

THE SMALL, MEDIUM AND MICRO ENTERPRISE SECTOR OF SOUTH AFRICA

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Executive summary

This report presents a broad statistical overview of the Small, Medium and Micro Enterprises (SMMEs) of South Africa.

The Department of Trade and Industry (DTI) published a comprehensive report on the SMME sector of South Africa in 2008. Since then, the domestic, as well as global economy, changed significantly. The global financial crisis followed in 2008 and 2009, pulling the South African economy into recession. Domestic economic policies changed, interest rates were reduced significantly, a new political administration came to power and much more. All these factors of change impacted on the SMME landscape in South Africa, and we aim to identify those changes and evaluate the current situation.

To do this, we used a two pronged approach. Firstly, we summarised some of the key issues from the latest literature on SMMEs. Secondly, we analyse and interpret the latest statistics on small businesses.

In the literature study, we first set the scene by summarising the historical background of SMME policy in South Africa. This is followed up by a list of findings and lessons. We found that SMMEs are challenged by access to finance and markets, poor infrastructure, labour laws, crime, skills shortages and inefficient bureaucracy.

In order to extract the latest statistical trends, we follow a similar methodology as the DTI to estimate the number of SMMEs in South Africa over time. The statistical data should enable the reader and other researchers to take the next step and do an in depth analysis of specific topics on SMMEs.

To present the statistics, we table and graph the two major types of economic indicators that describe SMMEs. Firstly, we used demographic and geographic indicators to identify where SMMEs operate, who owns them, how educated their owners are and in which economic sectors they function. Secondly, we used financial indicators to compare the size of SMEs according to economic sector, their tax, wages, interest and rents paid. The following table summarises the key indicators:

KEY INDICATORS	2015Q2
Number of SMMEs	2 251 821
Number of formal SMMEs	667 433
Number of informal SMMEs	1 497 860
SMME owners as % of total employment	14%
% operating in trade & accommodation	43%
% operating in community services	14%
% operating in construction	13%
% operating in fin. & business services	12%
% contribution to GVA*	21%
% black owned formal SMMEs	34%
% operated by income group < R30k pa	7%

Source: BER, StatsSA *GDP before taxes and subsidies

We concluded that there is a significant distinction between the formal and informal sectors. The formal sector tends to be more educated, white, situated in Gauteng and the Western Cape, with a higher income generation. However, most SMMEs are black owned and operate in the informal sector, especially in the more rural provinces.

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Introduction

In 2008, the DTI published a comprehensive report on the Small, Medium and Micro Enterprises (SMME) sector of South Africa (The DTI, 2008). As economies evolve over time and adjust to new circumstances, so too the SMME landscape in South Africa. This might be particularly true given the major economic events of the last eight years. Some of these events include the global financial crisis of 2008 and 2009, and a new administration in government (President Zuma vs. former President Mbeki). Also a full cycle of interest rates (from a tightening to an accommodative cycle), and the peak of the commodity super cycle.

With these changes in mind, it is reasonable to assume that the SMMEs in South Africa have adapted themselves to the new circumstances. The aim of this report is to identify the current situation of SMMEs in South Africa, and to compare this with their situation in 2008. From these time-comparisons some trends emerge.

This research note starts off with a short overview of the current literature on SMMEs in South Africa, with a focus on the DTI report. Then we present the methodology used to derive a proxy for the number of SMMEs in the country. This section is followed by the relevant data, which is presented in tables and graphs according to two main topics. The first topic deals with demographic and geographic properties of SMMEs. It derives data from the Quarterly Labour Force Survey (QLFS), as published by Statistics South Africa (StatsSA). Here we focus on the distribution of SMMEs by province, race, income groups and economic sectors. The second main topic focuses on the financial indicators of SMMEs. It is based on the Quarterly Financial Survey (QFS) of StatsSA, and the focus is on the aggregate income statement of companies¹.

Since we cover a wide spectrum of indicators on SMMEs, we mostly present only tables and graphs of the data, with limited comment and analysis. The aim is to provide future researchers with the data they need to do more in depth analysis of specific topics regarding SMMEs.

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¹ All industries in the South African economy, excluding agriculture, financial intermediation, insurance and government institutions.

Context and background

In this section, we highlight the importance of SMMEs in the economy. A short summary is provided on the relevant policies and responsible institutions.

Small business key to job creation business, play an important role in an economy. They can be key drivers of economic growth, innovation and job creation. In South Africa, government recognises the importance of this segment of business activity, so much so that a new Ministry of Small Business Development was established in early 2014. The aim of the Ministry is to facilitate the promotion and development of small businesses. These enterprises contribute significantly to national GDP and have proved to be major contributors to job creation (The DTI, 2008). South Africa struggles with an alarmingly high national unemployment rate of 25% (Statistics South Africa, Quarter 2: 2015), which is partly exacerbated by a chronic shortage of skilled labour. Against this backdrop, government is aiming to put policies, strategies and programmes in place which aim to create an enabling environment for small business.

Small, Medium and Micro Enterprises (SMMEs), also referred to as small

The range in size is very wide

The definition for SMMEs encompasses a very broad range of firms, some of which includes formally registered, informal and non-VAT registered organisations (The DTI, 2008). Small businesses range from medium-sized enterprises, such as established traditional family businesses employing over a hundred people, to informal micro-enterprises. The latter includes survivalist self-employed persons from the poorest layers of the population. The upper end of the range is comparable to the small- and medium-sized enterprises (SME) segment found in developed countries. In South Africa, a large majority of SMMEs are concentrated on the very lowest end, where survivalist firms are found (Berry, 2002). These firms can take the form of street trading enterprises, backyard manufacturing and services, and occasional home-based evening jobs. The informal sector comprises almost exclusively of SMMEs; those classified as survival entities have very little growth potential and are less likely to hire staff (The DTI, 2008).

Government policy on South African SMME development was initially documented in the 1995 White Paper on SMME development. The Integrated Small Business Development Strategy provided an action plan with focus on:

- 1) increasing financial and non-financial support,
- 2) creating a demand for the products and services provided by the SMMEs and
- 3) reducing regulatory constraints (The DTI, 2008).

In line with this action plan, the government established a number of institutions

Policy development which would be responsible for the implementation of small business development strategy (GEM, 2014) & (The DTI, 2008).

The Small Enterprise Development Agency (SEDA) is an agency of the

Department of Small Business Development. It was established in December 2004, through the National Small Business Amendment Act (Act 29 of 2004). It is mandated to implement government's small business strategy, design and implement a standard and common national delivery network for small enterprise development, and integrate government-funded small enterprise support agencies across all tiers of government. The Small Enterprise Finance Agency (SEFA) was merged with the South African Micro-Finance Apex Fund (SAMAF) and Khula Enterprise Finance Limited, to cater for small businesses requiring funding up to a limit of R3 million. SEFA offers bridging finance, revolving loans, term loans, asset finance and funds working capital needs. The National Youth Development Agency (NYDA) was formed with the purpose of assisting young South Africans between the ages of 14 and 35 years to start businesses and to finance existing businesses. In order to enable and support technological innovation, as well as to enhance the global competitiveness of South African businesses, the Department of Science and Technology established the Technology and Innovation Agency (TIA). The formation of the TIA was through a merger of seven entities which were previously tasked to do the same. Lastly, the National Empowerment Fund (NEF) was founded with the intention of

offering financial and non-financial support to black empowered businesses.

Responsible institutions

Lessons from the literature

Various papers and reports have been written about SMMEs in South Africa. We summarise some of their findings, focusing mostly on the challenges and risks that SMMEs face.

The literature on small business development in South Africa has focused largely on the practicalities surrounding small business or SMME development policies. The three key areas of focus are:

- 1) An assessment of policies and instruments put in place by the South African government in order to support the small business segment.
- An examination of the role and impact of private and public sector institutions on small business growth and development.
- 3) A consideration of the state of South Africa's "culture of entrepreneurship", which is common in many other middle-income developing countries and has been a key driver of job creation.

Three focus areas

Although a defined set of challenges being faced by SMMEs in South Africa can be listed, it is important to consider that not all domestic small businesses necessarily face the same set of challenges. According to the Finscope Small Business Survey (2010), challenges tend to be location specific. More of this detail will be explored in the following section which provides an overview of risks and challenges faced by SMMEs from various sources.

Challenges faced by SMMEs

Access to finance and credit

Limitations of access to finance for SMMEs are very common (Financial Services Regulatory Task Group, 2007). Given their highly conservative nature, South African banks and lenders are more inclined to put resources in small businesses in their later stages of development. They are less likely to lend to start-up SMMEs (Financial Services Regulatory Task Group, 2007). The degree of these inclinations, however, can vary depending primarily on locational differences. For instance, Finscope's Small Business Survey (Finmark Trust, 2010) reported that SMMEs in Gauteng and North West tend to have greater access to finance relative to SMMEs in the other provinces. In Gauteng, the greater access to finance could partly explain why the province is home to about 48% of formal SMMEs (The DTI, 2008). SMMEs in Mpumalanga and the Northern Cape, on the other hand, find it difficult to access finance. This is mainly due to the predominantly rural nature of these provinces.

Start-up SMMEs not financed easily

According to the GEM South Africa 2014 report, lack of access to finance and poor profitability, are among the chief reasons for business discontinuance in South Africa. The GEM report also pointed to the fact that poor profitability, as a reason for discontinuance, was rising sharply. Typical hindrances towards small businesses obtaining finance include: inadequate collateral on the part of the entrepreneur, a lack of credit history (Financial Services Regulatory Task Group, 2007), the inability to produce an acceptable business plan according to financial institutions, poor market research and the absence of a viable business idea, and lack of access to vibrant markets (GEM, 2014).

Obstacles to credit access

Poor infrastructure

The lack of access to physical infrastructure is a key impediment to business growth and adds significantly to the cost of doing business. The GEM South Africa report (2014) alludes to the fact that infrastructure is one of the key enablers for SMMEs development. Ease of access to communication infrastructure, utilities and transport, land or space at affordable prices can be

Infrastructure key to SMME development instrumental to supporting new businesses. The GEM report further extends the concept of infrastructure to commercial and professional infrastructure, which speaks to the presence of commercial, accounting and other legal services and institutions. These services are key to promoting the sustenance of existing SMMEs and the emergence of new ones.

Results showed that small businesses in Gauteng have more difficulty finding physical space in which to operate (Finmark Trust, 2010). SMMEs in the North West cited problems related to utilities, particularly interruptions in the delivery of electricity. In Mpumalanga and the Northern Cape, on the contrary, the experiences were different. There SMMEs claim to have access to adequate amenities and space.

Low levels of research and development (R&D)

Building R&D capacities is important for small businesses, as it can help determine the feasibility of transforming ideas into actual businesses. Investing in this aspect of business also allows businesses to access innovative solutions through the process of discovery. According to Maas, De Coning and Smit (1999), innovating firms are likely to grow faster than traditional start-up businesses. They found South African SMMEs to be less innovative compared to those in developed countries. Booysens (2011) suggests that innovation in South Africa is stifled by the failure of small businesses to form strong upward linkages with larger firms. This failure denies them opportunities for technology diffusion. The GEM report (2014) proposes that government should provide incentives for R&D. The aim would be to foster innovation, and to attract and strengthen lasting linkages among domestic and foreign knowledge intensive firms.

Linkages to larger firms key to innovation

Onerous labour laws

Labour laws discourage SMMEs to employ South Africa's labour laws have been found to be a significant regulatory obstacle (OECD, 2015) to business growth, particularly when it comes to laying off staff. Small business owners have found that once they have employed workers, the law makes it difficult to lay the workers off if the business can no longer afford to keep them or if they prove to be unproductive. Labour laws do not provide for cyclical downswings in small businesses (GEM, 2014). Berry Al et al (2002) identified SMMEs within the manufacturing sector, e.g. clothing and furniture production, as being labour-intensive. Such SMMEs tend to be subject to relatively high labour costs, which in South Africa is the result of labour laws which were well-intentioned to benefit workers. South Africa's relatively high minimum wages, however, are proving costly for small businesses, particularly

at their start-up stage. With SMMEs finding it costly even to hire unskilled and semi-skilled workers, this adds to the hindrances of small business growth.

An inadequately educated workforce

Skills shortage a constraint

The National Development Plan (NDP) notes that small business in the services sector is negatively affected by a shortage of skills. This shortage is mostly true for business services such as accounting and sales capabilities. Interestingly, South Africa's trade and accommodation sector – which is sales oriented – happens to have the largest number of SMMEs relative to the other sectors. The Department of Trade and Industry (2008) acknowledges that a shortage of skills and limited entrepreneurship capacity act as constraints to employment growth.

Inefficient government bureaucracy

Permit delays are an obstacle

Government policies are instrumental in enhancing entrepreneurial activities, as they set the platform upon which new businesses can be started and sustained. The GEM (2014) South African report and the WEF 2014/2015 Global Competitiveness Report listed government bureaucracy as one of the major obstacles to entrepreneurial and business activity in South Africa. Delays in the time required to obtain permits and licences was one of the aspects mentioned in the WEF report. The report also highlighted that there was red tape associated with starting up and managing a business.

Lack of coordination in government

In its policy report concerning the integrated strategy on the promotion of entrepreneurship and small businesses, the Department of Trade and Industry (DTI) (2005) identifies inter-departmental cooperation within government to be a weakness when it comes to programme planning and implementation. The DTI asserts that at the height of inter-departmental conflicts, various departments abandon any coordination of efforts and go about creating their own SMME functions. This usually results in the duplication of efforts and hampers the development of the monitoring and evaluation framework for assessing the success of SMME programmes.

High levels of crime

Security spending pushes up costs

More rural areas

lack market

access

The high level of crime is a pervasive problem in South Africa. In this regard, both formal and informal SMMEs are equally affected. In their 2015 economic survey of South Africa, the OECD found that high crime was forcing SMMEs to increase security spending. Increased spending on security has a ripple effect on the overall cost of doing business. GEM (2014) highlights the business cost of crime and violence as one of the key drags on investment confidence in South Africa.

Lack of access to markets

The inability for SMMEs to access markets has been noted as one of the major factors threatening their longevity. Access to markets is one of the fundamental requirements (by credit providers) to accessing funding and mentorship at early stages. However, small businesses located in rural areas are at a disadvantage compared to their urban counterparts (Watson & Netswera, 2009). The authors find that their small size and remote location hinder them to form collectives in order to enhance their bargaining power. Consequently, they find it difficult to lobby government institutions to better serve their needs.

The practice of forming spatial clusters is encouraged by Naude et al (2008). However, forming clusters is encouraged mostly for SMMEs which have passed their start-up phase. Clustering could place fragile small businesses in intensely competitive positions.

Risks faced by SMMEs

The majority of SMMEs fail in their first year

Risks to SMMEs refer to forces – whether internal or external to the small business sector – that threaten their existence as a going concern. The DTI (2008) found that the majority of South Africa's SMMEs rarely survive beyond their nascent phases, lasting for an average of less than 3.5 years. According to Global Entrepreneurship Monitor (GEM), the survival rate for start-ups is low and opportunities for entrepreneurial activity appears to be lowest in developing countries. This is most likely because developing economies tend to house a larger proportion of necessity-driven entrepreneurship, whereas opportunity-driven activities are most common in developed countries. The DTI (2008) defines entrepreneurial activity which finds niche markets as opportunity entrepreneurship. GEM (2014) further expounds on this definition, explaining that opportunity-driven entrepreneurship is often embarked upon by those who might have jobs but seek better opportunities. This form of entrepreneurship is

different from necessity-based entrepreneurship, which is said to relate to involvement in business as a result of having no better choice for work. In its 2014 survey, GEM uncovers that entrepreneurial activity driven by opportunity has yielded a greater likelihood of survival and propensity to create employment than necessity-driven entrepreneurial activity.

As already discussed, lack of access to finance and poor profitability are at the top of the list of reasons why small businesses close shop.

As is true for other business segments, a low interest rate environment is ideal for SMMEs. Currently, the South African Reserve Bank is on a moderate interest rate tightening cycle, which could be seen as posing a risk to small businesses accessing finance with ease. Interest rates, however, still remain at relatively low historical levels. Furthermore, the National Treasury, in its 2015 budget, continued to amend tax policy in favour of small businesses (SME South Africa, 2015). The above conditions should be supportive towards the survival of small businesses, and allow government to gain some ground in its job creation targets through these enterprises.

Interest hiking cycle at hand

Methodology

The methodology we follow is based on the example set by the DTI in their 2008 report on SMMEs. We use the number of employers and self-employed people as a proxy for the number of SMMEs.

Definition

Classified according to turnover

The first step to describe the SMMEs of South Africa is to look at the official definition. The DTI classifies enterprise size according to their annual turnover in terms of the National Small Business Amendment Bill. These cut-off points differ among the economic sectors. StatsSA then adjusts the turnover cut-off points every year to provide for inflation. These are published in the Quarterly Financial Survey (QFS). The March 2015 cut-off points appear in Table 1 below:

Table 1: DTI's lower-boundaries on enterprise sizes (adjusted by StatsSA)

	Industry Turnover	Large > Rm	Medium > Rm	Small > Rm	Very small > Rm
SIC2	Mining and quarrying	370.5	95.0	38.0	2.0
SIC3	Manufacturing	456.3	123.5	47.5	2.0
SIC4	Electricity, gas and water	456.3	123.5	48.5	2.0
SIC5	Construction	247.0	57.0	28.5	2.0
SIC61	Wholesale trade	608.0	304.0	57.0	2.0
SIC62	Retail trade	370.5	180.5	42.5	2.0
SIC63	Motor trade	370.5	180.5	42.5	2.0
SIC64	Accommodation and catering	123.5	57.0	48.5	2.0

SIC7	Transport	247.0	123.5	28.5	2.0
SIC8	Real estate & business services	247.0	123.5	28.5	2.0
SIC9	Community, social and personal	123.5	57.0	8.5	2.0

Source: StasSA

However, the QFS only publishes financial data (income statement and balance statement items). There are no provincial or demographic information sets available. For this data we turn to the QLFS as a proxy.

The proxy

The first step to identify a proxy is to determine the number of SMMEs in a particular year, and then to find another statistic that would give a comparable number. According to the Integrated Business Register, South Africa had 553 491 enterprises in 2007, of which only 17 251 (3.1%) were classified as large enterprises (The DTI, 2008). The DTI estimated a total of 2.26 million SMMEs in South Africa in 2007, of which more than 75% operated in the informal sector. They based this estimate on the QLFS published by StatsSA.

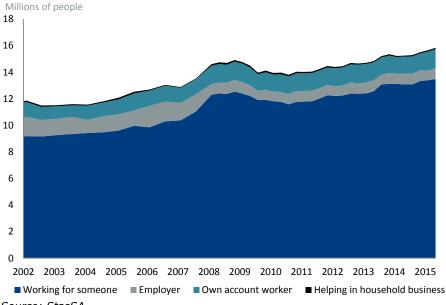
With this number in mind, we analysed the QLFS data to see if a comparable statistic could be found. The QLFS publish data on the employment status of individuals. It specifies the number of persons in South Africa who work for a salary, the number who employ others and themselves and also the number who employ only themselves (own account worker). From this data (presented in Figure 1), those who work for someone else are excluded from the proxy. To avoid double counting, those helping in a household business are also excluded.

Looking at employment status

Compare proxy

to official number

Figure 1: South Africa: type of worker



Source: StasSA

Own account workers included

The own account workers should all be included in a possible proxy as it would be highly unlikely that any would have a turnover above R123.5 million. Regarding employers, their numbers have been above the 700 000 level since 2008. This number can be assumed not to include large enterprises for two reasons. Firstly, large enterprises constitute such a small part of the total on the business register (3.1% in 2007). Secondly, many of them are owned by multiple owners and will not be counted in the QLFS, which is a sample among individuals. Their managers will be counted among those "working for someone".

Table 2: Proxy for SMMEs (annual averages in millions)

<u> </u>	J	,						
Indicator	2008	2009	2010	2011	2012	2013	2014	2015
Employer	0.839	0.779	0.774	0.788	0.775	0.802	0.812	0.776
Own account worker	1.377	1.323	1.317	1.331	1.372	1.336	1.267	1.429
SMMEs proxy	2.216	2.102	2.090	2.119	2.147	2.138	2.079	2.205
Working for someone	12.400	12.110	11.730	11.969	12.307	12.793	13.153	13.438
Helping in household business	0.126	0.123	0.119	0.108	0.096	0.096	0.085	0.101
Total employed	14.742	14.336	13.940	14.195	14.551	15.027	15.317	15.744
SMME owners as % of total employment	15%	15%	15%	15%	15%	14%	14%	14%

Source: StasSA

Proxy close to official number

Thus, the proxy for the number of SMMEs will be taken as the number of employers and own account workers combined. Together they constitute 14% to 15% of all employees, a number which has not changed much in the last seven years. From the comparison in Table 3, we can deduct that the QLFS-proxy is a relatively accurate estimate of the number of SMMEs in 2007 according to the DTI (it differs by only 3%). This methodology is similar to the original methodology used by the DTI.

Table 3: Number of SMMEs compared to the OLFS-proxy

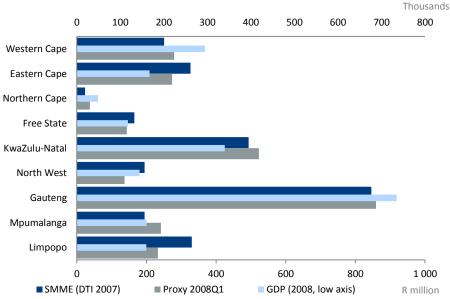
		Proxy	
SMMEs	DTI (2007)	(2008Q1)	Difference
	Total	Total	%
Total	2 260 096	2 182 823	-3%
Western Cape	200 448	223 933	12%
Eastern Cape	261 435	218 865	-16%
Northern Cape	18 823	29 894	59%
Free State	132 167	114 949	-13%
KwaZulu-Natal	394 599	418 406	6%
North West	155 698	109 860	-29%
Gauteng	676 831	687 556	2%
Mpumalanga	155 732	193 259	24%
Limpopo	264 363	186 101	-30%

Source: DTI, StatsSA, BER

High correlation with proxy

From this proxy, we can estimate recent trends in the SMME distribution in terms of provinces, demographics and income. However, it is important to note that the intention is not to arrive at a robust result. Rather, the purpose is to isolate relative changes over time, specifically following the financial crisis. As an additional control, we can deduct from Figure 2 below that the official number, proxy and GDP have a similar provincial distribution. The DTI estimation of 2007 is 95% correlated to GDP in the same year, and 98% correlated to the proxy in 2008. (We did not use the 2007 proxy, since in 2008 StatsSA changed the QLFS survey methodology).

Figure 2: SMMEs by province: DTI & proxy vs. GDP



Source: DTI, StatsSA, BER

Other methodologies

Other researchers have arrived at different SMME population sizes when estimating the magnitude of the sector. In most cases, the results differ mainly due to the challenges inherent in using South African labour statistics and/or estimates of the informal economy. Total SMME estimates have ranged from at least 1 million by the Unilever Institute to just under 6 million by Finscope (2010). The latest Global Entrepreneurship Monitor (GEM) states a value of just under 1.5 million but admits that it is very difficult to measure the nascent number of people establishing SMMEs and this can be as high as 7% of the workforce. Using the upper level of 7% leads to a number of just under 4 million. In other words, it is difficult to establish with a great degree of certainty what the actual number is. The BER considered the various options and settled on the DTI derived methodology as this allows for a consistent ability to measure changes over time and includes regional patterns.

Different results obtained by different methodologies

The profile of SMMEs in South Africa

In this section, we present the statistical profile of SMMEs in South Africa according to the methodology described above.

Two sets of data presented

To give an overview of the SMME sector, we present a number of key graphs with a short discussion on the implications. The first set of graphs will be on the economic, geographic and demographic data derived from the QLFS, the second set will be on the financial data from the QFS. In the case of the non-financial data, comparisons over time will be done between 2008 (not 2007) and 2015. The reason is to avoid complications from the structural break in the data by the end of 2007 (as mentioned above).

Part I: Economic, geographic and demographic data

Formal or informal sector

In this subsection we briefly look at the distribution of SMMEs between the formal and informal sectors of the economy, and identify the type of owners typical to each.

Table 4: Type of SMME owners in 2015Q2

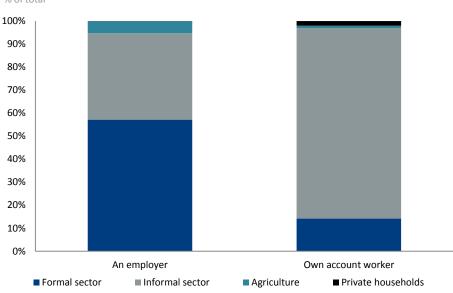
SMMEs	Formal sector	Informal sector	Agriculture	Private households	Total
An employer	462 815	304 303	41 971	740	809 829
Own account worker	204 618	1 193 557	14 803	29 014	1 441 992
Total	667 433	1 497 860	56 774	29 754	2 251 821

Source: StatsSA, BER

Own account workers operate informally

More than half of employers operate in the formal sector (69%), while the vast majority (80%) of own account workers operate informally. Of SMMEs that operate in the agricultural sector, 74% employ other workers besides the owner. Some own account workers provide a service to private households (2%); these could include domestic workers who work part time at different households every day.

Figure 3: Type of SMME owners in 2015Q2 % of total



Provincial distribution

In this subsection we briefly look at the distribution of SMMEs between the nine provinces of South Africa, with the aim of identifying where most SMMEs operate and changes between 2008 and 2015.

Table 5: SMMEs by province

SMMEs		Number (2008Q1)		Number (2015Q2)			
	Total	Formal	Informal	Other	Total	Formal	Informal	Other
Total	2 182 823	666 501	1 420 933	95 389	2 251 821	667 433	1 497 860	86 528
Western Cape	223 933	114 976	95 212	13 745	230 324	110 107	110 188	10 030
Eastern Cape	218 865	56 579	154 631	7 655	197 366	50 670	141 739	4 957
Northern Cape	29 894	11 450	11 768	6 676	20 611	8 534	9 058	3 019
Free State	114 949	31 040	76 127	7 783	96 846	26 224	60 816	9 806
KwaZulu-Natal	418 406	102 591	289 347	26 468	373 434	74 976	283 165	15 293
North West	109 860	25 817	76 855	7 188	112 856	27 430	79 153	6 273
Gauteng	687 556	270 093	405 180	12 283	785 321	306 231	465 100	13 989
Mpumalanga	193 259	29 760	156 814	6 685	185 399	35 208	141 129	9 063
Limpopo	186 101	24 193	155 001	6 907	249 663	28 054	207 512	14 098

Source: StatsSA, BER

SMME growth below GDP

Over the last seven years, the number of SMMEs in South Africa increased by only 3%, from 2.18 million in 2008Q1 to 2.25 million in 2015Q2. This growth is significantly less than the 14% expansion in GDP over the same period. Among the provinces, Limpopo had the highest growth rate in its number of SMMEs (34%), followed by Gauteng (14%). The Northern Cape lost the largest portion (31%), followed by the Free State (16%).

Western Cape Eastern Cape Northern Cape Free State KwaZulu-Natal North West Gauteng Mpumalanga Limpopo 0 100 200 300 400 500 600 700 800 900

Figure 4: SMMEs by province: 2008Q1 vs 2015Q2

■ Number (2008Q1)

Rural provinces have more informal SMMEs In seven of the nine provinces, there are significantly more informal SMMEs compared to formal ones. Only in the Western Cape and Northern Cape are the numbers virtually equal. Rural provinces tend to have more informal SMMEs, due to their high number of hawkers and informal traders. Nearly half of South Africa's formal SMMEs operate in Gauteng (46%), followed by the Western Cape (16%). Gauteng also has the most informal SMMEs (31%), followed by KwaZulu-Natal (19%). The correlation between the number of formal SMMEs per province to GDP is 98%, while that of informal SMMEs is 92%.

■ Number (2015Q2)

Thousands

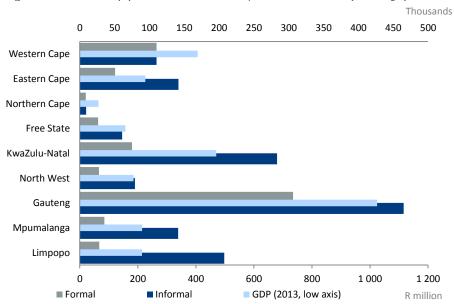


Figure 5: SMMEs by province and formal/informal sector (2015Q2)

Source: StatsSA, BER

Northern Cape has highest GDP per SMME The GDP-SMME ratio is a crude indication of the economic environment in which SMMEs operate and is simply the region's GDP divided by the number of SMMEs. Between 2008 and 2013, the GDP per SMME increased by 8% from R1.24 million to R1.33 million. This ratio increased in all the provinces except Gauteng and Limpopo, where the growth in SMMEs outpaced economic growth. The Northern Cape has the largest GDP/SMME ratio. In contrast, SMMEs in Limpopo will largely be active in the informal economy with fewer opportunities to grow.

Western Cape Eastern Cape Northern Cape Free State KwaZulu-Natal North West Gauteng Mpumalanga Limpopo 0.0 0.5 1.0 1.5 3.5 2.0 2.5 3.0 ■ 2008 **2013** R million

Figure 6: GDP/SMME by province: 2008 vs 2013

Source: StatsSA, BER

Economic sectors

In this subsection we briefly look at the distribution of SMMEs between the main economic sectors, with the aim of identifying where most SMMEs operate and changes between 2008 and 2015.

Table 6: SMMEs by economic sector

SMMEs	Number (2008Q1)	Number (2015Q2)				Turnover* (2015Q1)	GDP (2015Q2)	Turnover* /SMME
	Total	Total	Formal	Informal	Other	R million	R million	R million
Total	2 182 823	2 251 821	667 433	1 497 860	86 528	2 908 020	815 636	1.29
Agriculture	87 820	56 774	0	0	56 774	na	35 213	na
Mining	2 696	2 199	0	2 199	0	35 256	69 421	16.03
Manufacturing	267 817	201 459	62 657	138 801	0	658 740	111 672	3.27
Electricity, gas & water	4 252	7 456	6 656	801	0	7 488	38 647	1.00
Construction	252 233	299 242	77 098	222 143	0	229 016	38 804	0.77
Trade & Accommodation	974 083	944 467	186 798	757 669	0	1 160 560	129 144	1.23
Transport & Communication	122 370	133 134	56 620	76 514	0	134 152	87 612	1.01
Finance & Bus. Services	236 740	271 712	172 423	99 289	0	571 384	183 430	2.10
Community	227 243	305 624	105 181	200 444	0	111 424	50 982	0.36
Other	7 569	29 754	0	0	29 754	0	70 711	0.00

Source: StatsSA, BER

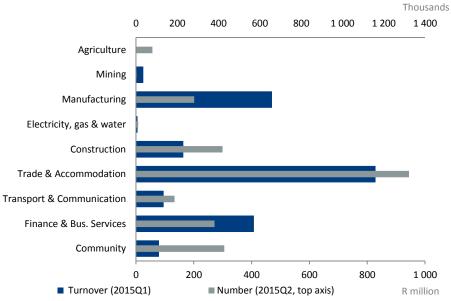
* annualised

Most SMMEs found in the trade sector Of the 2.2 million SMMEs in South Africa, most (944.5 thousand) operate in the domestic trade (wholesale and retail) and accommodation sector of the economy, followed by the community, social and personal services sector. However, the turnover of SMMEs in the various sectors differs largely. On the high side, SMMEs in the mining sector had an average turnover of R16 million (annualised) in the first quarter of 2015, compared to only R360 000 in the community and social services sector.

Formal SMMEs correlate to GDP per sector

The total number of SMMEs per industry is more correlated to turnover (85%) than to GDP (39%). However, when only formal SMMEs are considered, the correlation with GDP increases to 78%, while informal SMMEs drop to 28%. The implication is that informal SMMEs do not operate in economic sectors because of their size, but rather due to other reasons (such as initial layout costs and ease of entry).

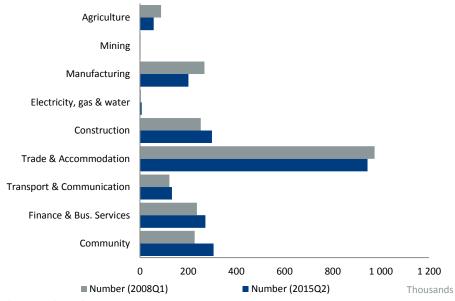
Figure 7: SMMEs by industry: number vs. turnover (2015)



Migration away from trade

As mentioned above, most SMMEs operate in the trade and accommodation industry. This number declined between 2008 and 2015, while there was a significant increase for the community services, financial and business services and construction industries. Very few SMMEs operate in the electricity, gas and water as well as the mining industry.

Figure 8: SMMEs by industry: 2008Q1 vs 2015Q2



Source: StatsSA, BER

Informal SMMEs mostly in trade

Most informal SMMEs operate in the trade and accommodation sector. The formal SMMEs have a more equal distribution across the different industries. Only the financial and business services and the electricity, gas and water industries have more formal SMMEs than informal ones. Mining seems to have only informal SMMEs, according to the QLFS proxy, perhaps a gauge of illegal mining activity in South Africa.

Agriculture Mining Manufacturing Electricity, gas & water Construction Trade & Accommodation Transport & Communication Finance & Bus. Services Community 300 400 100 200 500 600 700 800 ■ Formal ■ Informal Thousands

Figure 9: SMMEs by industry and formal/informal sector (2015Q2)

Source: StatsSA, BER

Demographic distribution

In this subsection we briefly look at the distribution of SMMEs between the main population groups. We focus on their education levels, and income distribution.

Table 7: SMMEs per population group

SMMEs		Number (2	2008Q1)	Number (2015Q2)				
	Total	Formal	Informal	Other	Total	Formal	Informal	Other
Total	2 182 823	666 501	1 420 933	95 389	2 251 821	667 433	1 497 860	86 528
Black	1 523 219	199 430	1 278 803	44 985	1 604 601	228 178	1 325 672	50 750
Coloured	101 047	37 399	60 039	3 608	92 171	33 236	52 454	6 481
Indian	64 669	47 989	16 061	619	94 889	66 596	27 470	823
White	493 889	381 683	66 030	46 176	460 160	339 423	92 264	28 474

Source: StatsSA, BER

White ownership declining

The majority of SMME owners are black (71%), followed by whites (20%). The number of white owners declined the most between 2008 and 2015, while Indians and blacks were the only population groups to register an increase in SMME ownership. The number of SMMEs owned and operated by Indians increased by 47% between 2008 and 2015, while black owned SMMEs increased by 5%.

White
Indian/Asian
Coloured
Black

800

1 000

■ Number (2015Q2)

1 200

1 400

1 600

1 800

Thousands

Figure 10: SMMEs by Race: 2008Q1 vs 2015Q2

Source: StatsSA, BER

200

■ Number (2008Q1)

400

600

Blacks own most informal SMMEs

In 2015, whites owned and operated 51% of formal SMMEs, down from 57% in 2008. Blacks improved their share from 30% in 2008 to 34% in 2015. The share of coloureds declined along with that of whites, while Indian ownership improved from 7% to 10%. In the case of informal SMMEs, blacks are by far the largest group of owners (89%).

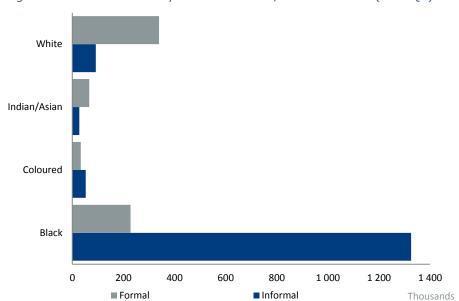


Figure 11: SMME owners by race and formal/informal sector (2015Q2)

Formal SMME owners earn more Respondents are very hesitant to reveal their income levels in the QLFS survey. The last time StatsSA published data on this was in 2010. No value should be attached to the absolute number. However, from the data we deduced that formal SMMEs tend to have a much higher level of income than informal SMMEs. The median annual income of an informal SMME owner was R4 200. In the case of formal SMMEs, the median annual income was R276 000.

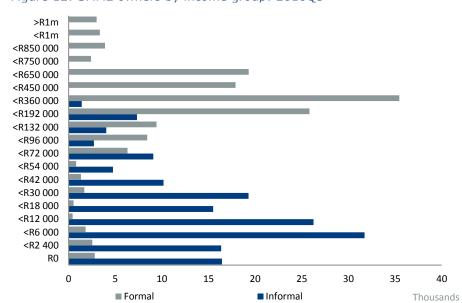


Figure 12: SMME owners by income group: 2010Q3

Source: StatsSA, BER

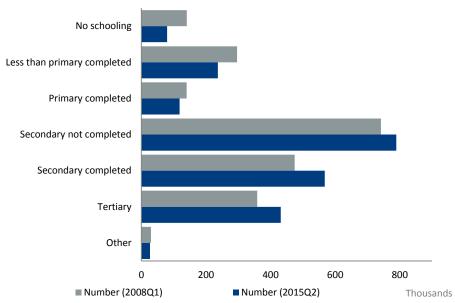
Table 8: SMME owners per education group

SMMEs	Number (2008Q1)			Number (2015Q2)				
	Total	Formal	Informal	Other	Total	Formal	Informal	Other
Total	2 182 823	666 501	1 420 933	95 389	2 251 821	667 433	1 497 860	86 528
No schooling	140 732	3 645	129 138	7 950	79 986	5 490	70 588	3 909
Less than primary completed	296 391	18 890	265 016	12 485	236 842	15 381	211 230	10 230
Primary completed	140 323	10 281	126 764	3 278	118 385	4 709	109 286	4 389
Secondary not completed	742 242	127 419	593 192	21 631	789 648	112 404	653 413	23 831
Secondary completed	474 806	224 419	223 526	26 861	568 226	221 738	318 732	27 756
Tertiary	358 711	274 048	64 618	20 045	431 784	299 797	115 574	16 413
Other	29 618	7 799	18 679	3 140	26 950	7 914	19 036	0

Education levels improved

The majority of SMME owners have some secondary education (60%), and a substantial number have a tertiary education (19%), while only 4% have no schooling. There was some improvement in the level of education of SMME owners between 2008 and 2015. The number with tertiary education increased by 20%, while those who completed high school also increased by 20%.

Figure 13: SMME owners by education: 2008Q1 vs 2015Q2



Source: StatsSA, BER

Formal sector better educated

Those SMME owners with a tertiary education operate mostly in the formal sector, while those with an incomplete high school education operate mostly in the informal sector. With regard to formal SMME owners, nearly half (45%) have tertiary schooling, while only 4% have finished primary school or less.

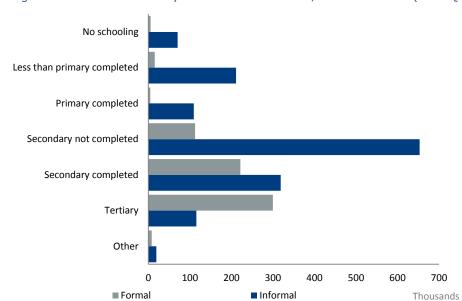


Figure 14: SMME owners by education and formal/informal sector (2015Q2)

Table 9: SMME owners by occupation group

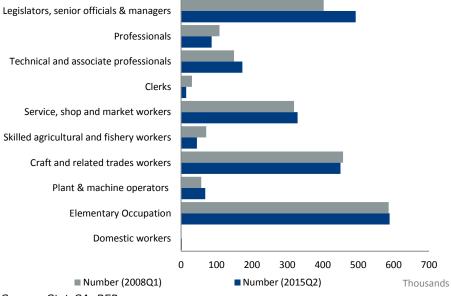
Number (2008Q1)					Number	(2015Q2)		
	Total	Formal	Informal	Other	Total	Formal	Informal	Other
Total	2 182 823	666 501	1 420 933	95 389	2 251 821	667 433	1 497 860	86 528
Legislators, senior officials & managers	402 756	333 907	57 162	11 686	492 955	371 204	111 534	10 217
Professionals	108 450	95 161	12 841	448	86 623	68 742	17 881	0
Technical and associate professionals	149 736	62 419	86 604	712	173 194	78 032	95 162	0
Clerks	30 674	21 384	7 083	2 207	14 444	9 259	4 733	453
Service, shop and market workers	319 234	52 834	263 171	3 229	329 077	45 042	280 714	3 320
Skilled agricultural and fishery workers	70 885	6 030	6 267	58 589	44 897	853	2 830	41 214
Craft and related trades workers	457 310	65 650	389 583	2 077	450 392	58 891	391 501	0
Plant & machine operators	57 183	9 383	47 801	0	68 546	13 555	54 318	673
Elementary Occupation ²	586 258	19 734	550 422	16 102	589 140	21 855	539 187	28 099
Domestic workers	338	0	0	338	2 553	0	0	2 553
Other Occupation	0	0	0	0	0	0	0	0

Source: StatsSA, BER

Fewer professionals despite better education Despite the improvement in schooling levels, many of the SMME owners still find themselves in the elementary occupations. The number in professional occupations declined by 20% between 2008 and 2015, though SMME owners in technical professions increased by 16%. There was also a migration to the senior/management level. The number of SMMEs in the skilled agricultural profession contracted (-37%) more than any other sector.

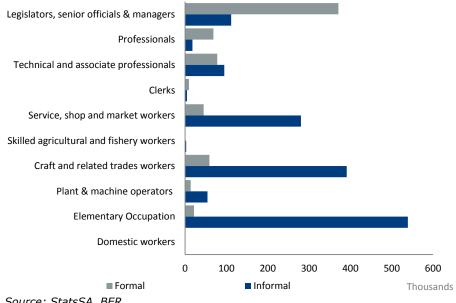
² For example shoe-cleaning and other street services, helpers, care takers, etc.

Figure 15: SMME owners by occupation group: 2008Q1 vs 2015Q2



Elementary occupations mostly informal More than half (56%) of SMME owners in the formal sector are operating at the senior official / management level. This is partly self-explanatory, since 69% of formal SMME owners are employers (see Table 4 above). A mere 31% employ only themselves. In contrast, those in the informal sector find themselves in the elementary occupations. This pattern is confirmed by the similar pattern in the level of education of the SMME owners.

Figure 16: SMME owners by occupation and formal/informal Sector (2015Q2)



Source: StatsSA, BER

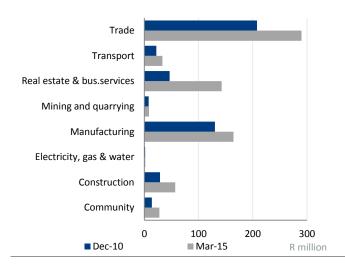
Part II: Financial profile

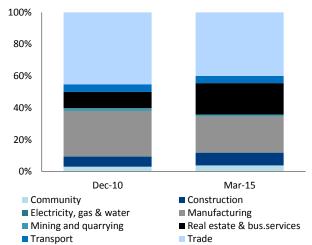
The graphs below are based on the QFS survey of StatsSA. They cover the financial position of SMMEs and are only available by economic sector from December 2010. Since the data is collected by StatsSA from the enterprises themselves, **this data is representative of the formal sector only**. All the values are in current prices.

Turnover

The majority of SMME turnover is in the trade sector, followed by manufacturing. Increases from 2010 to 2015 in these two sectors are mostly due to inflation. The only significant real increases were in the real estate and business, community and construction sectors.

R million	Dec-10	Mar-15	% change
Community	14 004	27 856	99%
Construction	29 192	57 254	96%
Electricity, gas & water	1 516	1 872	23%
Manufacturing	130 293	164 685	26%
Mining and quarrying	8 242	8 814	7%
Real estate & bus.services	46 925	142 846	204%
Transport	22 168	33 538	51%
Trade	207 877	290 140	40%

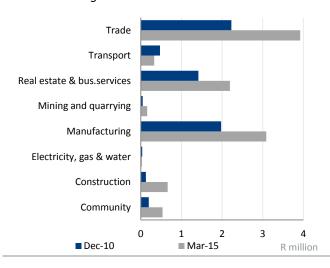


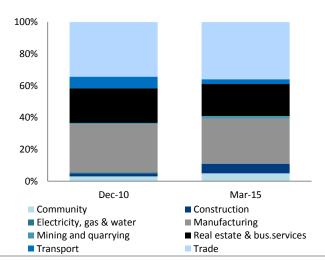


Company Tax

Taxes paid by SMMEs increased substantially between 2010 and 2015. In 2010, the economy had just emerged from the big recession, after which enterprises recovered somewhat in the following years. At the moment most company taxes by SMMEs are paid by those in the trade and manufacturing sectors.

R million	Dec-10	Mar-15	% change
Community	194	535	176%
Construction	125	659	427%
Electricity, gas & water	36	25	-31%
Manufacturing	1 975	3 086	56%
Mining and quarrying	47	157	234%
Real estate & bus.services	1 416	2 193	55%
Transport	472	331	-30%
Trade	2 226	3 922	76%

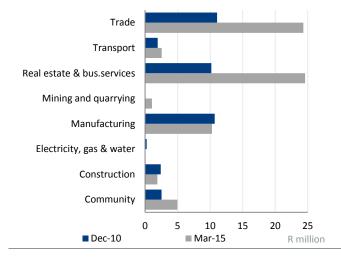


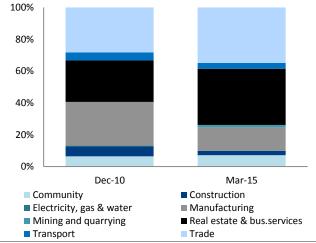


Net profit before tax

SMMEs in the real estate and business services sector have the highest aggregate profit, followed by the trade sector. The profit of SMMEs in mining grew exponentially, while those in the secondary sector of the economy experienced a contraction in profit between 2010Q4 and 2015Q1.

R million	Dec-10	Mar-15	% change
Community	2 522	4 972	97%
Construction	2 397	1 895	-21%
Electricity, gas & water	236	44	-81%
Manufacturing	10 705	10 274	-4%
Mining and quarrying	28	1 055	3668%
Real estate & bus.services	10 175	24 594	142%
Transport	1 936	2 549	32%
Trade	11 072	24 323	120%

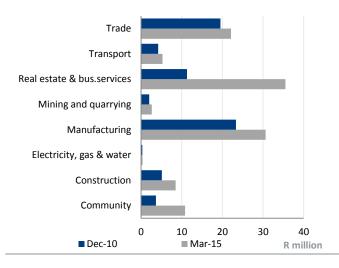


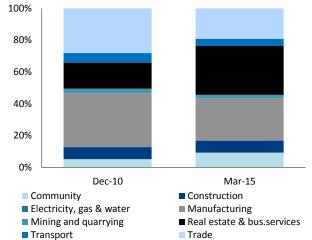


Employment costs

The SMMEs in real estate and business services have the highest aggregate wage bill, even though they do not have the highest turnover. This wage-to-turnover ratio is indicative of an industry with generally high wage costs.

R million	Dec-10	Mar-15	% change
Community	3 639	10 803	197%
Construction	5 097	8 504	67%
Electricity, gas & water	317	322	2%
Manufacturing	23 342	30 622	31%
Mining and quarrying	2 009	2 621	30%
Real estate & bus.services	11 283	35 487	215%
Transport	4 194	5 242	25%
Trade	19 507	22 095	13%

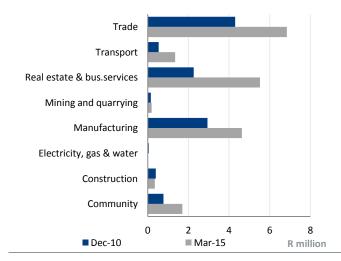


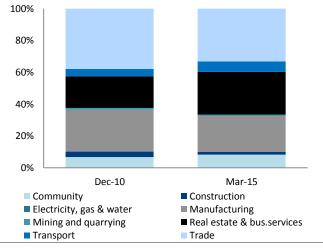


Rent paid

The aggregate rent of SMMEs follows a similar pattern to their aggregate company tax paid. The transport sector had the largest increase in its rent cost, followed by the real estate and business services. SMMEs tend to pay more rent than tax.

R million	_ Dec-10_	Mar-15_	% change
Community	767	1 702	122%
Construction	388	344	-11%
Electricity, gas & water	41	9	-78%
Manufacturing	2 937	4 626	58%
Mining and quarrying	144	188	31%
Real estate & bus.services	2 259	5 520	144%
Transport	531	1 342	153%
Trade	4 296	6 844	59%





Interest paid

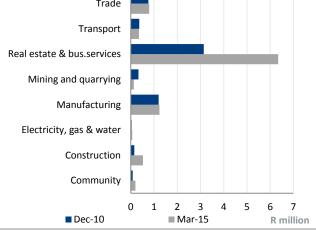
SMMEs in the real estate and business services sector have a very high interest burden, compared to the other sectors. SMMEs in the mining and quarrying sector paid less interest in 2015Q1, compared to 2010Q4.

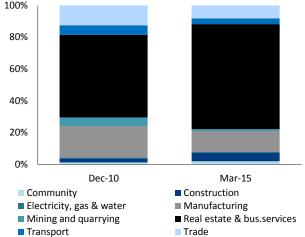
rery mgm interest barden, compared	Manufacturing	1 197	1 231
ctors. SMMEs in the mining and	Mining and quarrying	329	128
or paid less interest in 2015Q1,	Real estate & bus.services	3 143	6 345
010Q4.	Transport	364	352
3134	Trade	755	787
🖿	100%		
Trade			
ensport	80%		
ervices	60%		
arrying	400/		

Community

Construction

Electricity, gas & water





R million Dec-10

80

149

32

Mar-15

195

522

59

144%

250%

84%

3%

-61%

102%

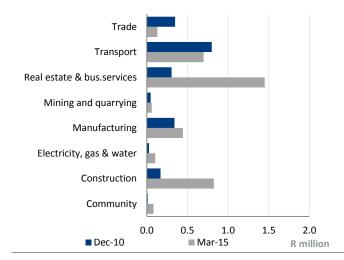
-3%

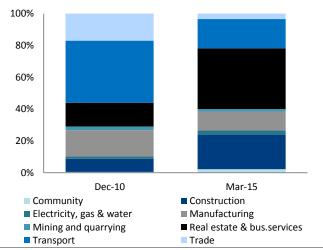
4%

Vehicles

The transport and trade sectors spent less on vehicles in 2015Q1 than in 2010Q4, while the community and construction sectors spent considerably more. Most of the SMME spending in 2015Q1 on vehicles were done by those in real estate and business services.

R million_	Dec-10	Mar-15	% change
Community	11	83	655%
Construction	169	825	388%
Electricity, gas & water	28	104	271%
Manufacturing	341	445	30%
Mining and quarrying	48	61	27%
Real estate & bus.services	305	1 450	375%
Transport	799	698	-13%
Trade	349	130	-63%

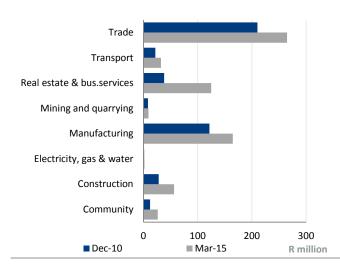


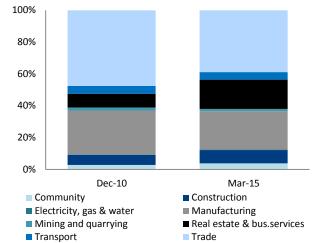


Total expenditure

In terms of total expenditure, the trade industry is the largest among the SMMEs, followed by manufacturing. Growth in the different industries varied. However, expenditure increased relatively more than turnover and profit levels for SMMEs in most industries.

R million	Dec-10	Mar-15	% change
Community	12 391	26 391	113%
Construction	28 046	56 519	102%
Electricity, gas & water	1 375	1 887	37%
Manufacturing	121 896	164 878	35%
Mining and quarrying	8 504	9 238	9%
Real estate & bus.services	38 257	125 190	227%
Transport	21 926	32 236	47%
Trade	210 333	264 986	26%



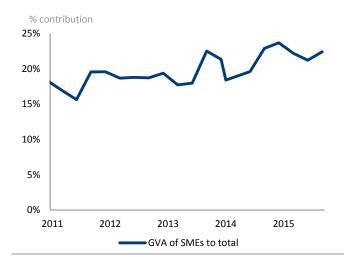


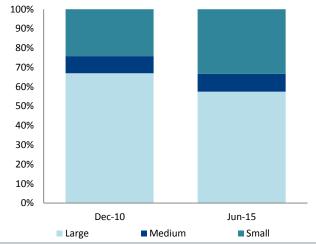
Contribution to GVA

The gross value added (GVA = GDP before taxes and subsidies) is the sum of all wages, net operating surplus (NOS) and consumption of fixed capital. From the QFS data we can derive a proxy for the GVA of SMEs by summing the combined salaries paid, profits and depreciation respectively.

Dec-10	Jun-15	% change
234 619	257 056	10%
31 125	40 982	32%
84 923	149 464	76%
350 667	447 502	28%
634 375	851 095	34%
18%	22%	
	234 619 31 125 84 923 350 667 <i>634 375</i>	234 619 257 056 31 125 40 982 84 923 149 464 350 667 447 502 634 375 851 095

From this aggregate we can derive that SMEs contributed 18% to GVA in 2010Q4, and their contribution increased to 22% by 2015Q2.





Conclusion

We presented lessons from the literature and the latest statistical profile and trends of the SMME sector in South Africa. In the literature review we briefly summarised the historical background to the policy framework for SMMEs, and listed eight important challenges. The statistical profile is mostly based on two quarterly surveys of StatsSA: the QLFS and the QLS. To determine the number of SMMEs in South Africa, we used the number of employers and self-employed workers as a proxy. This methodology is similar to that used by the DTI in 2008.

The main findings are that the growth in the number of SMMEs from 2008 to 2015 was lower than the economic growth rate. However, the contribution of SMMEs to GVA increased over the same period. Most SMMEs still operate in the informal sector. Provinces with larger economies tend to have the largest share of formal SMMEs. Though whites still own the largest portion of formal SMMEs, their share has declined. While the level of education of SMME owners improved during the last seven years, it did not seem to boost the number providing professional services.

SMMEs in the informal sector provide a living for a great number of people in South Africa. As expected, SMMEs are mostly found in those industries with a low start-up cost (low capital layout and ease of entry), namely trade and accommodation and other service-related sectors. Industries such as mining, with a large capital outlay, remain the territory of large enterprises.

References

- Berry, A. e. (2002). *The Economics of SMMEs in South Africa*. Pretoria: Trade and Industry Policy Strategies.
- Booysens, I. (2011). Are Small, Medium, and Micro-Sized Enterprises Engines of Innovation? The Reality in South Africa. *Science and Public Policy 38.1*, 67-78.
- Department of Trade and Industry. (2005). *Integrated Strategy on the Promotion of Entrepreneurship and Small Enterprises*. Pretoria.
- Financial Services Regulatory Task Group. (2007). SMEs' Access to Finance in South Africa: A Supply-Side Regulatory Review.
- Finmark Trust. (2010). Finscope Small Business Survey. Johannesburg.
- GEM. (2014). The crossroads a goldmine or a time bomb? Cape Town: Global Entrepreneurship Monitor.
- Global Entrepreneurship Monitor (GEM). (2014). Retrieved September 2015, from GEM: http://www.gemconsortium.org
- Maas, G., de Coning, T., & Smit, v. M. (1999). Identifying indicators that can play a meaningful role in promoting creativity in SMEs–a South African study. *South African Journal of Business Management*, 39-47.
- National Planning Commission. (2011). National Development Plan 2030. Pretoria.
- National Treasury. (2015). Response to the OECD's 2015 Economic Report. Pretoria.
- Naude, W., Gries, T., Wood, E., & Meintjies, A. (2008). Regional Determinants of Entrepreneurial Start-Ups in a Developing Country. *Entrepreneurship and Regional Development*, 111-124.
- OECD. (2015). *OECD Economic Surveys: South Africa.* Paris: Organisation for Economic Co-operation and Development .
- SME South Africa. (2015). *Budget 2015 and SMEs*. Retrieved September 2015, from SME South Africa: http://www.smesouthafrica.co.za/Budget-2015-and-SMEs/
- Statistics South Africa. (Quarter 2: 2015). Quarterly Labour Force Survey. Pretoria.
- The DTI. (2008). *Annual review of small business in South Africa 2005-2007.* Pretoria: Department of Trade and Industry.
- Watson, L., & Netswera, G. (2009). Support for Rural Small Businesses in Limpopo Province, South Africa. *Development Soutern Africa*, 225-239.

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