

Where you live matters: Urbanisation and labour markets outcomes

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Abstract

Given apartheid's legacy of irrational spatial planning it should be unsurprising that location matters for labour market outcomes. This paper attempts to quantify this effect by introducing a new urbanisation index into standard employment regressions. Utilising a multinomial logit model, it is found that there is a positive relationship between the probability of being employed and the degree of urbanisation. For example, an individual in Johannesburg is 1,5 times more likely to be employed than a similar individual in a medium-sized town such as Harrismith, and twice as likely to have a job than someone in a small town such as Mthatha. Also, an individual is nearly 1,5 times more likely to be discouraged in Mthatha than Johannesburg. Where you live does matter and it matters a great deal.

However, there are outliers. These are important for policy purposes, because these towns have managed to be successful, notwithstanding their relative economic size. Six smaller district councils stand out as successes: Carltonville, Stellenbosch, Malmesbury, Swellendam, Bronkhorstspuit and Knysna/ Plettenberg Bay. Each one of these is located on or near a national highway, has rail linkages to a metropolitan area and has a relatively well-educated or highly skilled workforce.

Given the improvement in labour market outcomes that larger towns and cities offer, urbanisation is inevitable. Whilst planning for rapid urbanisation is the obvious conclusion, spatial policy must not underestimate the potential of the mid-sized towns. Improving transport infrastructure, such as rail and road, will, quite literally, bridge the divide between the two economies of the rural poor and the urban rich.

1 Introduction

The Accelerated and Shared Growth Initiative (ASGI-SA) identifies six binding constraints to growth. One of the binding constraints is the spatial legacy of apartheid. This legacy is deeply ingrained: for example, education systems differ greatly between former white and black areas, leading to differences in education and skill allocations. Also, irrational population settlement patterns have increased the transportation cost of labour, raising reservation wages and affecting especially the opportunities available to the rural poor.

South Africa has a long history of irrational spatial planning, based primarily on separating races and keeping non-whites out of urban areas. As a result, since the abolition of the Group Areas Act in 1991, South Africa has experienced rapid urbanisation. Between the 1996 and 2001 censuses, the population of Gauteng, (which includes Johannesburg) grew by an average of 4 per cent per year, twice as fast as the country. On the other hand, the population of the Northern Cape, one of the most rural provinces, shrunk. Understanding the factors behind these migration patterns will not only be central to understanding South Africa's future growth path, but will also inform spatial, economic and infrastructural policies over the years to come. Naturally, rural-urban migration is not a new phenomenon. However, Posel (2003) notes temporary labour migration does appear to have risen. This may be due to the relaxation of influx control, or a rise in female labour migration.

The literature draws a clear link between socio-economic outcomes (particularly employment) and location. This paper investigates this further, by considering how urbanisation and employment outcomes interact. It is found, unsurprisingly, that after conditioning for other characteristics (such as age, education, gender etc.), individuals in more urbanised areas are more likely to be employed than individuals in more rural locations. In particular, in rural areas individuals are more likely to be discouraged, whereas in urban areas, the unemployed are actively seeking work. This study finds that although employment opportunities are higher in metropolitan and highly urban areas, so is the probability of individuals searching for employment – this has not been demonstrated clearly in previous papers.

There is a slowly expanding literature on the interaction between location and socio-economic outcomes. The particular contribution of this paper is to construct an urbanisation index, which allows for more subtle comparisons than the rather crude dummy variables used in earlier papers. Also, continuing work into the refinement of this index is discussed.

Whilst the results seem somewhat self-evident, the policy conclusions are not. Essentially, it presents a choice for policy makers – either to encourage development outside urban areas or adapt to and plan for rapid urbanisation.

2 Methodology

The analysis is based on the Labour Force Survey (LFS) of March 2005. Unlike previous LFS releases, this particular survey contains no information on urbanisation. In addition, past analyses utilising urbanisation data have used simple dummy variables, i.e. a respondent is regarded as being in an urban area or in a rural area.

Crude dummy variables create a number of problems, not least of which is that there is no measure of the “degree of urbanisation”. Although other surveys include metropolitan areas, the urbanisation information is insufficient, with, for example, a respondent from Mthatha¹ classified as “urban”, as is a respondent who lives in the Johannesburg Central Business District.

The main contribution of this paper is to estimate “the degree of urbanisation” by district council and to use this index as a basis for quantitative analysis. Although this index is not without problems, it does allow for more subtle analysis.

The National Treasury Intergovernmental Division provided urbanisation data for each district council (DC), cross-border district council (CBDC) and metro. This information was obtained from the population census of 2001 and is utilised for fiscal planning. The variable measures the proportion of individuals in a district council that is urbanised, i.e. the relative level of urbanisation of the district council. Then each respondent in the district council is assigned this relative urbanisation value².

This is both an advantage and a disadvantage. The obvious advantage is that it provides a relatively graduated urbanisation index, from a low of 3,1 per cent (Marble Hall) to a high of 99,7 per cent (Johannesburg). Although a dramatic improvement on the rural/ urban/ metropolitan variable, one disadvantage of the urbanisation index is that it is still somewhat aggregated. It has only 53 discrete values and some variation within DCs still persists. For example, an individual living in Amatole (DC12) will be assigned an urbanisation index of 41,7 per cent, even though she may live in a flat in the centre of the city of East London or in a hut on the banks of the Kei river. Fortunately, Amatole is not at all representative of the average council, as it is a particularly dispersed DC, incorporating parts of the former Transkei and Ciskei.

¹When referring to a location name, the paper implies the corresponding district council or metropole rather than a town or city. This is merely to assist the reader, and it should be borne in mind that district councils are relatively large administrative entities and generally include a large town and a few satellite towns (e.g. the OR Tambo district council includes Mthatha and Port St Johns). Please refer to the appendix for a comprehensive list of district councils and metropolises. Also see footnote 4.

²Details of the district council and the level of index for that council is provided in Appendix A.

In addition, by construction, the urbanisation index is correlated with the DC. To some extent what is interpreted here as differences across levels of urbanisation may actually reflect differences across DCs that are unrelated to the level of urbanisation (e.g. the standard of service delivery). However, this paper has attempted to take this into account as far as possible, and this fact also informs the policy discussion.

3 Data discussion

Using the constructed measure, the six metros³ – Johannesburg, City of Cape Town, City of Tshwane (Pretoria), Nelson Mandela Metro (Port Elizabeth), Ekurhuleni Metro (East Rand), Emfuleni Metro (Durban) – have an average urbanisation index of 95,4 per cent.

There are also a further 44 district councils⁴, with an average urbanisation index of 47,1 per cent. This ranges from the least urbanised, Umkhanyakude (which includes the towns of St Lucia and Mtubatuba) with an index of 3,8 per cent, to the most urbanised at 95,8 per cent, namely Sedibeng (which includes the Vaal Triangle towns of Vereeniging, Sebokeng and Vanderbijlpark). This highlights a drawback of other studies that use “metropolitan area” as a measure of relative urbanisation – by this paper’s measure, Sedibeng is more urbanised than the Tshwane metropole. This is intuitively correct as Sedibeng is the industrial heartland of southern Gauteng, whereas the City of Tshwane metropolitan area includes large parts of rural northern Gauteng.

Finally, there are the five cross-border district councils (CBDCs), which straddle two provinces. Although in the run-up to the 2006 municipal elections CBDCs were abolished, in our data set they still fall into two provinces. Two of the CBDCs have high urbanisation indices – West Rand (Carltonville/ Merafong) and Metsweding (Bronkhorstspuit and the far east of Pretoria). The remainder of the CBDCs are in rural locations, with the least urbanised being Marble Hall (CBDC3), with an urbanisation index of 3,1 per cent.

³A brief discussion of the intergovernmental system may assist the reader. There are three spheres of government: national, provincial and local. Local government consists of two types of municipalities: metropolitan municipalities or “metros” (6) and district councils (46). Each district municipality contains between three and six local municipalities (total of 131) resulting in wall-to-wall boundaries for all municipal areas. Functions are shared between district and local municipalities depending on their size and capacity, whilst metros typically provide all municipal functions and some functions assigned by provinces. All municipalities are autonomous in terms of the constitution, but some can raise more revenue than others depending on their revenue base and the functions and powers assigned. For instance, local municipalities and metros may charge property taxes, but districts can not. Some local municipalities provide water and electricity, but in rural areas this may be the district council’s responsibility. Metros do everything.

⁴The discrepancy with footnote 4 is due to the changes to municipal boundaries during 2006. Both the LFS and the Census data used in this study refer to previous boundaries.

Summarising the data by province, it is found that Gauteng has the highest mean level of urbanisation (96,4 percent urbanised) by this paper’s measure, followed by the Western Cape (79 percent) and the Free State (75,5 percent). Excluding cross-border municipalities, KwaZulu-Natal (30,3 percent) and Limpopo (16,4 percent) are the least urbanised provinces.

A priori, there is naturally an inherent endogeneity problem: not only are socio-economic outcomes caused by the level of urbanisation, but also the degree of urbanisation is influenced by socio-economic conditions. For example the paper finds that being in a more urban area strongly increases the probability of a respondent having a better education. However, educated individuals may move to more urban areas, and it is also found that higher levels of education cause higher levels of urbanisation. This point is discussed in more detail in section 5 below.

4 How does urbanisation affect economic outcomes?

Urbanisation is likely to affect the probability of a person having a job. The addition of the urbanisation index should provide a better understanding of the dynamics influencing the employment outcome of a person given the degree of urbanisation where the person lives.

4.1 Our approach

This paper utilises a multinomial logit model to estimate the probability of four labour-market outcomes⁵:

- **Non-economically active “by choice”**, includes students, housewives and the disabled;
- **Employed**, those who have been part of productive activity for an hour or more a week, resulting in a stream of income;
- **Unemployed**, those individuals within the economically active population who: (a) did not work during the seven days prior to the interview; (b) want to work and are available to start work within a week of the interview; and (c) have taken active steps to look for work or to start some form of self-employment;
- **Discouraged**, those individuals within the economically active population who (a) did not work during the seven days prior to the interview; (b) want to work and are available to start work within a week of the interview; and (c) have not taken active steps to look for work or to start some form of self-employment.

⁵Cf. the definitions provided by Natrass (2001) and Statistics South Africa in successive labour force surveys.

The variables that were found to be significant in distinguishing between these four labour-market states are the following:

- The urbanisation index, constructed as discussed in section 2
- Province
- Head of household
- Whether someone in household has a job
- Whether the person is supported by a pension or disability grant
- Whether the person is female
- The marital status of the person
- The person's age (and age squared, to capture potential non-linearities)
- Population group
- The years of education
- Whether the person has had skills training
- Whether the person is supported by other income such as bursaries, study loans or grants
- The household size

The age, gender, marital status, population group, education level, and whether a person has skills training are all well-known variables that would influence a person's job-market outcome (Kingdon and Knight, 2001). Other variables were added to capture the difference between a respondent being not economically active by choice such as household-head status, whether a person is supported by a pension or disability grant or by other income. Wittenberg (2001) found that there are strong social effects that operate at a household level that influence the success of different individuals in the labour market. One such variable is the availability of market information. For this reason a variable was included to provide for the possibility that someone in the household already has a job.

The regression model predicts (see the tables in Appendix B) the job-market outcome of being non-economically active by choice relatively well: the model correctly allocates 75 percent of the observations as non-economically active by choice. The model performs well at predicting the employed outcome and is able to predict the persons currently employed with 99 percent accuracy. However, the model struggles to distinguish between the unemployed and discouraged outcomes. In each case the model gives the highest probability to the correct outcome, but predicts only a small percentage (37 and 30 percent respectively)

of the persons currently unemployed or discouraged. From the survey, it seems difficult to identify characteristics that may distinguish between these categories. “Soft characteristics”, which are difficult to establish, may separate the unemployed from the discouraged. By definition, it is the time since the last search that differentiates the unemployed from the discouraged. Consequently, this variable cannot be used in the estimation as it would introduce multicollinearity. Kingdon and Knight (2000) also found that it is hard to distinguish between the searching and non-searching unemployed, especially when unemployment is high as in South Africa. A Wald test performed on the multinomial logit model, however, indicated that the two groups are indeed separable and should not be joined. The unemployed and discouraged are therefore kept in separate groups for the purpose of this analysis.

4.2 Urbanisation Results

While this study builds on other literature on the spatial impact on labour market outcomes, such as Burger *et al* (2004), Wittenberg (2001) and Kingdon and Knight (2001), to the authors’ knowledge this is the only study that analyses labour market outcomes at district council level.

As can be expected, Figure 1 indicates a positive relationship between a person’s probability of being employed and the level of urbanisation. There are, however, a number of interesting outliers (“winners”) where a person’s probability of being employed is significantly higher than one would have expected given the level of urbanisation. A number of DCs contain individuals with a higher-than-expected probability of being employed⁶, including the Natal South Coast, Swellendam, Carltonville, Stellenbosch, Malmesbury, Knysna and Bronkhorstspuit. There are various factors that may explain this, including the proximity of job opportunities, excellent road and rail linkages to large cities and above-average skills or education levels. DCs like Stellenbosch and Malmesbury are both relatively closely situated to Cape Town (a metro) so that higher-income individuals tend to live in these towns and travel to Cape Town for work. This may stimulate ancillary industries, such as services which employ lower-skilled workers. Both areas also have substantial agricultural activity. Carltonville is a DC with mining activity, so the job opportunities compared to the level of urbanisation is high. Bronkhorstspuit lies between Witbank, a large mining town, and Pretoria. Both are linked to the N4, a major highway that runs east-west from Gauteng.

Outliers at the other end of the spectrum (the “losers”) include DCs with towns such as Greytown, Pampierstad, Marble Hall and Groblersdal. These DCs have a relatively low level of urbanisation, but persons living in these DCs have an even lower probability of being employed. These towns are all have

⁶Where the probability of being employed exceeds the predicted probability by at least 10 percentage points.

relatively large populations, but are poorly linked to the national road network and passenger rail system.

The level of urbanisation therefore matters for a person's job-market outcomes. To investigate this further, the DCs have been divided into five urbanisation categories:

- “Metros”, which are the six metropolitan areas: Cape Town, Tshwane, City of Johannesburg, Ethekewini (Durban), Ekurhuleni (East Rand) and Nelson Mandela Metro (Port Elizabeth);
- “Urban”, which are highly urbanised, non-metro DCs with an urbanisation index greater than 75 percent, for example the Motheo district council (greater Bloemfontein);
- “Semi-urban”, which have an urbanisation index of between 50 and 74 percent, for example uMgungundlovu (greater Pietermaritzburg);
- “Rural”, which have an urbanisation index of between 25 and 49 percent, for example the Chris Hani district council (greater Queenstown); and
- “Deep rural”, which have an urbanisation index of between 0 and 24 percent, for example Vhembe district council (which includes parts of the former Venda and the border town of Musina).

As can be seen from Figure 2 below, a person living in a metro, an urban or semi-urban DC has a higher probability of being employed. However, what is interesting is that a person living in these DCs also has a higher probability of being discouraged. This feeds into the debate about migration: people tend to migrate to more urbanised areas, but end up being unemployed (although not discouraged). Although they believe there are opportunities, they may lack the required characteristics to find work immediately. This is supported by the findings of Rospabé and Selod (2006). They found that recent migrants from rural areas to the city of Cape Town had a lower probability of finding employment in the city, relative to non-migrants. This indicates that not only does the development of metros matter, but the development of smaller towns matters too.

Extending the analysis, it is found that there is a negative relationship between the probability of a person being discouraged and the level of urbanisation (as can be seen from Figure 3). There are DCs, however, that have a higher probability of a person being unemployed given the level of urbanisation, including Marble Hall, Groblersdal, Tzaneen, Polokwane, Greytown and Pampierstad. There are other factors, apart from the level of urbanisation that may play a role, including the lack of job opportunities and the proximity to the nearest town.

How do the results compare across provinces? The results illustrate that, after conditioning for other characteristics, a person living in the Western Cape has the highest probability of being employed, followed by Gauteng. Persons living in Limpopo and the North West Province have the lowest probability of being employed and also have a high probability of being discouraged. These provinces also have the lowest level of urbanisation.

4.3 What makes urban areas different?

Figure 4 indicates that skills training can to some extent explain the relationship between the probability of being employed and urbanisation. All the metropolitan areas have more people that report some skills training compared to less-urbanised DCs. Other areas that have a relative high level of skills training include Carltonville, Bloemfontein, Welkom and Bronkhorstpruit. This explains some of the outliers in the earlier graph showing the level of urbanisation against the probability of being employed. DCs with generally low levels of skills training are Groblersdal and Greytown – persons living in these DCs also has a low probability of being employed.

Figure 4 can contribute to explaining some of the outliers, but what about towns like Swellendam and Stellenbosch? Would the level of education in these DCs better explain why they are outliers?

Figure 5 indicates that metropolises have the highest level of education. The education level of Stellenbosch may explain why it is an outlier, but then the education level of Swellendam is relatively low. Then again, even though other DCs such as Polokwane, Rustenburg and Musina have a relatively high level of education, a person’s probability of being employed is relatively low in these DCs. These DCs have a relative low level of urbanisation, indicating that there may be a lack of job opportunities in these DCs.

The racial composition of Stellenbosch, Malmesbury and Swellendam may to some extent explain why these towns are outliers (as can be seen in Figure 6). Stellenbosch, Malmesbury and Swellendam are mostly made up of coloured South Africans with a higher probability of being employed due to historically better quality education, as they did not fall under the Bantu education system. However, this is not a consistent phenomenon across DCs, as a DC such as De Aar also has a high proportion of coloured South Africans, yet still has low predicted employment, which suggests that the distance from Cape Town may be more important than racial composition.

4.4 Other demographic factors

Beyond urbanisation, the study includes other demographic factors that influence employment outcomes. These include the age distribution between urban

and rural areas, racial composition, gender, head of household status and, importantly, education levels and skill training.

Age

The inclusion of age in a non-linear form leads to the probability of a person being employed increasing with age, up to a maximum at around 40 years old. Thereafter the probability of being employed declines. In South Africa, the probability of a person being discouraged peaks at 20 years and starts to decline thereafter (**Figure 7**).

This supports Wittenberg (2001: 3), who argues that:

It is clear that the transition into work is . . . much slower. Furthermore the flow into work is slower than the flow into the schooling system. As a result, one sees a build up of the unemployed.

Education

Figure 8 shows that education improves a person's likelihood of being employed, *ceteris paribus*. A person with a post-matric education has the highest probability of being employed and a very low probability of being discouraged. Less educated respondents have higher probabilities of being discouraged. However, a person with some secondary education has the lowest probability of being employed, not, as would be expected, a person with no education. From our analysis it is not clear what drives this result, but a possible contributing factor includes the age distribution: it may be older people who (due to historical reasons) have no education, but are absorbed into, for example, the domestic worker industry and have significant work experience. The underlying dynamics at work here warrant further investigation.

Skills Training

Skills training is also very important for a person's job-market outcome; this is illustrated in Figure 9. A person with skills training has a much larger probability of being employed compared to a person with no skills training. However, a person with skills training also has a larger probability of being unemployed.

The interpretation of the skills training dimension needs to be considered carefully. The survey question: "Has . . . been trained in skills that can be used for work, e.g. book-keeping, security guard training, welding, child minding?" It does not follow that, if a high proportion of people answer "yes" to this question, that the area's population is "highly-skilled", given the nature of the questions. It merely indicates that the person has a skill of some description. In addition, high levels of employment may be correlated with high levels of skill – due to on-the-job training.

Race, Gender and Head of the Household Status

Table 1 illustrates that there are still significant racial disparities in terms of the probability of a person being employed. A Coloured, White, or Indian/Asian person has the highest probability of being employed. This is mainly due to past apartheid education and segregation policies. An African person has the highest probability of being discouraged. This picture, however, cannot show the progress that has been made since 1994 in rectifying this through affirmative action, as it does not provide a comparison over time. The reduction of formal barriers, both gender and racial, also increased access to employment (see, for example, Van der Westhuizen 2008).

Gender also still matters when it comes to being employed. A male is more likely to be employed. Again this graph does not say anything about the progress made through affirmative action as it provides a static picture.

Lastly, the head of the household has a larger probability of being employed, while the non-head of the household has a larger probability of being non-economically active by choice. The non-head of the household is also more likely to be unemployed or discouraged.

5 What influences urbanisation?

In this section regression results for a set of socio-economic variables on the urbanisation variable is presented. This implies causality in the opposite direction: i.e. that the degree of urbanisation is a function of a set of characteristics of the individual. For example, individuals in urban areas may have higher levels of education because they have better access to urban schools. As discussed in the introduction, the apartheid education system focussed resources on urban, white schools at the expense of rural, black schools.

Simple univariate regressions suggest that the degree of urbanisation in a municipality is positively related to an individual who is:

- Male;
- Working age;
- Not black South African;
- Educated;
- In paid non-farm work;
- Supported by a pension;
- Not a housewife or student;
- A permanent worker, i.e. not seasonal; and

- In a relatively small household.

Rural municipalities are characterised by individuals that report that they do not have paid employment because they lack skills or because they cannot find work.

6 Conclusion and Policy Recommendations

This paper provided a first cut at analysing the influence of urbanisation on socio-economic outcomes. It argued that urbanisation and socio-economic outcomes are inextricably linked. It is not immediately apparent which effect dominates. For instance, does the degree of urbanisation affect socio-economic outcomes such as education, employment, economic activity and income? Or do the socio-economic characteristics of the individual influence where he or she chooses to live?

The constructed urbanisation variable used in this paper suggests that there are widespread differences between district councils in terms of the socio-economic characteristics of people in those councils and that these differences are related to the degree of urbanisation of the council. The wealthy and educated are concentrated in the urban councils (particularly the metros) whereas the poor, unskilled and marginalised are in the more rural councils. It is found that the type of individual most likely to live in a more urban environment is male, of working age, non-African, educated or skilled, working for a wage on a permanent basis and in a relatively small household. The inverse is naturally also true: rural areas have predominantly marginalised individuals (female, young or old, African, uneducated, grant recipient and large household).

Urbanisation levels matter for a person's job-market outcome. It is not only the metros that matter, but also the urban and semi-urban DCs, since individuals living in these DCs have a relatively higher probability of being employed. Urbanisation, however, is not the only factor that matters for a person's probability of being employed. Other factors that matter include gender, race, education levels and skills levels. The identified two-way relationship between socio-economic outcomes and urbanisation provides a peculiar policy dilemma. In general, urban areas attract the most capable and as a result register growth and development; whereas there is "brain drain" from rural areas due to a persistent lack of economic and educational opportunities. Essentially there are three policy options:

- Improve the links between the margins and the centres;
- Try and reverse what is a natural process, i.e. actively discourage urbanisation; or
- Improve quality of life for the marginalised in rural areas.

This has important policy implications – providing each council equal resources (even on a per capita basis) may lead to persistent inequality. Large-scale Government projects such as the Expanded Public Works Programme (EPWP) and the Municipal Investment Grant (MIG) are best targeted at rural municipalities, or even better, at municipalities that display adverse socio-economic indicators.

Kanbur and Venables (2005) present a two-pronged approach to address the problem of spatial inequalities, namely the removal of barriers to the deconcentration of economic activity and the development of economic and social infrastructure to help the poor benefit from integration. Experience from other countries in dealing with spatial inequalities suggests that:

- Local endowments of human and physical infrastructure are important.
- Investment in lagging regions needs to be developed through infrastructure programmes.
- The remoteness of the areas means that the provision of infrastructure linking towns to larger metropolises through road and rail is key.
- Physical restrictions to migration are not effective.
- Freer migration ought to be promoted.
- Fiscal incentives, such as the restriction on the sale of subsidised houses, ought to be provided.

For which DCs does the level of urbanisation not matter? It does not matter for DCs with sufficient job opportunities and an industrial base (such as Carltonville and Bronkhorstspuit), for DCs with a close proximity to a metropolitan or highly urbanised area (such as Swellendam and Stellenbosch). Spatial proximity is thus important. Building roads and other infrastructure that links smaller DCs (or towns) to larger DCs or metropolitan areas where there are more jobs is also important.

The National Spatial Development Perspective (NSDP) calls for the development of people and not places. The NSDP works towards improving people’s mobility, recognising that certain areas are more sustainable than others, to provide sustainable employment and other economic opportunities. The NSDP promotes the development of future settlements and economic development opportunities within activity corridors and nodes that are adjacent or linked to main growth centres (IDP Nerve Centre, 2004).

Whilst it is clear that the development of people is important, location (“place”) is also important as it can provide access to education, services and jobs. It is not possible to improve people’s lives without improving their environment.

Also, mobility is important in the short-term, but, in the long term, job creation in non-highly urbanised areas may be more important. In the longer term, focussing resources on the urban and metro areas may lead to unbalanced growth. This is a particular problem in a developing country context, as clearly indicated by the experience of fast-growing economies such as China, which has experienced extremely fast growth in cities along the coast, but slower growth inland, leading to social pressures and widening poverty.

Urbanisation has its own problems such as crime, lack of social networks, environmental impacts, overcrowding and stretched infrastructure. Access to work is not the only issue. Other issues that are important include the sustainability of both rural and urban settlements, including access to health care, clean water, clean air, the absence of disease, adequate sanitation, safety and security, adequate shelter, education, access to economic resources, mobility, connectivity, access to information, participation and democracy, natural heritage, urban decay and community support (CSIR, 2006).

However, it is clear that South Africa will continue to experience rapid urbanisation as the country's growth accelerates. To manage these growing economic and social pressures successfully will remain a key challenge for all levels of government.

Future research will aim at improving the urbanisation index to include more disaggregated data at a level below DCs. Further work may incorporate aspects of migration, economic activity and employment opportunities also at a level below DC. Understanding the underlying dynamics of migration is also crucial to planning for rapid urbanisation.

References

- [1] Ahtonen, S-M. 2003. *Spatial autocorrelation in employment-output relation*. ERSA 2003 Congress.
- [2] Bhorat H. and R. Kanbur. 2005. *Poverty and Well-being in Post-Apartheid South Africa: An Overview of Data, Outcomes and Policy*. Development Policy Research Unit. October 2005. WP05/101
- [3] Burger, R., S. van der Berg, S. van der Walt, and D. Yu. *Geography as Destiny: Considering the Spatial Dimensions of Poverty and Deprivation in South Africa*. TIPS Forum. 13-15 October 2004.
- [4] CSIR. 2006. *Sustainable Analysis of Human Settlements in South Africa. Chapter 4: Towards a framework for analysing the sustainability of human settlements in South Africa*. <http://www.csir.org.za>
- [5] IDP Nerve Centre. 2004. *The Presidency produces the National Spatial Development Perspective (NSDP)*. http://www.idp.org.za/content_CSIR/news/News_NSDP.html.
- [6] Kanbur, R. and A.J. Venables. 2005. *Spatial Inequality and Development Overview of UNU-WIDER Project*. September 2005. UNU-Wider.
- [7] Kingdon, G.G, and J. Knight. 2000. *Are Searching and Non-searching Unemployment Distinct States when Unemployment is High? The Case of South Africa*. Centre for the Study of African Economies. University of Oxford. April 2000. WPS/2000-2.
- [8] Kingdon, G.G, and J. Knight. 2001. *Unemployment in South Africa: the nature of the beast*. Centre for the Study of African Economies. University of Oxford. August 2001. WPS/2001-15.
- [9] Rospabé, S. and Selod, H. 2006. *Does City Structure Cause Unemployment? The Case of Cape Town*. In: H. Bhorat and R. Kanbur (2006) *Poverty and Policy in Post-Apartheid South Africa*. HSRC Press: Pretoria.
- [10] Posel, D. 2003. 'Have Migration Patterns in post-Apartheid South Africa Changed?' Paper prepared for Conference on African Migration in Comparative Perspective, Johannesburg, South Africa, 4-7 June, 2003.
- [11] South Africa. 2006. *South African Government Information*. <http://www.info.gov.za/aboutsa/history.htm>
- [12] Van der Westhuizen. 2008. *White Power and the Rise and Fall of the National Party*. IPM/Struik.
- [13] Wittenberg, M. 2001. *Spatial Dimensions of Unemployment*. Paper presented at the DPRU/FES Conference "Labour Markets and Poverty in South Africa". Johannesburg. November 2001.

Table 1: Summary of Job Market Outcomes and Demographic Factors

	Not economically active by choice	Probability of being		
		Employed	Unemployed	Discouraged
Race				
African	44.08	31.56	14.69	9.67
Coloured	37.68	46.42	14.67	1.23
Indian/Asian	50.58	41.59	7.83	0.00
White	53.99	45.03	0.98	0.00
Gender				
Male	39.78	42.13	14.91	3.18
Female	47.78	28.63	12.31	11.27
Head of the Household Status				
Not Head of the Household	52.39	23.02	15.59	9.00
Head of the Household	29.86	55.16	9.91	5.06

Figure 1 Level of urbanisation and the probability of being employed

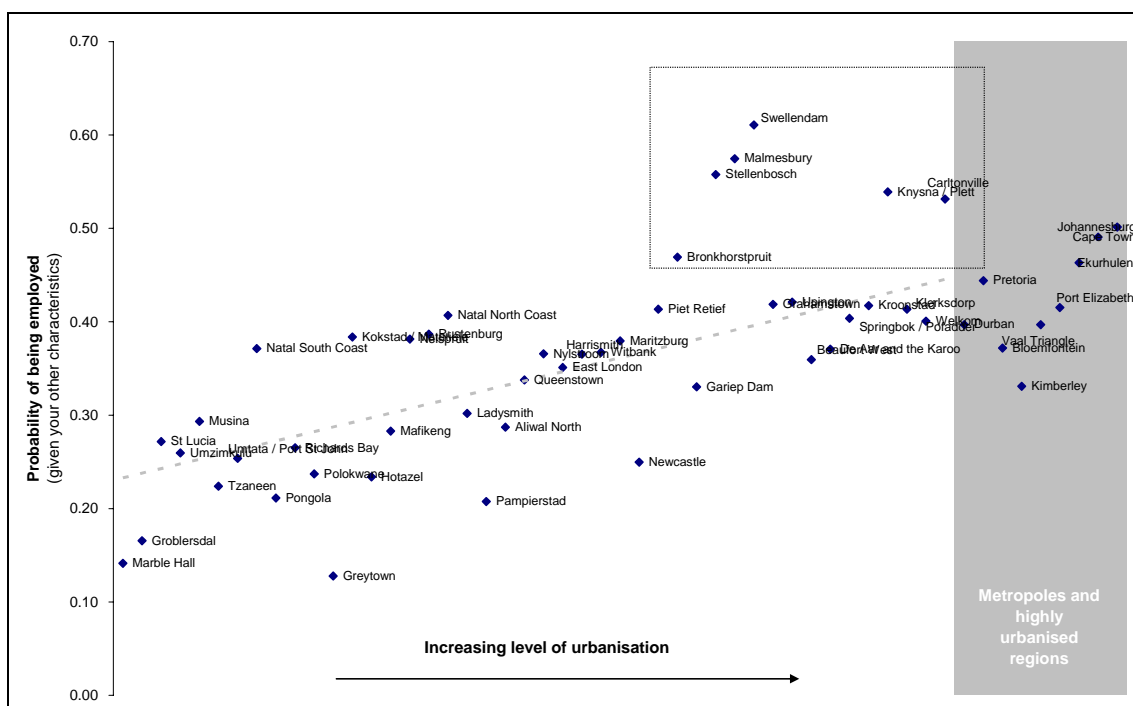


Figure 4 Level of urbanisation and skills training

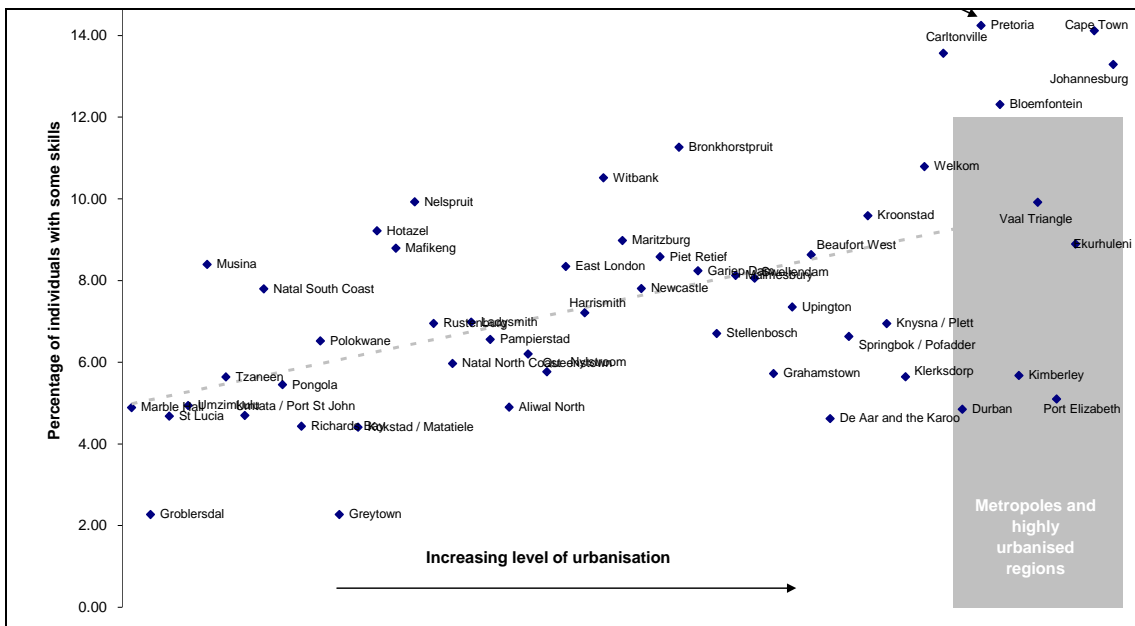


Figure 5 Level of urbanisation and education

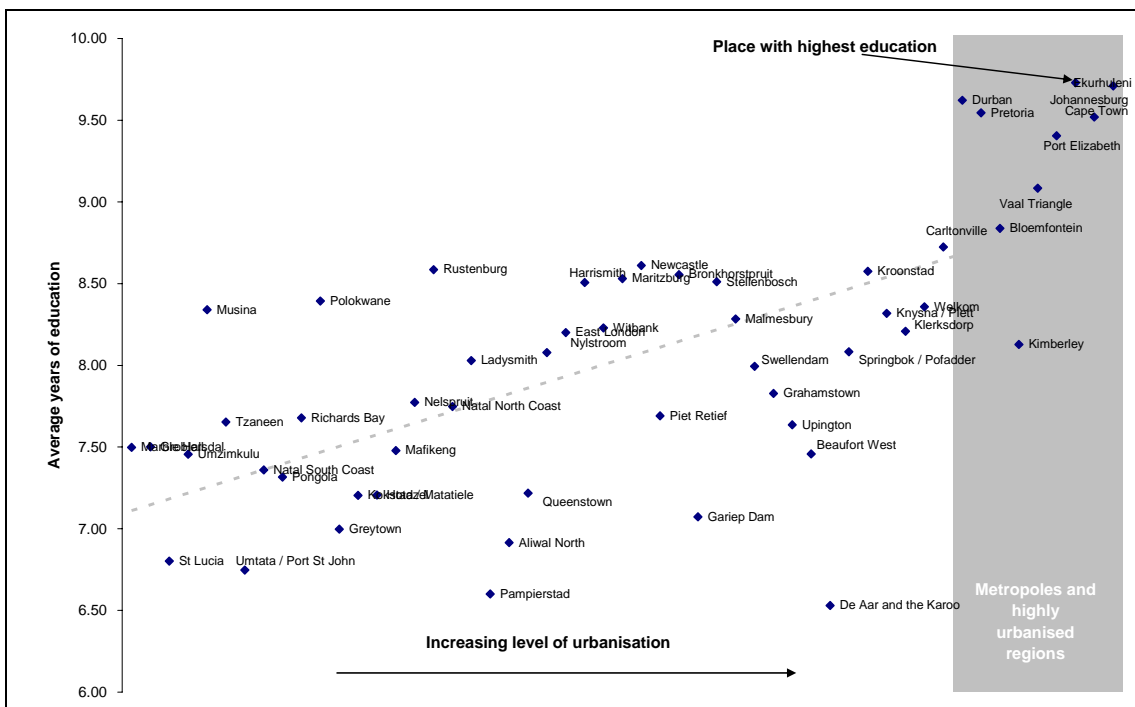


Figure 6 Level of urbanisation and racial composition

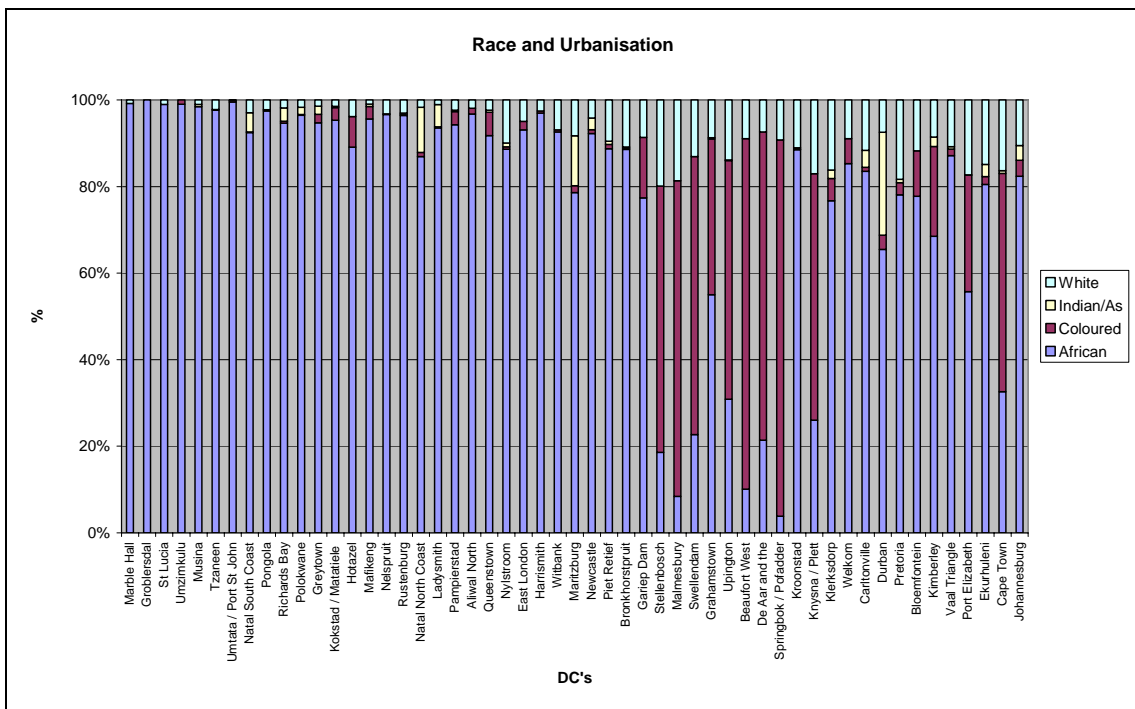


Figure 7 Age and probability of being either employed or discouraged

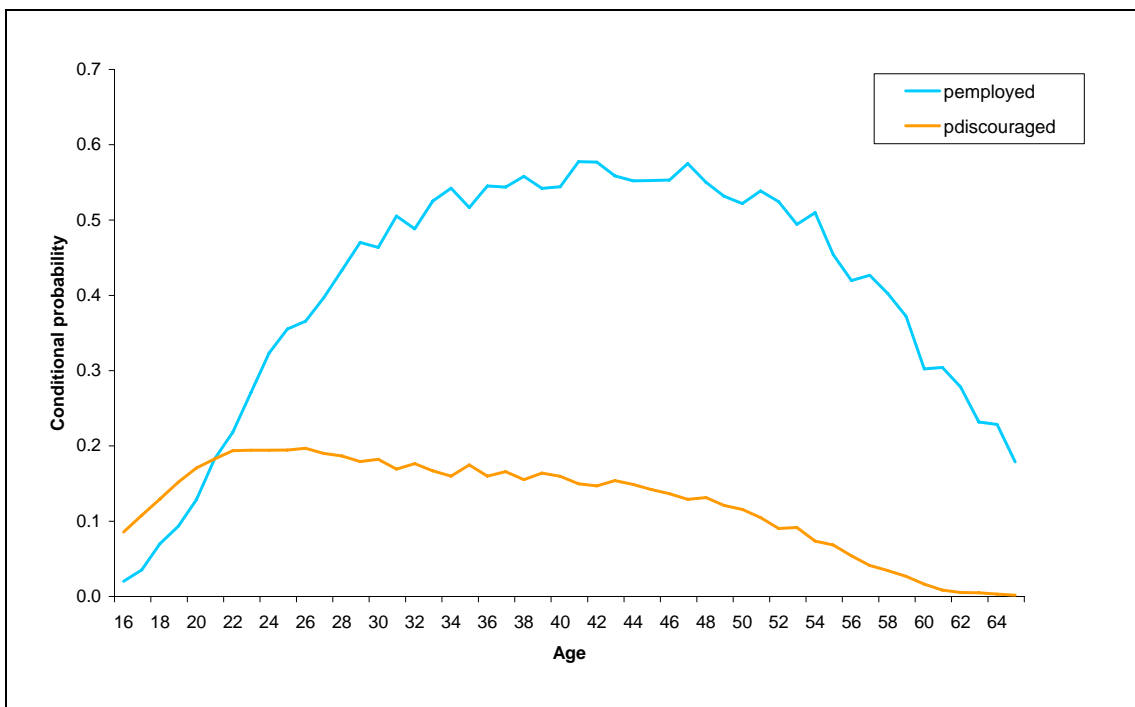


Figure 8 Education category and job market outcomes (excl non-economically active by choice)

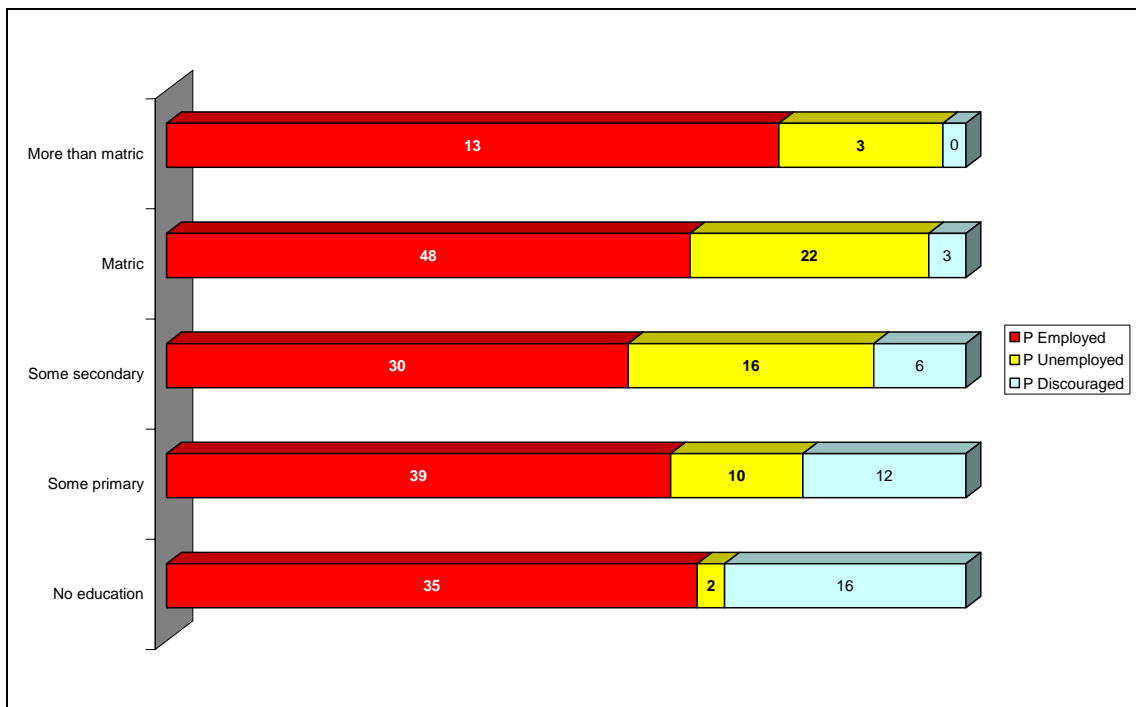
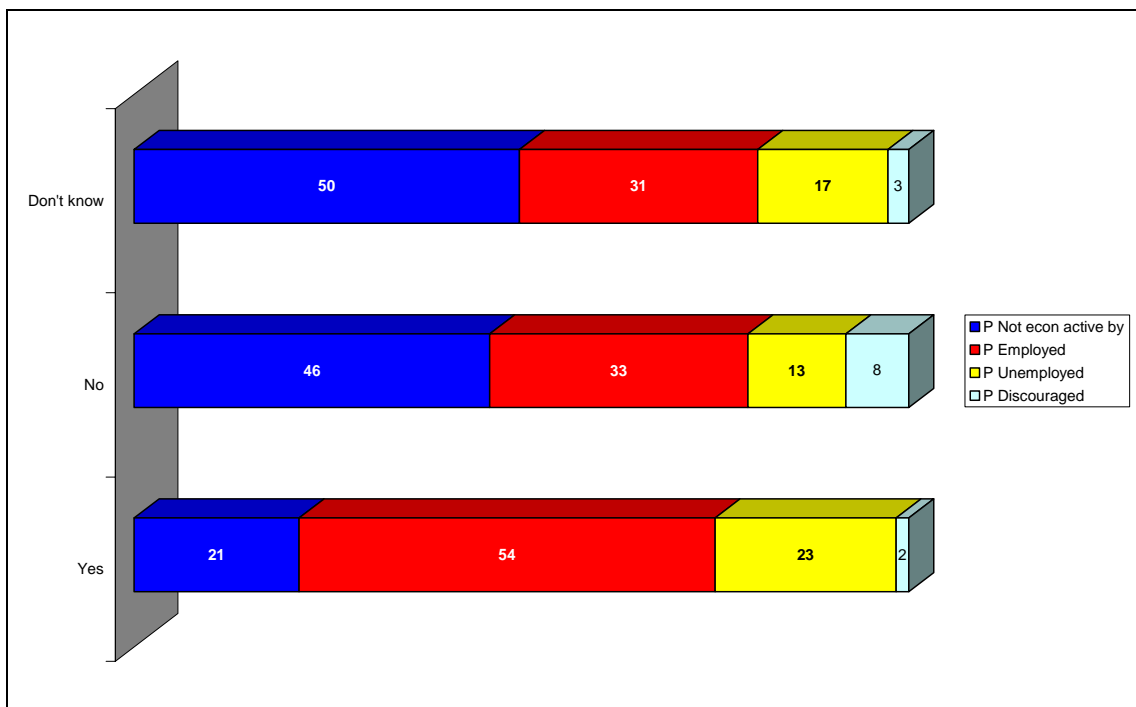


Figure 9 Skills training and job market outcomes



Appendix A

Code	District council/Metro	Province	Main town(s)	Size	Urban	Rural	% Urban	% Rural
CBDC1	Kgalagadi District Municipality	Northern Cape	Hotazel	176909	32651	144257	18.5	81.5
CBDC2	Metsweding District Municipality	Gauteng / Mpumalanga	Bronkhorstpruit	159890	101967	57923	63.8	36.2
CBDC3	Sekhukhune Cross Boundary District Municipality	Limpopo / Mpumalanga	Marble Hall	476314	14619	461695	3.1	96.9
CBDC4	Bohlabela District Municipality	Limpopo / Mpumalanga	Groblerdsdal	318786	11125	307662	3.5	96.5
CBDC8	West Rand District Municipality	Northwest	Carltonville	744156	659402	84754	88.6	11.4
DC01	West Coast District Municipality	Western Cape	Malmesbury	282672	198325	84347	70.2	29.8
DC02	Boland District Municipality	Western Cape	Stellenbosch	629488	441500	187991	70.1	29.9
DC03	Overberg District Municipality	Western Cape	Swellendam	203520	144772	58747	71.1	28.9
DC04	Eden District Municipality	Western Cape	Knysna / Plettenberg Bay	454924	377220	77703	82.9	17.1
DC05	Central Karoo District Municipality	Western Cape	Beaufort West	60482	48351	12131	79.9	20.1
DC06	Namakwa District Municipality	Northern Cape	Springbok / Pofadder	108111	89390	18720	82.7	17.3
DC07	Karoo District Municipality	Northern Cape	De Aar and the Karoo	164608	132557	32049	80.5	19.5
DC08	Siyanda District Municipality	Northern Cape	Upington	209891	162053	47838	77.2	22.8
DC09	Frances Baard District Municipality	Northern Cape	Kimberley	263477	244849	18627	92.9	7.1
DC10	Cacadu District Municipality	Eastern Cape	Grahamstown	388207	294207	94001	75.8	24.2
DC12	Amatole	Eastern Cape	East London	1664254	693426	970824	41.7	58.3
DC13	Chris Hani District Municipality	Eastern Cape	Queenstown	810301	267477	542825	33.0	67.0
DC14	Ukhahlamba District Municipality	Eastern Cape	Aliwal North	341341	102507	238834	30.0	70.0
DC15	O.R.Tambo	Eastern Cape	Mthatha / Port St John	1676482	133636	1542848	8.0	92.0
DC16	Xhariep District Municipality	Free State	Gariep Dam	135247	94048	41200	69.5	30.5
DC17	Motheo District Municipality	Free State	Bloemfontein	728261	662270	65992	90.9	9.1
DC18	Lejweleputswa District Municipality	Free State	Welkom	657012	568704	88308	86.6	13.4
DC19	Thabo Mofutsanyane District Municipality	Free State	Harrismith	725938	346040	379901	47.7	52.3
DC20	Northern Free State District Municipality	Free State	Kroonstad	460316	381052	79263	82.8	17.2
DC21	Ugu District Municipality	KZN	Natal South Coast	704031	93848	610183	13.3	86.7
DC22	UMgungundlovu District Municipality	KZN	PMB	927846	498154	429690	53.7	46.3
DC23	Uthukela District Municipality	KZN	Ladysmith	656985	180139	476846	27.4	72.6
DC24	Umzinyathi District Municipality	KZN	Greytown	456454	76186	380268	16.7	83.3
DC25	Amajuba District Municipality	KZN	Newcastle	468037	260461	207576	55.6	44.4
DC26	Zululand District Municipality	KZN	Pongola	804454	107526	696926	13.4	86.6
DC27	Umkhanyakude District Municipality	KZN	St Lucia	573341	21648	551693	3.8	96.2
DC28	Uthungulu District Municipality	KZN	Richards Bay	885965	130260	755705	14.7	85.3
DC29	iLembe District Municipality	KZN	Natal North Coast	560390	151349	409041	27.0	73.0
DC30	Gert Sibande District Municipality	Mpumalanga	Piet Retief	900007	509455	390551	56.6	43.4
DC31	Nkangala	Mpumalanga	Witbank	1020585	523124	497461	51.3	48.7
DC32	Ehlanzeni	Mpumalanga	Nelspruit	944699	210239	734460	22.3	77.7
DC33	Mopani District Municipality	Limpopo	Tzaneen	964237	57904	906334	6.0	94.0
DC34	Vhembe District Municipality	Limpopo	Musina	1199884	67360	1132523	5.6	94.4
DC35	Capricorn District Municipality	Limpopo	Polokwane	1154693	188582	966110	16.3	83.7
DC36	Waterberg District Municipality	Limpopo	Nylstroom	614154	230903	383250	37.6	62.4
DC37	Bojanala District Municipality	Northwest	Rustenburg	1185329	317678	867650	26.8	73.2
DC38	Central District Municipality	Northwest	Mafikeng	762999	167439	595560	21.9	78.1
DC39	Bophirima District Municipality	Northwest	Pampierstad	439674	125992	313683	28.7	71.3
DC40	Southern District Municipality	Northwest	Klerksdorp	599670	515484	84186	86.0	14.0

DC42	Sedibeng District Municipality	Gauteng	Vaal Triangle	794604	761146	33458	95.8	4.2
DC43	Sisonke District Municipality	KZN	Kokstad / Matatiele	298394	54713	243680	18.3	81.7
DC44	Alfred Nzo District Municipality	Eastern Cape	Umzimkulu	550401	24469	525932	4.4	95.6
MCT	City of Cape Town	Western Cape	Cape Town	2893247	2878559	14688	99.5	0.5
MDURBS	Ethekwini Municipality	KZN	Durban	3090122	2760365	329757	89.3	10.7
MEKUR	Ekurhuleni Metropolitan Municipality	Gauteng	Airport	2480277	2461480	18797	99.2	0.8
MJHB	City of Johannesburg Metropolitan Municipality	Gauteng	Johannesburg	3225812	3217175	8637	99.7	0.3
MPE	Nelson Mandela	Eastern Cape	Port Elizabeth	1005779	984500	21278	97.9	2.1
MPTA	City of Tshwane Metropolitan Municipality	Gauteng	Pretoria	1985983	1804105	181878	90.8	9.2

Appendix B

Not economically active by choice			
Status3	Mean	Std. Dev.	Freq.
Not economically active by choice	0.750	0.250	28759
Employed	0.004	0.032	23455
Unemployed	0.343	0.213	9402
Discouraged	0.392	0.226	8812
Total	0.403	0.376	70428

Employed			
Status3	Mean	Std. Dev.	Freq.
Not economically active by choice	0.005	0.064	28759
Employed	0.989	0.036	23455
Unemployed	0.006	0.074	9402
Discouraged	0.005	0.068	8812
Total	0.332	0.467	70428

Unemployed			
Status3	Mean	Std. Dev.	Freq.
Not economically active by choice	0.119	0.136	28759
Employed	0.004	0.008	23455
Unemployed	0.367	0.165	9402
Discouraged	0.303	0.156	8812
Total	0.137	0.176	70428

Discouraged			
Status3	Mean	Std. Dev.	Freq.
Not economically active by choice	0.126	0.125	28759
Employed	0.004	0.008	23455
Unemployed	0.284	0.106	9402
Discouraged	0.301	0.120	8812
Total	0.128	0.148	70428