Stellenbosch by the numbers

First partial draft for discussion purposes only

A data report commissioned by
The Local Economic Development unit at Stellenbosch Municipality

Bureau for Economic Research (BER), University of Stellenbosch

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Executive Summary

The Bureau for Economic Research (BER) was requested to provide research assistance into the data availability for the greater Stellenbosch Municipality. The report deals with some of the high levels deductions that may be made from the available data but the specific output is a comprehensive and up-to-date (July 2013) overview of economic and social data available for the town and region. The data is too extensive to be provided in hard-copy format but is presented as an EXCEL file attachment to the main report.

The BER further investigated recent economic trends within the region to assist the local authority to make more informed decisions on local matters.

The draft is meant as an introduction to the data collected only, rather than a stand-alone report, and is intended to stimulate internal debate so as to allow phase 2 to proceed. Phase two refers to internal municipal capacity development where the data may be applied following internal needs analysis.

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1. Introduction

1.1 Context

Stellenbosch Municipality requested the Bureau for Economic Research to provide data research capacity to collect and interpret all available data for the town and region. While significant data is now available on ward level following Census 2011, various other sources were also included to provide as comprehensive as possible coverage of the region of Stellenbosch by numbers. It needs to be stressed that the research focussed on quantitative data and methods and as such does not attempt to provide anything more than an analytical overview of the towns and regions that fall within the Stellenbosch Municipal authority.

1.2 Sources of data

Significant data is available from Statistics South Africa but local, provincial and national government agencies also provide data on various issues. The researchers expended substantial effort to ensure that the data collected, aggregated and interpreted in the accompanying database is as extensive as possible. Where needed the researchers further refined the data to provide easy to access information on a variety of matters. While most data is forthcoming from official sources, where appropriate private sources of data that pertain to the region, such as a property rental index for the town, were sourced from private institutions. While these data sources are not necessarily fully representative or long running, they were included for the sake of comprehensiveness.

The following is a list of the headline data contained in the database:

- Census 2011 data by Stellenbosch suburbs
- Municipal Revenue by Stellenbosch Suburbs: Actual Payments and Debtors Raised
- Water Use by Western Cape Municipalities
- Fuel Sales: Volume/Consumption by SA Towns
- Vehicles: Live Vehicle Population Per Local Authority: Western Cape Towns / Suburbs
- Agriculture: Production and Sum of Planted Hectares by Suburb/Town and Type of Produce
- Farm Projects
- Food Gardens
- Education
- Higher Education: Overview, Headcount, Graduates, Undergraduate Success
- Social Grants
- HIV: Population, HIV Infection, AIDS Deaths and Other Deaths by gender, population group, age group and local municipality
- Human Development Index (HDI)
- Phones: Households' household phone by population group and local municipality
- Toilets: Households' toilet facility by population group and local municipality
- Water: Households' access to water by population group and local municipality
- Rental: Payprop rental data for Stellenbosch town only
Population
Household expenditure: Household income & expenditure by local municipality
Gross Value Added: Regional output and GVA at basic prices by local municipality
Tress Index: Tress index for GVA by local municipality
Capital Investment: Fixed capital formation and capital stock by asset type and local municipality
Capital Investment: Fixed capital formation and capital stock by industry and local municipality
Crime: Region by Crime by Month (Monthly 2001/02-2011/12 - Source: SA Police Service)
Crime: Station by Month by Crime (Monthly 2001/02-2011/12 - Source: SA Police Service)
Health
Lighting: Households' energy for lighting by population group and local municipality
Refuse: Households' refuse removal by population group and local municipality
Dwellings: Households' type of dwelling by population group and local municipality
Death Rate: Crude Death Rate (deaths per 1000 population) by population group, gender and local municipality
Schooling: Persons' level of education by gender, population group, age group and local municipality
Age Dependency: Age Dependency Ratios by population group, gender and local municipality
Unemployment: Employment and Unemployment by local municipality
Employment: Employment by skill level, 23 industries and local municipality
Graph: Rental
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Graph: Gross Value Added
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Graph: Ward Revenue
Graph: Census 2011
Ward Leadership
Ward Demographics
Ward Employment
Ward Monthly Income
Ward Socio-Demography
Ward Household Dynamics
Ward Access to Services
Ward Household Goods
1.3 This Report

This report is meant to assist the local authority to identify and use appropriate data to best inform policy decisions. As such and given the mandate of the BER, no attempt at qualitative assessments are made as it is outside of the competence of the BER to comment on socio-political matters. While an overview that briefly describes the areas that fall within the various 22 wards that make up the Municipal area will be provided, the body of the report simply refers to the ward numbers rather than the area and strives to draw unbiased conclusions from the data interpretation. It is assumed that the political process in a democratic dispensation will dictate final outcomes. The data is simply intended to collate everything into a comprehensive and useful source for reference purposes.

Secondly, this report is simply to highlight the types of uses that may be found for the extremely extensive data that have been gathered during this study. As such Section Two endeavours to provide an economist’s macro view of the municipal area and major trends identified.

1.4 The need for appropriate data. How does data assist a local authority to stimulate and guide local economic development? Socio economic factors that impact on economic development

Economies are superficially two sided affairs. On the one hand you have consumption and on the other production. In a closed system, the two are required to be in balance and that which is produced may be consumed. This ideal simplistic state practically does not exist outside of theory.

Rational consumers will live (given the choice) where their opportunity for maximising their income is greatest so that they may consume the most. Similarly from the production side, location will be chosen where the most can be produced with the least cost be-it locally, nationally or internationally.

The market in its purest form is meant to signal through the pricing system where this state of balance can be found in any instance. However simple it is to describe this in theory, in practice it is almost impossible to determine any state of equilibrium other than assuming that the current reality is the closest one can get given the great magnitude of factors that constantly influence any outcome.

Classical economists will argue that any perceived failures such as structural (long term) unemployment is simply the result of a market failure due to missing information or structural constraints. Enough time and freedom will allow people to find a perfect outcome given personal preferences etc.. It does not take even limited knowledge of economics to realise that this state of affairs never really comes about. The modern state and society is an extremely complex outcome of the various economic, societal, geographic and political forces at play at any time. As such the ability to direct development is not only very complex but also often only of limited success.

Specifically at the local (town) level the ability to influence the broader economic forces is limited. Thus to change/alter/improve on structural outcomes brought about by larger societal forces is extremely challenging on a local level. Local authorities may influence outcomes in only a limited fashion given not only their legal mandate but also limited financial powers and subjugation to regional and national authorities.

A local authority may influence events by influencing the relative cost of living or doing business. As simple as this seems it hides a great many factors. Cost of living is relative to the earning potential of the consumer and note that here non-pecuniary (non-monetary considerations) aspects are also relevant. Living in a clean, safe, aesthetically pleasant environment implies value
to a typical person which needs to be factored in (and actually is all the time). For example it is not hard to find examples of local inhabitants of a town such as Stellenbosch or Franschhoek who earn a lower salary while working in the area than they might in another part of the country. However the other factors all interact to influence the outcome so the consumer will take a great variety of issues into consideration such as access to good schools, safety, scenery etc. into account. By influencing these other factors positively, a local authority might increase the relative competitiveness of the town and thereby aid economic development and growth.

A simple example is crime in a town. Crime, if relatively greater in one town than another, increases the cost of living as well as the cost doing business. In this example making both the consumption side of the economy, and the production side less competitive, relative to the town with the lower crime rates. It is however important to realise that it is only changes to the relative relationships that will cause these types of impacts given the assumption that the current reality at any time already reflects the outcomes from all the factors at play. Therefore, in the crime example if one town experiences an increase in crime while the other town has stable crime levels, the town with the increase will have experienced erosion of its relative competitiveness. This is true even if the town with the increase still has lower absolute or relative levels of crime.

There are a great many factors over which a local authority might have influence that affect these relationships. Examples include crime, pollution, congestion, local taxes, infrastructure, healthcare and local government efficiencies but the list is potentially very extensive.

It is for evaluating these relative movements that economic and socio-economic data is required.

2. Stellenbosch: a bird’s eye view

2.1 Stellenbosch as a region within South Africa and the province

Stellenbosch comprises 22 wards that include the towns of Stellenbosch, Franschhoek, Kayamandi Klapmuts, Raithby, Jamestown, Kylemore, Idas Valley, Pniel and Cloetesville.

While historically associated with the wine industry and Stellenbosch University, the town has also in recent times become increasingly relevant in terms of tourism, high technology firms and other service sector activities such as banking.

Holistic Stellenbosch includes both highly affluent areas (often extensively frequented by international tourists) and very poor informal settlements. The report briefly reviews available data to determine whether the spread of income and services is representative of broader South African trends or whether Stellenbosch is more unique in its constituents.

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1 All other things being equal (Ceteris Paribus).
The growth rates for Gross Value Added in post 1994 South Africa indicate that apart from two brief periods (1998 and 2009) Stellenbosch grew faster than either the Western Cape or the National economy. The Western Cape economy on average outperformed the national economy. Stellenbosch added approximately 2% annually on top of the provincial growth rates. During this time and in absolute terms, Stellenbosch became a more prominent contributor to the broad economy as is clear in Figure 2.

Significantly, given the often perceived wisdom that Stellenbosch is a university and wine/tourism region, the sectoral composition of the regional economy in 2011 offers some interesting insights.

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2 Gross value added refers to the value of total sales within the area minus the costs incurred from other firms. In other words it refers to the amount available for profit and wages.
Tourism and university related activities typically fall within the tertiary sector (often also referred to as services). One would therefore expect the region to be dominated by the tertiary sector (as is the province and country). The national accounts point to the fact that Stellenbosch has a significantly larger contribution from the secondary sector (manufacturing) at 31% of the total versus the provincial and national levels of 23%. The primary sector in Stellenbosch is very small at only 5% but still above the provincial level of 4%. The national average is 8%. The largest component growth in the secondary sector was registered by construction but there are several large food manufacturing concerns in the town and region and their contribution is meaningful.

2.2 Some demographics

Consistent employment- and economic growth are arguably the most important goals from an economic point of view given South Africa’s dire employment situation. Stellenbosch again performs better than either the province or the country as can be seen in Figure 4.

As a sector, manufacturing in the region was the area most seriously affected during the recent recession. As can be seen from Figure 5, manufacturing was hard hit in 2009 and has still not recovered from pre-crisis levels.

In the tertiary sector of Stellenbosch all major components performed well in the period after 1994. Unfortunately, even though the primary and secondary sector in the area managed to grow moderately after 1994, the sectoral composition of employment in the region changed dramatically.
From the bottom two graphs in Figure 5, the dramatic deterioration in employment in the primary and secondary sector can be clearly seen. However, in absolute terms by far the greatest impact occurred in the agricultural sector with a near three-quarter contraction in absolute employment over the period. In contrast employment in the tertiary sector increased across all sectors. It is noteworthy that during the major contraction in agricultural employment that Stellenbosch was able to grow employment in manufacturing and construction.

\[ \text{GVA: Primary & Secondary Sectors} \]

\[ \text{R billion (2005 prices)} \]

\[ \text{Employment: Primary & Secondary Sectors} \]

\[ \text{Thousand} \]

\[ \text{GVA: Tertiary Sector} \]

\[ \text{R billion (2005 prices)} \]

\[ \text{Employment: Tertiary Sector} \]

\[ \text{Thousand} \]

Source: Quantec, 2013

\[ ^3 \text{In the formal sector} \]
Figure 6: Secondary and Tertiary sector employment trends

Formal and informal employment: Manufacturing

Formal and informal employment: Construction

Formal and informal employment: Trade
While employment deteriorated badly in agriculture, this was the general trend also experienced by other parts of the country the performance of employment in manufacturing is noteworthy. Manufacturing employment contracted across the South African spectrum but Stellenbosch significantly deviated from trend and has been growing employment in manufacturing. It is therefore rational to deduce that Stellenbosch now enjoys a significant relative competitive advantage over other South African regions as a manufacturing destination and not just as a service and agricultural region. While employment trends in Trade and Finance are also picking up further they are in line with the relative outperformance of the region. In addition to the worrying trend in agricultural employment, the strong rise in government employment in the regions needs to be monitored as it is conceivable that most of this employment stems from the local government layer and as such carry both costs and benefits.

It seems clear from the data that Stellenbosch now enjoys a relative advantage in manufacturing and as such it would make sense to stimulate this further if possible.
While the average employment trends are visible in Figure 5, when viewing Figure 7 it becomes clear that there is a very clear sub-regional variation in employment levels. Ward 9 registers almost no unemployment or informal dwellings so one might assume that it comprises the most affluent part of town. However the reality is that Ward 9 actually refers to the university campus so it comprises students with low/no employment or income. As inane as this example is, it highlights the dangers of blindly following the numbers as local knowledge is imperative in the interpretation of this data.

It is important to note that combined, the unemployed as percentage of the total region’s values, for Wards 1,2,12 and 15 constitute close to half of all the unemployed in the region clearly indicating the need for greater job creation in these areas.

While a local authority has very limited capacity to affect change it would be prudent to keep this in mind when determining future developmental strategies for the towns in question and endeavour to facilitate development in these areas if feasible. However it is likely that the picture in Stellenbosch is no different than many/most other areas within the country.
It is probable that the employment levels are very good indicators of other socio-economic factors. Figure 8 clearly shows a strong correlation between formal and informal dwelling types per ward level and employment levels.

Figure 8: Housing types

Source: Quantec, 2013. BER calculations

Interestingly, Ward 2 (for example) has very high levels of unemployment but reasonably low levels of informal housing. While not investigated in any detail, this might indicate that Ward two is predominantly farm areas where formal housing is still available or that there have been some housing scheme developments. Also important to note is that the assumption must be that ward demarcations do not necessarily reflect actual spatial boundaries. When looking at the income levels for Ward 2 it is clear that there is probably significant poverty present. Therefore using only informal housing levels as indicator would imply erroneously assuming an absence of poverty.

Figure 9: Ward 2 and income levels across the region

Source: Quantec, 2013, BER calculations
While the stated intention is to not introduce political/administrative demarcated boundaries into an economic report, the case of Ward 2 described above becomes interesting when actually determining where it is. In the case of Ward 2 it does include some extensive and affluent farm areas (La Motte in Franschhoek for example) but crucially also a section of Groendal. This implies that it serves to highlight some of the dangers of relying on political demarcations when trying to determine economic trends as Groendal is a highly populated but poor area where some formal housing has indeed been provided.

*Education levels attained is another good way of assessing probable income and other indicators as higher levels of education mostly lead to higher income earned.*

![Educational attainment by ward (% of Stellenbosch)](image)

Source: Quantec, BER calculations

Wards 7,10,11,17,21 and 22 clearly contain be best educated mix of people with ward 10 and 22 having very low levels of inhabitants with education levels lower than matric.

### 2.4 An example of the application of the the data

The question of what the local authority can do to affect faster/better local economic development is a complex one. The local authority has limited resources and is constrained by many institutional factors. Education for example, while being of great importance to a local community is a provincial task. The local authority has a limited legislative ability and limited capital to invest in infrastructure. While the local municipality can set local rates and taxes even these are subject to higher level government scrutiny.

It is in the area of enabling development that a local authority is most able to influence the local economy. By setting the appropriate framework in terms of safety, service levels and infrastructure, the local authority enables the private sector to aid development by allowing investment to flow in those directions which are appropriate.

In this view, the importance of a proper long term spatial development framework that is coherently implemented cannot be overemphasised.
A superficial viewing of the trends for municipal revenue growth is presented in Figure 10 and shows that there has been a significant increase over the three years to the local authority. This revenue growth occurred during a period when Stellenbosch grew faster than the Western Cape (see Figure 1) implying that the rates and taxes generated by the local authority did not materially affect the wellbeing of the local economy or hamper growth. The question however is whether this revenue growth might have been even more robust leading to all the positive externalities this may bring about (such as job creation).

As an example only, we now turn to the crime situation in Stellenbosch. The analysis is indicative only and does not make any normative assessment, other than crime is a cost to society and to doing business. From Figure 10 it appears that Stellenbosch has significantly higher levels of crime per 1000 inhabitants than either the country as a whole or the Western Cape. While crime statistics are notoriously unreliable, the reader is advised that it is simply trends under discussion here. 4

It appears from the graph that there was a drop in the crime levels in Stellenbosch from 2003 to 2005/6. They again started increasing slowly while the Western Cape stayed constant and the rest of the country kept slowing. This implies that crime has probably negatively impacted on the relative competitiveness of Stellenbosch to other areas.

However, the data also allows for some further insights. The uptick in average serious crime depicted above can be separated into property- and person (contact) related crime as is done in Figure 11. Here it is clear that the increase in crime since 2010 is entirely property related. Further analysis shows that there is a possible correlation between property related crime and the size of the local population. Interestingly, reworking the data to assess for possible correlation between crime and unemployment indicates that unemployment levels have increase significantly and also seem to correlate with higher property related crime after 2006.

4 It is entirely conceivable that there are specific factors such as better reporting/more efficient policing and others that allow Stellenbosch to present with such high per capita trends.
From a purely speculative point of view, it would be sensible to determine what led to the decline in crime levels witnessed between 2003 and 2005/6 and/or allowed the crime levels to escalate so rapidly after 2006 RELATIVE to the provincial averages. By potentially changing this trend of increased crime, the cost of doing business/living in the Stellenbosch region will decline thereby providing an economic incentive for faster economic development.

The dramatic increase in absolute levels of unemployment and the seeming correlation to property related crime obviously raises the possibility that crime levels are set to increase further unless the situations is handled properly. While increased law enforcement addresses the symptom it does not necessarily address the causes over the short term. However over time, lower crime levels (by whatever means) will lead to lower costs of living and doing business thereby stimulating economic activity. Should the local authority possess the ability to manage crime better they will be creating a better environment to economic development.

3. **A ward view**

The following section depicts the types of demographic data available for all wards and is used purely for descriptive purposes.
Ward Summaries: Stellenbosch (2011\textsuperscript{5})

Ward 1

1. Demographics

Compared to the 21 other wards, in 2011 Ward 1 is home to the largest population in Stellenbosch. Of Stellenbosch LM’s population of 155 732, Ward 1’s population of 12 389 accounted for 8% of the entire Stellenbosch population. By age, the population of Ward 1 is relatively young. In descending order, the composition of the population in Ward 1 is comprised largely of 15 to 19-year olds (1 276 or 10.3% of total population); 20 to 24-year olds (1 208 (9.8%)) and 0 to 4-year olds (1 168 (9.4%)) and 25 to 29-year olds (1 089 (8.8%)). Children of school-going age also feature prominently within the ward. At a count of 1 067, children aged

\textsuperscript{5} All data contained in the accompanying data files and sourced from StatisticsSA via Quantec 2013.
between 5 to 9 years old account for 8.6% of the ward’s total inhabitants, while those aged between 10 to 14 were 1,034 in number, accounting for 8.3% of the ward’s populace. Largely (63%) populated by the coloured ethnic group, a quarter (25%) of the population is comprised of black Africans. Whites make up 10% of the populace. At 1% each, the presence of the Indian/Asian and ‘other’ ethnic groups are in the minority.

2. Labour

In 2011, Ward 1 was home to some 1,070 unemployment persons. By comparison to other wards within Stellenbosch, the ward had the fourth-largest number of unemployed people after Wards 2, 12 and 15. In addition to the 1,070 unemployed persons, a total of 344 were discouraged work seekers. Consistent with the national, provincial, City of Cape Town Metropolitan Municipality, the Cape Winelands district and the Stellenbosch LM figures, the bulk (55%) of the unemployed persons in Ward 1 were female.

Despite being home to one of the highest numbers of unemployed persons, Ward 1 has the second-highest (after Ward 20) number of employed persons, representing 8.0% of the employed population of Stellenbosch.
3. **Monthly Income**

Despite having the second-highest number of employed persons in Stellenbosch, Ward 1 is home to the highest number of people with no income. This is in comparison to other wards within Stellenbosch.

4. **Socio-demography**

Educational attainment in Ward 1 was fairly low, with the bulk of the population reported to having some secondary education. Those that reported to have attained a Grade 12 (matric) qualification accounted for 17.9% of the total inhabitants of the ward. Some 5.5% reported are reported to have a higher qualification.
5. Household dynamics

In 2011, Ward 1 was the most populous of all the wards, with its 3,359-strong household population accounting for 7.7% of Stellenbosch’s household population of 43,420. Compared to the 21 other wards in Stellenbosch, Ward 1 had the largest percentage (23.2%) of inhabitants that reported to live in informal dwelling/shack in back yard. 16.9% of the households in Ward 1 live in such conditions, while a small minority (1.5%) of the ward’s occupants live in an informal dwelling/shack NOT in back yard, e.g. in an informal/squatter settlement or on farm.

It’s not all doom and gloom in Ward 1 as 75% of its populace live in a House or brick/concrete block structure on a separate stand or yard.
6. **Access to services**

6.1. **Heating source**

![Graph showing heating source distribution](image)

- **Stellenbosch**: Heat source: Electricity

![Graph showing heating source distribution](image)

- **Stellenbosch**: Heat source: Animal dung

![Graph showing heating source distribution](image)

- **Stellenbosch**: Heat source: None
While the bulk (29 298 or 67%) of Stellenbosch households had access to electricity as a heating source, 6 025 (14%) lacked access. Over 600 of these households were in Ward 1. The ward was among the four wards with a high number of households without a heating source (alongside Wards 2, 12 and 15). While extremely small in number, around four homes in Ward 1 still used animal dung, while four more used coal as a heating source. Wood was used by over 350 of the households. It must be taken into consideration that some households with access to electricity might choose to use wood (fireplaces) as a heating source. Overall, compared to the 21 other wards, Ward 1 had the highest number of households with access to electricity as a heating source.
6.2. Lighting source

Lighting source

Stellenbosch: Lighting source: None

Stellenbosch: Lighting source: Electricity

Stellenbosch: Lighting source: Paraffin
At 3,314 households, Ward 1 had the second highest number of households with access to electricity as a lighting source after Ward 15. Nevertheless, 15 households reported to having no access to a lighting source, while only 8 used paraffin.

6.3. Water source
The majority (2 846) of the water needs for Ward 1’s families was provided by a regional/local water scheme (operated by municipality or other water services provider). Thirty households in the ward reported to have used a river/stream as their water source, while another 34 reported to have used water from the spring. Dam/pool/stagnant water was used by 134 families. Compared to the 21 other wards, Ward 1 housed the bulk of such households.

6.4. Toilets

Stellenbosch: Water source: Water vendor

Stellenbosch: Toilets: Flush toilet (Sewage)
While access to sanitation was not a big problem in Ward 1, the ward was among the top six wards (after Wards 2, 3, 18, 19 and 20) with households using bucket toilets. Ward 1 was home to over 90 such households. The bulk of the families in Ward 1 used flush toilets. In fact, Ward 1 had the second-highest number of households in Stellenbosch that had access to flush toilets. An estimated 30 households used pit latrines, while another 33 had no access to toilets.
6.5. Refuse removal

With only a reported seven households, a lack of refuse removal in Ward 1 was not problematic. The majority of the households in Ward 1 reported that their refuse was taken away by the local authority or a private company at least once a week. In fact, Ward 1 had the second-highest number of households (after Ward 15) that reported that their refuse was removed weekly by the local authority or a private company.

As useful and interesting as raw data is, interpreting the results are needed to ensure appropriate decisions are made on a local level. For this the following sections attempts to gain some higher level of insights from the data.
4. A qualitative view

The interpretation of economic data is normally associated with some form of ideological world view. This is especially noticeable when dealing with large data sets such as this project generated.

However, it is impossible not to form some opinion from the data. This project is designed to allow the local Stellenbosch authority to make better informed decisions by utilising the significant amounts of data now available. This section clearly shows how different interpretations of the same data may follow depending on a normative assessment.

Three economists tasked with the collection and broad interpretation of the local economic data provided their high level personal interpretations of what the data shows. The following section therefore should be read as indicative only of the types of differing deduction that may be possible from the same data.

It is stressed that this section is not edited nor does it necessarily imply the BER view, rather the reality that data will mean different things to different people.

4.1 Economist 1

An overview of the Stellenbosch Economy

The economy of Stellenbosch Municipality tracks those of South Africa, Western Cape, City of Cape Town and Cape Winelands District Municipality. All these economies, including that of Stellenbosch, contracted at the height of the global financial crisis in 2009. Nevertheless, the economies have since rebounded, with Stellenbosch leading in terms of the growth pace, registering growth of 5.4% in 2011.

In 2011, four sectors dominated economic activity in Stellenbosch, namely manufacturing, trade, finance and government services. At 23.6%, the financial services sector was the largest contributor to economic activity, followed by manufacturing, which accounted for 22.3% of economic activity and trade (18.2%) and government services (12.0%). It must however be noted

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6 Regional economic (GVA) data lags national GDP data by 1 year
7 Includes wholesale and retail trade, catering and accommodation
8 Includes insurance, real estate and business services
that while still important to the economy of Stellenbosch, the contribution of the manufacturing sector has been on a gradual decline and has fallen from 30% in 1996 to 22% in 2011. On the other hand, the trade and financial services sectors’ contribution to the local economy have been gradually rising. The share of the trade sector has risen from 10% (1996) to 18% (2011), indicating an increasing importance to the Stellenbosch economy. The share of the financial services sector has climbed from 19% (1996) to 23.6% (2011). Of particular concern is the agricultural sector. The contribution of the sector to Stellenbosch has fallen from 13% in 1996 to 5% in 2011.

On the whole, the tertiary/services sector, which comprises of trade, transport, finance, community and government services, accounted for the bulk (65.5%) of economic activity in Stellenbosch. The secondary (29.4%) and primary (5.1%) sectors’ importance trail behind.

Although in 2011 Stellenbosch’s unemployment rate was high at an estimated 20%, the local municipality’s unemployment rate was lower than that of South Africa (24.7%), the Western Cape (21.2%) and the Cape Winelands (20.3%).

In terms of employment (both formal and informal), the community (government) services sector employed the majority (30%) of the employed population in Stellenbosch in 2011. Trailing closely is the trade sector, which absorbed 16.9% of the employed population. The agriculture and manufacturing sectors respectively employed 13.1% and 13.4% of the employed population respectively. Despite its declining importance to Stellenbosch Municipality, the agriculture sector managed to be the fourth highest employer in 2011. The financial services sector was the fifth largest employer in the region. This is despite it being the biggest sector by contribution.

The high employment in the community services, manufacturing, trade and financial services sectors reflects the contribution of the three sectors to the local economy.

The economy of Stellenbosch Municipality is the biggest in the Cape Winelands, and outpaced the Drakenstein Municipality’s economy in 2009. Furthermore, the contribution of the Stellenbosch economy to the District’s economy is on a gradual increase. The share of the local municipality to the Cape Winelands DM has risen from 25.5% in 1996 to 33.6% in 2011.

**Strengths**

- Youthful population which drives consumption
- Increasing importance of the financial services sector
- Increasing importance of the manufacturing sector, with established manufacturing concerns, i.e. Distell, Parmalat and many established world-recognised wine estates which produce top wines
- Biggest local economy the Cape Winelands District Municipality. Overtook Drakenstein as the biggest economy in the District.
- In 2011, Stellenbosch economy expanded at a rate higher than that of South Africa, the City of Cape Town and Cape Winelands
- Attractive landscape and scenery, which attract tourists
- A world-class, reputable university

**Weaknesses**

- Economy not highly diversified. Instead, the economy is highly dependent on a handful of economic sectors, namely manufacturing, trade, finance and government services. This leaves the economy highly vulnerable to the impact of exogenous variables that may destabilise the economy, i.e. drought, dry spells, seasonal droughts, cold spells, strong winds, heavy rains, hail, windstorms, floods, extreme temperatures, economic recessions, low domestic and in international demand, commodity price fluctuations, interest rate hikes, low consumer spending, inflation, power failures, labour strikes, adverse
environmental/ geological factors, i.e. earthquakes, fires, volcanoes, flooding, water scarcity, tidal waves; political instability, insurgency, etc.

- Given the nature of the economy, which is services sector-driven and requires specialised skills, the economy cannot absorb a high number of unskilled population.

**Opportunities**

- Young population to drive consumption in the economy in years to come
- The Stellenbosch wine route provides an opportunities for the expansion of the tourism sector
- Landmark historical buildings provide a tourist attraction
- Stellenbosch’s gradual economic expansion provides an opportunity for the expansion of the construction sector, as demand for buildings increases
- Given its warm climate during the summer months, Stellenbosch provides a lucrative location for solar powered electricity

**Threats**

- While the Municipality excels in service delivery, there is a small minority that still lack services. For instance, out of the 43 420 households in 2011:
  - 13.9% had no heating source
  - 9.6% used petrol as a heating source
  - 4.1% used paraffin as a lighting source
  - 2.1% used candles as a lighting source
  - 1.9% used dams/ stagnant water as a source of water
  - 2.4% had no toilets
  - 0.5% used pit latrines
  - 2.6% used bucket toilets
  - 1.0% reported that they had no rubbish disposal
- Therefore, service delivery protests/insurgency is possible, given that some (poorer) wards are underserved and lack basic amenities
- The lack of access to services to the minority group also poses a health risk to the affected communities
- Declining agriculture sector threatens the diversity of the economy as well current and future employment
- Given that the economy is driven by the highly-skilled services sector, outmigration might lead to the brain drain
- Given that Stellenbosch-produced wine is a top export commodity, a slowdown in key international export markets could threaten wine exports and therefore the profitability of wine-making concerns.
- An unfavourable climate (i.e. drought) poses a threat to yields in the agriculture sector
- A rise in mechanisation in the agriculture and manufacturing sector poses a threat to employment in the sectors
- Labour legislation that is seen as too rigid poses a threat to employment across various sectors, i.e. agriculture
- A decline in unsecured lending poses a risk to the unsecured lending market, therefore affecting the thriving financial services sector
- Lower consumer confidence poses a threat to the thriving trade sector

**4.2 Economist 2**

**Stellenbosch, more than a student town**

When the town of Stellenbosch comes to mind, the first thoughts that strike one are beautiful mountains, good wine and wealthy students. But this is not the full picture. The people of
Stellenbosch, and the rest of the country, consider this town to be a unique place. They mainly consider it to be a privilege to live and work here. First of all, while being the second oldest town in South Africa, Stellenbosch did not grow much over its three and a quarter centuries of existence. This slow growth is mostly the reason Stellenbosch was able to retain its unique tranquility, as opposed to Cape Town. Walking through the streets of the town centre, and driving around the wine farms sketches a picture of a very pleasant place – perhaps one of the most beautiful in the country.

However, when paging through the tables and statistics a different picture emerges. Stellenbosch is no longer a slow growing town, in fact is has been growing faster than the country or the province in the last decade. This growth was in terms of population as well as the town’s economy, and along with the growth came its virtues as well as its vices. Since the Ruperts, the super wealthy have started to establish their headquarters in Stellenbosch. Along with them came the poor, seeking for the spin-off job opportunities. Over the years this process resulted in a bi-polar society where the wealthy and poor are confronted with each other on a daily basis. As expected, the huge wealth difference is a recipe for crime. Shocking as it may be, Stellenbosch report more criminal activity relative to its population than Cape Town or South Africa.

For the past century one of Stellenbosch’s core economic sectors was higher education. In many perspectives the town is synonymous with the University of Stellenbosch. Occupying the centre of the town, the university’s students lend a youthful vibrancy to the historical old surroundings. The university also serves as an intellectual hub, attracting an active group of academics and professionals. Their impact on the town’s culture can be subtly detected in the art galleries, cultural societies and architecture. However, Stellenbosch is not about lofty intellect only, it has a surprisingly large manufacturing sector. This stems mostly from the wine farms surrounding the town in need of further processing of their grape harvests. The lion’s share of Stellenbosch’s factories find themselves in the food processing industry – producing wines, brandies and coolers for an international market. The wine farms also serve as a catalyst for another important industry to Stellenbosch: tourism.

However, Stellenbosch remains a boat in the South African ocean: vulnerable to the national and international socio-economic climate. The town did not escape the wave of unemployment which hit South Africa. In only five years the number of unemployed people in town more than doubled. The majority of the newly unemployed lost their jobs during the international financial crisis when South Africa was adversely affected. On its own this unemployment creates a number of social problems: poverty, housing, crime, health and political. Solving the unemployment problem is not entirely in the hands of the local authority – it can only contribute to a national coordinated strategy.

Finally, Stellenbosch became unique and special due to the quality of its life, products and teachers. The town will only retain this character if it keeps on focusing on quality rather than quantity. Though, it can also theoretically prosper by following the Chinese model of low-end mass production, it will lose its soul.

4.3. Economist 3

Stellenbosch is a town of extremes and in many reflects both the best and worst of South Africa and the legacy of the past. The data gathered for this study indicates a town/region that has grown significantly faster than both the immediately neighbouring regions but also the country as a whole. It is however important to note that the region is not isolated and its very success in the past might have served as incentive for a significant inflow of both those looking for a better quality of life and can afford it, as well as those that cannot afford it but wish to better their chances.
The data creates a clear picture of a town that is greatly divided along traditional South African lines that include race, income and education. Employment creation has been broadly in line with the regional averages but the mix has changed very significantly. Agricultural employment in the Stellenbosch regions has dwindled dramatically in the last decade while public sector employment has increased. Public sector employment, no matter at which level of government cannot be sustained without growth in the private sector so as to allow for greater revenues to the state which in turn may be employed to pay salaries. The scale of job losses in agriculture is also such that it must have caused significant social change in the area.

The impression created by the data is that there are broadly four main components to the mix in the Stellenbosch region.

1. The university and its students by and large are extremely well educated and enjoy very high living standards.
2. The traditionally “white” parts of the towns include highly educated and affluent inhabitants even by South African standards. This implies that Stellenbosch’s wealthy enjoy living standards that are high even relative to the rest of the wealthy in South Africa on average.
3. The traditional “coloured” parts of town, while having reasonably high income and education levels with good access to services seem to have a relative lag of services such as housing. This indicates a potentially politically charged environment where recent local authority attention might have been predominantly focused on service delivery to the last portion of the region namely the poor, traditionally “black” areas and the informal settlements.
4. The four wards that constitute the poorest sections of local society ⁹ are extremely poor and while they probably enjoy better levels of service delivery than the average poor South African, stand in stark contrast to the rest of the region.

Furthermore, the data is now available on sub-regional level down to demarcated wards, 22 in all that constitute the Stellenbosch Municipal region. Data is crucial to ensure that service delivery is directed at that area that most urgently requires it as this maximises the impact, but, a snapshot view as provided by one data point in time also hides important aspects.

However much detail the data provides on a ward level at this time, it cannot inform the relative changes between regions over time. Both the magnitude and scale of changes are crucial to balance the overall outcome. Given the fact that the Stellenbosch region does not exist in isolation, it stands to reason that external forces might have significant impacts on perceived outcomes. For example, it is important to note whether or not the pace of growth in inhabitants outpaced the planned-for roll out of services in any areas before determining where the problem lies.

In a country such as South Africa where unemployment and abject poverty is the daily reality for a significant portion of the population it is to be expected that areas that outperform the average in terms of service delivery to the poor, job creation and personal security will attract significant inflows of people looking to better their lives. These inflows might be completely out of relation to the relative outperformance of the economy. In other words, the very success of Stellenbosch in managing to grow and prosper in the past might actually become the single biggest challenge in the future.

Local authorities have extremely limited capacity to influence the level and scale of economic development in their region given their legal and capacity constraints. It is in areas such as law enforcement, special planning & development and local service delivery levels and quality that the local authority plays the most important role. By enabling a better/safer/cleaner environment, the relative competitiveness of the region can be enhanced and this in turn will attract more investment and consumption in the region. In aspects such as planning and engineering,

⁹ Wards1,2,12 and 15
comprehensive data analyses such as that provided by this project allows for the most appropriate application of policy.

While this study was not intended to provide policy direction, a few recommendations come to mind. Some of the wards have decent levels of education, reasonable incomes but high incidence of informal dwellings. By applying appropriate zoning, it is conceivable that investment into lower cost housing will follow. Other wards again have high unemployment and perhaps zoning new labour absorbing development zones for light manufacturing will lead to employment and income growth in the areas most in need.

In the Stellenbosch case, the extremely concerning rapid rise of property related crime since 2005 needs to be urgently investigated. There is a probable correlation between unemployment and property crime and given the fact that the absolute numbers of unemployed in the Stellenbosch region have risen very significantly it implies that crime might well continue climbing. Crime is a cost to society that negatively influences both income levels and investment. Given the perceived structural break in 2005/6 and the fact that local crime levels are significantly higher than both the provincial and national levels (and diverging further) this should raise serious concerns as to the longer term sustainability of the outperformance relative to the rest of the country.

5. Conclusions

This interim report is intended to stimulate internal debate within the local authority as to how best to apply the data to help design more appropriate responses to local municipal policy. As such the report does not draw specific conclusions yet.

Expanded data key

<table>
<thead>
<tr>
<th>Titles</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Census 2011 data by Stellenbosch suburbs</td>
<td>Population by Age, Citizenship, Year moved to SA, Disability, Education Level, Educational Institution Attendance, Employment Status, Gender and Age, Gender, Higher education, Monthly income, First language, Marital status, Enumerator area type, Population group, Employment sector, Migration since 2001, Area (Sqr Km)</td>
</tr>
</tbody>
</table>

10 Please note that this is the personal view of the economist ONLY and does not constitute BER policy.
Population total
Household size
Age group and Gender (household head)
Dwelling type
Annual household income
Energy for lighting
Number of rooms
Population group (head of household)
Refuse removal
Telephone facilities
Tenure status
Toilet facilities
Access to piped water
Source of water
Internet access
Motorcar or Computer
Satellite or Television
Radio or DVD player
Washing machine or Vacuum cleaner
Refrigerator or Electric/ gas stove
Mail delivered at residence or Mail post box/bag
Employment status (head of household)

**Municipal Budget**
Draft Budget 2011/12: Stellenbosch, George & Overstrand

**Municipal Revenue by Stellenbosch Suburbs: Actual Payments and Debtors Raised, July 2010-June 2013**

**Water Use by Western Cape Municipalities**
Summary of System Input Volume and NRW - Western Cape Municipalities

**Fuel Sales: Volume/Consumption by SA Towns**
- Petrol
- Diesel
- Furnace oil
- Jet fuel
- LPG
- Paraffin
- Aviation gasoline

**Vehicles: Live Vehicle Population Per Local Authority: Western Cape Towns/Suburbs**
- Heavy load veh(GVM>3500Kg equip to draw)
- Heavy load veh(GVM>3500Kg, not to draw)
- Heavy passenger mv (12 or more persons)
- Light load vehicle (GVM 3500Kg or less)
- Light passenger mv(less than 12
Agriculture: Production and Sum of Planted Hectares by Suburb/Town and Type of Produce

Farm Projects

Food Gardens

Education

- Number of learners, educators and schools in the ordinary school sector, by province, region, district and metropolitan municipality (StatsSA District Councils)

Higher Education, 2000-2011

- Over view of South African public higher education institutions
- Headcount enrolments in public higher education institutions, by major field of study and formal qualification
- Headcount enrolments of contact and distance mode students in public higher education institutions, by population group
- Graduates/diplomates in public higher education institutions, by major field of study and formal qualification
- Summaries of key graduation rates in public higher education institutions
- Full-time equivalent enrolments of contact and distance mode students in public higher education institutions
- Undergraduate success rates of contact and distance mode students in public higher education institutions, by population group
- Overview of permanent staff in public higher education institutions

Social Grants

- Number of grants in the Western Cape Region broken down by paypoint as at 2013-05

HIV: Population, HIV Infection, AIDS Deaths and Other Deaths by gender, population group, age group and local municipality

Human Development Index (HDI)

- Life expectancy at birth
- Expected years of schooling
- Mean years of schooling
- GNP per capita 2005 $PPP
- Human Development Index

Phones: Households' household phone by population group and local municipality, 1995-2011

Toilets: Households' toilet facility by population group and local municipality, 1995-2011

Water: Households' access to water by population group and local municipality, 1995-2011

Rental: Payprop rental data, Stellenbosch and South Africa

- Total Rent Collected
- Number of Units
- Average Rent

Population, 1995-2013

Household expenditure: Household income & expenditure by local municipality, 1995-2001

- R millions at 2005-prices
- R millions at current prices

Gross Value Added: Regional output and GVA at basic prices by local municipality

- Gross value added at basic prices, Rm
- Compensation of employees - Total, Rm
- Compensation of employees - Highly skilled, Rm
Compensation of employees - Skilled, Rm
Compensation of employees - Semi- and unskilled, Rm
Compensation of employees - Informal, Rm
Gross operating surplus, Rm
Intermediate consumption, Rm

**Tress Index:** Tress index for GVA by local municipality, 1995-2011

**Capital Investment:** Fixed capital formation and capital stock by asset type and local municipality, 1995-2011

**Capital Investment:** Fixed capital formation and capital stock by industry and local municipality, 1995-2011

Gross domestic fixed investment: Total (Rm constant 2005 prices)
Fixed capital stock: Total (Rm constant 2005 prices)
Gross domestic fixed investment: Total (Rm current prices)
Fixed capital stock: Total (Rm current prices)

**Crime:** Region by Crime by Month (Monthly 2001/02-2011/12 - Source: SA Police Service)

Contact (Crime against the person)
Contact-related crime
Property-related crime
Crime heavily dependent on police action for detection
Other serious crime
Other crime categories

**Crime:** Station by Month by Crime (Monthly 2001/02-2011/12 - Source: SA Police Service)

Contact (Crime against the person)
Contact-related crime
Property-related crime
Crime heavily dependent on police action for detection
Other serious crime
Other crime categories

**Health, Cape Winelands, 2000-2012**

Finance
Management
Hospital services
Child health
Immunisation
Maternal health
Reproductive health
TB Control
HIV and AIDS
Chronic care
Burden of disease

**Lighting:** Households’ energy for lighting by population group and local municipality, 1995-2011

Solar/other/unspecified
Electricity
Gas
Paraffin
Candles

**Refuse:** Households’ refuse removal by population group and local municipality, 1995-2011

Unspecified / other
Removed by local authority at least once a week
Removed by local authority less often
Communal refuse dump
Own refuse dump
No rubbish disposal

**Dwellings: Households' type of dwelling by population group and local municipality, 1995-2011**
- House or brick structure on a separate stand or yard
- Traditional dwelling/hut/structure made of traditional materials
- Flat in a block of flats
- Town/cluster/semi-detached house (simplex, duplex or triplex)
- House/flat/room, in backyard
- Informal dwelling/shack, in backyard
- Informal dwelling/shack, NOT in backyard, e.g. in an informal/squatter settlement
- Room/flatlet not in backyard but on a shared property
- Other/unspecified/NA

**Death Rate: Crude Death Rate (deaths per 1000 population) by population group, gender and local municipality, 1995-2011**

**Schooling: Persons' level of education by gender, population group, age group and local municipality, 1995-2011**
- Grade 0/No schooling
- Grade 1/Sub A
- Grade 2/Sub B
- Grade 3/Standard 1
- Grade 4/Standard 2
- Grade 5/Standard 3
- Grade 6/Standard 4
- Grade 7/Standard 5
- Grade 8/Standard 6/Form 1
- Grade 9/Standard 7/Form 2
- Grade 10/Standard 8/Form 3/NTC1
- Grade 11/Standard 9/Form 4/NTC11
- Grade 12/Standard 10/Form 5/Matric/NTC11
- Less than matric & certif/dip
- Certificate with Grade 12
- Diploma with Grade 12
- Bachelor's Degree
- Bachelor's Degree and Diploma
- Honours degree
- Higher Degree (Master's, Doctorate)
- Other/Unspecified/NA

**Age Dependency: Age Dependency Ratios by population group, gender and local municipality, 1995-2011**

**Unemployment: Employment and Unemployment by local municipality, 1995-2011**
- Population - Total (Number)
- Population - Working age (Number)
- Economically active (Number)
- Employed - Formal and informal - Total (Number)
- Employed - Formal - Total (Number)
- Employed - Formal - Highly skilled (Number)
- Employed - Formal - Skilled (Number)
- Employed - Formal - Semi- and unskilled (Number)
- Employed - Informal (Number)
- Unemployed (Number)
Not economically active (Number)
Unemployment rate (Percentage)
Labour force participation rate (Percentage)

**Employment: Employment by skill level, 23 industries and local municipality, 1995-2011**

Formal and informal employment - Total (Number)
Formal employment by skill: Total (Number)
Formal employment by skill: Highly skilled - Total (Number)
Formal employment by skill: Skilled - Total (Number)
Formal employment by skill: Semi- and unskilled (Number)
Informal employment - Total (Number)

**Graphs:**
- Rental
- Population
- Crime
- Gross Value Added
- Capital Investment
- Household Expenditure
- Employment
- Schooling
- Health
- Ward Revenue
- Census 2011
- Ward Leadership

**Ward Demographics**

**Population (Size)**

**Gender**
- Male
- Female

**Population Groups**
- Black African
- Coloured
- Indian or Asian
- White
- Other

**Languages**
- Afrikaans
- English
- IsiNdebele
- IsiXhosa
- IsiZulu
- Sepedi
- Sesotho
- Setswana
- Sign language
- SiSwati
- Tshivenda
- Xitsonga
- Other
- Unspecified
Not applicable

**Age Groups**
- 00 0 04
- 05 0 09
- 10 0 14
- 15 0 19
- 20 0 24
- 25 0 29
- 30 0 34
- 35 0 39
- 40 0 44
- 45 0 49
- 50 0 54
- 55 0 59
- 60 0 64
- 65 0 69
- 70 0 74
- 75 0 79
- 80 0 84
- 85+

**Ward Employment**
- Employed
- Unemployed
- Discouraged work-seeker
- Other not economically active

**Ward Monthly Income**
- No income
- R1-R400
- R401-R800
- R801-R1600
- R1601-R3200
- R3201-R6 400
- R6401-R12800
- R12801 - R25600
- R25601 - R51200
- R51201 - R102400
- R102401 - R204800
- R204801 or more

**Ward Socio-Demography**

**Sex of Household head**
- Male
- Female

**Marital Status**
- Married
- Living together like married partners
- Never married
- Widower/ Widow
Separated
Divorced

**Highest education level**
- No schooling
- Some primary
- Completed primary
- Some secondary
- Grade 12/Std 10
- Higher
- Other
- Unspecified
- Not applicable

**Relationship to Household head**
- Head/Acting head
- Husband/Wife/Partner
- Son/daughter
- Adopted Son/Daughter
- Stepchild
- Brother/sister
- Parent Mother/Father
- Parent-in-law
- Grand/Great-Grandchild
- Son/Daughter-in-law
- Brother/Sister-in-law
- Grandmother/Father
- Other relative
- Non-related person
- Unspecified
- Not applicable

**Ward Household Dynamics**

**Number of households**

**Type of main dwelling**
- House or brick/concrete block structure on a separate stand or yard
- Traditional dwelling/hut/structure made of traditional materials
- Flat or apartment in a block of flats
- Cluster house in complex
- Town house (semi-detached house in complex)
- Semi-detached house
- House/flat/room in back yard
- Informal dwelling/shack in back yard
- Informal dwelling/shack NOT in back yard, e.g. in an informal/squatter settlement or on farm
- Room/flatlet on a property or a larger dwelling/servants' quarters/granny flat
- Caravan or tent
- Other

**Number of rooms in dwelling**

**Household size**

**Ward Access to Services**

**Heating**
None
Electricity
Gas
Paraffin
Wood
Coal
Candles (not a valid option)
Animal dung
Solar
Other
Unspecified
Not applicable

**Lighting**

None
Electricity
Gas
Paraffin
Candles (not a valid option)
Solar
Unspecified
Not applicable

**Cooking**

None
Electricity
Gas
Paraffin
Wood
Coal
Animal dung
Solar
Other
Unspecified
Not applicable

**Source of water**

Regional/local water scheme (operated by municipality or other water services provider)
Borehole
Spring
Rain water tank
Dam/pool/stagnant water
River/stream
Water vendor
Water tanker
Other
Not applicable

**Toilets**

None
Flush toilet (connected to sewerage system)
Flush toilet (with septic tank)
Chemical toilet
Pit toilet with ventilation (VIP)
Pit toilet without ventilation
Bucket toilet
Other
Unspecified
Not applicable

**Refuse**
Removed by local authority/private company at least once a week
Removed by local authority/private company less often
Communal refuse dump
Own refuse dump
No rubbish disposal
Other
Unspecified
Not applicable

**Ward Household Goods**
Ownership of a refrigerator
Cellphone
Computer
Access to internet
DVD Player
Electric or Gas stove
Motor car

**Graphs:**
- Ward Demographics
- Ward Employment
- Ward Monthly Income
- Ward Socio-Demography
- Ward Household Dynamics
- Ward Access to Services
- Municipal Budget

**Employment:**
- Formal and Informal: by sector, Stellenbosch, Cape Winelands, Western Cape, SA, 1995-2011
- Formal and Informal: Agriculture Sector, 1995-2011
- Formal and Informal: Manufacturing Sector, 1995-2011
- Formal and Informal: Construction Sector, 1995-2011
- Formal and Informal: Wholesale and retail trade, catering and accommodation, 1995-2011
- Formal and Informal: Finance, insurance, real estate and business services, 1995-2011
- Formal and Informal: Community, social and personal services, 1995-2011
- Formal and Informal: Employment by Region, 1995-2011
- Formal and Informal: Sector Contribution, 1995-2011

**References and online resources**