories of cities and urban regions are therefore important in explaining their specialised differences and roles in the global economy, or (rather) the various circuits within which they insert themselves in that economy. Global cities are distinguished by concentrations of command and control functions (i.e. finance and business services), those specialised capacities required to debug, manage, service (and by extension enable) digitised and globalised firms and markets. But these functions are not generic; they emerge from, are shaped by and embedded within specialised complex structures of localised economies.

The character and dynamics of the production structures of cities, and the economic development trajectories that cities find themselves locked into; are therefore not entirely a result of functions assigned to them in the international division of labour, as Friedmann (1995a, 1995b) argued. The long-term urban development strategies, like the Joburg 2040 Growth and Development Strategy or Ekurhuleni 2025, and economic strategies adopted to support them, are critical platforms for defining and driving development agenda for each city. It is in these strategic platforms that the concepts of 'global city' and the 'global city region' have become overarching descriptors of the kind of city futures aspired to. These concepts are in these platforms under-defined, and not critically examined for their implications for the kind of production structures and economic trajectories they purport or imply.

If the specialised economic histories of cities matter, and economic development is path dependent, the rise of finance and advanced producer services in cities must be analysed against the levels of per capita income in a country; the kind of deindustrialisation upon which the rise is premised, and (for developing countries) the chances for catch up, and the economic trajectory they launch the economy into. If the industrial base is low, and the deindustrialisation emerging is downward and premature, these countries will potentially degenerate into their original Ricardian comparative advantage.

Industrialisation is distinguished by complex production processes, technology intensity and higher rents for learning. It allows for product differentiation, higher value-add, increased productivity levels, and higher income elasticity of demand. There are increasing returns to scale embedded in manufacture, and its growth depends initially on agriculture and later on exports. It is the sector with the most intensive and extensive backward (upstream) and forward (downstream) linkages, and therefore the unique potential and capacity to carry forward and upward the entire economy (Thirwall, 2002).

Urban regions in countries beset with the catch up problem must build technological capabilities, a risky and costly endeavour that requires loss financing. Such loss financing cannot be delinked from selective industrial policy with in-built reciprocal control mechanisms, and aimed primarily at industrialisation and structural change. After all, metro performance is not only an indication of a city's economics base, sectoral composition and

international specialisation; but also reflects the impact of national industrial, fiscal, monetary and trade policies (Brookings Institution, 2010). Ultimately, competitiveness for cities of developing countries riddled with the catch up problem has to do with creative destruction of the dynamics of their production structures, through technological capability building, developmental states and selective industrial policy.

Reference List

Books

Amsden, A. (2001). *The Rise of the Rest: Challenges to the West from Late Industrializing Economies*. Oxford University Press, New York.

Amsden, A. (2007). *Escape from Empire: The Developing World's Journey Through Heaven and Hell*. MIT Press, Massachusetts.

Arestis, P. & Sawyer, M. (eds.), (2004). *Neo-Liberal Economic Policy: Critical Essays*. Edward Elgar Publishing Limited, Cheltenham.

Brenner, N. (2004). *New State Spaces: Urban Governance and the Rescaling of Statehood*. Oxford University Press, Oxford.

Burdett, R. & Sudjic, D. (eds) (2011). *Living in the Endless City*. Phaidon, London.

Castells, M. (1972). *La Question Urbaine*. Francois Maspero, Paris.

Chang, H-J. (2010). *23 Things They Don't Tell You About Capitalism*. Penguin Books Ltd, London.

Cohen, D. (2009). *Three Lectures on Post-Industrial Society*. The MIT Press, Cambridge.

Gugler, J. (ed) (2004). *World Cities beyond the West: Globalisation, Development and Inequality*. Cambridge University Press, UK.

Hall, P. (1966). *World Cities*. Orion Publishing Co., London.

Harvey, D. (1973). *Social Justice and the City*. Edward Arnold, London.

Harvey, D. (2005). *A Brief History of Neoliberalism*. Oxford University Press, New York.

Kaldor, N. (1996). *Causes of Growth and Stagnation in the World Economy*. Cambridge University Press, Cambridge.

King, A. (1990). *Global Cities: Post-Imperialism and the Internationalization of London*. Routledge, London.

Leedy, P. & Ormrod, J. (2010). *Practical Research: Planning and Design*. Pearson Education Inc., New Jersey.

Lin, J. (2012). *New Structural Economics: A Framework for Rethinking Development and Policy*. The World Bank, Washington DC.

Lipietz, A. (1987). *Mirages and Miracles: the Crises of Global Fordism*. Verso, London.

McDonald, D. (2008). *World City Syndrome: Neoliberalism and Inequality in Cape Town*. Routledge, New York.

Merrifield, A. (2002). *Dialectical Urbanism: Social Struggles in a Capitalist City*. Monthly Review Press, New York.

Murray, M. (2008). *Taming the Disorderly City: The Spatial Landscape of Johannesburg after Apartheid*. University of Cape Town Press, Lansdowne.

Pike, A., Rodriguez-Pose, A., & Tomaney, J. (2006). *Local and Regional Development*. London, Routledge.

Poulantzas, N. (1978). *State Power and Socialism*. Verso, New Left Books.

Robinson, J. (2006). *Ordinary Cities: Between Modernity and Development*. Routledge, Oxon.

Roy, A. & Ong, A. (eds.) (2011). *Worlding Cities: Asian Experiments and the Art of Being Global*. Blackwell Publishing Limited, West Sussex.

Sassen, S. (2000a). *Cities in a World Economy*. Pine Forge Press, California.

Sassen, S. (2001). *The Global City: New York, London, Tokyo*. Princeton University Press, New Jersey.

Sassen, S. (2007). *A Sociology of Globalization*. W.W. Norton & Company, Inc., New York.

The World Bank (2010). *Competitiveness and Growth in Brazilian Cities: Local Policies and Actions for Innovation*. The World Bank, Washington DC.

Thirlwall, A.P. (2002). *The Nature of Economic Growth: An Alternative Framework for Understanding the Performance of Nations*. Edward Elgar Publishing Limited, Cheltenham.

Book Chapters

Abdulsomad, K. (1999). 'Promoting Industrial and Technological Development under Contrasting Industrial Policies: the Automobile Industries in Malaysia and Thailand'. In *Industrial Technology Development in Malaysia: Industry and Firm Studies*, edited by Jomo K., Felker, G. and Rasiah, R., Routledge, London. 274-300.

Amin, A. (2003). 'The Economic Base of Contemporary Cities'. In *A Companion to the City*, edited by Bridge, G. and Watson, S. Blackwell Publishers Ltd, Oxford. 115-129.

Braudel, F. (1984). 'World City Formation: An Agenda for Research and Action'. In *The Global Cities Reader*, edited by Brenner, N. & Keil, R., Routledge, London. 25-31.

Brenner, N. & Keil, R. (2006). 'Editor's Introduction: Global Theory in Retrospect and Prospect'. In *The Global Cities Reader*, edited by Brenner, N. & Keil, R., Routledge, New York. 1-16.

Brenner, N. & Theodore, N. (2002). 'Cities and the Geographies of 'Actually Existing Neoliberalism''. In *Spaces of Neoliberalism: Urban Restructuring in North America and Western Europe*, edited by Brenner, N. & Theodore, N., Blackwell Publishers, London. 2-32.

Cornelissen, S. (2008). 'Internationalisation and Competitiveness in South African Urban Governance: On the Contradictions of Aspirationist Urban Policy-Making'. In *State of the Nation South Africa 2008*, edited by Kagwanja, P. & Kondlo, K., HSRC Press, Cape Town. 226-252.

Fine, B. (2009). 'Neoliberalism in Retrospect? - It's Financialisation, Stupid'. In *Developmental Politics in the Neo-Liberal Era and Beyond*, edited by Kyung-Sup, C., Fine, B. & Weiss, L., Center for Social Sciences, Seoul. 19-34.

Friedmann, J. & Wolff, G. (2006). 'World City Formation: An Agenda for Research and Action'. In *The Global Cities Reader*, Brenner, N. & Keil, R., Routledge, London. 58-66.

Friedmann, J. (1995a). 'Where We Stand: A Decade of World City Research'. In *World Cities in a World-System*, edited by Knox, P. & Taylor, P., Cambridge University Press, Cambridge. 21-47.

Friedmann, J. (1995b). 'Appendix: The World City Hypothesis'. In *World Cities in a World-System*, edited by Knox, P. & Taylor, P., Cambridge University Press, Cambridge. 317-331.

Knox, P. L. (1995a). 'World Cities in a World-System'. In *World Cities in a World-System*, edited by Knox, P. & Taylor, P., Cambridge University Press, Cambridge. 3-20.

Knox, P. L. (1995b). 'World Cities and the Organization of Global Space'. In *Geographies of Global Change: Remapping the World in the Late Twentieth Century*, edited by Johnston, R., Taylor, P., & Watts, M. Blackwell Publishers, Massachusetts. 232-247.

Lin, J. & Monga, C. (2012). 'Growth Identification and Facilitation: The Role of the State in the Dynamics of Structural Change'. In *New Structural Economics: A Framework for Rethinking Development and Policy*, by Lin, J., The World Bank, Washington DC. 141-180.

Ocampo, J. A. (2005). 'The Quest for Dynamic Efficiency: Structural Dynamics and Economic Growth in Developing Countries'. In *Beyond Reforms: Structural Dynamics and Macroeconomic Vulnerability*, edited by Ocampo, J., Stanford University Press, Palo Alto. 3-44.

Ong, A. (2011). 'Introduction: Worlding Cities, or the Art of Being Global'. In *Worlding Cities: Asian Experiments and the Art of Being Global*, edited by Roy, A & Ong, A., Blackwell Publishing Limited, Chichester. 1-26.

Palma, G. (2005). ‘Four Sources of “Deindustrialization” and a New Concept of the “Dutch Disease”’. In *Beyond Reforms: Structural Dynamics and Macroeconomic Vulnerability*, edited by Ocampo, J. Stanford University Press, Palo Alto. 71-116.

Sassen, S. (2002). ‘Locating Cities on Global Circuits’. In *Global Networks, Linked Cities*, edited by Sassen, S., Routledge, New York. 1-36.

Sassen, S. (2004a). ‘Afterword’. In *World Cities Beyond the West: Globalisation, Development and Inequality*, edited by Gugler, J. Oxford University Press, Oxford. 371-386.

Sassen, S. (2009c). ‘The Specialised Differences of Cities Matter in Today's Global Economy’. In *Reforming the City: Responses to the Global Financial Crisis*, edited by Whimster, S., Forum Press. 209-235.

Sassen, S. (2011). ‘The Economies of Cities’. In *Living in the Endless City*, edited Burdett, R. & Sudjic, D. Phaidon, London. 56-65.

Scott, A. & Storper, M. (1992). ‘Industrialization and Regional Development’. In *Pathways to Industrialization and Regional Development*, edited by Storper, M. & Scott, A., Routledge, London. 3-15.

Scott, A. J. & Garofoli, G. (2007). ‘The Regional Question in Economic Development'. In *Development on the Ground: Clusters, Networks and Regions in Emerging Economies*, edited by Scott, A. & Garofoli, G., Routledge, New York. 3-22.

Scott, A. J. (2004). ‘Flexible Production Systems and Regional Development: The Rise of New Industrial Spaces in North America and Western Europe’. In *Reading Economic Geography*, edited by Barnes, T., Peck, J., Sheppard, E., & Tickell, A., Blackwell Publishing Ltd, Oxford. 125-136.

Scott, A. J., Agnew, J., Soja, E. & Storper, M. (2001). ‘Global City Regions: An Overview’. In *Global City-Regions: Trends, Theory, Policy*, edited by Scott, A., Oxford University Press, Oxford. 11-32.

Storper, M. (1998). ‘Industrial Policy for Latecomers: Products, Conventions, and Learning’. In *Latecomers in the Global Economy*, Storper, M., Thomadakis, S., & Tsipouri, L. Routledge, London. 11-37.

Storper, M. (2004). ‘Territories, Flows, and Hierarchies in the Global Economy’. In *Reading Economic Geography*, Barnes, T., Peck, J., Sheppard, E. & Tickell, A. Blackwell Publishing, Oxford. 271-289.

Taylor, P. J. (1995). ‘World Cities and Territorial States: The Rise and Fall of their Mutuality’. In *World Cities in a World-System*, edited Knox, P. & Taylor, P. Cambridge University Press, New York. 48-62.

Journals

Beaverstock, J., Smith, R., & Taylor, P. (1999). 'A Roster of World Cities'. *Cities* 16(6): 445-458.

Brenner, N. (1998a). 'Between Fixity and Motion: Accumulation, Territorial Organization and the Historical Geography of Spatial Scales'. *Environment and Planning D: Society and Space* 16(5): 459-481.

Brenner, N. (1998b). 'Global Cities, Glocal States: Global City Formation and State Territorial Restructuring in Contemporary Europe'. *Review of International Political Economy* 5(1): 1-37.

Brenner, N. (1999). 'Globalisation as Reterritorialisation: The Rescaling of Urban Governance in the European Union'. *Urban Studies* 36(3): 431-451.

Dupont, V. (2011). 'The Dream of Dehli as a Global City'. *International Journal of Urban and Regional Research* 35(3): 533-554.

Friedmann, J. (2001). 'World Cities Research: A Comment'. *Urban Studies* 38(13): 2535-2536.

Goldman, M. (2011). 'Speculative Urbanism and the Making of the Next World City'. *International Journal of Urban and Regional Research* 35(3): 555-581.

Haila, A. (2000). 'Globalising Asian Cities: Guest Editor's Introduction'. *Urban Studies,* 37(12): 2141-2143.

Harrison, P. & Zack, T. (2012). 'The Power of Mining: The Fall of Gold and the Rise of Johannesburg'. *Journal of Contemporary African Studies* 30(4): 551-570.

Harvey, D. (1989). 'From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism'. *Geografiska Annaler* 71(B(1)): 3-17.

Hill, R. & Kim, J. (2000). 'Global Cities and Developmental States: New York, Tokyo and Seoul'. *Urban Studies,* 37 (12): 2167-2195.

Jessop, B. & Sum, N.-L. (2000). 'An Entrepreneurial City in Action: Hong Kong's Emerging Strategies in and for (Inter)Urban Competition'. *Urban Studies* 37(12): 2287-2313.

Kratke, S. (2012). 'How Manufacturing Industries Connect Cities across the World: Extending Research on 'Multiple Globalizations''. *GaWC Research Bulletin* 391: 1-19.

Lapavitsas, C. (2011). 'Theorizing Financialization'. *Work Employment Society* 25(4): 611-626.

Leitner, H. (1990). 'Cities in Pursuit of Economic Growth: The Local State as Entrepreneur' *Political Geography Quarterly* 9(2): 146-170.

Libanio, G. & Moro, S. (2009). 'Manufacturing Industry and Economic Growth in Latin America'. *Anais do XXXVII Encontro Nacional de Economia*, ANPEC - Associação Nacional dos Centros de Pós-graduação em Economia.

Lovering, J. (1999). 'Theory led by Policy: the Inadequacies of the 'New Regionalism''. *International Journal of Urban and Regional Research* 23: 379-395.

MacLeod, G. (2001). 'New Regionalism Reconsidered: Globalization and the Remaking of Political Economic Space'. *International Journal of Urban and Regional Research* 25(4): 804-829.

Marshall, M. (1996). 'Sampling for Qualitative Research'. *Family Practice*, 13(6): 522-525.

Morgan, G. (2012). 'Supporting the City: Economic Patriotism in Financial Markets'. *Journal of European Public Policy* 19(3): 373-387.

Pillay, U. (2004). 'Are Globally Competitive 'City Regions' Developing in South Africa?: Formulaic Aspirations or New Imaginations?'. *Urban Forum* 15(4): 340-364

Robinson, J. (2002). 'Global and World Cities: A View from off the Map'. *International Journal of Urban and Regional Research* 26(3): 531-554.

Rogerson, C. (2009). 'The Turn to 'New Regionalism': South African Reflections'. *Urban Forum* 20: 111-140.

Sassen, S. (2000b). 'The Global City: Strategic Site/New Frontier'. *American Studies* 41(2/3): 79-95.

Sassen, S. (2005). 'The Global City: Introducing a Concept'. *Brown Journal of World Affairs* XI (2): 27-43.

Sassen, S. (2009a). 'Cities in Today's Global Age'. *SAIS Review* XXIX (1): 3-32.

Sassen, S. (2009b). 'Cities Today: A New Frontier for Major Developments'. *The Annals of the American Academy* 626: 53-71.

Scott, A. & Storper, M. (1987). 'High Technology Industry and Regional Development: A Theoretical Critique and Reconstruction'. *International Social Science Journal* (112): 215-232.

Scott, A. & Storper, M. (2003). 'Regions, Globalization, Development'. *Regional Studies* 37(6&7): 579-593.

Scott, A. J. (2001). 'Globalization and the Rise of City-regions'. *European Planning Studies* 9(7): 813-826.

Scott, A. J. (2002). 'Regional Push: Towards a Geography of Development and Growth in Low-income and Middle-income Countries'. *Third World Quarterly* 23(1): 137-161.

Storper, M. (1995). 'Territorial Development in the Global Learning Economy: The Challenge to Developing Countries'. *Review of International Political Economy* 2(3): 394-424.

Ward, K. & Jonas, A. (2004). 'Competitive City-Regionalism as a Politics of Space: A Critical Reinterpretation of the New Regionalism'. *Environment and Planning A* 36: 2119-2139.

Ward, K. (2003). 'Entrepreneurial Urbanism, State Restructuring and Civilizing 'New' East Manchester'. *Area* 35(2): 116-127.

Working Papers

Greenberg, S. (2010). 'The Political Economy of the Gauteng City-Region'. *GCRO Occassional Paper* 2: 1-50.

Palley, T. (2007). 'Financialization: What It Is and Why It Matters'. *The Levy Economics Institute Working Paper* **525**: 1-30.

Scott, A. & Storper, M. (1990). 'Regional Development Reconsidered'. *Lewis Center for Regional Policy Studies Working Paper* (1): 1-50.

UNIDO (2009). *Breaking in and Moving Up: New Industrial Challenges for the Bottom Billion and the Middle-income countries*. UNIDO, Vienna.

Conference Papers

Chang, H-J. (2005). Policy Space in Historical Perspective – with special reference to Trade and Industrial Policies''. A paper presented at the *Queen Elizabeth House 50th Anniversary Conference*, Queen Elizabeth House, University of Oxford, 4-5 July.

Yeung, H. & Olds, K. (2001). 'From The Global City to Globalising Cities: View from a Developmental City-State in Pacific Asia'. A Paper to be presented at the *IRFD World Forum on Habitat – International Conference on Urbanizing World and UN Human Habitat II*, Columbia University, New York City, USA, 4-6 June.

Government Documents

CoJ. (2002). *Joburg 2030, Full Report*. CoJ, Johannesburg.

CoJ. (2006). *Growth and Development Strategy*. CoJ, Johannesburg.

CoJ. (2011). *Joburg 2040: Growth and Development Strategy*. CoJ, Johannesburg.

CoT. (2006). *Growth and Development Strategy for the City of Tshwane: A Limited Set of High Impact Strategies*. COT, Pretoria.

EMM. (2006). *Ekurhuleni Growth & Development Strategy 2025*. EMM, Ekurhuleni.

GDED. (2010a). *Gauteng Industrial Policy Framework (2010-2014), Version 6*. GPG, Johannesburg.

GDED. (2010b). *GEGDS*: *Gauteng Employment Growth and Development Strategy (201-2014)*. Johannesburg, GDED.

GDoF. (2010). *Provincial Economic Review and Outlook*. GDoF, Johannesburg.

GPG. (2005). *A Growth & Development Strategy (GDS) for the Gauteng Province*. GPG, Johannesburg.

GPG. (2006a). *Building Gauteng as a Globally Competitive City Region*. GPG, Johannesburg.

GPG. (2006b). *Gauteng Global City-Region: Realising Our Vision of Gauteng as a Globally Competitive City Region*. GPG, Johannesburg.

GPG. (2008). *Building Gauteng as a Globally Competitive City Region*. GPG, Johannesburg.

GPG. (2009). *Gauteng Vision 2055: The Future Starts Here*. GPG, Johannesburg.

GPG (2014). *Socio-Economic Review and Outlook 2014*. GPG, Johannesburg.

Reports

Brookings Institution. (2010). *The Path to Economic Recovery: A Preliminary Overview of 150 Global Metropolitan Economies in the Wake of the Great Recession*. Metropolitan Policy Program LSE Cities, London.

GCRO. (2011). *The City-Region Review 2011*. GCRO, Braamfontein.

IDC. (2009). *Sectoral Trends: Performance of the Primary and Secondary Sectors of the South African Economy-Statistical Update*. IDC, Sandton.

IDC. (2009). *Trends in South African Manufacturing Production, Employment and Trade*. IDC, Sandton.

Khan, M. (2009). *Learning, Technology Acquisition and Governance Challenges in Developing Countries*. DFID.

Knight Frank Research (2014). *The Wealth Report 2012: A Global Perspective on Prime Property and Wealth*. Think Publishing.

OECD (2011), *OECD Territorial Reviews: The Gauteng City-Region, South Africa 2011*. OECD Publishing, Paris.

SARB. (2011). *Annual Economic Report 2011*. SARB, Pretoria.

The World Bank (2009). *Reshaping Economy Geography*. The World Bank, Washington DC.

van Huyssteen, E. & Botha, A. (2008). *A National Overview of Spatial Trends and Settlement Characteristics*. The Council for Scientific and Industrial Research (CSIR), Pretoria.

Unpublished Documents

Metileni, M. (2006). 'Global City-Regions: An Agenda for Research and Action for Urban Regions Off-the-Map?'. *Unpublished BSc Honours Research Report*. Department of Urban and Regional Planning, University of the Witwatersrand, Johannesburg.

Metileni, M. (2011). 'In the Name of Growth?: Exploring State/Spatial Restructuring in Johannesburg (1990-2009)'. *Unpublished Master of Science Research Report*. Department of Urban and Regional Planning, University of the Witwatersrand, Johannesburg.

Interviews

Sassen, S. (2004b). 'Political Actors in Global Cities'. Interviewed by Yuri Kazepov, included in CD-ROM *Visual Paths through Europe*, Blackwell Publishing Ltd, Oxford

Speeches

Shilowa, M. (2006). *Address at the Launch of the Strategy to Build Gauteng as a Globally Competitive City Region*. Gauteng Provincial Legislature, August 26.

Internet Sources

www.lboro.ac.uk/gawc/

Shapiro, H.(2007). *Industrial policy and growth. November*, available from http://www.un.org/esa/policy/backgroundpapers/Industrial_policy_growth.pdf , [accessed 28 May 2014].