International Literature Review

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1. Introduction

Much of the urban research conducted around the world has focused on what is known as world cities\(^1\) or larger metropolitan areas.\(^2\) Although such research is essential, it seems as though smaller and intermediate-sized urban centres are being neglected. Confirming this ‘over-emphasis’ on larger urban areas, De Boeck et al note that existing research “pays little attention to the relations and networks which develop between diverse cities and towns, or between the city and its various peripheries”,\(^3\) while Bolay and Rabinovich argue that “urban players still lack an understanding of intermediate cities, and are thus incapable of effectively integrating the concept in their political development strategies.”\(^4\) This in spite of the fact that Rondinelli had already pointed out in the mid-1980s that “Despite their relative weakness in economies of developing countries, intermediate cities seem to perform important economic and social functions that can contribute to national development.”\(^5\)

Admittedly, there is some literature that focuses on the settlement hierarchy and potential role of intermediate cities. However, much of this research was conducted in the 1970s and early 1980s,\(^6\) and the two most prominent books written on the topic originate from this era.\(^7\) The increase in research on intermediate cities during this time period was at least partly a “response to the failure of economic-growth policies during the 1950s and 1960s that sought to transplant modern, large-scale, export-oriented, capital-intensive industries in a few regional centers.”\(^8\) Although this research and implications are still of value three decades later, it must be acknowledged that the world economy and government policy responses have changed considerably over the past 30 years. To start with, the role of government as the central planning and implementation agency has been considerably reduced. In addition, the world’s manufacturing and service industries have been transformed as a result of the global economy transcending local and national boundaries. Furthermore, the roles played by knowledge, information, communication and technology across various sectors have expanded considerably. Taking these changes into consideration, this literature review attempts to distinguish between research from the 1970s and 1980s and literature that was generated in the 1990s and 2000s. Although this distinction is not always made explicitly, it would be foolhardy to ignore the specific context and time period in which the research was conducted.

It is important to first gain an understanding of the distribution of the world’s urban population (see Table 1).
Table 1: Distribution of the world’s urban population by size of urban settlement, 2000 (%)\(^9\)

<table>
<thead>
<tr>
<th>Area</th>
<th>Urban areas with 10 million people or more</th>
<th>Urban areas with 5 - 10 million people</th>
<th>Urban areas with 1 - 5 million people</th>
<th>Urban areas with 500 000 – 1 million people</th>
<th>Urban areas with fewer than 500 000 people</th>
</tr>
</thead>
<tbody>
<tr>
<td>World overall</td>
<td>7.9</td>
<td>5.9</td>
<td>23.6</td>
<td>10.1</td>
<td>52.5</td>
</tr>
<tr>
<td>More developed regions</td>
<td>7.5</td>
<td>4.4</td>
<td>24.1</td>
<td>8.6</td>
<td>55.4</td>
</tr>
<tr>
<td>Less developed regions</td>
<td>8.0</td>
<td>6.6</td>
<td>23.3</td>
<td>10.8</td>
<td>51.3</td>
</tr>
<tr>
<td>Least developed regions</td>
<td>7.3</td>
<td>3.0</td>
<td>22.6</td>
<td>8.4</td>
<td>58.7</td>
</tr>
</tbody>
</table>

The evidence in Table 1 shows that in 2000, more than 50% of the world’s urban population resided in areas with fewer than 500 000 people. Furthermore, almost 63% of the world’s urban population resided in urban areas with populations smaller than 1 million. The fact that the majority of urban dwellers live in urban centres with fewer than 500 000 people explains why a more detailed understanding of smaller and intermediate cities is required.

The aim of this paper is to provide an overview of the international literature in respect of intermediate cities. The paper starts off with a discussion of the definition of intermediate cities and then turns to the historical reasons for the development of intermediate cities around the globe. This is followed by a presentation of key research themes in respect of intermediate cities, namely the importance of intermediate cities in policy-making, reasons for intermediate city policy failures, the World Bank policy recommendations regarding intermediate cities and other themes present in research on intermediate cities. The paper then turns to South African literature and policy aspects related to intermediate cities. Finally, we attempt to make a number of key points relevant to the policy environment.

2. Towards a definition of intermediate cities

Hardoy and Satterthwaite noted as early as the mid-1980s that there was no agreed-upon definition of what an intermediate city is: “A review of the literature found no agreement among governments or researchers as to how such urban centres should be defined.”\(^{10}\) Unfortunately, there has been little progress since then in finding a common definition. Further complicating the matter, there is a range of terms used in the literature, from metro towns, satellite cities and middle cities to more commonly used terms such as secondary cities, intermediate cities and medium-sized cities.\(^{11}\) The terms ‘secondary’ and ‘intermediate’ are generally viewed as being wider in scope and imply an interjacent position and supplementary role in respect of functions.\(^{12}\) The earlier literature suggests that three key aspects should be considered in a definition of secondary or intermediate cities: size, urban function and location.\(^{13}\) In
addition, a range of thresholds (usually related to size and function) can be used to distinguish intermediate cities. More recently, these defining aspects have been expanded on. This section discusses these three main aspects and then turns to the broader considerations of more recent research.

First, we consider the role that city size plays in defining intermediate cities. The word ‘intermediate’ suggests that these cities form part of an urban hierarchy. They are in a secondary position in relation to the primary cities of a country but also stand in relation to the smaller urban areas and hinterlands. Common indicators of size are population, population density and the extent of the built-up area. In many cases, the terms intermediate and secondary indicate that the city is big enough to manage self-generated growth but small enough to avoid some of the negative aspects associated with massive urban agglomerations such as the environmental and social costs. The notion of ‘self-generated’ growth requires an in-depth understanding of the historic and current reasons / risks for the growth or decline of a specific area. At the same time, the relationship between size and economic functions (more specifically the variety of economic functions) cannot be ignored.

In addition to size, consideration should be given to urban function, an aspect which can be difficult to contextualise. Rondinelli argues that the term intermediate or secondary city “also connotes functional intermediacy in the flows of power, innovation, people and resources among places. Determining functional intermediacy is quite difficult. Empirical evidence from both developed and developing countries shows a positive correlation between city size and functional complexity.” The main problem comes in when trying to measure urban function in quantitative terms. Key issues related to function are multi-functionality (as opposed to mono-functionality) and the degree of dependence on an economic sector.

Thirdly, the strategic location of a city in respect of large metropolitan centres, infrastructure and resources (agricultural, mining and the physical environment) is an important consideration in identifying intermediate cities. Furthermore, the existing interactions and communication networks with the rural hinterland and larger urban areas are essential components of location. Van der Merwe argues that intermediate cities should not be too far away from metropolitan areas to benefit from developments in the metropolitan area, but they should also not be too close that full integration with these metropolitan areas occurs. In the 1970s and 1980s, it was assumed that: “The small city near the large metropolis gains most of the benefits of agglomeration without the pains of large size.”

More recently, researchers studying intermediate cities have emphasised aspects such as urbanisation, political and institutional frameworks, regional functions, specialisation in services and products, the environment, urban planning and development, urban infrastructure and social and cultural aspects. In one of these more recent studies, Baloy and Rabinovich summarise the role of intermediate cities in the following way: “To conclude, we may say that the cities we studied, and by extension a number of urban agglomerations, have a double affiliation: their intermediate function on the one hand, their position of medium-sized town within the urban hierarchy on the other. Owing to their social and territorial specificities, intermediate cities are a privileged environment for regional planning linking urban growth and regional equilibrium in a positive dynamic between the urban and the rural. They supply goods and public and private services, and often function as administrative centres, representing the provincial and national authorities.” The authors continue in stating that intermediate cities “…concentrate a number of secondary and tertiary activities that are indispensable to life within society (banks, retail and wholesale businesses, telecommunications, etc.). They are the heart of a region and regulate the flows that irrigate it, serving as mediators towards the higher echelons of the economic and administrative structure—the country, the world. Due to political and administrative decentralization on the one hand, to the liberalisation of economic exchange on the other, these regional development factors will grow stronger in the years to come, reducing the role of the state in the regulation of goods, capitals and persons.”
In conclusion, a number of points should be made regarding attempts to define the concept of 'intermediate city'. First, it is not possible to make generalized conclusions about population growth or economic structure in respect of intermediate cities. Second, one of the key problems associated with the definition of the intermediate city is an over-emphasis on population size and area. Third, the varying levels of development, the uniqueness of urban systems in specific countries and differing economic structures make international comparisons very difficult. Fourth, consideration should be given to the intermediate role of these cities, in other words how they mediate between metropolitan and rural areas. Finally, the increasing role of intermediate cities in the world economy and the dependence of these cities on volatile international markets cannot be ignored. In many cases these cities are ill-prepared for the challenges associated with international competitiveness.

3. Reasons and problems associated with growth and development of intermediate cities

The available literature suggests a range of reasons for the growth of intermediate cities. According to Satterthwaite, secondary cities are growing due to their important role as market towns, mining towns, border posts, retirement areas, and centres for education, agricultural processing, tourism and the armed forces. Bayloy and Rabinovich further identify ten typologies or urban functions of intermediate cities, including regional markets, service centres, regional capitals, economic locations, tourist centres, communication hubs, the metropolitan periphery, cities at the national / international interface (ports), urban regions and conurban areas / groups of towns. Considering this wide range of categories, nine main reasons for the growth of intermediate cities are discussed in more detail below.

First, there are many examples in which the existence and growth (and subsequent decline) of an intermediate city is related to its proximity to natural resources. Consequently, many of these cities are subject to the boom-bust cycles of specific resources. Using the examples of two intermediate-sized resource towns in Indonesia, Wood illustrates how a boom cycle makes it extremely difficult for local government to provide public infrastructure quickly enough. Another common concern in respect of resource towns is that although local governments have very little influence over resource extraction activities, as this is usually a national prerogative, these activities have a direct influence on the area's urban development. For example, land-use decisions and the rapid increase in new urban migrants are factors not under the control of local governments, but local authorities must still deal with the effects. The close linkages between resources and international markets also make these places more vulnerable to price-shocks. The future of these cities is dependent on their ability to diversify their economies, long term commitment from national governments and ensuring that planning for mine closure starts when mine activities are initiated.

A second reason for the growth of intermediate cities, coastal cities in particular, is tourism and intensive agricultural production. A third prominent reason is related to ‘defensive positions’ and military bases. One of the key issues regarding military bases is that the base’s function might change over time, impacting the function of the city and surrounding area.

Fourth, secondary cities can grow as a result of the sometimes arbitrary way in which administrative, political and educational centres are selected and develop over time. The literature provides examples in South America, Africa and India. Although the employment of government officials is an important factor in the development of urban areas, Hardoy and Satterthwaite argue that the relationship between administrative functions and the development of urban centres is not always well understood. Also fitting within this context is the role that universities play in facilitating the growth of intermediate cities and peripheral areas. Fifth, colonization resulted in the creation of an urban hierarchy and intermediate cities. To a large degree colonization resulted in the growth of coastal cities – in the man to ensure exports of raw products.
Sixth, in an increasingly global environment, direct foreign investment is an important cause of the growth of intermediate cities in the developing world.⁴⁷ In China, for instance, intermediate cities have benefitted from the opening-up of the economy and considerable economic growth over the past two decades.⁴⁸ However, exposure to international markets also carries threats. Bolay and Rabinovich articulate these threats in the following words: “unstable markets are not without their dangers. Competition is fierce; one must adapt rapidly to changes in the international markets, and supply high quality ‘products’ to a very volatile market. These products include both manufactured goods and raw materials, but also the men and women who sell their labour under extremely precarious conditions.”⁴⁹

Seventh, the role of transport technology should not be under-stated in the development of intermediate cities.⁵⁰ The presence of airports and seaports or a city's location on a national road all contribute to a city's economic growth.⁵¹ More recently, the considerable impact of high speed rail systems on intermediate cities has received attention.⁵² A number of studies have also considered the distribution of air passenger transport amongst different city types.⁵³ However, the research on both high speed rail systems and air passenger travel focuses mainly on the Global North.

Eighth, many of these cities provide services, commerce and trade opportunities to their rural hinterland.⁵⁴ This regional role in respect of services and commerce and its relation to regional development is well described in the following words: “they have played a very important role as a link between large cities and rural areas, and therefore enabling the territorial dissemination of development.”⁵⁵ Finally, proximity to a primary city is in some cases the main reason for the development of intermediate cities.⁵⁶ The concept of ‘polarization reversal’ is often used to explain the links between secondary and primary cities. However, some scholars have warned that improvements in transport and communication technology might negatively impact this relationship.

In conclusion, there are multiple reasons for the development and growth of intermediate cities. In general, it seems as if intermediate cities whose growth is due to more than one factor might have more positive outcomes. In contrast, intermediate cities with higher levels of dependence on one economic sector are at greater risk of experiencing problems. As we shall argue later in the paper, the risk is even higher when that single sector is dependent on international market forces. Therefore, in order to understand the implications for future development, one must first have a thorough understanding of the reasons why particular intermediate cities were settled in the first place.

4. Key themes in intermediate city research

For the purpose of this paper, research on intermediate cities is divided into four categories:

- Reasons why intermediate cities are important in policy considerations and a general understanding of the types of policies that are related to intermediate cities
- Reasons for the failure of many intermediate city-related policies
- World Bank policy proposals and their implications for intermediate cities
- Other themes present in respect of intermediate cities

4.1 Reasons why intermediate cities are important in policy considerations

Rondinelli suggested in the mid-1980s that there are seven main reasons why intermediate cities are important in the national development of emerging countries. Put concisely, intermediate cities help to de-concentrate urbanisation (away from primary cities), reverse polarization, alleviate the problems of larger cities, reduce regional inequalities, stimulate rural economies, increase administrative capacity for rural development and reduce urban poverty while increasing productivity.⁵⁷ Similar sentiments have been expressed by Hardoy and Satterthwaite.⁵⁸ In particular, the role played by intermediate cities in
helping divert some of the mass migration to primary urban settlements is frequently mentioned in the literature. Another reason why intermediate cities are of importance for policy development is that they play a role in government decentralization and articulating local needs. Furthermore, the available literature acknowledges that government plans and priorities are often articulated and played out in intermediate cities. Likewise, some scholars have noted that intermediate cities are important places in terms of introducing government programmes. In this respect, Rogerson argues that by the end of the 1980s, it became increasingly important to integrate social and economic goals with spatial planning. Meanwhile, Richardson notes that an intermediate city policy approach is only one approach amongst a range of others: laissez faire, growth centres, development axes, a polycentric structure, counter magnet cities, small service towns, preferential regions, subnational capitals and a hybrid approach. The remainder of this section investigates some of these factors in more detail.

First, the potential role of intermediate cities in managing urbanisation is a common theme in the literature. This is mainly due to the fear that primary urban centres might grow too big. However, policy proposals in this respect have often been articulated in a negative way. This 'negative' outlook on urbanisation is well summarised in the following words: "The goal of controlling urbanization was to be achieved by slowing down rural–urban migration to major cities, making intermediate-sized cities more attractive to migrants, and by improving the living standards of rural areas so as to reduce rural–urban migration." It seems as if there are two opposite poles in this respect. On the one hand, many governments tried to use intermediate centres to help reduce urbanisation. It is important to note, however, that very few, if any governments have been successful in these attempts. The World Bank is extremely critical of the notion of utilising intermediate cities to prevent urbanisation to larger urban settings, stating that: "Neither the magnitude of urbanization nor the size of mega-cities should motivate policymakers to implement restrictive policies." On the other hand, a laissez faire approach prevails in other countries, where there is little to no planning or interference regarding urbanisation.

Attempting to find some ground between these two opposing poles, Van der Merwe has suggested a middle of the road approach in which a process of self-selection (in terms of size and function) identifies intermediate cities which could be used to manage (as opposed to restrict or control) urbanisation. This approach is more in line with the recent World Bank emphasis on medium and small cities helping to address urbanisation, and is premised on two realities. First, 53% of the world’s urban dwellers reside in cities with a population of 500 000 or less. Secondly, it is a commonly-held assumption that well-managed urbanisation can help to alleviate poverty and promote development. Therefore, the World Bank proposes that: "To reap the benefits of poverty reduction through increased urbanization, countries require national urban strategies supported by new diagnostic frameworks." Within this mind-set, intermediate cities, by means of their role in urbanization, help to foster economic growth and alleviate poverty. At the same time, it is important to try and counter the negative impacts of urbanisation. In the words of a World Bank publication, the high proportion of urban dwellers residing in urban areas of 500 000 people and fewer "raises important questions about the process of managing urbanization and delivery mechanisms for urban development assistance in the decade ahead."

There is without a doubt a major difference between more recent views on the roles of intermediate cities in addressing urbanisation and those held in the mid-1980s. The earlier views were premised on the assumption that larger cities would not cope with continued growth. Today, however, the World Bank emphasizes that a significant amount of urbanization takes place automatically in intermediate cities, and therefore this process of urbanization should simply be managed well. This notion is best summarised in the following words: "Urbanization in the developing world was once considered too fast and unmanageable, something to be resisted and controlled. For many today, the question is not one of how to contain urbanization, but rather how to prepare for it – reaping the benefits of economic growth associated with urbanization while proactively managing and reducing the negative externalities of congestion, crime, informal settlements and slums." At this juncture, it is important to note that different levels of urbanisation require different policy approaches. Consequently, the World Bank notes: “As different parts of a country urbanize at different rates and the binding constraints to promote
Concentration differ by the stage of urbanization, policies should be formulated according to the stage of urbanization permitting both rural-urban and inter-urban linkages. At each stage, however, the objective of urbanization policies should be to facilitate economic density by improving the options available to people and to firms.\textsuperscript{75}

A second policy consideration in respect of intermediate cities is the regional development roles of these cities. Within the context of rural development, intermediate cities are seen as spaces in which national development goals can be reached more easily and cheaply. This notion can be articulated in the following words: “The argument for developing small urban centers is based on the theory that widespread economic growth is facilitated by the emergence of an articulated and integrated settlement system of towns and cities of different sizes and functions that are large enough and diversified enough to serve not only their own residents but also those in surrounding rural areas.”\textsuperscript{76} Rondinelli adds to this idea by stating that intermediate cities contribute to “economies of scale for a wide variety of basic social and economic activities, organize the economies of their hinterlands, provide access for rural populations to basic services and facilities as well as to markets, services, and facilities in large urban centers, allow access to transportation and communications networks, and offer opportunities for nonfarm employment in secondary and tertiary sectors of the economy.”\textsuperscript{77} The literature also mentions the important role of these centres in the diffusion of social and technical knowledge from metropolitan areas to rural areas.\textsuperscript{78}

Essentially, intermediate cities provide a collective infrastructure to not only the urban populations of these settlements but also to the rural and regional populations.\textsuperscript{79} Bolay and Rabinovich elucidate this role by using the following words: “As medium-sized cities that are well integrated within a rural region, they are - unlike the great metropolitan centres - seen as playing a crucial role in rural–urban interactions given the usually strong link and complementary relationship with their rural hinterland. They offer rural populations better living conditions, jobs, a less polluted environment, and act as local markets for their products.”\textsuperscript{80} It is no wonder then that some countries explicitly include small and intermediate cities in their rural development strategy.\textsuperscript{81}

Third, closely linked to the above point is the important role played by intermediate cities in creating regional markets as well as trade and commerce spaces for more diversified and higher order goods and services not often found in small urban or rural areas.\textsuperscript{82} Many scholars seem to consider a well-structured system of central places to be a prerequisite for economic growth and development.\textsuperscript{83} Although this notion probably remains valid, the increasing importance of the knowledge economy may have far-reaching implications for the notion of central places.

Fourth, many policies in respect of intermediate cities address the fact that more balanced national development profiles are needed.\textsuperscript{84} This is largely due to the fact that the urban settlement patterns of many developing countries are deeply entrenched in colonial history. Accordingly, the history and development of many urban systems has been closely intertwined with colonial interests — for example, some cities were formed to ensure the effective exploitation and export of resources. Addressing this reality, current research and policy documents related to intermediate cities focus on economic de-concentration in order to address regional imbalances.\textsuperscript{85} More recently, the notion of a balanced settlement system has given way to an emphasis on the creation of effective linkages between urban settlements, a focus on how different urban settlements (including intermediate cities) complement one another and an effort to understand the differentiated roles of various urban settlement categories (of which intermediate cities are but one category).\textsuperscript{86}

A fifth reason commonly used to argue for policies supporting intermediate cities is the social and environmental ills associated with the growth of large urban areas.\textsuperscript{87} Although we shall point out later that this notion is largely ill-founded, some scholars argue that intermediate cities have the potential to minimise some of the downsides of urban areas such as high energy use and greenhouse gas emissions. As intermediate cities are smaller and not as highly populated, they present opportunities for creative solutions. Along these lines, the World Bank suggests that: “Urbanization, if properly managed, can help advance the climate change agenda through the design of denser, more compact cities that would also
benefit from energy efficiency gains and reduced travel time and costs for urban residents and businesses. In a similar fashion, Otiso writes that: “Secondary cities are also critical in national urban and environmental management because they provide grounds for alternative management approaches.” Others share these sentiments, arguing that because intermediate cities are smaller and their problems are of a smaller scale, opportunities exist to improve on current practices and be more innovative.

Sixth, intermediate cities are also important within the context of political and administrative decentralization. In this respect, Satterthwaite argues that: “More dispersed patterns of urban development (in which various small urban centres become increasingly important and some grow to become large urban centres) are likely to develop, without economic losses, if national economies grow and through effective decentralization (especially increasing the competence, capacity and accountability of local governments in small urban centres).

Seventh, the inclusion of the settlement hierarchy in national development goals has also been mentioned by some scholars as an important policy imperative. In this regard, Hardoy and Satterthwaite comment that “the identification of specific developmental roles for selected small and intermediate urban centres within broader social and economic development plans should be the first step towards formulating a special programme for such centres.” They argue further that “national (or regional) urban systems are essentially the infrastructure of development and the backbone on which development projects should be planned.”

Eighth, although the notion of international competitiveness is not new, the importance of intermediate cities within a ‘national growth agenda’ has recently been highlighted by the World Bank. The international linkages of intermediate cities and the role that these cities play in respect of international competitiveness are two important factors to consider. Writing about Kenya, Richardson argues that Nairobi’s lack of long term sustainability should not be the primary reason to devote attention to the nation’s intermediate cities. Rather, the focus should be on how intermediate towns can increase Kenya’s international competitiveness as well as on the role that intermediate cities can play in rural development.

In conclusion, it seems as if the policy-related reasons for focusing on intermediate cities have changed over the past three decades. Earlier motivations emphasised balanced settlement development, economic de-concentration and the prevention of urbanisation. More recently, emphasis has been placed on the importance of intermediate cities in respect of decentralization, international competitiveness and the potential of these cities to innovatively manage urbanisation and urban development.

4.2 Reasons for the failure of polices related to intermediate cities

Policies in respect of intermediate cities have had mixed success. Attempting to explain this, Hardoy and Satterthwaite argue that “…despite ambitious aims and objectives these intermediate city policies seldom supported the towns or the development of the regions they were supposed to benefit.” They even go so far as to say that “there is a danger that all lessons learnt from 30 years of ‘regional development’ and ‘growth centre policies’ will be forgotten.” Otiso contends that many national policies involving intermediate cities failed because: during the planning phase, status quo analyses were inadequate, resource estimates were unrealistic and there was a lack of objective criteria when determining what an intermediate city is; the policies were top down, used unviable locations and were not taken seriously; and there was inadequate coordination and insufficient supply of infrastructure. This section now turns to a more detailed discussion of the reasons why many intermediate city policies have failed.

Firstly, the literature frequently refers to the importance of strong political will and administrative capacity in ensuring an appropriate intermediate city strategy. In literature from before the early 1990s, South Korea is commonly used as an example of a country that implemented an effective intermediate city
strategy. South Korea’s success is attributed to political will and significant national government investment in infrastructure and social services in order to create an attractive investment environment. However, most countries have not experienced the same level of policy success, largely due to the lack of political will and the limited degree of decentralization. A fair amount of literature focuses on the fact that political and administrative decentralization is not well entrenched in the policy or practice of many countries, and therefore there is little capacity to implement local responses or place-based strategies.

Four distinct aspects related to this lack of decentralization require more attention. Firstly, there seems to be a general hesitance in respect of political decentralization. In this regard, Otiso suggests that one of the key reasons for the failure of an intermediate city strategy in Kenya is the “insufficient devolution of power and fiscal responsibility to municipal and other local government units.” Secondly, governments must actively apply administrative decentralization by transferring administrative functions to various regions, but this rarely happens in the developing world. Thirdly, the limited amount of decentralization should be understood within the limitations of existing funding models. The World Bank employs the term “decentralized paradox” to make the point that, despite significant lip service being paid to political and administrative decentralization, centrally controlled funding allocation systems still dominate local government functions; “National governments have increasingly devolved service delivery and expenditure responsibilities to the local level but have retained control over significant revenue sources.” One of the most prominent examples of national government control is the fact that national governments usually determine which taxes can be levied at the local level. “As a result most local governments have a narrow fiscal base, with sharply limited discretion over own source-revenues.” Fourthly, according to some observers, the increasing significance of inter-governmental transfers between national and local governments has simultaneously enhanced dependency on national coffers. Along these lines, some scholars argue that secondary cities do not receive a fair share of national budgets. Rondinelli, for example, asserts that “these cities have received a disproportionately low share of national investments in infrastructure, services, industry, and other activities compared to the largest city in nearly every developing nation.”

Of course, the other side of the decentralization debate focuses on the lack of local capacity to perform decentralized functions effectively. In this respect, Linn notes that “the quality of management by the urban authorities may have an important effect on whether and how a city grows.” Accordingly, capacity building within intermediate cities is a central theme in World Bank policies. And lack of local capacity is the second important reason why many intermediate city policies have failed.

Third, few developing countries have a well-developed settlement hierarchy, a situation which results in an inadequate distribution of services and functions and limited urban-rural linkages. A well-established settlement hierarchy, on the other hand, should help uncover how different settlements types complement one another and shift the focus away from the ways in which these cities compete with one another. Even in countries such as South Africa that have a fairly well-developed settlement hierarchy, it remains a challenge to effectively utilize the urban hierarchy.

Fourth, intermediate city policies have often gone hand in hand with government efforts to de-concentrate the spatial economy, but these attempts have also had mixed outcomes. The literature warns against simplistic strategies (usually in some form of subsidy) of infrastructure provision aimed at creating new industrial spaces outside core urban areas. In general, such attempts have been unsuccessful, largely due to poor conceptualization of the growth pole concept and the inability to operationalize policy proposals. According to Satterthwaite: “The record of governments in successfully doing this is very poor; they often push investment into unsuitable locations, or the choice of where public investment is concentrated is determined by political considerations not economic potential.” The literature also warns against trying to steer industry away from the main urban centres and towards intermediate centres. In this respect, Hardoy and Satterthwaite state that: “Premature attempts to steer industry away from primate cities or large cities are likely either to be very expensive for what they achieve, or very expensive for national production because the industries pushed to small or intermediate centres produce high cost goods and /or work far below capacity.” However, other researchers argue that this strategy has shown some success, particularly when intermediate urban areas are close to a larger metropolitan...
area. Brazil and Korea, for instance, have experienced some success in de-concentrating economic activity. The Israeli new town programme is also often cited as an example of a successful intermediate city development programme. However, the political motive in creating settlements outside Tel Aviv and Jerusalem coupled with the high per capita income and the fact that Israel benefits from significant amounts of foreign aid help to explain the relative success of the Israeli programme. Furthermore, due to ambiguity surrounding the ‘growth pole’ concept, there is not an appropriate definition, and subsequently there is no uniform application in policy. Any intermediate city strategy might suffer from the same problem.

Fifth, a significant amount of growth point research involving intermediate cities has been dominated by the pre-selection and inappropriate assessment of places. Subsequently, the outcomes of growth point programmes have been doubtful. Picking up on this critique, the United Nations Centre for Human Settlements suggests that many so-called intermediate cities were defined using an imprecise evaluation of the cities’ existing circumstances and region of influence, a simplistic understanding of their development, an inadequate interpretation of factors specific to the various centres and an unrealistic understanding of the required investments. As a result, such analyses overlooked the fact that cities generally move up and down the national urban hierarchy and that any selection / settlement differentiation process should account for the dynamic nature of settlements within the settlement hierarchy. Nonetheless, Van der Merwe makes the point that a form of self-selection based on market forces has become far more common since the late 1980s.

Sixth, some scholars argue that the continued dominance of primary cities in terms of population size and economic growth has been a principal reason for the failure of policies and programmes regarding intermediate cities. The idea here is that government policies and private sector actions have an inherent large urban bias. According to Otiso, this large urban bias can be ascribed to the fact that the economic elites are mainly concentrated in large urban areas and they are therefore “directly or indirectly preoccupied by the problems of their host cities.”

Seventh, many intermediate city policies do not have a long term vision. This focus on short term benefits coupled with an inability to consider long term factors has hindered the development of effective policies and programmes aimed at intermediate cities. Researchers have suggested that policies and programmes should have a minimum focus period of twenty years, but even twenty years might be too short.

Eighth, the literature indicates that intermediate city strategies are rarely integrated with macro-development and sectoral policies. Three questions can be posed in this respect. First, do governments use intermediate cities (or for that matter the overall settlement hierarchy) to guide their investment in economic and non-economic infrastructure, and if yes, how? Second, do governments understand how their non-spatial policy directions influence the spatial economy? In this regard, Hardoy and Satterthwaithe suggest that: "The need to improve our understanding of the social and spatial biases within governments’ policies, revenue raising and expenditure is crucial to any special policy on small and intermediate urban centres." Third, to what degree is the envisioned spatial economy articulated in macro-development policies?

Ninth, using intermediate city policies to steer urbanisation away from primary cities has seldom worked. Hardoy and Satterthwaithe use apartheid South Africa as an example of a country which managed to control population movement to some degree through social engineering. But as they rightfully remark, this example “shows the degree of government repression and control which is needed for a long term policy to control migration flows to major cities” and is therefore largely irrelevant. Policies with an anti-urban bias have commonly been based on assumptions that cities are becoming too big and full of illegal activities and social ill. Nonetheless, Hardoy and Satterthwaithe point out that: “the empirical findings … suggest that such judgments – usually based on mathematical abstraction on degree of primacy seem of little value in assessing government’s potential role either in slowing large cities’ growth or in stimulating small urban centers’ development.”
Tenth, globalization has had a large impact on intermediate cities. The growing influence of global markets and the subsequent erosion of state economic sovereignty (both nationally and locally) over the past two decades have made any significant long-term intermediate city planning difficult; at the same time, new opportunities and risks have been created for intermediate cities, especially for those that are linked to a single industry. Intermediate city responses to globalization are distinctly different from the policies of larger cities for three reasons. First, the capacity of intermediate cities to plan within the global context is usually significantly less than larger metropolitan areas. Secondly, many intermediate cities are new-comers to the international context. In this regard, Bolay and Rabinovich state that “the cities we studied still lack a clear idea of how to open up internationally, and have a tendency to systematically recuperate solutions that are fruitful only if adapted to a specific profile.” Third, in many cases intermediate city economies are only linked to the international economy by a single industry. This dependence on a single sector exposes these cities to the volatility of international markets – something which is often a new phenomenon and for which there is minimal existing capacity.

Lastly, the notion of using intermediate cities to create products for local markets has not been successful. The main limitation in this respect is the small market scales. New production systems are highly dependent on economies of scale, which regional markets are seldom able to provide.

In conclusion, there are a few lessons that should be highlighted regarding the failure of intermediate city policies. First, government attempts to change the national spatial economy in a radical way have had limited impact. Second, increasing globalization has brought both opportunities and risks to intermediate cities. Finally, a more appropriate solution may lie in figuring out a country’s spatial economy and settlement hierarchy (including understanding how different settlement types complement one another) and using this settlement hierarchy to plan both spatial and non-spatial policies and programmes.

### 4.3 The World Bank urban agenda’s relevance to intermediate cities

Although the World Bank’s latest urban policy proposals consist of broad themes appropriate to urban areas in general, some specific notes have been made in respect of intermediate cities. This section discusses both the specific references to intermediate cities as well as the general notes which are applicable to intermediate cities.

The World Bank’s new urban strategy is built on four pillars:

- Knowledge programs, product development & dissemination
- Financing strategies
- Partnerships
- Results management

Although it is not our intent to provide a detailed explanation of the four building blocks, three points should be made. First, the notion of partnerships in the funding process should be noted. It is not the funding in itself that is the important point, but rather the funding of municipalities which can show partnerships. Inter-governmental funding in South Africa does not currently include this requirement, so some consideration should be given to linking finance to partnerships. Secondly, the World Bank’s approach to funding includes a significant emphasis on grants related to results. Although not all funding should necessarily be predicated on the ability of the recipient to demonstrate extensive results, cognizance should be taken of the principle. Thirdly, the emphasis on knowledge management has considerable implications for municipalities and their ability to ensure evidence-based planning and programmes.

The significance of intermediate cities is mentioned more specifically in respect of these cities’ expanding populations and the resulting need for financing and capacity development. In addition to the above four building blocks, a number of key notes should be made in respect of the World Bank’s urban agenda:
The principle of flexibility in finance systems is emphasized. The World Bank describes their approach in the following manner: “A flexible blend of financing instruments will be used to address a wide array of different circumstances.”\textsuperscript{143} This notion indicates that financing systems should be able to address differentiation and distinct conditions – as opposed to using a one size fits all approach.

Cities serve as important gateways to international markets. This includes intermediate cities and their role in respect of international competitiveness. In the words of the World Bank, however: “This cannot be achieved by cities alone. National policy coordination is essential to ensure cities have good connectivity to port and other transport infrastructure and to ensure appropriate linkages.”\textsuperscript{144}

The importance of knowledge is stressed, specifically in relation to managing urbanisation. The World Bank argues that: “Urbanization increases the complexity of city management and those cities that are succeeding have generally relied on robust data collection and analysis to underpin policy making.”\textsuperscript{145} Because the scale of urbanisation in intermediate cities is smaller, they have the opportunity to more successfully collect and analyse data.

Capacity building, particularly in intermediate cities, is a general theme running through the documents. Intermediate cities are experiencing considerable urban growth, and the management of urbanisation remains a key issue.

The ability of cities to address global warming and other environmental concerns is pivotal. Again, because of their smaller size, intermediate cities have the opportunity to explore more creative possibilities.

Finally, there is a need for a broader understanding of the overall system of cities and how they complement one another. This is articulated in the following words: “First, there is a fundamental asymmetry between primate cities and intermediate cities. No intermediate city can alone have an effect on the entire urban system whereas primate cities do. There is also considerable heterogeneity in the capabilities of intermediate cities to design and implement local policies that would be consistent with a national growth agenda.”\textsuperscript{146}

### 4.4 Other research themes related to intermediate cities

Most research conducted in respect of intermediate cities is related to the policy environment and national spatial planning imperatives. The above three sections have dealt with these issues. The focus in this section shifts towards a range of other research themes related to intermediate cities that have come to the fore over the past two decades. These themes are mainly not directly related to policy but nonetheless have some indirect policy relevance. The following issues are addressed:

- Implications of the knowledge economy for intermediate cities
- How the notion of ‘quality of life’ relates to intermediate city research
- Aspects related to how economic structures differ amongst settlement types
- The role of supermarket development and its influence on intermediate cities
- Counter-urbanisation and intermediate cities

Many of the reasons provided earlier for the rise of intermediate cities are related to ‘old’ production and administrative systems. The recent rise of the ‘knowledge economy’ / ‘knowledge capitalism’,\textsuperscript{147} however, has implications for intermediate cities. Up till now, not much research has been done in this regard, and the studies that have been done have mainly taken place in the Global North. A study about the relationship between venture capital and intermediate cities in the United States of America noted that:\textsuperscript{148}

- Intermediate cities that attract the most venture capital seem to benefit from the presence of a high concentration of enterprises in a particular cluster
- Smaller cities that attract venture capital benefit from the strong connections among individuals within industries (or a cluster of industries)
• Institutions of higher education play a major role.
• There is a strong correlation between the ability of communities to successfully attract venture capital and the quality of life in these areas.
• It appears that this correlation can be attributed to both the ease of recruiting high-level technical and management expertise to attractive communities and the propensity for such highly mobile talent to have already migrated to such places.

European research shows that urban areas with the following prerequisites will benefit from the growing knowledge economy:

• An economic and institutional regime that provides incentives for entrepreneurship, the efficient use of existing knowledge and the creation of new knowledge.
• An educated and skilled population that can create and effectively use knowledge.
• A dynamic information infrastructure that can facilitate the effective communication, dissemination and processing of information.
• A system of research centres, universities, think-tanks, consultants, firms and other organisations that can tap into the growing stock of global knowledge, assimilate and adapt it to local needs and create new local knowledge.

In Canada, recent research has shown that the call-centre industry is closely related to the growth of intermediate cities. Information and Communication Technology (ICT) and the low technology service industry have replaced traditional economic activities such as manufacturing in some of these cities. Two factors seem to play a role here: the quantity, quality and relative low cost of labour and the Canadian-US exchange rate which for a time made it financially advantageous for companies to locate in Canada.

Another theme commonly associated with secondary cities is the high quality of life in these areas. It is noteworthy that of the 54 electronic sources used to compile this literature review, 15% refer to the term ‘quality of life’. Research in the United States of America has emphasised the life-style requirements of knowledge workers in smaller urban areas. In the developed world, these cities have often been “marketed” as having better quality of life, lower living costs, lower start-up costs for new enterprises, better community stability and cheaper unit costs of services. It is important to note that much of the research considering quality of life occurred in the developed world during the 1970s and 1980s, a time period of bias against large urban areas, and very little empirical evidence exists to substantiate this claim that secondary cities have higher quality of life. Consequently, many of the above quality of life claims are debatable. More recent research has focused on intermediate cities being part of the overall urban system and has not made claims about supposed advantages.

Research in the mid-1990s compared the economic structure of metropolitan and intermediate cities in the United States of America. The outcomes of this research suggest that: “In general, production of standardized traditional items tends to be more heavily concentrated in smaller and medium-size cities, while production of less standardized or non-traditional items tends to be relatively more concentrated in larger cities. Less standardized could refer to products in the experimental stage, or evolving products; or it could refer to items which are not produced on a massive scale, but are special order products for limited sets of customers.” This study further found that smaller cities generally have industries that require more low skilled workers. A key lesson of this study is that intermediate cities run the risk of not benefitting from increasing globalization and the growing importance of the knowledge economy.

Another important theme present in intermediate city research relates to the growth of supermarkets and their role in influencing urban development and urban / rural hinterland relationships. Although the majority of this research focuses on North America, Europe and to a lesser extent Latin America, some recent research has focused on Africa. Supermarket systems require larger volumes of quality products, something which is not always within the means of small producers, or even commercial farmers. Furthermore, a considerable amount of supermarket procurement takes place through...
distribution centres, causing a change in the historic linkage between rural hinterlands and service centre market towns. Wheatherspoon and Reardon note that “as supermarkets are diffusing and then rapidly consolidating their procurement systems to gain economies of scale and of co-ordination, this means that farmers need to supply larger volume transactions than was common in traditional markets.”

A final theme present in the literature is the notion of counter-urbanisation. One of the prominent reasons for the success of intermediate cities in the developed world is the process of counter-urbanisation – people moving from large urban areas to secondary cities. This is of benefit to intermediate cities because it is usually skilled and creative individuals who flee larger cities.

A fifth set of literature of note relates to work on intermediate cities/regions in Europe. It is especially the work of Rodríguez-Pose that should be mentioned in this regard. The basic assumption within this work is that the world is becoming spikier with increasing agglomerations of economic activity in a few concentrated areas. This, according to Rodríguez-Pose & Fitjar, means that intermediate and peripheral areas “… are left in a precarious position”. Two approaches have mainly been followed in addressing the plight of intermediate regions or cities.

The first option (and also the more dominant approach) focuses on clusters, industrial districts and regional systems of innovation. This is largely an inward-looking approach of finding local agglomerations and local responses. Yet, Rodríguez-Pose & Fitjar criticise this approach arguing that “[t]oo much local interaction in small and relatively isolated environments will in all likelihood throttle the diffusion of new knowledge, lead to institutional lock-in and smother productivity and growth”. An approach of this nature is unlikely to reverse the increasing trend towards concentration.

The second option that seems not to be too popular is an emphasis on interaction beyond region/cities boundaries. The principal idea here is the creation of networks, economic activity and interaction with actors outside the city or region. However, as Rodríguez-Pose & Fitjar argue, “… this type of intervention is more difficult to implement, is costlier and involves a great deal of uncertainty”. Implementing an intervention of this nature requires the building of pipelines from the internal or the local economy to the external world.

5. South African research

This section is divided into three sub-sections. We first consider the apartheid period, after which we turn to research on intermediate cities in the post-apartheid period. Finally, consideration is given to the National Development Plan and its contextualization of the urban hierarchy in South Africa.

5.1 Apartheid period

The role of apartheid planning in minimizing the urbanisation of black South Africans is well captured in the literature, and we do not intend to provide a detailed overview. However, a few notes are required. The unbalanced economic development in South Africa, together with the apartheid regime's priority of homeland development, led to policies of influx control, growth point development and industrial decentralisation. Various mechanisms were used, but: “The underlying motive of these strategies was to keep blacks out of white cities.” The failure of de-concentration and growth points is best described by Dewar et al, who state that “after thirty years of operation in South Africa … there are very few points which are showing significant success.” Today, the majority of these points have collapsed. Although there are some exceptions in the Free State, the long term viability of even the more successful ones is doubtful.

Despite the failure of growth points and decentralization in South Africa, there was still a need to address urbanisation and regional development. As a result, the apartheid regime commissioned research in the early 1990s to examine the possibility of addressing urbanisation through a strategy centring around intermediate cities. Using ‘self-selection’ methodology based mainly on population size, population
growth, ethnic composition, age distribution, literacy and education levels, economic diversity and size of economically active population, 16 main towns were identified as potential intermediate cities: East London, Bloemfontein, Pietermaritzburg, Potchefstroom, Welkom, Newcastle, Kimberley, Witbank, George, Secunda, Kroonstad, Pietersburg, Ladysmith, Umtata, Worcester and Grahamstown. After further analysis, the following intermediate cities were suggested to be the most appropriate for South Africa:

- Bloemfontein
- East London-Mdatsane
- Pietermaritzburg
- Pietersburg-Seshego
- Witbank-Middelburg

In the post-apartheid dispensation, two of the five cities listed above have become metropolitan municipalities: Bloemfontein (Mangaung) and East London (Buffalo City). Pietermaritzburg (Msunduzi) also appears to be on its way to becoming a metropolitan municipality, while Witbank (Emalahleni) and Pietersburg (Polokwane) are two of the cities that the SACN is considering in this study. Of the 16 places initially considered in 1992, George, Witbank (Emalahleni) and Pietersburg (Polokwane) are the only ones included in the current study. In addition, this study also considers Umhlatuzi (Richards Bay), Emfuleni (Vereeniging and Vanderbijlpark) and Matlosana (Klerksdorp). It should be noted that some of the places on the initial list of 16 such as Welkom (Matjhabeng) have experienced considerable economic decline in the last two decades due to mine downscaling.  

Perhaps the important lesson that should be drawn is that cities and towns change in economic function over time. Therefore, static considerations of cities and towns in urban hierarchies do not help to account for the dynamic reality.

### 5.2 Current research in South Africa

The knowledge base concerning South African cities is heavily skewed towards the main metropolitan areas, which also happens to (unsurprisingly) be where the majority of universities in South Africa are located. Table 2 and Table 3 below illustrate the difference in magnitude of available research concerning the metropolitan areas and six intermediate cities in South Africa. These tables show the number of hits for each city on Google Scholar. It is important to note that the figures reflect all papers containing the search terms; therefore, authors’ addresses could also result in a ‘hit’ even if the paper does not deal with that particular city. The tables demonstrate the important relationship between universities and places and suggest that there is an extensive knowledge base regarding metropolitan areas.

**Table 2: Search hits in Google Scholar related to the metropolitan areas in South Africa, September 2013**

<table>
<thead>
<tr>
<th>Search term</th>
<th>Number of hits</th>
<th>%</th>
<th>Search term</th>
<th>Number of hits</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;City of Cape Town&quot;</td>
<td>5,780</td>
<td>28.7</td>
<td>&quot;Cape Town&quot;</td>
<td>1,130,000</td>
<td>46.1</td>
</tr>
<tr>
<td>&quot;City of Johannesburg&quot;</td>
<td>4,230</td>
<td>21.0</td>
<td>&quot;Johannesburg&quot;</td>
<td>442,000</td>
<td>18.0</td>
</tr>
<tr>
<td>&quot;eThekwini&quot;</td>
<td>4,050</td>
<td>20.1</td>
<td>&quot;Durban&quot;</td>
<td>252,000</td>
<td>10.3</td>
</tr>
<tr>
<td>&quot;Ekurhuleni&quot;</td>
<td>1,580</td>
<td>7.8</td>
<td>&quot;Brakpan&quot;; &quot;Benoni&quot;; &quot;Boksburg&quot;</td>
<td>6,000</td>
<td>0.2</td>
</tr>
<tr>
<td>&quot;Buffalo City&quot;</td>
<td>1,350</td>
<td>6.7</td>
<td>&quot;East London&quot;</td>
<td>24,700</td>
<td>1.0</td>
</tr>
<tr>
<td>Search term</td>
<td>Number of hits</td>
<td>%</td>
<td>Search term</td>
<td>Number of hits</td>
<td>%</td>
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<tr>
<td>------------------------------</td>
<td>----------------</td>
<td>----</td>
<td>--------------------</td>
<td>----------------</td>
<td>----</td>
</tr>
<tr>
<td>&quot;City of Tshwane&quot;</td>
<td>1,180</td>
<td>5.9</td>
<td>&quot;Pretoria&quot;</td>
<td>518,000</td>
<td>21.1</td>
</tr>
<tr>
<td>&quot;Mangaung&quot;</td>
<td>1,150</td>
<td>5.7</td>
<td>&quot;Bloemfontein&quot;</td>
<td>34,300</td>
<td>1.4</td>
</tr>
<tr>
<td>&quot;Nelson Mandela Bay&quot;</td>
<td>809</td>
<td>4.0</td>
<td>&quot;Port Elizabeth&quot;</td>
<td>44,600</td>
<td>1.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20,129</td>
<td>100.0</td>
<td>TOTAL</td>
<td>2,451,600</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 3: Search hits in Google Scholar related to the intermediate cities considered in this study, September 2013

<table>
<thead>
<tr>
<th>Search term</th>
<th>Number of hits</th>
<th>%</th>
<th>Search term</th>
<th>Number of hits</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polokwane</td>
<td>4,100</td>
<td>76.2</td>
<td>&quot;Pietersburg&quot;</td>
<td>6,030</td>
<td>19.9</td>
</tr>
<tr>
<td>Emfuleni</td>
<td>517</td>
<td>9.6</td>
<td>&quot;Vanderbijlpark&quot;</td>
<td>11,900</td>
<td>39.2</td>
</tr>
<tr>
<td>Emalahleni</td>
<td>347</td>
<td>6.4</td>
<td>&quot;Vereeniging&quot;</td>
<td>11,900</td>
<td>39.2</td>
</tr>
<tr>
<td>uMhlathuze</td>
<td>247</td>
<td>4.6</td>
<td>&quot;Richards Bay&quot;</td>
<td>4,810</td>
<td>15.8</td>
</tr>
<tr>
<td>City of Matlosana</td>
<td>85</td>
<td>1.6</td>
<td>&quot;Klerksdorp&quot;</td>
<td>3,280</td>
<td>10.8</td>
</tr>
<tr>
<td>City of George</td>
<td>85</td>
<td>1.6</td>
<td>&quot;George&quot;(^{180})</td>
<td>30,350</td>
<td>100.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5,381</td>
<td>100.0</td>
<td>TOTAL</td>
<td>30,350</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Considering these two tables, the following key comments should be made:

- Cape Town, Johannesburg, Durban and Pretoria obtained the highest number of hits. This is not surprising given that these cities also host four of the countries’ five top universities (Although Stellenbosch technically does not fall under Cape Town it is functionally part of the Cape Town area).
- Amongst the six intermediate cities, Polokwane (Pietersburg) and Emfuleni (Vanderbijlpark / Vereeniging) have the most hits. Again, these two cities have a significant university presence: the University of Limpopo in Polokwane and the Vaal University of Technology and a campus of the North West University in Emfuleni. Of the other four intermediate cities, George hosts a satellite campus of the Nelson Mandela Metropolitan University whereas the other three do not have any university presence.
- There is a significant difference in number of hits between the five main metropolitan areas and the intermediate cities, suggesting that the available knowledge base regarding the intermediate cities remains small.
Having said this, the amount of research outside the main metropolitan areas, particularly research focusing on settlement hierarchy or place-based case studies, remains small. Furthermore, in contrast with an increasing body of work on small towns\textsuperscript{181} (notably the work on LED and small towns by Nel\textsuperscript{182} and others\textsuperscript{183}), the amount of research focusing on intermediate towns remains limited – secondary cities seem fall within an unfortunate research gap. An exception is resource-based towns such as the Free State Goldfields, which have received some attention over the past five years.\textsuperscript{184} The case study papers to follow will provide a more detailed overview of the work in each area. However, it should be acknowledged that a significant part of the existing knowledge is post-graduate work, which is not always published in academic journals. Overall, it seems as if intermediate cities have fallen through the proverbial crack between research focusing on large metropolitan areas and research concentrating on smaller urban settlements. The remainder of this section provides a brief review of the main research trends in the six case study cities.

City of Matlosana

There has been a fair amount of academic research covering the Dr Kenneth Kaunda District Municipality as well as the City of Matlosana Local Municipality. Much of this research was completed in 2012 and 2013 (20 and 17 research outputs, respectively). There are also numerous outputs that cover both of these areas that were counted as only one output. Most of the research was conducted and published by post-graduate students and academics at the North West University (due to its close proximity), but there are a few reports and studies from other universities such as the University of South Africa (UNISA) and the University of the Witwatersrand (Wits). The majority of the topics fall under the Departments of Education, Development, Management and Town and Regional Planning. There was only one PhD that covered the region, entitled: An empowerment programme for social work students regarding HIV and AIDS: Adapted REeds programme\textsuperscript{185} (2010).

The research outputs can be grouped into a few broad categories. Within the theme of education, topics included the Integrated Quality Management System (IQMS), skills and training, school governance, discipline and capacity, and the quality of teachers. The second category was local governance, including the following topics: participatory governance in ward committees, municipal leadership, performance management, by-elections, competitive bids and the delivery of basic services such as sanitation and water. Health was another focus: primary health care, tuberculosis, HIV and girls at risk, and the importance of physical fitness. A fourth theme was disaster risk management, with specific reference to the police service, wild fires, local capacity, community development and determining what is valuable to protect. The last category was town planning and business, including subjects such as regional shopping centres, the extension of the Alabama suburb, small and medium enterprises, business dynamics in Klerksdorp and the Labour Law courts.

Emalahleni

There is substantial literature on the geology, geochemistry, sedimentology, petrography and coal resources of the Karoo basin. In addition, some literature focuses on the effects of mining and industry on the environment\textsuperscript{186} – air\textsuperscript{187} and water pollution\textsuperscript{188}, acid mine drainage\textsuperscript{189} and underground fires.\textsuperscript{190,191} Other research covers the historical, social and economic development of the Witbank area. The following overview summarises the literature pertaining to the history of Witbank. The South African gold industry of the late 19\textsuperscript{th}early 20\textsuperscript{th} centuries required large quantities of cheap coal for deep-level mining. The opening of the Delagoa Bay railway line to Pretoria in 1895 further fuelled the demand for coal from the Witbank area, as the railway runs through Witbank and the region’s coal was close to the surface and could be safely mined and supplied.\textsuperscript{192}

The Witbank collieries initially relied mostly on Mozambican labour.\textsuperscript{193} These workers were obtained by ‘Wenela’ (the Witwatersrand Native Labour Association), the only association that was permitted to recruit mine workers from Portuguese territory. In 1908, Wenela provided the area’s coal mines with 60% of their workers. This figure increased to 80% in 1911 and 90% in 1918 before decreasing again to 80% in 1920.\textsuperscript{194} In 1918, more than 85% of the mine workers on the Witbank coal fields were from
Mozambique\textsuperscript{195}, while 36% of all the African mine labourers in the country were from Mozambique.\textsuperscript{196} Many of these immigrants had families and friends on the Witwatersrand, so the excess immigrants that were sent to Witbank from crowded Gauteng felt isolated.\textsuperscript{197}

Since the production of coal depended on a stable work force, the immigrants recruited by Wenela were persuaded to settle close to the coal mines, and Mozambican women were initially allowed to live near the mines. By 1926, about 25% of the workers were living in "married quarters" and had established new homes close to their place of work. However, in 1927 the police began mass deportations of Mozambican women\textsuperscript{198}, including some who had been living in Witbank for 20 years. Another significant occurrence during this time period was the rise of labour unions\textsuperscript{199}, although none of the Witbank collieries with high numbers of settled workers underwent strikes between 1918 and 1926.\textsuperscript{200, 201}

A Centre for Development and Enterprise (CDE) study on migrants and attitudes towards immigrants in Witbank shows that many South Africans think that the country is flooded with illegal immigrants, mostly from neighbouring countries. This perception is fuelled by the absence of reliable figures on immigration, although the above-mentioned study showed that there are not as many migrants as South Africans think. It is generally assumed that immigrants tend to favour large cities, but immigrants to South Africa are not limited to metropolitan areas. Witbank has immigrants not only from southern African countries, but also from other African countries (20%) such as Nigeria and from Asian countries (10%). The highest percentage (44%) of immigrants are younger than thirty, and they were attracted to Witbank due to its prosperous coal industry. A large percentage of these migrants are entrepreneurs, and 24% are self-employed full-time.\textsuperscript{202}

**Emfuleni**

In assessing the knowledge base of the area, an attempt was made to examine the nature and scale of post-graduate research. In the process, 56 theses and dissertations were found, and they can be classified under the following main themes:

- Development planning (17%)
- Service delivery (12.5%)
- Human resource and performance management (12.5%)
- Poverty (12.5%)
- LED (10.7%)

These main themes are closely aligned with the development problems experienced in the area. 75% of the theses / dissertations were completed at North West University, a sign of the institution’s important presence in the area. However, post-graduate students from the University of the Witwatersrand, the University of Pretoria, the University of Johannesburg and the University of South Africa also focused their research on the Emfuleni area, showing that the region is of national interest.

Emfuleni most likely benefits indirectly from this knowledge generation, and many of the students who complete their post-graduate studies probably live and/or work in the area. However, it does not seem as if there is a deliberate effort on the part of the government to ensure the systematic utilisation of the knowledge base created through post-graduate work. Initiatives encouraging one page summaries (or policy briefs) and debates on the policy lessons could help significantly in the application of this important post-graduate research.

Although the amount of literature published in academic journals is significantly smaller, there is some knowledge that is being created and publicised through this venue. It would be helpful if more of the post-graduate work gets published, as this would result in the further spread of the knowledge.

**George**

George does not have a full-fledged university campus, which explains why the city and its immediate hinterland have not been heavily researched. Only a handful of university degree studies have been published, and there are very few academic or consultancy research reports that focus on the area. The
little research that has been conducted focuses broadly on social, environmental, spatial, economic and administrative issues, and most of it was published within the past twenty years. During the major municipal restrukturings in 2000, one study compared the spatial transformations of George, Pretoria and Cape Town. This study painted a very positive picture of George’s socio-political transformation but noted that George’s apartheid spatial landscape was very much intact\textsuperscript{203}. Recently, the city’s proposed integrated transport strategy has received some attention.\textsuperscript{204} In addition, a handful of papers have focused on local economic development (LED) and tourism development\textsuperscript{206}, specifically looking at the role of construction\textsuperscript{206}, SMMEs\textsuperscript{207} and informal businesses\textsuperscript{208}.

The drought experienced in the region during the late 2000s evoked interest among some scholars in how authorities dealt with the disaster\textsuperscript{209} as well as the possibility of the opposite risk – floods\textsuperscript{210}. There has also been increased debate surrounding the impact of climate change\textsuperscript{211} on the sensitive biodiversity\textsuperscript{212} present in the Eden district. Another study looked at how urban growth and development impact the physical environment, especially given the growing number of golf estates in the region\textsuperscript{213}.

The fact that George exhibits good governance has resulted in investigations of the municipality’s internal communication strategies\textsuperscript{214}, management competencies\textsuperscript{215} and performance as measured by the provision of government subsidized housing\textsuperscript{216}. In terms of social issues, the focus of research has been on food security\textsuperscript{217}, teenage pregnancies\textsuperscript{218}, crime\textsuperscript{219} and primary health care\textsuperscript{220}. The expansion of the Nelson Mandela Metropolitan University (NMMU) campus at Saasveld might contribute to more research being conducted on the city and surrounding areas in the future.

**Polokwane**

Existing research outputs related to Polokwane are available mainly in the form of academic (Master’s) theses, and to a lesser extent academic journal articles. This literature focuses on the performance of various public sectors in and around Polokwane city, covering five main themes:

- Municipal capacity and the provision of basic services in Polokwane city and the surrounding farms and villages
- Planning and implementation of anti-poverty projects in the Polokwane area
- Local Economic Development (LED) and small businesses (SMMEs; SMEs; smallholder farmers and co-operatives) in Polokwane city and the surrounding farms and villages
- Impact of migration on the Polokwane area
- Land uses and spatial planning in Polokwane and the surrounding rural areas

**Umhlathuze**

Existing research on Umhlathuze highlights the already mentioned polarity of the Umhlathuze Local Municipality. Although much of this research focuses on the urban areas, there are also a number of studies which investigate the surrounding hinterland, looking at aspects such as rural development, service delivery, cultural and indigenous knowledge, crime, health, religion and tourism. The literature regarding the area’s economy concentrates on tourism and forestry; there is surprisingly little mention of the sugar cane industry. Literature pertaining to the urban area and administrative issues focuses on planning, service delivery and urban development in addition to environmental, economic and social issues.

Due to the fact that Richards Bay is a coastal area with a port and a considerable amount of industry, much of the research focuses on environmental issues such as coastal/beach management, marine ecology, ground water, water supply and management, estuaries and wetland areas, and how the use of these can impact the environment. There is also interest in biodiversity, climate change, ecosystems research and air and water quality assessments. For instance, the municipality and corporations such as Mondi and Grindrod Terminal Bulk Materials have conducted air quality assessments.

Economic research examines local economic development, tourism, the creation of markets, the informal sector and coal demand and supply. Also contained within this research is a focus on empowering
women as agents of poverty alleviation. Social research looks at religion, crime, education and health. Most of the health research considers the impact of HIV/AIDS, although cholera and rabies are also highlighted. There are also numerous recommendations within the literature to incorporate indigenous knowledge regarding health issues.

Planning research focuses on spatial development based on air quality investigations. In addition, the local municipality is planning public transport and road freight infrastructure improvements in line with the district municipality’s vision of integrated transportation and land use. There is also interest in multi-stakeholder driven planning and development. The majority of the dissertations and theses have been conducted at the University of Zululand, North West University (Potchefstroom) and UNISA.

5.3 The National Development Plan and the settlement hierarchy in South Africa

Against the historical backdrop and the overall lack of research in respect of intermediate cities, this section has two aims. First, it provides a brief overview of the key aspects of South Africa’s National Development Plan (NDP) related to urban areas. Secondly, it attempts to identify to what degree the notion of settlement differentiation is manifested in the document.

The key aspects in the NDP related to urban South Africa are as follows:

- South African urban areas are due to host another 7.8 million people by 2030
- The rapid growth in the number of young people in cities is an area of concern
- Settlement in urban areas is fragmented
- The ecological limits of urban areas cannot be ignored (for example whether an area is able to provide adequate access to water and electricity)
- Transportation networks will play an essential role in the future of urban areas
- The productivity of South African cities is low and not enough jobs are being created
- The lack of institutional capacity and instruments for implementation are two major stumbling blocks

The NDP proposes the following key aspects in regards to settlement differentiation:

- South Africa has a “reasonably balanced settlement structure, with economic activity distributed across four metropolitan regions and a network of cities, towns and service centres all linked by established networks of infrastructure”
- Differentiated rural settlement requires a differentiated planning approach
- Inadequate intergovernmental relations and slow coordination between different spheres of government are concerning
- There should be spatial contracts (based on a thorough understanding of space and the spatial economy) which are binding across provincial and national government operations
- There should be public participation regarding the planning and spatial implications of cities, towns and villages
- A small town development strategy should be put in place

Overall, the NDP suggests that a significant level of settlement differentiation does exist in South Africa. Consequently, it advocates for differentiated planning approaches and finance systems.
In addition to the above aspects, the NDP also argues for a national spatial framework in the following words: “Spatial policy seeks to coordinate and connect the principle decisions that create and shape places to improve their function. Spatial policy does not operate in isolation – unaided it cannot transform the country’s economic geography or promote growth. However, spatial policies can make a significant difference, especially when they are integrated with plans of tangible investment that are sustained over time and carefully adapted to the needs and opportunities of specific place”.

This national spatial framework should:

- Reflect a common vision
- Involve the public and private sectors and civil society organisations
- Articulate the responsibility of various government departments
- Provide broad principles for local and regional development
- Emphasise areas of national importance (including secondary cities)
- Promote the development of national competitive corridors and nodes, rural restructuring zones, resource critical regions, transnational development corridors and special intervention areas

6. Policy notes for South Africa

This final section aims to distil the above literature review into a number of key policy notes for South Africa.

1. Any intermediate city strategy should pay attention to the functional role of secondary cities. This functional role could be the contribution of a specific city to national strategic importance or international competitiveness, its role in economic growth or rural development or another functional contribution. Regardless of what specific functional role a city might take on, the important point is that the function’s risk factors and future potential should be articulated. In this respect, Bolay and Rabinovich argue that: “Urban stakeholders will have to be educated and made aware of these issues, regardless of the sector they represent, so that they may understand not only the potential of ‘intermediation’ (which is the aspect they most readily assimilate in terms of economic projects) but also its risks. In fact, risks are often ignored, whereas they should serve diagnostic purposes and help in the realistic planning of projects.”

2. Any process of identification of intermediate cities should consider functionality within the settlement hierarchy. This may mean that certain urban areas that are smaller in terms of population might be considered because of functional reasons.

3. Urbanisation is an important development process, and intermediate cities have a potentially important role in future urbanisation and development.

4. Rural development policies in South Africa should consider the strategically important role of smaller and intermediate urban areas.

5. Although South Africa is politically and administratively decentralized, the main funding system remains largely centralized. This raises the fundamental question of whether the appropriate environment has been created for the development of place-based strategies.

6. There are a number of key lessons regarding how to select intermediate cities. The literature suggests that a self-selection process is preferable to a pre-determined approach. Current economic and population trends should be identified and assessed. In addition to current trends, attention should be devoted to understanding historical factors and aspects that may play a role in the future.
7. The impact (both intentional and unintentional) of national policies on intermediate cities requires some attention. Although some reference to this has been made in respect of small towns, it is an under-researched topic in respect of intermediate towns.

8. Increasing globalization makes intermediate cities vulnerable to volatile international markets and increases pressure to successfully plan for this volatility.

9. Intermediate cities dependent on natural resources are especially dependent on the boom-bust cycles of international resource prices. These cities probably require a very specific planning approach.

10. Spatial targeting of intermediate cities requires a long-term approach and will be subject to significant policy tensions.

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