

VU Research Portal

Recent business transformation in intermediate-sized cities in South-Africa

Geyer, M.; Coetzee, H.C.; du Plessis, D.; Donaldson, R.; Nijkamp, P.

2011

document version

Early version, also known as pre-print

Link to publication in VU Research Portal

citation for published version (APA)
Geyer, M., Coetzee, H. C., du Plessis, D., Donaldson, R., & Nijkamp, P. (2011). Recent business transformation in intermediate-sized cities in South-Africa. (Research Memorandum; No. 2011-5). FEWEB, VU University.

General rightsCopyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
 You may freely distribute the URL identifying the publication in the public portal?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl

Download date: 23. May. 2021

Recent business transformation in intermediate-sized cities in South Africa

Research Memorandum 2011-5

H.S. Geyer

H.C. Coetzee

D. du Plessis

R. Donaldson

P. Nijkamp



Recent Business Transformation in Intermediate-Sized Cities in South Africa

- H. S. Geyer, CRUISE, Department of Geography, Stellenbosch University, Matieland 7602, Stellenbosch, South Africa; e-mail: hsgeyer@sun.ac.za
- H. C. Coetzee, Research Unit for Environmental Sciences & Management, North-West University
- D. Du Plessis, CRUISE, Department of Geography, Stellenbosch University
- R. Donaldson, Department of Geography, Stellenbosch University
- P. Nijkamp, Department of Economics, VU University, Amsterdam.

ABSTRACT

Significant spatial and structural changes have occurred in the business sector of intermediate-sized cities in South Africa since the mid-1990s. These changes can largely be ascribed to responses of entrepreneurs, from both formal and informal sectors, to the profound changes that have taken place in business markets in those cities over the period. This paper addresses the question how the business environment has changed in three rather representative intermediate-sized cities in the North West Province of South Africa since the demise of apartheid and what economic, environmental, social and political key factors may have played a role in those changes. It analyses changes in the spatial distribution of formal and informal businesses in those cities and, based on that, identifies general trends in the structural changes that have become apparent in them since the political transition. Some general conclusions are drawn from our survey results.

INTRODUCTION

The global understanding of political and economic restructuring is based on the shift from a Fordist to a post-Fordist industrial organisation in the developed world and from a largely exploitational to a more participatory industrial relationship between the developed and developing world. Internationally, this process of de-industrialisation of the developed world, exacerbated by the recent global recessionary conditions has led to social polarisation, homelessness and unemployment in many less favoured regions. Although many developing countries have been benefitting hugely from post-Fordism – some in the Pacific Rim and

Central Asia recording exceptionally high levels of industrial and economic growth and employment – South Africa has not benefitted as much. This, together with factors such as international dis-investment during the early 1990s and record levels of rural-urban migration of black people after democratization, has led to a higher dependency of lower income households on the informal economy. This trend as such is not new, but the implications for South Africa are prominently different from other parts of the world.

The economic restructuring in Europe over the last decades has been particularly characterized by a shift in employment from large firms in the formal sector to selfemployment in small firms in both the formal and informal sectors. Since immigration (legal and illegal) has picked up in an expanded Europe, the involvement of immigrants in this process has become particularly visible (Baycan-Levent et al., 2003 and 2006; Chaganti and Green, 2002; van Delft et al., 2000; Fairlie, 2004 and 2005; Masurel et al., 2002; and Zhou, 2004). An almost identical process has taken place in South Africa over the past fifteen years. Since the first democratic election was held in 1994 the South African economy has undergone significant structural changes. As a result of affirmative action there has been a marked shift in the racial composition of the work force in the commercial, industrial and service sectors, favouring the previously excluded population groups¹. This, as well as the marked increase in rural urban migration on the one hand, and the inflow of international migrants to the country on the other hand, brought about a nominal increase in the numbers of people who could no longer find gainful employment in large firms. Cities of all sizes are affected resulting in an increase in self-employment amongst all population groups in small firms in both the formal and informal sectors. The increase in informal activities in central city areas has radically changed the character and sense of place of many cities, especially those in the northern parts of the country. It is the purpose of this paper to investigate what role the informal business sector played in the structural changes that took place in the urban economies of South Africa in general, and in the economies of three of its intermediate sized cities from 1985 to 2003 specifically.

THE INFORMAL SECTOR

Although the informal sector has always been a prominent feature in the economies of urban areas all over the world, the term was only officially used for the first time in the early 1970s (ILO, 1972; Hart 1973; Castells and Portes, 1989). A chief characteristic of businesses in the

_

¹ Previously excluded persons are referred to as black and include the previous racially categorized African, coloured and Indian groups.

informal sector in the developing world is that they are not officially licensed, enumerated and taxed by the government. Although the street traders are visible, the informal sector is for the most part quite invisible. Due to regulatory and control mechanisms that apply to the formal sector it is normally easer to access the informal sector. However, due to its informal nature it does not always enjoy advantages such as easy access to credit and the restriction of competition through tariff schemes (Meier, 1989). Typically, a large proportion of businesses in this category tends to be family-owned. Operations are also often smaller in scale and more labour-intensive than formal businesses (Timothy and Wall, 1997). More women generally tend to participate in the informal economy than men and the former are also over-represented in low-income activities (Sethuraman, 1999; Rogerson, 1996). Males tend to have larger scale businesses than females and they are also more active in non-food product lines. Even within particular product lines males and females tend to concentrate on different elements of the trade (Sethuraman, 1999). When technology is used, it is often adapted to suit local circumstances and needs. Skills that are used are often acquired outside the formal schooling system. Although local structures sometimes exist to regulate elements of the sector, a wide spectrum of the activities normally remains largely unregulated. There is also usually an oversupply of most product lines resulting in fluctuations in prices according to competition and the time of day. Packaging and scales of sales of a wide range of products are also standardized according to the needs and buying power of the clientele, which, in the developing world, are usually the poor. Due to small markets and the over-supply of products the quality and quantity of sales may vary significantly, often resulting in low profit margins and irregular earnings (Meier, 1989; Timothy and Wall, 1997; Penouil, 1981).

Although these characteristics apply to a wide spectrum of informal businesses in urban areas in South Africa, significant changes have taken place in the sector since the end of apartheid. The most important element of change lies in the way in which the sector is being viewed by the post-apartheid ANC government. While street trading was not allowed in the former white residential areas and CBDs during the years of apartheid, informal activities became a common feature in such areas since the early 1990s. The desegregation of residential areas and deracialization of business space created opportunities for the underclass to engage in the informal sector in these previously excluded areas (Donaldson and Van der Merwe, 1999).

The greater leniency of the current government towards the informal sector - a change in attitude which already started towards the end of the previous regime's period of authoritarian

control – has led to a large escalation in street trading in or central business districts from which they were previously barred. Rogerson (2008: 238) however states that 'recent observers question whether life on the street has changed much from the days of strict apartheid governance of street traders', especially if one looks at the Johannesburg metro Police's informal trade handbook. Nominally, the blacks always dominated the informal urban sector, even during the apartheid era, but at that time trading in the sector occurred almost exclusively in black neighbourhoods. But when the previous regime started lifting influx control measures on blacks, especially after 1990, local authorities followed suit. For the first time informal business activities were allowed in central city areas, a situation that would eventually dramatically alter the character and appearance of city centres in South Africa. Central city areas that were once economically dominated by white traders, while nonwhite people were only allowed to passively participate as shoppers, have now been transformed into areas where large numbers of (mostly) black informal traders are sharing trading space with formal traders. At the same time most Indian traders that were once banished to Indian shopping centres somewhere on the fringes of city centres or even fringes of urban areas, have also moved back to the central areas. This was a 'vacuum' period when laws still existed which prohibited black business ownership in areas that were still officially classified as 'white'. After 1994 this vacuum was replaced by local authorities that increasingly allowed informal vendors to do business in central city areas.

Subsequently, two other components which had not existed on such a large scale previously have also been added to the informal sector. Significant numbers of whites, most of them people who lost their jobs after the political transition, as well as black foreigners who have been moving to the country in increasing numbers since the end of the 1990s, have now entered the sector. This added new vitality and variety to the sector.

Initially, the relationship between the formal and informal sectors was merely seen in terms of the traditional-modern division that existed for many years in developing countries. The westernised modern sector was regarded as the source of dynamism and change in those countries and it was the perception that this sector was most likely to keep on growing while the traditional (informal) sector would slowly wither away (Meier, 1989). Based on observations made over the last decade of political change in South Africa, at least three elements of the latter view on the relationship between the formal and informal sectors in the country seem to be questionable: (i) the importance of the informal sector relative to the

formal sector, (ii) the simple traditional-modern stereotyping of the two sectors, and (iii) the ability of formal businesses to keep on doing business-as-usual in central city areas where the informal urban economic sector has gained a foothold.

During apartheid large numbers of semi- and unskilled people were prevented from migrating to urban areas through racially biased influx control measures (Geyer, 1989a). Despite the measures the numbers of people who managed to migrate from Bantustans to urban areas consistently exceeded the ability of the formal business sector to provide sufficient employment to fulfil the need. After the abolishment of influx control measures rural-urban migration increased significantly, resulting in a huge escalation in unemployment rates. Unemployment in the country jumped from 31.2 per cent in 1993 to 35.6 per cent in 1996 and from then on it kept on rising to 38.8 per cent in 2005 with the highest level at 41.8 per cent in 2002 (Kingdon and Knight, 2009; 2004). Not only large urban agglomerations were hard hit by the inflowing migrants, urban areas of all sizes, even small towns and villages, gained large numbers. The latter was an indication of step-wise migration – people who became redundant on farms moving to the nearest towns in rural areas. But most people, especially those who had lived in Bantustans, directly moved to larger intermediate-sized cities or to metropolitan areas. To make ends meet many of these people had no alternative but to enter the informal urban sector.

After apartheid the new government showed much greater leniency to traders in this sector than any government before. An important reason for this was because it seemed to be the only sector with the potential to make significant inroads into the growing numbers of unemployment in urban areas. However, factors such as (i) the general over-concentration of the informal urban sector on a relatively narrow range of agricultural and household products, (ii) most of these products directly or indirectly obtained through formal economic channels, (iii) very low profit margins as a result of the over-supply of products, (iv) a general lack of civil infrastructure, and (v) a general lack of knowledge of existing organizational structures in the private, non-governmental and governmental sectors that support informal economic activities, keep on limiting the potential of the sector to accommodate larger numbers of the current urban unemployed. These are widely recognised problems and much work has been done over the years to better understand the composition, functioning, and shortcomings of the informal sector in the country (Skinner, 1999; 2000; Mayrhofer and Hendriks, 2003;

Mahadea, 2002; Ismail and Horn, 1997; Rogerson, 1996; Preston-Whyte and Rogerson, 1991).

The transition period to democracy contributed to an overemphasis in political negotiations at the national level on local issues. As a result, little attention was paid in the early 1990s to the new Business Act of 1991 (Act No. 71 of 1991) as amended. The Business Act 'abolished licensing boards and all licensing requirements in some 76 business categories' and was seen as 'a significant step in the development of the informal sector' (South African Institute of Race Relations, 1991/92: 170). The Act provides a flexible framework for local governments. It gives them a choice, basically, between regulating the sector or not. It is expected that most local authorities will formulate related by-laws according to Section 6A1a. The Act (Section 6A1) provides that powers be given to local authorities to make by-laws regarding: (1) the supervision, control, restriction and prohibition of the carrying on of the business of street vendor, pedlar or hawker; (2) Sections 6A1b and 6A1c specify that no local authority shall restrict such businesses to 'specific hours or places; or specific goods or services', nor that such persons need to obtain permission of some sort (e.g. a licence or permit); (3) Section 6A1d provides authorities with the power to enforce any formulated by-laws (Business Act, 1991: 9). There are contrasting opinions among local municipal structures responsible for formulating informal economic policy on the general good of these changes. Some view economic informality in cities as problematic. Others see it as positive (Dewar, 2005).

In the following sections we outline the general trends in the redistribution of businesses of cities in South Africa since the demise of apartheid in the mid-1980 started. We use the empirical evidence of spatial changes that have occurred in Potchefstroom, Klerksdorp and Rustenburg, three intermediate-sized cities in the North West Province from 1985 to 2003 as case studies. The paper starts with a general overview of economic conditions in urban areas during the late apartheid era. Then, using telephone data, the authors show how the locations of formal businesses have changed in the central business areas of the three cities from 1985 to 2003. The paper concludes with the identification of general trends in the structural changes that have become apparent in the cities since the political transition.

ENTREPRENEURSHIP CHANGE DURING THE POLITICAL TRANSITION

Until the end of the 1980s a typical 'colonial' relationship existed between black and white local governments. The latter were the centres of economic and political power while the former remained economically dependent (Davenport, 1991). Through the policy of

apartheid, blacks were particularly disadvantaged and as a result the levels of entrepreneurship amongst population groups became severely skewed over the years. Numerous laws and concealed measures, all of them well-known by now, were created to curb the influx of blacks to urban areas and hinder their entrepreneurial development in white dominated areas while the paths to industrial and commercial development were much less obstructed for the whites (Christopher, 1997; Geyer, 1989a). One important way of achieving these goals of obstruction was to create an urban business environment which effectively prevented black entrepreneurs from developing a formal business culture within their own communities. Unless permits could be obtained – which were strictly controlled by government in terms of numbers and types of businesses - entrepreneurs always had to participate through the informal economic underground in black townships. This situation was achieved through legislation such as the Group Areas Act of 1950 which made it possible for authorities to technically distinguish between black and white controlled urban areas. Bantustans and designated black residential areas fell in the former category. In the 'white' group areas, white local authorities had executive powers while black urban committee members only served in an advisory capacity (Cameron, 1991; Cloete, 1986). By and large the international community – with the UN in the forefront – reacted by imposing wide ranging economic sanctions on the South African government.

These power relations played an important role in shaping business conditions in the urban areas of South Africa. First, protectionism, assisted by the UN-led economic sanctions, caused the blossoming of the internal local white business community. Initially, during the 1960s and early-1970s, mostly white small businesses flourished. Later on in the 1970s, the mushrooming of local franchises led to an increase in bigger business such as chain stores and, at the same time, a decline in small single-owner businesses, especially the number of small wholesale businesses. Conducting businesses by blacks in white-controlled areas was only allowed under very constricting conditions, and only in designated black residential areas. And those who had the freedom to conduct business in the Bantustans did not have the advantage of gaining experience by means of the demonstration effect or honing their skills within a competitive business environment. The result of the many years of economic repression can clearly be seen in Fig. 1 (Geyer, 2009). The figure shows how much more developed the urban centres in former white-controlled areas were than those located in the former Bantustans.

Fig. 1 around here

Gradually, the effects of the economic and cultural sanctions against white South Africa became so overwhelming that the South African government was forced to concede more power to black local authorities until full local authority status was granted by 1982 (Cloete, 1986), however these authorities soon turned out to be merely puppets of the apartheid regime, and were widely rejected by the black communities (Shubane, 1991). Boycott campaigns intensified, and by the end of the 1980s the ravages of unrest were such a dominant feature in urban areas throughout the country that emergency regulations were needed to maintain control. At that stage the State realized the need for the participation of blacks in local government, which marked the final acceptance of the need for the unification of South African cities (Shubane, 1991). These changes also had an effect on the urban economies.

As South Africa moved into a new democratic era in the early 1990s, and the country started benefiting from its re-admittance into a new competitive global economy, an increasing number of multinational franchises started locating in the country. The result was an increase in production lines and in the variety of outlets. Many local small businesses began tapping into new production lines that became available in the global market.

When the political transition started the South African government began introducing new legislation that provided a uniform, effective and efficient framework for spatial planning and the cultivation of entrepreneurship (South Africa, 2001). The ultimate goal of the evolving post-apartheid legislative and policy framework was to develop a set of principles and norms that will create a new vision for urban development in the country. These principles and norms include: sustainability (i.e. striving for a harmonious relationship between the built and natural environments), equality between people, efficiency in the use of resources, integration of diverse elements of land use, and fair and good governance. The planning system is, therefore, being promoted as a policy-led, normative system in which incrementalism and minimalism are pivotal principles. The former informs and builds on the strengths of the evolution of planning outputs and instruments as the planning practices change over time and the latter acknowledges the limitations that the government face and places an imperative on the government to create space for the operation of other sectors of society, especially, the private and non-governmental sectors (South Africa, 1999; 2001).

Despite these positive objectives a decline has been experienced in employment opportunities in both urban areas and the commercial farming sector during most of the 1990s. Continuing changes in the land reform process, coupled with new permanent tenure models for farm workers which are not productivity related, cause uncertainty within the established commercial farming community. Conditions tended to undermine the social and economic stability within the sector, resulting in a growing reluctance amongst commercial farmers to commit to labour intensive farming practices. This gave rise to unprecedented levels of evictions of farm workers on the one hand and on the other hand the consequential increase in rural-urban migration. Soon, this resulted in extreme conditions of over-urbanization in virtually all the urban areas in the country (Geyer and van der Merwe, 2002; Geyer 2003).

THE CHANGING ECONOMIC MORPHOLOGY OF THE CITIES

Unemployment, underemployment and misemployment, features that are generally associated with overurbanization in developing countries (Gugler, 1990), have become commonplace in cities in South Africa. In a chain of cause and effect, several factors are responsible for conditions of over-urbanization in South Africa over the past fifteen years. The first was a distinct and observable increase in the rate of black urbanization after the scrapping of the influx control measures in 1986.

By the time the apartheid plan was abandoned, but especially after the release of Nelson Mandela from prison in 1990 the stream of rural-urban migrants turned into a flood. Between 1996 and 2001 for instance, Gauteng's population alone increased by approximately 20 per cent. This represents an increase of 1 488 755 people, 35 per cent of the total increase of the population in South Africa as a whole over this period (StatsSA, 2001). Large new informal black residential areas sprang up almost overnight, most of them on vacant land on the outskirts of towns and cities (Geyer, 2002). This typically resulted in a morphological urban structure in which large numbers of poor people settled on the outskirts of the towns and cities, often far removed from their potential areas of employment. In metropolitan areas significant numbers of these new migrants moved into older suburbs in central areas where urban decay had already, or was beginning to set in. In certain cases, parts of central areas which did not yet show signs of degeneration were specifically targeted, causing premature urban deterioration there. Examples are Hillbrow, in Johannesburg and Sunnyside in Pretoria (Donaldson et al, 2003). Generally the in-migration of newcomers to central city areas changed the demographics of these cities (Morris, 1999; Beavon, 2000). This is part of an

urban restructuring process that inevitably had to happen in a democratising South Africa. City populations were now beginning to reshape the residential and entrepreneurial composition of parts of the cities that they were denied before.

In his analysis of desegregation and deracialisation, Saff (1994) conceptualises the integration of urban space exclusively as residential space. A parallel can be drawn between his conceptualisation and what is presented here in terms of business space. Since street traders are generally engaged in such activities as a form of subsistence, it can be argued that, during apartheid, the regulation of street traders was primarily based on race. Deregulation of such activities, therefore, has resulted in the deracialisation of the CBDs. However, as Saff (1994: 382) points out "while spatially the racial impress of the apartheid city is changed by this process, it has little effect on [street traders of all previous racial categories] as they are excluded from access to virtually all facilities and social institutions" within the former whites-only CBD. According to Dewar (1991: 96-97) "most self-generated economic activity undertaken by the urban poor takes place in peripheral, poorly located parts of the city and is therefore marginalised from the outset." With the subsequent reregulation of the sector, Saff (1994: 383) anticipates that the process of desegregation will be accomplished because "the challenge facing the urban poor will be to translate the deracialization of space into genuine democratization of local governance and also the desegregation of, and equal access to, the resources and facilities in a given CBD." The aim, therefore, is to desegregate business space, which should be accomplished by means of formulating new street by-laws, and local government policy on the informal sector in general, aimed at providing facilities, access to credit, and infrastructure similar to that enjoyed by the formal sector.

There is a longstanding record of a strong relationship between high levels of rural-urban migration of lowly skilled people in developing countries and high rates of unemployment, underemployment, poverty and crime in host cities due to the inability of urban markets to absorb the expanding numbers of job seekers (Gizewski and Homer-Dixon, 1995; Gilbert and Gugler, 1992). Due to rural-urban inequalities the same scenario has been playing itself out in South African cities over the past two decades as well. To be able to survive many of these new migrants are forced to enter the informal sector (Maharaj, 2004; Blaauw, 2005). The increasing informality in central city areas has changed the character of entire or parts of CBDs, especially in cities in the northern and eastern parts of the country. In such cases the outcome was usually a visible decline in the number of higher income shoppers at first,

followed by the dwindling of upmarket business and eventually capital (mostly 'white') flight from such areas.

Although indications are that some informal street businesses are owned by whites but operated by foreigners², especially those that make use of mobile operators selling goods at main intersections and main collector roads, stationary street trading in central city areas and in historically black neighbourhoods is still predominantly black owned. Local people usually dominate in the informal sector but significant numbers of foreigners have also entered the sector in recent years – in certain areas in sufficient numbers for them to cause a threat (Maharaj, 2004).

By and large, vendors operating in the informal sector are highly dependent on the formal sector for their trading stock. Most products that are put on offer are obtained through the formal sector, a large proportion of them inexpensive products originating from the Pacific Rim. Unless informal markets are formed which collectively are able to attract significant numbers of clients, individual street traders that conduct their business on the sidewalks in CBDs are usually dependent on the clientele that are passing by on route to somewhere else for business. As a consequence informal businesses tend to concentrate along streets that connect public transport hubs with prominent business streets and places of work.

The changes described above are indicative of what was needed for South Africa to adjust from a dispensation in which a significant part of the society was excluded from meaningful participation to one in which more people were given an opportunity to express themselves socially, culturally and economically. The increase in informal trading in central urban areas caused a whole range of interesting reactions and counter reactions within different sections of the business communities of urban areas. The most notable of these were the waves of relocations of businesses in the formal sector during the early to mid-1990s. Six clearly distinguishable trends can be observed.

First, formal businesses that were located in areas where informal trading increased began to focus more on the lower ends of the market. They started offering cheaper product lines, many of them using the sidewalks in front of their businesses as part of their display areas to prevent informal merchants from occupying this space. Mimicking the informal sector's style of trading was one way in which formal businesses in these areas managed to recapture some

11

² This is only a tentative observation at this stage. Informal discussions with many vendors point to the fact that many of them do not own the businesses, they only operate them, while the owners (some of them white, many of them foreigners) are elsewhere for considerable periods of time during the day. Operators are often reluctant to discuss the matter openly, however.

of the market space that was taken over by informal traders – a phenomenon that is not unique to South Africa (Brown and Connell, 1993). Although the placing of wares on sidewalks in front of shops is commonplace in black townships this was not allowed in what was regarded as the "white" parts of the central city areas. There, urban planning regulations that prohibited the use of commercial use of sidewalks in front of businesses, were strictly applied while a blind eye was cast to transgressions in what were regarded as the "black" parts of cities.

Closely associated with the above trend has been the upsurge in growth of new or the upgrading of existing security oriented shopping malls in central city areas. Many of these malls targeted the higher income market and tended to develop in what was regarded as the "safer" parts of central business areas. This was clearly an attempt by the entrepreneurial community to lure back higher income shoppers who have started to avoid central city areas. Closely linked with this are major strategic initiatives by cities councils in recent years aimed at regenerating inner cities and attracting investment (South Africa, 2009).

Third, certain businesses tended to relocate in older residential areas on the fringes of central business districts, i.e. the residential zone of urban decay along the outskirts of city centres. Businesses that targeted these areas were usually those that were well adapted to house conversion conditions such as professional and commercial services. In the beginning of the transformation process this business sprawl was often limited to only one or two blocks around the city centre, but in recent years the spread has become wider in many cities. An overwhelming majority of these businesses tend to move to refurbished residential buildings, although redevelopments on re-zoned residential stands also do occur. There are several reasons for relocation. One is the changing business environment that led to the deterioration of the client base of existing businesses. Other reasons revolve around financial security. Due to the unattractiveness of residential areas along the urban fringe for continued residential use, rents of these houses are usually lower than in commercial buildings inside the city centres, even when the rates in the latter are deflated. Homeowners in these zones also benefited from this trend because they now based their rents on commercial demand compared with residential rates previously, a trade-off that also applied when they sold their properties. Other important reasons were: the possibility of creating more appropriate individualistic outward appearances in buildings; the creation of cosy, modern, periodical or international internal ambiences that suit the particular character of businesses; the possibility of providing more personal attention to customers; and the provision of safe parking close-by.

A fourth trend, closely associated with the previous trend, was the transformation of strips of residential areas along main collector roads leading towards central business areas or connecting shopping centres, into business corridors. Intra-urban axial forces play an important role in linear development along major corridors in cities (Geyer, 1989c). The tendency of certain specialized commercial and service functions to relocate from inside city centres to locations along major traffic arterials in South African cities has increased in recent years. Most of the factors that cause economic sprawl towards the urban fringe also apply to businesses that relocate to transport corridors. Two additional factors that cause this phenomenon are: the necessity for these sites to be visible from major arterials and their need for easier access by a larger number of vehicles from such arterials. As a result development of this nature often occurs along major collector roads that connect large residential areas and existing business areas or shopping centres.

The upsurge in the development of new up-market shopping centres at suburban (even exurban) locations that are generally regarded as safer and economically more viable locations for businesses catering for the higher income market is also a relatively new phenomenon. In terms of timing this upsurge ties in well with the capital flight that has occurred from negatively affected central city areas. Indications are that business locations in securely designed shopping centres in suburban and exurban areas are preferred to the traditional shopping streets in central city locations. It should be stressed, however, that businesses moving to inwardly designed shopping centres are not unique to post-apartheid South Africa. This phenomenon had already started to occur in the country during the 1970s when local franchises began to blossom as a result of protectionist policies during the apartheid era. The difference between what had happened during the apartheid era and what has been happening in South Africa since then lies in the mechanism that induced the process. During the 1970s and 1980s the development of shopping malls was almost exclusively economically driven. They were widely advertised as 'one-stop-shopping' facilities conveniently located 'around-the-corner' under one roof. Although the economic incentive for the development of security malls in suburban areas is still there, security has since become an important additional locational factor. The greater accessibility of businesses from people's homes in the suburbs, greater security for shoppers, sufficient safe parking close-by, the protection of shoppers against the elements, a variety of shopping opportunities, the entertainment value of malls, greater financial security for the tenant and the property owner, and the maintaining of a first world shopping atmosphere, seem to be playing a decisive role in the development of these malls. These are now being referred to as shopertainment.

Finally, the growth in home-based businesses opened up challenges for policy formulation in this regard. Whilst the illegal provision of commercial or industrial services such as motor mechanic works, electrical repair services, and hair dresser services has been a long standing phenomenon in poor white and black neighbourhoods during the apartheid era, the increase in highly specialized economic activities such as professional services, art galleries, specialized clock repair services, computer services, specialized jewellery sales, and small scale production requiring high skills deep inside higher income residential areas is an expanding phenomenon. These relocations are possible because such activities often target a relatively small but lucrative market. For such businesses security is often a priority, but accessibility is not. Although a few businesses of this kind were always found in high income neighbourhoods, the increase in their numbers in upmarket neighbourhoods, many of them informal in character, is something new. A much larger proportion of the products that are put of offer in this upper layer of the informal sector are sophisticated products aimed at the higher income market. Also, a much larger proportion highly qualified whites are now entering this market than at any time before³. However, home-based businesses have been a prominent feature in the black townships since apartheid. An approximated 355 000 of these businesses currently operate across townships and inner city areas in South Africa. They financially sustain an estimated 13 per cent of the total population (Rust, 2006).

STRUCTURAL CHANGE IN THREE INTERMEDIATE SIZED CITIES

Rustenburg, Potchefstroom and Klerksdorp are three intermediate cities located in the North West Province within a distance of 150km from Johannesburg (see Fig. 2). Due to their proximity to the latter they have strong functional linkages with Gauteng, the economic heartland of South Africa. According to the latest available official statistics (*Statistics SA*, 2007) the three cities had a municipal population of approximately 450 000, 125 000 and 385 000 in 2007 respectively. These figures refer to the entire municipal area under jurisdiction of the three local municipalities and thus include an area extending beyond the boundaries of the cities themselves. In the case of Rustenburg it includes approximately 30 satellite settlements mostly located within a 25 km radius from the city while the Klerksdorp

municipality includes the satellite towns of Orkney, Stilfontein, and Hartbeesfontein. The economies of Rustenburg and Klerksdorp are both dominated by the mining sector while Potchefstroom is well known as a small university city.

As a result of the increase in informal business activities the inner city areas of the three cities have undergone a considerable character change since the early 1990s. An analysis was done on the spatial redistribution of formal businesses in the central business areas of the three cities from 1985-2003. Changes that have occurred in the cities generally confirm the trends that have been referred to in the previous section.

Fig. 3 shows the spatial changes that have occurred in the commercial and service sectors in the central city areas of the three cities between 1985 and 2003. Signs of an increase in the number of businesses in residential zones surrounding the CBD cores, along corridors and in outlying nodes are chartacteristic features of urban change. A surprising finding in all cases in both years was that businesses in the commercial and service sectors seem to have significantly different micro economic locational requirements since large concentrations of the two sectors are rarely found in exactly the same locations in the city centres. Reasons for this are a matter that deserves further investigation. Other than that, the following general observations can be made: First, although commerce and services partially displayed different location attributes in 1985 and 2003, they were generally much more concentrated within the hearts of the CBDs in 1985 than in 2003. Second, although some punctuated service development had occurred in the cities by 1985, higher concentrations of this sector were found in the central business areas of the cities at the time. Now they are much more punctuated and dispersed. Punctuated development mostly occurs around the fringes of the CBDs – i.e. services penetrating the residential areas along the surrounding CBD-suburban contact zones - and in outlying suburban areas. 'Holes' appear now where significant concentrations occurred in 1985. Third, commercial activities are also less concentrated in the central areas of the cities currently than in 1985. Similar to the service sector, 'commercial holes' have also appeared in certain areas in 2003 where concentrations were found in 1985. Fourth, in the case of Potchefstroom city centre, the holes that have appeared in 2003 in areas where concentrations of services and commercial businesses still occurred in 1985 coincide with locations where concentrations of informal activities were found.

-

³ The development of a new security system for Internet transactions which was developed by a young man, Mark Shuttleworth, and a few of his friends in his parents' garage a few years ago (a product that was sold to an

Fig.3 around here

Based on the trends that are visible in Fig. 3 it is clear that there has been a general trend of deconcentration of formal businesses in the cities. Clearly, this has been caused by changing shopping conditions in central city areas. There has been a visible decrease in the number of high income shoppers in the areas accompanied by the closing down of businesses that used to cater for this market segment in the past. At the same time there has been an increase in informal business activities. The closing down of formal businesses or their relocation amounts to significant capital losses for central city areas – capital that traditionally served as the driving force behind sustained economic development in those areas in the past. If one were to accept that these changes were necessary for the sake of creating new 'African urban space' in cities, then a laisser-faire approach should be followed. However, if local authorities want to attract higher income shoppers back to city centres – something that seems to have become a priority in most larger cities as soon as South Africa was nominated as the 2010 soccer world cup host – then a number of things need to happen. First, the growing feeling of despondency amongst many formal business owners in city centres in general needs to be corrected, something that will only happen if the quality of the environment and trading conditions that currently prevail in parts of central areas could be improved. This means that trading conditions for the informal sector needs to be significantly improved. Serious attention needs to be given to the redesign and gentrification of CBDs to address the needs of both formal and informal merchants in central city areas.

Under this assumption, part of the solution has to lie in ways in which we see the structure of the formal and informal sectors. Unless the informal market could be broadened through the widening of its range of products and the improvement of its marketing mechanisms, something that is a general limitation of the informal sector in the developing world (Timothy and Wall, 1997; King, 1996), the ability of the informal sector to accommodate much larger numbers of the unemployed in the South Africa could easily be over-estimated. As will be demonstrated later on, both the private sector and local governments will have to look at ways in which the formal and informal sectors could be brought closer to one another for them to stand a realistic chance of accommodating significantly larger proportions of the country's current urban unemployed.

To be able to provide a livelihood to more of the unemployed in the country changes seem to be necessary in the informal as well as the formal sector. On the one hand there is a need for changes in the perceptions amongst certain sections of the formal sector about the composition of the informal sector worldwide, but particularly in parts of Africa. The general view that the informal sector mainly consists of petty traders, street hawkers, and shoeshine boys (Meier, 1989; King, 1996) does not apply to the informal sector as a whole any longer. It only applies to a relatively small range of activities in the sector. Also the traditional dichotomous characterization of developing economies no longer accurately describes the range of businesses that are currently found in the formal and informal sectors in many parts of the developing world.

Both views represent an over-simplification of the informal sector's composition in this part of the world, and perhaps even worldwide. Based on observations made by Penouil (1981) in his analysis of the informal sector in the Ivory Coast, one can say that a simple modern-traditional division of the economy of South Africa is not realistic since sizable proportions of its population are engaged in enterprises that contain characteristics of both. In Africa, Penouil (1981) found that traditional forms of business were often abandoned or adapted to tie in with changing demands in the market in the modern economy, with the understanding that traditional methods of production and trading could not match the standards of efficiency and organization of enterprises in the modern sector. Such transitional activities seem to fit comfortably in-between the traditional and the modern urban economic domain. A more applicable view of the informal sector is that it consists of at least three layers: traditional, transitional, and semi-formal activities and that it forms part of the lower levels (Geyer, 1989b) of a what could be regarded as a continuum of business activities from the most traditional and survivalist in the informal sector to the largest, technologically most sophisticated formal businesses in the formal business domain (Fig. 4).

Fig. 4 around here

Fig. 4 distinguishes between the sizes and types of businesses, their sectoral reach, levels of sophistication, locational preferences, and preferred ways of communication within the business sector as whole, and at the same time shows the (potential) overlap between the

informal, formal and intellectual business sectors from the primary to the pentanary⁴ sector. It is factors such as the way in which businesses are continuing to be conducted in both the formal and informal sectors that keep the two sectors from bridging the void that continue to exist between them in the developing world today. The increase in informal businesses in traditional formal business areas, bringing with it what is often perceived by the formal business sector as inferior products, unfair competition, unethical conduct, and unsanitary conditions, undermine their acceptance inside formal business districts. Because of this many of the traditional customers of formal businesses stay away causing them to start struggling financially. In reaction, formal businesses often tend to mimic informal business practices to survive. In areas where the informal sector have increased they tend to start selling product lines that are also sold by informal merchants and tend to move products out of display areas inside shops onto sidewalks in front of their premises. Entrepreneurs who are unwilling to make these changes normally struggle to survive and have no choice but to move to upmarket business areas elsewhere in the cities where they can continue their former business practices. It is factors such these that could create the impression that the informal sector is more resilient and competitive than the formal commercial sector and could be the reason why the formal sector is waning in parts of the cities in South Africa.

It, therefore, seems as if there are three ways in which the informal sector could be changed to enable it to play a more significant role in providing a livelihood to a larger part of the unemployed in South Africa: (i) recognizing the inherent layered structure of the informal urban sector, (ii) focussing on ways in which infrastructure could be provided for the upper layers of the sector to enable them to mutually coexist with the formal sector inside formal business districts, and (iii) finding ways in which linkages between the formal and informal urban sectors could be maximized to the benefit of both sectors. In its current form, policies that are designed to laterally expand the informal sector could quickly lead to over-exploitation which, in turn, could result in large numbers of vendors offering similar goods of similar quality at the same location and at similar prices, leaving most of the vendors with barely enough income to survive.

In urban South Africa the informal sector is mostly local oriented. However, there is significant scope for the internationalization of informal activities, i.e. informal businesses

_

⁴ The pentanary sector refers to economic activities that predominantly serve the human imagination and intellect. The sector mostly lies within the new information, creative and communication economic realm

having some partners located abroad while others operate locally. The Tongan informal business community which is largely dependent on partners abroad is a typical example of the potential that the internationalization (globalization) of the sector holds for expansion. Brown and Connell (1993) identified four typical phases of evolution of the internationalization of the sector in Tonga: First, cash is remitted from relatives working abroad for the purpose of family maintenance. Later on the relatives start sending goods instead of cash. The principal purpose of this switch is to allow the recipient to sell the goods in the local market to earn additional income. The recipients tend to remain committed operating in the informal sector and income earned is still used primarily for purposes of family maintenance at this stage. During a more advanced stage, the goods are now becoming the means for further accumulation and a source of income for investment in the domestic economy. Finally, the proceeds from the remitted goods are reinvested in the domestic economy in order to produce export goods that are then sent to the relatives abroad to be sold there. One can see how the activities acquire more and more features of the formal sector as the process unfolds. This process holds enormous potential for economic development in South Africa.

To improve conditions for job creation in the informal sector, generally, however, it is necessary to strengthen, expand, and more fully exploit the upper layers of the sector. For this to happen a distinction needs to be made in the provision of urban infrastructure between the upper and lower layers of the informal sector, structurally and in terms of location. Space has to be provided for the provision of facilities that suit the informal sector's particular trading practices and significantly improve the quality of the environment in which informal merchants do their business. This could contribute to the creation of a more conducive environment for the formal sector in central city areas. Second, the range of commercial, service and manufacturing activities in the informal sector should be broadened. This should increase the likelihood of linkages between the formal and informal sectors and also bring the two sectors closer together, one of the likely reasons why there is a greater degree of synergy between the two sectors in cities in Central and South America (Funkhouser, 1996) than in South and Southern Africa. It is noteworthy that these policy lessons are somewhat similar to policy strategies for migrant entrepreneurs in North-American and European cities. Also there, we observe a multi-layered structure, for which the main challenge is to develop breakout strategies at the interface of formal and informal business activities (Van Delft et al, 2000).

CONCLUSIONS

The informal business sector is gaining importance as a legitimate component of urban economies all over the world. Informal businesses with a 'Third World' look now appear in cities in Western Europe and the United States on a scale that was unheard of before. Traditional Mexican street traders gradually infiltrated the American urban environment and are now doing business on a large scale in some cities. In Western and Southern Europe – France, Italy, Spain – African street trading is also becoming more and more visible. While the phenomenon is being resisted in certain circles, some local authorities there are welcoming them.

Business transformation has also been happening in cities in South Africa over the past two decades. Since the late 1980s, but especially after democratization the government has become more lenient towards informal street traders. This has led to a complete transformation of some inner cities. The transformation has become so dramatic in the northern and eastern parts of the country that certain central cities or parts of them can now truly be regarded as 'Africanized spaces'. Although dramatic, this change was necessary to provide space for a section of the entrepreneurial population of South African cities that was denied to them during the apartheid era.

The increase in informality in city centres have brought about a whole chain reaction of business deconcentration in all the cities referred to above. Some of the businesses in the city centres had to adapt to changing market conditions. Others relocated, some to residential areas along the CBD fringes, others to residential areas along main collector roads connecting the CBD with other business nodes in outer lying areas, and others yet to suburban, even exurban locations. This tendency of business deconcentration has been confirmed in all the intermediate-sized cities that were investigated in this study. Examples of each of the different kinds of relocation destinations can be found in all the cases investigated.

An important conclusion that is drawn from this study is that when the underlying layered structure of the informal sector is considered, too much emphasis seems to be put on the differences between the formal and informal business sectors. If the layered structure of the informal sector could be exploited more fully, it seems logic to conclude that it holds considerable potential for diversification and, at the same time, the development of a more symbiotic relationship with the formal sector. If greater diversification could be achieved

more employment opportunities could be provided for the urban unemployed, and at the same time, a continuum of economic activities conceptually be created ranging from the most sophisticated firm operating on a global scale to the most modest traditional activity somewhere in a small village in a deep rural area.

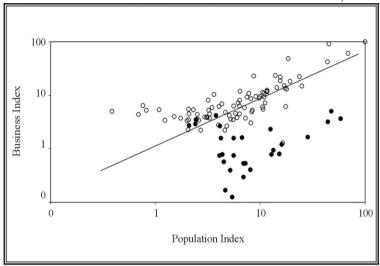
REFERENCES

- Baycan Levent, T., E. Masurel and P. Nijkamp (2003) Diversity in entrepreneurship: ethnic and female roles in urban economic life, *International Journal of Social Economics* 30(11): 1131-1161.
- Baycan Levent, T., E. Masurel and P. Nijkamp (2006) Gender differences in ethnic entrepreneurship, *International Journal of Entrepreneurship and Innovation Management* 6(3): 173-190.
- Beavon, K. S. O. (2000) Northern Johannesburg: part of the 'rainbow' or neo-apartheid city in the making? Mots Pluriels, No 13 April 2000, http://motspluriels.arts.uwa.edu.au/MP1300kbtext.html
- Brown, R. And J. Connell, (1993) The global flea market: Migration, remittances and the informal economy in Tonga, *Development and Change*, *24*, pp. 611 647.
- Cameron, R. (1991) Managing the coloured and Indian areas, in M. Swiling, R. Humphries, And K. Shubane (Eds.) *Apartheid City in Transition*. Oxford: Oxford University Press.
- Castells, M, and A. Portes (1989) World underneath: The origins, dynamics, and effects of the informal economy, in A. Portes, M. Castells, and L. A. Benton (Eds.) *The informal economy: studies in advanced and less developed countries*. pp. 11-37. Baltimore: John Hopkins University Press.
- Chaganti R. and P.G. Greene (2002) Who are ethnic entrepreneurs? A study of entrepreneurs' ethnic involvement and business characteristics, *Journal of Small Business Management* (40): 126-143.
- Christopher, A.J. (1997) Racial land zoning in urban South Africa, *Land Use Policy*, *14*, pp. 311 323.
- Christy, C. (1924) Big game and Pygmies: Experiences of a naturalist in Central African forests in quest of the Okapi. London: McMillan and Co.
- Cloete, J.J.N. (1986) Sentrale Regionale en plaaslike owerheids-Instellings van Suid-Afrika. Pretoria: Van Schaik.
- Davenport, R. (1991) Historical background of the apartheid city to 1948, in M. Swiling, R. Humphries, And K. Shubane (Eds.) *Apartheid City in Transition*. Oxford: Oxford University Press.
- Donaldson, R. and Van der Merwe, I.J. (1999) Deracialisation of urban business space: the case of street traders in Pietersburg., *Acta Academica*, 31(1): 140-166.
- Donaldson, R., Baehr, J. And Juergens, U. (2003) Assessing Inner City Change in Pretoria, *Acta Academica*, 3(1): 1-33.
- Fairlie R W. (2004) Recent Trends in Ethnic and Racial Business Ownership, *Small Business Economics* 23: 203-218.
- Fairlie, R.W. (2005) Entrepreneurship among Disadvantaged Groups: An Analysis of the Dynamics of Self-Employment by Gender, Race, and Education, *Handbook of Entrepreneurship* (S.C. Parker, Z.J. Acs and D.R. Audretsch, eds.), Dordrecht: Kluwer Academic.
- Geyer, H. S. (2009) Notes on spatial-structural change in urban South Africa the 1990s, *Journal of Urban and Regional Analysis*, 1: 27-39
- Geyer, H. S., (1989a) Industrial development policy in South Africa The past, present and future, *World Development*, *17*, pp 379-396.
- Geyer, H. S., (1989b) The integration of the formal and informal urban sectors in South Africa, *Development Southern Africa*, 6, pp. 29-42.
- Geyer, H. S., (1989c) The terminology, definition, and classification of development axes, The **South African Geographer**, **16**, pp 113-129

- Geyer, H.S. (2003) South Africa in global context: the view from above and below, *Annals of Regional Science*, 37, pp. 407-420.
- Geyer, H.S. and I. J. Van Der Merwe, (2002) Current perspectives on urban change in South Africa, in H.S. Geyer, (Ed.) *International handbook of urban systems: studies of urbanization and migration in Advanced and Developing Countries*, pp.525-561, Aldershot, Hants, UK: Edward Elgar.
- Gilbert, A. and Gugler, J. (1992), *Cities Poverty and Development: Urbanization in the Third World* (Oxford: Oxford University Press.
- Gizewski, P., and Homer-Dixon, T., (1995) Urban Growth and Violence: Will the Future Resemble the Past?, Part 1. Occasional Paper, Project on Environment, Population and Security. Washington, D.C.: American Association for the Advancement of Science and the University of Toronto.
- Gugler, J. (1990) Overurbanization reconsidered, in J. GUGLER, (Ed.) *The urbanization of the Third World*, pp.74-92. London: Oxford University Press.
- Hart, K. (1973) Informal Income opportunities and urban employment in Ghana. Journal of *Modern African Studies*, *11*, pp. 61-89.
- ILO, (1972) *Employment, incomes and equality: A strategy for increasing productive employment in Kenya*. Geneva: International Labor Office.
- Ismail, B. and Horn, G.S. (1997) The characteristics of and constraints facing the informal sector entrepreneur in a traditional coloured community. *African insight*, 27(2), pp. 124 130.
- King, K. (1996) Microenterprise: Macroeconomic environment: Revisiting Kenya's informal (jua kali) sector against the background of the formal globalising economy. *International Journal of Educational Development*, *16*(4), pp. 417–426.Louw, A., (1999) Comparing crime in South Africa's major cities: Results of four city victim surveys. African Security Review, 8(1), pp. 3-10
- Mahadea, D. (2002) Street vending in the Eastern Cape: survival strategy or conduit to entrepeneurship? *South African Journal of economic and management sciences*, 5(3), pp. 625 643.
- Maharaj, B. (2004) Global migration perspectives, No. 1, Immigration to post-apartheid South Africa. Global Commission on International Migration, 1, Rue Richard Wagner, CH-1202 Geneva, Switzerland.
- Masurel E., P. Nijkamp, M. Tastan and G. Vindigni (2002) Motivations and Performance Conditions for Ethnic Entrepreneurship, *Growth & Change.* 33(2): 238-260.
- Mayrhofer, A. and Hendriks, S. (2003) Service provision for street-based traders in Pietermaritzburg, KwaZulu-Natal: comparing local findings to lessons drawn from Africa and Asia. *Development Southern Africa*, 20(5), pp. 595 604.
- Meier, G. M. (1989) *Leading Issues in Economic Development*. 5th ed. Oxford University Press: New York. 560 p.
- Morris, A. 1999. *Bleakness & Light: Inner-City Transition in Hillbrow, Johannesburg.* Johannesburg: WUP.
- Moser, C. (1984) The informal sector reworked: viability and vulnerability in urban development. *Regional Development Dialogue*, 5:
- P F Blaauw (2005) The dynamics of the informal sector in South Africa a case study of day labourers in Pretoria. Paper presented at the biennial conference of the Economic Society of South Africa, 7 9 September, Durban, South Africa
- Penouil, M. (1981) Ivory Coast: an adaptive center-down approach in transition, in W. B. Stöhr, and D. R. F. Taylor, (Eds.) *Development from above or below? The dialectics of regional planning in developing countries*, pp.305-328. Chichester: John Wiley & Sons.
- Preston-Whyte, E. and Rogerson, C. (Eds.) (1991) *South Africa's Informal Economy*. Cape Town: Oxford University Press.
- Rogerson, C. (1996) *Rethinking the informal economy of South Africa*. Development Paper No. 84. Midrand: Development Bank of Southern Africa.
- Rogerson, C. (2008) Policy and planning for changing informal retailing in South Africa, Africa Insight, 37(4): 230-247.
- Rust, K. (2006) Home based entrepreneurs, Report for FinMarkTrust, Johannesburg.
- Sethuraman, S. (1999) Gender, informality and poverty: a global review. Washington: World Bank.

- Shubane, K. (1991) Black local authorities: a contraption of control, in M. Swiling, R. Humphries, And K. Shubane (Eds.) *Apartheid City in Transition*. Oxford: Oxford University Press.
- Skinner, C. (1999) Women street traders: local government in transition. *Indicator South Africa*, 16(3), pp. 46 52.
- Skinner, C. (2000) Getting institutions right? Local government and street traders in four South African cities. *Urban Forum*, 11(1), pp. 49-71.
- South Africa, (1999) Green Paper on Development and Planning. http://www.polity.org.za/html/govdocs [Date of use: 2 October 2003].
- South Africa, (2001) White Paper on Spatial Planning and Land Use Management. http://www.polity.org.za/html/govdocs [Date of use: 2 October 2003].
- South Africa, (2003) Statistics South Africa, National Census Statistics, 2001. Pretoria.
- South Africa, (2009) South Africa Info. http://www.southafrica.info/business/investing/opportunities/investment-cities.htm
- Timothy, D.J. and Wall, G. (1997) Selling to tourists: Indonesian street vendors. *Annals of Tourism Research*, 24(2), pp. 322 340.
- Truen, S., Ketley, R., Bester, H., Davis, B., Hutcheson, H., Kwakwa, K., Mogapi, S. (2005) **G:enisis:** Supporting remittances in Southern Africa,
- Van Delft, H., C. Gorter and P. Nijkamp (2000) In search of ethnic entrepreneurship opportunities in the city: A comparative policy study, *Environment and Planning C: Government and Policy* 18(4): 429-451.
- Zhou, M. (2004) Revisiting Ethnic Entrepreneurship: Convergencies, Controversies, and Conceptual Advancements, *The International Migration Review 38*(3): 1040.

Figure 1. Distortions in the provision of goods and services between former Black and White controlled towns and cities in South Africa, 1996



Source: Own calculations, 1996

Figure 2 Locational map of Rustenburg, Klerksdorp and Potchefstroom

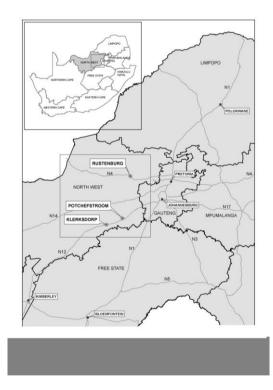
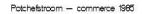
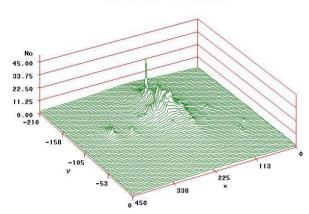


Figure 3. Distribution of businesses in the commercial and services sectors in the central city areas of Potchefstroom, Klerksdorp and Rustenburg in 1985 and 2003 (Own survey)

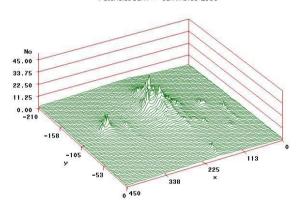
а





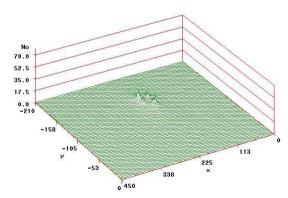
b

Potchefstroom - commerce 2003

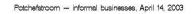


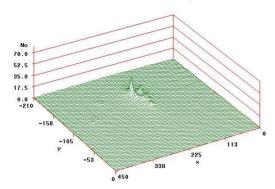
С

Potchefstroom - informal businesses, March 31, 2003



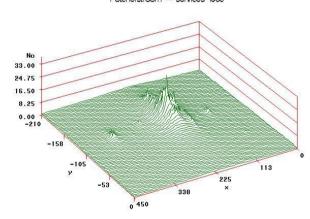
d





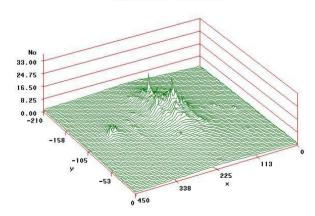
е

Potchefstroom - services 1985

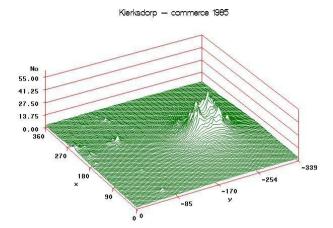


f

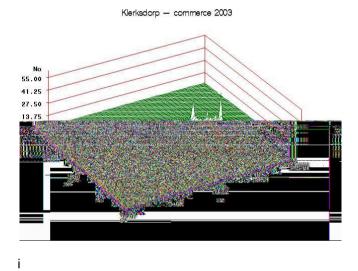
Potchefstroom - services 2003



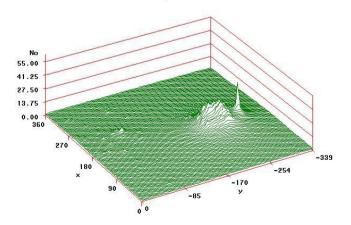


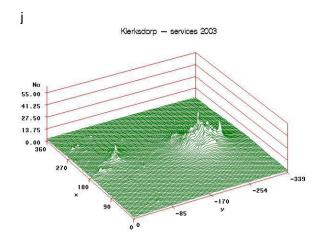


h

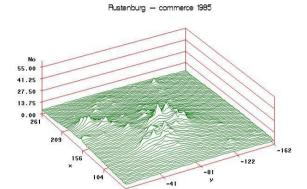


Klerksdorp - services 1985

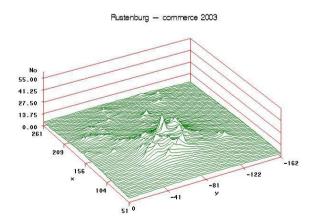




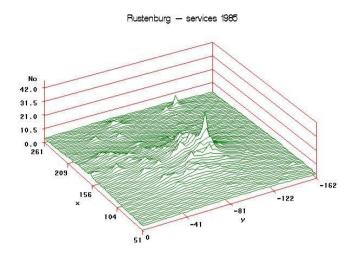
k



I



m



n

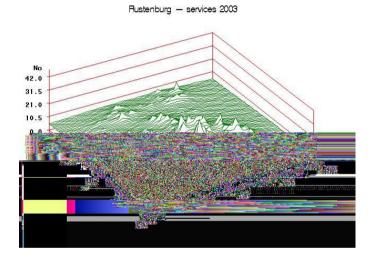
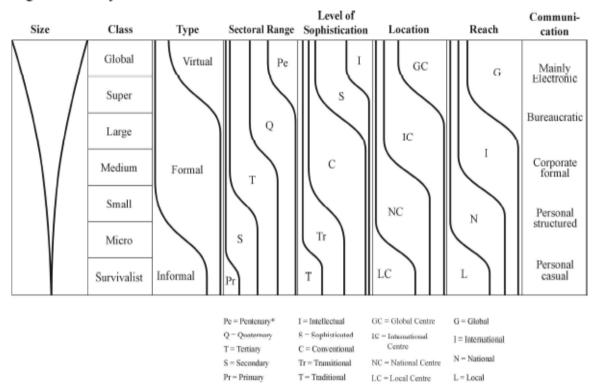


Fig. 4 Anatomy of the business sector in South Africa



* refers to the intellectual sector (see Geyer 2002)

2007-1	M. Francesca Cracolici Miranda Cuffaro Peter Nijkamp	Geographical distribution of enemployment: An analysis of provincial differences in Italy, 21 p.
2007-2	Daniel Leliefeld Evgenia Motchenkova	To protec in order to serve, adverse effects of leniency programs in view of industry asymmetry, 29 p.
2007-3	M.C. Wassenaar E. Dijkgraaf R.H.J.M. Gradus	Contracting out: Dutch municipalities reject the solution for the VAT-distortion, 24 p.
2007-4	R.S. Halbersma M.C. Mikkers E. Motchenkova I. Seinen	Market structure and hospital-insurer bargaining in the Netherlands, 20 p.
2007-5	Bas P. Singer Bart A.G. Bossink Herman J.M. Vande Putte	Corporate Real estate and competitive strategy, 27 p.
2007-6	Dorien Kooij Annet de Lange Paul Jansen Josje Dikkers	Older workers' motivation to continue to work: Five meanings of age. A conceptual review, 46 p.
2007-7	Stella Flytzani Peter Nijkamp	Locus of control and cross-cultural adjustment of expatriate managers, 16 p.
2007-8	Tibert Verhagen Willemijn van Dolen	Explaining online purchase intentions: A multi-channel store image perspective, 28 p.
2007-9	Patrizia Riganti Peter Nijkamp	Congestion in popular tourist areas: A multi-attribute experimental choice analysis of willingness-to-wait in Amsterdam, 21 p.
2007-10	Tüzin Baycan- Levent Peter Nijkamp	Critical success factors in planning and management of urban green spaces in Europe, 14 p.
2007-11	Tüzin Baycan- Levent Peter Nijkamp	Migrant entrepreneurship in a diverse Europe: In search of sustainable development, 18 p.
2007-12	Tüzin Baycan- Levent Peter Nijkamp Mediha Sahin	New orientations in ethnic entrepreneurship: Motivation, goals and strategies in new generation ethnic entrepreneurs, 22 p.
2007-13	Miranda Cuffaro Maria Francesca Cracolici Peter Nijkamp	Measuring the performance of Italian regions on social and economic dimensions, 20 p.

2007-14	Tüzin Baycan- Levent Peter Nijkamp	Characteristics of migrant entrepreneurship in Europe, 14 p.
2007-15	Maria Teresa Borzacchiello Peter Nijkamp Eric Koomen	Accessibility and urban development: A grid-based comparative statistical analysis of Dutch cities, 22 p.
2007-16	Tibert Verhagen Selmar Meents	A framework for developing semantic differentials in IS research: Assessing the meaning of electronic marketplace quality (EMQ), 64 p.
2007-17	Aliye Ahu Gülümser Tüzin Baycan Levent Peter Nijkamp	Changing trends in rural self-employment in Europe, 34 p.
2007-18	Laura de Dominicis Raymond J.G.M. Florax Henri L.F. de Groot	De ruimtelijke verdeling van economische activiteit: Agglomeratie- en locatiepatronen in Nederland, 35 p.
2007-19	E. Dijkgraaf R.H.J.M. Gradus	How to get increasing competition in the Dutch refuse collection market? 15 p.

2008-1	Maria T. Borzacchiello Irene Casas Biagio Ciuffo Peter Nijkamp	Geo-ICT in Transportation Science, 25 p.
2008-2	Maura Soekijad Jeroen Walschots Marleen Huysman	Congestion at the floating road? Negotiation in networked innovation, 38 p.
2008-3	Marlous Agterberg Bart van den Hooff Marleen Huysman Maura Soekijad	Keeping the wheels turning: Multi-level dynamics in organizing networks of practice, 47 p.
2008-4	Marlous Agterberg Marleen Huysman Bart van den Hooff	Leadership in online knowledge networks: Challenges and coping strategies in a network of practice, 36 p.
2008-5	Bernd Heidergott Haralambie Leahu	Differentiability of product measures, 35 p.
2008-6	Tibert Verhagen Frans Feldberg Bart van den Hooff Selmar Meents	Explaining user adoption of virtual worlds: towards a multipurpose motivational model, 37 p.
2008-7	Masagus M. Ridhwan Peter Nijkamp Piet Rietveld Henri L.F. de Groot	Regional development and monetary policy. A review of the role of monetary unions, capital mobility and locational effects, 27 p.
2008-8	Selmar Meents Tibert Verhagen	Investigating the impact of C2C electronic marketplace quality on trust, 69 p.
2008-9	Junbo Yu Peter Nijkamp	China's prospects as an innovative country: An industrial economics perspective, 27 p
2008-10	Junbo Yu Peter Nijkamp	Ownership, r&d and productivity change: Assessing the catch-up in China's high-tech industries, 31 p
2008-11	Elbert Dijkgraaf Raymond Gradus	Environmental activism and dynamics of unit-based pricing systems, 18 p.
2008-12	Mark J. Koetse Jan Rouwendal	Transport and welfare consequences of infrastructure investment: A case study for the Betuweroute, 24 p
2008-13	Marc D. Bahlmann Marleen H. Huysman Tom Elfring Peter Groenewegen	Clusters as vehicles for entrepreneurial innovation and new idea generation – a critical assessment
2008-14	Soushi Suzuki Peter Nijkamp	A generalized goals-achievement model in data envelopment analysis: An application to efficiency improvement in local government finance in Japan, 24 p.
2008-15	Tüzin Baycan-Levent	External orientation of second generation migrant entrepreneurs. A sectoral

	Peter Nijkamp Mediha Sahin	study on Amsterdam, 33 p.
2008-16	Enno Masurel	Local shopkeepers' associations and ethnic minority entrepreneurs, 21 p.
2008-17	Frank Frößler Boriana Rukanova Stefan Klein Allen Higgins Yao-Hua Tan	Inter-organisational network formation and sense-making: Initiation and management of a living lab, 25 p.
2008-18	Peter Nijkamp Frank Zwetsloot Sander van der Wal	A meta-multicriteria analysis of innovation and growth potentials of European regions, 20 p.
2008-19	Junbo Yu Roger R. Stough Peter Nijkamp	Governing technological entrepreneurship in China and the West, 21 p.
2008-20	Maria T. Borzacchiello Peter Nijkamp Henk J. Scholten	A logistic regression model for explaining urban development on the basis of accessibility: a case study of Naples, 13 p.
2008-21	Marius Ooms	Trends in applied econometrics software development 1985-2008, an analysis of Journal of Applied Econometrics research articles, software reviews, data and code, 30 p.
2008-22	Aliye Ahu Gülümser Tüzin Baycan-Levent Peter Nijkamp	Changing trends in rural self-employment in Europe and Turkey, 20 p.
2008-23	Patricia van Hemert Peter Nijkamp	Thematic research prioritization in the EU and the Netherlands: an assessment on the basis of content analysis, 30 p.
2008-24	Jasper Dekkers Eric Koomen	Valuation of open space. Hedonic house price analysis in the Dutch Randstad region, 19 p.

2009-1	Boriana Rukanova Rolf T. Wignand Yao-Hua Tan	From national to supranational government inter-organizational systems: An extended typology, 33 p.
2009-2	Marc D. Bahlmann Marleen H. Huysman Tom Elfring Peter Groenewegen	Global Pipelines or global buzz? A micro-level approach towards the knowledge-based view of clusters, 33 p.
2009-3	Julie E. Ferguson Marleen H. Huysman	Between ambition and approach: Towards sustainable knowledge management in development organizations, 33 p.
2009-4	Mark G. Leijsen	Why empirical cost functions get scale economies wrong, 11 p.
2009-5	Peter Nijkamp Galit Cohen- Blankshtain	The importance of ICT for cities: e-governance and cyber perceptions, 14 p.
2009-6	Eric de Noronha Vaz Mário Caetano Peter Nijkamp	Trapped between antiquity and urbanism. A multi-criteria assessment model of the greater Cairo metropolitan area, 22 p.
2009-7	Eric de Noronha Vaz Teresa de Noronha Vaz Peter Nijkamp	Spatial analysis for policy evaluation of the rural world: Portuguese agriculture in the last decade, 16 p.
2009-8	Teresa de Noronha Vaz Peter Nijkamp	Multitasking in the rural world: Technological change and sustainability, 20 p.
2009-9	Maria Teresa Borzacchiello Vincenzo Torrieri Peter Nijkamp	An operational information systems architecture for assessing sustainable transportation planning: Principles and design, 17 p.
2009-10	Vincenzo Del Giudice Pierfrancesco De Paola Francesca Torrieri Francesca Pagliari Peter Nijkamp	A decision support system for real estate investment choice, 16 p.
2009-11	Miruna Mazurencu Marinescu Peter Nijkamp	IT companies in rough seas: Predictive factors for bankruptcy risk in Romania, 13 p.
2009-12	Boriana Rukanova Helle Zinner Hendriksen Eveline van Stijn Yao-Hua Tan	Bringing is innovation in a highly-regulated environment: A collective action perspective, 33 p.
2009-13	Patricia van Hemert Peter Nijkamp Jolanda Verbraak	Evaluating social science and humanities knowledge production: an exploratory analysis of dynamics in science systems, 20 p.

2009-14	Roberto Patuelli Aura Reggiani Peter Nijkamp Norbert Schanne	Neural networks for cross-sectional employment forecasts: A comparison of model specifications for Germany, 15 p.
2009-15	André de Waal Karima Kourtit Peter Nijkamp	The relationship between the level of completeness of a strategic performance management system and perceived advantages and disadvantages, 19 p.
2009-16	Vincenzo Punzo Vincenzo Torrieri Maria Teresa Borzacchiello Biagio Ciuffo Peter Nijkamp	Modelling intermodal re-balance and integration: planning a sub-lagoon tube for Venezia, 24 p.
2009-17	Peter Nijkamp Roger Stough Mediha Sahin	Impact of social and human capital on business performance of migrant entrepreneurs – a comparative Dutch-US study, 31 p.
2009-18	Dres Creal	A survey of sequential Monte Carlo methods for economics and finance, 54 p.
2009-19	Karima Kourtit André de Waal	Strategic performance management in practice: Advantages, disadvantages and reasons for use, 15 p.
2009-20	Karima Kourtit André de Waal Peter Nijkamp	Strategic performance management and creative industry, 17 p.
2009-21	Eric de Noronha Vaz Peter Nijkamp	Historico-cultural sustainability and urban dynamics – a geo-information science approach to the Algarve area, 25 p.
2009-22	Roberta Capello Peter Nijkamp	Regional growth and development theories revisited, 19 p.
2009-23	M. Francesca Cracolici Miranda Cuffaro Peter Nijkamp	Tourism sustainability and economic efficiency – a statistical analysis of Italian provinces, 14 p.
2009-24	Caroline A. Rodenburg Peter Nijkamp Henri L.F. de Groot Erik T. Verhoef	Valuation of multifunctional land use by commercial investors: A case study on the Amsterdam Zuidas mega-project, 21 p.
2009-25	Katrin Oltmer Peter Nijkamp Raymond Florax Floor Brouwer	Sustainability and agri-environmental policy in the European Union: A meta-analytic investigation, 26 p.
2009-26	Francesca Torrieri Peter Nijkamp	Scenario analysis in spatial impact assessment: A methodological approach, 20 p.
2009-27	Aliye Ahu Gülümser Tüzin Baycan-Levent Peter Nijkamp	Beauty is in the eyes of the beholder: A logistic regression analysis of sustainability and locality as competitive vehicles for human settlements, 14 p.

2009-28	Marco Percoco Peter Nijkamp	Individual time preferences and social discounting in environmental projects, 24 p.
2009-29	Peter Nijkamp Maria Abreu	Regional development theory, 12 p.
2009-30	Tüzin Baycan-Levent Peter Nijkamp	7 FAQs in urban planning, 22 p.
2009-31	Aliye Ahu Gülümser Tüzin Baycan-Levent Peter Nijkamp	Turkey's rurality: A comparative analysis at the EU level, 22 p.
2009-32	Frank Bruinsma Karima Kourtit Peter Nijkamp	An agent-based decision support model for the development of e-services in the tourist sector, 21 p.
2009-33	Mediha Sahin Peter Nijkamp Marius Rietdijk	Cultural diversity and urban innovativeness: Personal and business characteristics of urban migrant entrepreneurs, 27 p.
2009-34	Peter Nijkamp Mediha Sahin	Performance indicators of urban migrant entrepreneurship in the Netherlands, 28 p.
2009-35	Manfred M. Fischer Peter Nijkamp	Entrepreneurship and regional development, 23 p.
2009-36	Faroek Lazrak Peter Nijkamp Piet Rietveld Jan Rouwendal	Cultural heritage and creative cities: An economic evaluation perspective, 20 p.
2009-37	Enno Masurel Peter Nijkamp	Bridging the gap between institutions of higher education and small and medium-size enterprises, 32 p.
2009-38	Francesca Medda Peter Nijkamp Piet Rietveld	Dynamic effects of external and private transport costs on urban shape: A morphogenetic perspective, 17 p.
2009-39	Roberta Capello Peter Nijkamp	Urban economics at a cross-yard: Recent theoretical and methodological directions and future challenges, 16 p.
2009-40	Enno Masurel Peter Nijkamp	The low participation of urban migrant entrepreneurs: Reasons and perceptions of weak institutional embeddedness, 23 p.
2009-41	Patricia van Hemert Peter Nijkamp	Knowledge investments, business R&D and innovativeness of countries. A qualitative meta-analytic comparison, 25 p.
2009-42	Teresa de Noronha Vaz Peter Nijkamp	Knowledge and innovation: The strings between global and local dimensions of sustainable growth, 16 p.
2009-43	Chiara M. Travisi Peter Nijkamp	Managing environmental risk in agriculture: A systematic perspective on the potential of quantitative policy-oriented risk valuation, 19 p.
2009-44	Sander de Leeuw	Logistics aspects of emergency preparedness in flood disaster prevention, 24 p.

Iris F.A. Vis Sebastiaan B. Jonkman
Eveline S. van Leeuwen

Peter Nijkamp

Tibert Verhagen

Social accounting matrices. The development and application of SAMs at the local level, 26 p.

Willemijn van Dolen

2000 47 Eveling van Legywan

2009-45

2009-46

The influence of online store characteristics on consumer impulsive decision-making: A model and empirical application, 33 p.

2009-47 Eveline van Leeuwen Peter Nijkamp

A micro-simulation model for e-services in cultural heritage tourism, 23 p.

2009-48 Andrea Caragliu Chiara Del Bo Peter Nijkamp Smart cities in Europe, 15 p.

2009-49 Faroek Lazrak Peter Nijkamp Piet Rietveld Jan Rouwendal Cultural heritage: Hedonic prices for non-market values, 11 p.

2009-50 Eric de Noronha Vaz João Pedro Bernardes Peter Nijkamp Past landscapes for the reconstruction of Roman land use: Eco-history tourism in the Algarve, 23 p.

2009-51 Eveline van Leeuwen Peter Nijkamp Teresa de Noronha

The Multi-functional use of urban green space, 12 p.

2009-52 Peter Bakker Carl Koopmans Peter Nijkamp

Vaz

Appraisal of integrated transport policies, 20 p.

2009-53 Luca De Angelis Leonard J. Paas The dynamics analysis and prediction of stock markets through the latent Markov model, 29 p.

Jan Anne Annema Carl Koopmans Een lastige praktijk: Ervaringen met waarderen van omgevingskwaliteit in de kosten-batenanalyse, 17 p.

2009-55 Bas Straathof Gert-Jan Linders

2009-54

Europe's internal market at fifty: Over the hill? 39 p.

2009-56 Joaquim A.S. Gromicho

Gromicho Jelke J. van Hoorn Francisco Saldanhada-Gama

Gerrit T. Timmer

Exponentially better than brute force: solving the job-shop scheduling problem optimally by dynamic programming, 14 p.

2009-57 Carmen Lee Roman Kraeussl Leo Paas The effect of anticipated and experienced regret and pride on investors' future selling decisions, 31 p.

as

2009-58 René Sitters Efficient algorithms for average completion time scheduling, 17 p.

2009-59 Masood Gheasi Peter Nijkamp Piet Rietveld Migration and tourist flows, 20 p.

2010-1	Roberto Patuelli Norbert Schanne Daniel A. Griffith Peter Nijkamp	Persistent disparities in regional unemployment: Application of a spatial filtering approach to local labour markets in Germany, 28 p.
2010-2	Thomas de Graaff Ghebre Debrezion Piet Rietveld	Schaalsprong Almere. Het effect van bereikbaarheidsverbeteringen op de huizenprijzen in Almere, 22 p.
2010-3	John Steenbruggen Maria Teresa Borzacchiello Peter Nijkamp Henk Scholten	Real-time data from mobile phone networks for urban incidence and traffic management – a review of application and opportunities, 23 p.
2010-4	Marc D. Bahlmann Tom Elfring Peter Groenewegen Marleen H. Huysman	Does distance matter? An ego-network approach towards the knowledge-based theory of clusters, 31 p.
2010-5	Jelke J. van Hoorn	A note on the worst case complexity for the capacitated vehicle routing problem, 3 p.
2010-6	Mark G. Lijesen	Empirical applications of spatial competition; an interpretative literature review, 16 p.
2010-7	Carmen Lee Roman Kraeussl Leo Paas	Personality and investment: Personality differences affect investors' adaptation to losses, 28 p.
2010-8	Nahom Ghebrihiwet Evgenia Motchenkova	Leniency programs in the presence of judicial errors, 21 p.
2010-9	Meindert J. Flikkema Ard-Pieter de Man Matthijs Wolters	New trademark registration as an indicator of innovation: results of an explorative study of Benelux trademark data, 53 p.
2010-10	Jani Merikivi Tibert Verhagen Frans Feldberg	Having belief(s) in social virtual worlds: A decomposed approach, 37 p.
2010-11	Umut Kilinç	Price-cost markups and productivity dynamics of entrant plants, 34 p.
2010-12	Umut Kilinç	Measuring competition in a frictional economy, 39 p.

2011-1	Yoshifumi Takahashi Peter Nijkamp	Multifunctional agricultural land use in sustainable world, 25 p.
2011-2	Paulo A.L.D. Nunes Peter Nijkamp	Biodiversity: Economic perspectives, 37 p.
2011-3	Eric de Noronha Vaz Doan Nainggolan Peter Nijkamp Marco Painho	A complex spatial systems analysis of tourism and urban sprawl in the Algarve, 23 p.
2011-4	Karima Kourtit Peter Nijkamp	Strangers on the move. Ethnic entrepreneurs as urban change actors, 34 p.
2011-5	Manie Geyer Helen C. Coetzee Danie Du Plessis Ronnie Donaldson Peter Nijkamp	Recent business transformation in intermediate-sized cities in South Africa, 30 p.