The profile and productivity of Zambian businesses

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About this publication

This report summarises the findings of the Zambia Business Survey (ZBS). The ZBS comprised two separate surveys. The MSME Survey was a nationally representative survey across all nine provinces of individuals who owned and ran their own businesses and employed up to 50 individuals. The supplementary Large Business Survey (LBS) was a survey of 161 large enterprises employing 51 or more individuals.

Analysis of the data resulted in four technical papers:

- The business landscape, which looks at the environment in which Zambian businesses operate (The business landscape for MSMEs and large enterprises in Zambia)
- Productivity, which examines the productivity of Zambian enterprises (Who’s productive in Zambia’s private sector? – Evidence from the Zambia Business Survey)
- Access to finance, which explores the demand-side data relating to access to financial services (Demand-side analysis of access to financial services for businesses in Zambia)
- The Business Facilities Measure, a model that groups enterprises and divides the market into more manageable segments (Segmenting the market into powerful pictures: Application of the Business Facilities Measure - BFM)

These reports are available via the web or from the offices of the four partner agencies that produced this work: Zambia Business Forum (www.zbf.org.zm, secretariat@zbf.org.zm); Private Sector Development Reform Programme (www.psdrp.org.zm); FinMark Trust (www.finmark.org.za, julietmunro@iconnect.zm); and World Bank Zambia Country Office (www.worldbank.org/Zambia, Pyramid Plaza, Plot No 746 Church Road, Lusaka. Tel: 260-1 252 811).

Acknowledgements

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Abbreviations

BFM  Business Facilities Measure
CSA  Census Supervisory Areas
CSO  Central Statistical Office
GDP  Gross domestic product
EA   Enumeration Area
GPRS General Packet Radio Service
GRZ  Government of the Republic of Zambia
ICA  Investment Climate Assessment
ICT  Information communication technology
K    Kwacha (Zambian currency)
LBS  Large Business Survey
MCTI Ministry of Commerce Trade and Industry
MSMEs Micro, small and medium enterprises
PACRO Patent and Company Registrar
POS  Point of sale
PSU  Primary Sampling Unit
TPIN Taxpayer identification number
ZBS  Zambian Business Survey
ZRA  Zambian Revenue Authority
Executive summary

The purpose of this report is to provide a snapshot of Zambia’s private sector: who they are, what they do and how they do it. In addition, the report describes the constraints the private sector faces and analyzes the impact of these on business productivity. While the report highlights the implications of the analysis, it does not provide recommendations as this will be undertaken in a separate but related process.

Although most Zambians work in micro, small and medium sized enterprises (MSMEs), there is little information about MSMEs available. This information gap has made it difficult for policymakers, businesses and donors to design policies, services and programs that can help these MSMEs improve their productivity and growth.

The Zambia Business Survey (ZBS) was designed to bridge this knowledge gap and was comprised of two separate surveys. The MSME Survey was a nationally representative survey across all nine provinces of individuals who owned and ran their own businesses and employed up to 50 individuals. The survey covers urban, peri-urban and rural areas in all provinces, providing detailed information on the profile and performance of MSMEs. The supplementary Large Business Survey (LBS) was a survey of 161 large enterprises employing 51 or more individuals. The ZBS, along with other complementary evidence, is used to benchmark MSMEs against large businesses and to identify the factors that most affect productivity and growth. The report also draws on information from other sources, such as the Zambia Investment Climate Assessment and World Bank Doing Business report. (See Box 1 for a comparison of diagnostic tools).

The report identifies obstacles to private sector development by looking at how these constraints affect MSME productivity. The sampling methodology ensures that all MSMEs – including hard-to-find informal enterprises – are represented in the survey.

The profile of Zambian businesses

The universe of Zambian businesses is highly dualistic, reflecting extreme differences in the profile and performance of firms. One world is comprised of MSMEs – the majority of which are tiny, microenterprises; most are informal, owner-operated and have no employees that are paid in-kind or in-cash. Many MSMEs are more akin to home-based, income-generating activities than to clearly structured businesses. Most MSMEs are in rural areas (81 percent), and operate in agricultural production (70 percent) or wholesale/retail trade (21 percent).

Within the world of MSMEs, there are important distinctions that can be useful for government, in terms of planning policy, regulation and investment, and for the private sector, in terms of developing and delivering services to the MSME market. Using the Business Facilitation Measure (BFM analysis – see Section 4), there are three main groups of MSMEs. The first group, BFM 1-4, is made up of tiny, owner operator “survivalists” that make up 77% of the MSME market. The second

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1 The findings of this report will be communicated in ways designed to (i) validate the results and (ii) explore the implications. These discussions, scheduled for the latter part of 2010, will be harvested and provide the basis for concrete recommendations.


3 See the Appendix for a more detailed description of the survey.
group, BFM 5, includes 13% of MSMEs and represents a “sweet spot” of high-potential enterprises that are not being provided with appropriate services. Although markedly more urban than their lower BFM counterparts, 60 percent of BFM 5 businesses are in rural areas. The third group, comprising 16 percent of MSMEs, includes the BFM 6, 7, and 8. This group is more urbanised, have better educated owners, and add value to their businesses. The implications of this more nuanced profile of MSMEs can be used to better serve these respective segments, thereby increasing the impact of service delivery and the probability that such services will be effective in increasing productivity and growth.

The other world in the business universe contains a small number of large businesses (a few thousand enterprises) that employ a fraction of the labour force (seven percent) and produce the bulk of industrial output. Most large Zambian enterprises are relatively small, with close to half having between 51 and 70 employees – just above the notional cut-off of 50 employees for medium-sized enterprises. Only about one-third has more than 100 employees and only 2.5 percent have more than 500 employees. Virtually all large enterprises are formal, and most (75 percent) are limited liability companies. In contrast to MSMEs, large enterprises are much more diversified: 14 percent operate in agriculture, nine percent in wholesale/retail trade and 24 percent are in manufacturing.

There is a vast productivity gap both between large, Zambian businesses and their international/regional competitors and between large, Zambian businesses and Zambian MSMEs. When compared to firms in high-performing low- and middle-income countries such as Brazil, Kenya, Malaysia, South Africa, and Thailand, manufacturing firms in Zambia firms are less productive and often have higher unit labour costs. As a result, Zambian firms are less competitive in global and regional market than firms from these countries. This can be seen in Zambia’s relative export performance—manufacturing firms in Zambia are far less likely to export than similar firms in high-performing countries.

While less productive than manufacturing firms in high-performing countries, Zambian manufacturing firms are more productive and export more than firms in many other low-income countries in Sub-Saharan Africa. However, Zambian manufacturers face relatively high labour costs compared to firms in these less competitive low-income countries, meaning that unit labour costs are higher than those of other low-income economies in the region.

The domestic market is characterised by low levels of competition, such that many large enterprises offset their higher costs by charging higher prices – without eroding their market share. As a result, large Zambian businesses tend to cream the market and enjoy a larger market share than would be expected based on their productivity.

Zambian MSMEs are far less productive than large businesses. Workers in the average microenterprise in the agricultural and service sectors produce about one-sixth of their counterparts working in large firms, and the difference for workers in manufacturing and retail firms is even greater. Workers in manufacturing microenterprises produce about one-ninth of the amount of their counterparts in large firms and one-twelfth as much as in those in retail trade.

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5 Zambia Investment Climate Assessment, Regional Program on Enterprise Development, World Bank 2009.
The least productive Zambian MSMEs do not use important inputs – both hard infrastructure (energy, transport, water and information communication technology (ICT)) and soft infrastructure (information, knowledge and financial services). This can be clearly seen when firms are disaggregated by location: businesses along the line of rail are 30 percent more productive than firms which are off the line of rail – largely because businesses on the line of rail have access to essential infrastructure. Conversely, non-agricultural firms in rural locations are 37 percent less productive than their counterparts in urban areas. Soft infrastructure is also important: MSMEs that use financial services are more productive than those that don’t. Likewise education is important – non-agricultural MSMEs owners that have completed secondary school are 25 percent more productive than their counterparts who lack a secondary school education.

Implications from productivity analysis

Informality is a symptom of other problems that, in turn, drive low productivity. The Government of the Republic of Zambia seeks to broaden the tax base, as do governments in many countries. This report suggests that the most effective ways to do this are to: (i) facilitate business productivity; and (ii) improve government regulation. Owners of unregistered MSMEs were more likely to say that a lack of sufficient income was the reason that they were unregistered than any other reason. Consistent with this, MSMEs that are most productive and growing fastest are far more likely to become registered. If government prioritises policies and programmes that improve enterprise productivity, formalisation is likely to follow. Government can also encourage formalisation by making it easier for enterprises to formalise. Improving access to information on the registration process and reducing registration costs (both in time and money) can make it less onerous for smaller enterprises to become formal.

What can drive increased productivity? When trying to answer this question, the report draws on two types of information: perceptions and productivity analysis. Perceptions reflect the response of business people when asked to prioritise the factors that most constrain their business, whereas the productivity analysis is based on regressions of business performance relative to key inputs. This information is complementary, yet as described below, it is important not to be captured by these perceptions as they may not reflect the key determinants of productivity and growth.

Increasing access to hard infrastructure can improve productivity. MSMEs in both the agricultural and non-agricultural sectors are far more productive when they have connections to basic infrastructure. Farmers that have water connections are almost 50 percent more productive than those without water connections. Similarly, farmers that have power connections are 60 percent more productive than farmers without power connections. Similar differences can be seen for non-agricultural enterprises.

Despite the strong relationship between access to infrastructure and productivity, MSMEs in Zambia have very limited access, especially in rural areas. Only six percent of MSMEs in rural areas and 24 percent in urban areas are connected to the public grid, while only 24 percent of urban MSMEs have such access. Similarly, 27 percent of rural MSMEs report having access to water-primarily through shared pumps or boreholes; 30 percent of urban MSMEs report having a water connection, mainly through municipal pipeline. Given the strong link between enterprise performance and access to infrastructure, this suggests that there would be significant benefits to expanding service to cover more MSMEs.

Transportation is a serious constraint, especially in rural areas, that needs to be unpacked. MSME owners were more likely to say that transportation was a serious problem than any area of the
investment climate – excluding access to finance. Almost half of the 41 percent of MSME owners that take their products to customers or markets reported that they spend between one hour and one day transporting them. Because the definition of transportation is broad, further work is needed to identify the key drivers of this constraint. For example, there is a tendency to focus on roads, which are clearly important, but so too is the cost of fuel, access to fuel, the price of vehicles and vehicle parts and the ability to keep vehicles maintained. Understanding the relative importance of these composite pieces, and the viability of resolving them, is essential. It is worth emphasizing the potential for approaches that stimulate the private provision of transport services – or inputs to transport services. Zambia’s experience with the mini-bus industry is illustrative.\(^7\)

**Improving soft infrastructure is also important.** The survey identified three priority areas that, if addressed, can facilitate business growth and productivity: financial services, education and land.

**Access to finance – or lack thereof – is the single, greatest concern of MSME owners.** Close to 60 percent of MSME owners said that access to finance was a serious constraint to their operations. Concern was particularly high among the smallest microenterprises and among farm owners. Consistent with MSMEs’ perceptions, the productivity analysis in this report also indicates that access to financial services and bank credit is a serious constraint to MSME performance.

**Businesses that use banking services are far more productive those that don’t – and it is the productivity of these businesses that allows them to access finance (as opposed to access to finance increasing their productivity).** Banking and other financial services can also help MSMEs manage working capital, smooth inventory management and improve their performance in other ways. It is, however, important to note that improving the performance of the financial sector is not a panacea.

**While physical access to financial services is challenging, a far greater constraint is that most MSMEs are not productive enough to afford the most basic financial services.** Between 67 and 83 percent of MSMEs do not generate enough revenue to qualify for the basic banking services provided by existing providers. Even if a transformational cellphone-based product\(^8\), such as one similar to the Kenyan M-Pesa product, were introduced, about 59 percent of MSMEs would not qualify for this service. Even fewer firms (less than 10%) qualify for bank loans. In other words, increased access to finance is of limited utility unless coupled with improved productivity.

**The Government of the Republic of Zambia (GRZ) can facilitate a more competitive and inclusive industry by creating incentives that trigger low-cost delivery of innovative services and – at the same time – maintaining a prudent regulatory framework that secures the financial sector.** GRZ can encourage the industry to exploit new technologies and ideas, such as leveraging on the rapidly expanding cell phone network, thereby reducing reliance on traditional banking infrastructure. As different models develop, they can reduce the cost of service delivery while increasing accessibility.

**Improved infrastructure (e.g. electricity and ICT) can reduce barriers to entry and trigger more innovative and inclusive financial services.** For example, stimulating competition in

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\(^7\) The authors understand that some years ago, when there was a dearth of public transportation, the GRZ reduced tariffs on mini buses. This led to a transformation in the industry, wherein mini buses were imported and a vibrant public transportation system quickly evolved, expanding from mini buses to large buses, which now make long-haul trips to various destinations.

\(^8\) For cellphone banking to be transformational it should open up services to currently unbanked people.
telecommunications and other supportive infrastructure can drive down costs and expand the ICT network, thereby creating a knock-on effect for the financial services industry.

**MSMEs with better educated owners are more productive than other MSMEs in both the agricultural and non-agricultural sectors.** Many MSME owners have only basic levels of education – especially in rural areas. About half of MSME owners in rural areas have a primary education and about 45 percent have a secondary education. Very few in rural areas have any vocational training and virtually none in urban or rural areas have a university education.

**In addition to the direct effect of improving education, there are also strong complementarities between education and other forms of investment.** The return from improving physical infrastructure – whether for irrigation or access to cellphone banking – will be lower unless concomitant investments in education are made.

**Improving access to land can reduce a significant constraint on agricultural MSMEs.** Access to land as well as its cost are significant barriers for MSMEs, especially in the agricultural sector. The small size of most farms makes it difficult for these enterprises to achieve economies of scale. The biggest barriers to secure title are the cost of land and the procurement process. The traditional land tenure system in Zambia limits options for small-scale farmers as most land is held under customary land arrangements with limited possibilities for transfer. While individuals can use land and pass it on to family members through inheritance, no exclusive rights can be claimed by individual users, nor can they sell or mortgage the land. Only between six and 15 percent of total land allows for ownership rights and registration under so-called statutory tenure. Not only does the lack of title limit access to capital from the financial system for housing and farm development, it could also be an obstacle to small enterprises expanding into commercial agriculture and forming more efficient farms that realise economies of scale.

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### BOX 1: PROFILING THE PRIVATE SECTOR – A COMPARISON OF DIAGNOSTIC TOOLS

Several reports and diagnostic tools have been used to diagnose barriers to firm performance and growth in Zambia. The Zambia Business Survey, developed jointly by the Zambia Business Forum, the GRZ through the Private Sector Development Reform Programme, FinMark Trust and the World Bank, is a new tool that complements existing tools such as the World Bank Investment Climate Assessments (ICAs), the annual Doing Business reports and the Global Competitiveness Report by focusing on a broader definition of the private sector that includes small, informal enterprises, agricultural enterprises, and rural enterprises.

The **ZBS complements other surveys by broadening coverage to a representative sample of MSMEs.** The ZBS surveyed a nationally representative sample of 4,800 MSMEs and a broad sample of 161 large enterprises, including household enterprises, agricultural farms and other formal and informal sector operators. Detailed interviews with MSME owners and large enterprise managers were conducted to profile the business and identify what challenges were encountered in running the business. The survey captured firms’ experience in a range of areas including: access to finance, governance, regulation, tax issues, labor, infrastructure services, supplies and marketing, technology, and business development services. These are areas where difficulties can add to the cost of doing business and reduce productivity. An assessment of these constraints is presented to give greater impetus to targeted policy reforms that can speed the private sector’s growth, leading to faster, more diversified economic growth and poverty reduction.

The **2009 ICA systematically analyses the conditions for private investment and enterprise growth.** The ICA is based on a 2007 Enterprise Survey of 603 Zambian enterprises. Enterprise Surveys, a product of the World Bank Group, are standardised and undertaken in a consistent way across countries to allow for cross-country benchmarking within the region and across the world.

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The Enterprise Survey for Zambia differs from the ZBS in several important ways. First, the Enterprise Survey covers four large, urban areas: Lusaka, Kitwe, Livingstone and Ndola. In the weighted sample, Lusaka accounted for over 70 percent of observations. The ZBS covers the entire country. The Enterprise Survey focuses on manufacturing, retail trade, and other services — agriculture and mining are excluded. The ZBS covers all sectors in all provinces, both urban and rural. Finally, firms in the Enterprise Survey are larger and more formal. This allows the ICA to perform detailed productivity analysis because the firms in that sample have more detailed financial statements. Although the Enterprise Survey did include a small number of microenterprises, sampled in the main market areas of each of the four cities, these microenterprises were larger, more productive and more formal than the mostly informal, household based enterprises in the ZBS. For example, almost three-quarters of microenterprises in the Enterprise Survey were registered compared to less than one in 20 in the ZBS. The earlier 2003 ICA, based on an earlier Enterprise Survey, was even more focused on large enterprises (median size of 88 employees) and manufacturing. In this respect the ZBS has a different focus in terms of geographic regions, sectors, size and formality than the ICA does.

The Doing Business report evaluates the regulatory framework in over 180 countries, establishing comparative measures of the costs incurred by businesses of complying with regulations. The Doing Business report, which benchmarks the regulatory burden facing enterprises in Zambia with the regulatory burden facing similar enterprises across the world, has a far narrower regulatory focus than either the ZBS or the ICA. The Doing Business report is based on a survey of five to 15 service providers (such as law firms or accounting firm) in each country. It is different from survey-based reports such as the ZBS and the ICAs. It is also important to note that the Doing Business report is focused on relatively large enterprises in Lusaka. For example, the Starting a Business indicator is calculated for a limited liability company in Lusaka with 50 employees and turnover equal to 100 times national income – far higher than for the MSMEs in the ZBS.

The Global Competitiveness Report, an annual report produced by the World Economic Forum is focused on the barriers that large, international companies face. The Global Competitiveness Report is based upon a survey of large, international companies in over 100 countries. The exact sampling methodology is not clearly described in the report and varies somewhat from country to country. But it is important to note that the samples are not intended to be representative of the entire economy and large enterprises with international experience are covered preferentially. About 45 percent of enterprises surveyed in Zambia had more than 100 employees and 27 percent were foreign owned. These firms are therefore far larger and more international than enterprises even in the Enterprise Surveys used in the ICAs, let alone the MSMEs in the ZBS.

The different approaches taken by the ZBS, ICA, Global Competitiveness Report and Doing Business report provide complementary information and analysis. Integrating the findings of the three tools can help government, the private sector and donors to better understand the composition, performance and needs of Zambia’s private sector.
Introduction

The purpose of this report is to provide a snapshot of Zambia’s private sector: who they are, what they do and how they do it. The survey on which the report is based focused primarily on micro, small and medium sized businesses, as they comprise the vast majority of Zambian businesses, and to date, there has been a dearth of information about this group. The report describes the constraints faced by the private sector and analyzes the impact that these constraints have on business productivity. While the report highlights the implications of the analysis, it does not provide recommendations as this will be undertaken in a separate but related process.

This report summarises the results from four technical papers on the business landscape, productivity, access to finance and the Business Facilities Measure. The main source of information for this study is the Zambia Business Survey (ZBS) which is the first demand-side, nationally representative survey of micro, small, and medium, enterprises (MSMEs) in Zambia. The survey of 4,800 formal and informal businesses was conducted between October and December 2008. The MSME survey was complemented with a survey of 161 large businesses throughout the country.

The MSME survey covered both urban and rural areas across all nine provinces in the country. The survey instrument drew upon the methodologies of both FinMark Trust’s FinScope Small Business Survey and the World Bank Enterprise Survey and Rural Investment Climate Surveys. The ZBS is the first survey that provides detailed information on the provision of finance, infrastructure and business support services to the private sector, along with a host of other information on enterprise employment, sales, costs and factors determining business viability and potential. These are collectively examined in this report, which is organised as follows:

Part 1 describes the landscape of businesses: where the enterprises are, what they do and how they do it. This includes information on size, methods of organisation, entrepreneur skills and education, linkages with other businesses and interactions with government. Enterprise efficiency will be affected by all these factors, to varying degrees.

Part 2 examines the environment or “investment climate” in which enterprises operate. It looks at the differences in investment climate faced by smaller, more rural enterprises versus larger formal sector enterprises. Differences in the investment climate could have a large impact on enterprise performance.

Part 3 focuses on the productivity of Zambian businesses. This section examines the impact of business characteristics and investment climate on enterprise performance, and identifies key factors that could increase enterprise productivity in Zambia.

Part 4 describes a complementary way of assessing the productivity of firms, called the Business Facilitation Model (BFM). The BFM segments MSMEs into different categories and identifies constraints and opportunities for each segment. This analysis provides new insights into the differentiated profile of MSMEs and useful implications to help facilitate their growth.

Part 5 provides the conclusions and preliminary implications of the above findings. Recommendations will be developed through the consultation process, scheduled for the latter part of 2010.

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1. Zambia’s business landscape

Zambia experienced steady annual growth of about five percent between 2001 and 2008, and while this has helped reduce poverty in urban areas, rural poverty has worsened. Despite efforts to diversify the economy, economic growth remains narrowly focused, with the mining, construction and service sectors contributing the most to growth in GDP (see Figure 1). To meet the goals of halving poverty by 2015 and reaching middle income status by 2030, Zambia’s economy needs to grow faster and the pattern of grown needs to become more diversified and more broadly based (meaning that the growth needs to take place in ways that have more of an impact on rural areas).

Figure 1: Growth is concentrated in mining, construction and services

GDP growth by sector


1.1 Country background

Minerals continue to be the largest export and hard currency earner, with copper and ancillary products comprising 70 percent of total exports. Mining, however, accounts for only about two percent of employment (see Figure 2). Most Zambians work in agriculture, while services account for the next largest sector of employment. The manufacturing, mining and construction sectors together account for a very small share of total employment in Zambia, providing jobs to only one to two percent of the labour force each.

Given the importance of the agricultural sector, it is useful to segment the composition of farmers. There are 1,145,829 households that grow crops, as reported by the Crop Forecast Survey 2007/2008. Of these, 96 percent are classified as small-scale farmers (holdings of five hectares or less). The rest are medium-scale farmers. Between 2000 and 2008, the proportion of small to medium scale holdings did not change significantly. Zambia also has about 1500 large commercial farms.

12 Source: Africa Economic Outlook, 2008.
Zambia’s private sector is dualistic, consisting of a small number of large enterprises and a significantly larger MSME sector. The large enterprise sector, which generates the majority of economic growth, exports and tax revenues, is made up of a few thousand enterprises with over 50 employees. 14 About 200 large enterprises produce the bulk of industrial output. 15

While large enterprises drive the economy, they only account for seven percent of employment (see Figure 3 and Table 1). Of a total labour force of almost five million people, 16 percent are unemployed. Of the 4.1 million Zambians that are employed, a vast majority (88 percent) work for informal enterprises with less than five employees. 16 These informal microenterprises are more common in rural areas, where they account for 91 percent of employment. 17 Reducing poverty and

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14 For example, the 2009 Investment Climate Assessment was based on a survey of formal enterprises of five or more employees in Lusaka, Kitwe, Ndola and Livingstone. The list of enterprises, which was provided by the Central Statistical Office, yielded a final list of only 3,336 enterprises in manufacturing and services with over five employees in these cities. Only 449 of these enterprises had over 50 employees. At the time of the last census (2000), these cities accounted for about 20 percent of total population and probably account for a greater share of the number of large enterprises in the country.


16 The Central Statistical Office (CSO) classifies workers as working for informal enterprises when they work were not entitled to paid leave, pension, gratuity and social security and worked in an establishment employing less than 5 persons. This definition excludes similar workers in enterprises with more than five employees. Note that this definition used by the CSO is very different from the definition used in this report, which focuses on registration with PACRO or others.

increasing prosperity in rural areas depends on increasing the productivity of the microenterprises – an outcome that has proven challenging in recent years.

**Figure 3: The formal private sector employs only 7% of Zambians – almost 90% are employed in its informal sector, mostly in agriculture**

![Distribution of employment in Zambia](image_url)

**Table 1: Employment by formality status**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>% of total labour force</th>
<th>% of total employed</th>
<th>% of total informal sector employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor force</td>
<td>4,918,788</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pct unemployed</td>
<td>787,006</td>
<td>16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total employed</td>
<td>4,131,782</td>
<td>84%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal private sector</td>
<td>277,680</td>
<td>5.6%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>218,104</td>
<td>4.4%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Informal sector</td>
<td>3,635,998</td>
<td>73.9%</td>
<td>88%</td>
<td>100%</td>
</tr>
<tr>
<td>Of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture¹</td>
<td>2,545,199</td>
<td>51.7%</td>
<td>62%</td>
<td>70%</td>
</tr>
<tr>
<td>Informal sector non-agriculture</td>
<td>1,090,799</td>
<td>22.2%</td>
<td>26%</td>
<td>30%</td>
</tr>
</tbody>
</table>

BOX 2: CONCLUSIONS FROM THE 2008 INVESTMENT CLIMATE ASSESSMENT REPORT

The 2008 Investment Climate Assessment (ICA) Report was based on a survey of 484 formal sector firms (those that are registered and have more than five permanent full-time employees) in the urban areas of Lusaka, Kitwe, Ndola and Livingstone. The survey included firms in manufacturing, services and retailing sub-sectors. It was the second ICA report for Zambia, building upon an earlier ICA that was completed in 2004. The results of this report include:

Zambia’s labor productivity continues to be much lower than its best performing regional competitors such as Kenya, Botswana, Namibia, Swaziland and South Africa. It is also much lower than in high performing international competitors such as China, Thailand and Brazil. Zambia could still be competitive in export markets if lower productivity was offset by lower wages paid to workers. This is not the case. Zambia’s unit labor costs remain higher than these comparators. Increasing the productivity of Zambia’s labor force remains a key policy issue.

Labor productivity in the formal sector is low because firms in Zambia face only limited competition from domestic or foreign companies. Without pressure from competitors, these firms enjoy large market shares within their product niches, and can offset higher costs of their products with higher prices charged to their customers. Lack of competition within the formal sector has an adverse effect on the rest of the economy that sources from these firms-creating a high cost economy overall.

Limited competition among formal sector producers is due to various business environment problems that deter entry of foreign and domestic firms. These include cost of finance, which remains high relative to most Sub-Saharan countries, macroeconomic stability caused by a fluctuating kwacha due to dependence on copper, taxation policy which has led to a disproportionately high tax burden on smaller formal enterprises, corruption, and continued problems with physical infrastructure particularly power and transport.

Overall, the report notes that while substantial improvements have occurred in the business environment relative to 2003, Zambia still requires vast improvements in its business environment for its workers to become more productive, and for its firms to compete with other countries regionally and globally.


1.2 Location and sectoral distribution of businesses

The MSME sector employs the majority of the population. Most are based in rural areas and are small agricultural farms or retail traders. Larger enterprises are much more diversified. Current estimates suggest that about 65 percent of the population lives in rural areas. Confirming this, the ZBS shows that most MSMEs in Zambia are in rural areas (about 81 percent). These enterprises are distributed across all nine provinces. More MSMEs are in Eastern Province (about 21 percent of the sample) than in any other province, while the least are in Northeastern Province (six percent).

Roughly 70 percent of MSMEs are agricultural (see Figure 4), and this is consistent with the labour force data that shows how important agriculture is with respect to employment (see Figure 8). The next most important sector is wholesale and retail trade – about 21 percent of MSMEs operate in this sector. In contrast, there are relatively few manufacturing MSMEs (only about three percent of MSMEs), hotels or catering enterprises (two percent) or enterprises in other sectors (four percent).

Figure 4: MSMEs are predominantly in agriculture and retail trade

Source: Zambia Business Survey

BOX 3: WOMEN ENTREPRENEURS IN ZAMBIA

Policymakers view female business ownership as an important tool for the economic empowerment of women that can lead to shared growth and increased prosperity for Zambia as a whole. Policies to foster increased business ownership by female entrepreneurs will depend on the constraints to participation and performance of women in this role.

The 2008 Investment Climate Assessment Report examines differences in entrepreneurial performance and constraints between male versus female owned firms in Zambia’s formal sector. It finds that female owned firms are less productive than their male owned counterparts. The lower labor productivity can be explained by four factors. First, women are located in low productivity sectors such as garments. Second, female owned firms have lower levels of capital per worker. Third, these firms are smaller. Fourth, their managers are less educated. Female owned firms face further constraints to business operations in the areas of access to finance, access to land, crime and theft, and corruption.

The ZBS indicates that women entrepreneurs are more likely to be engaged in trading and retailing (44 percent of enterprises) than agriculture (31 percent). Women start out with significantly less capital stock (a median startup capital of US$55 for women, compared to US$85 for men), and have lower levels of education compared to their male counterparts. Women owned firms have lower productivity than men, but these can be largely explained by differences in capital stock and education between the groups. The business constraints reported are similar for both men and women, with access to finance, access to land and cost of finance being the most reported constraints. However, both these studies cannot address the issue of entry. In several countries including Zambia, laws and customs impede women to a greater extent than men in obtaining credit, productive inputs, information and other public services, which limit their entry into entrepreneurship.

1.3. Characteristics of MSMEs and large enterprises

Most MSMEs are small home-based, self-employed individuals or family enterprises.19 About 35 percent have no employees of any type (paid or unpaid, full- or part-time) other than the owner (see Table 2), and fewer than 10 percent have more than 10 employees. If unpaid workers are excluded,

19 See Appendix for further discussion of the definition of employees and firm size.
the number of single person enterprises increases from 35 percent of MSMEs to 67 percent of MSMEs, further emphasizing the small size of most MSMEs. In the rest of this report, only paid employees will be included in measures of enterprise size.

Table 2: Distribution of enterprises based upon different definitions of employment

<table>
<thead>
<tr>
<th></th>
<th>All paid and unpaid employees</th>
<th>Only employees paid with cash or in-kind</th>
<th>Only employees paid in cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>No employees</td>
<td>35%</td>
<td>67%</td>
<td>79%</td>
</tr>
<tr>
<td>Micro (1 to 10 employees)</td>
<td>58%</td>
<td>30%</td>
<td>19%</td>
</tr>
<tr>
<td>Small and medium (11 to 50 employees)</td>
<td>7%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: Zambia Business Survey
Note: Each column shows firm-size based upon that classification of employees. For example, the first column counts all unpaid and paid employees. So it says that 35 percent of firms have no paid or unpaid employees. Similarly, column 2 shows that two-thirds of firms have no employees paid in cash or in-kind.

Combined with other information from the survey, this home-based profile shows a close relationship between very small enterprises and families and suggests that many unpaid employees are probably family members. Although family members play some role in the enterprise, the enterprise owner does not pay them a cash salary and often would not consider ‘eating from the same pot’ as in-kind remuneration for work done for the enterprise. In other words many – and arguably the majority – of Zambia’s MSMEs are more like home-based income-generating activities rather than formal business located on separate business premises.

BOX 4: ZAMBIA OFFICIAL MSME DEFINITIONS

The GRZ has recently introduced an MSME Policy that defines different categories of MSMEs. The policy states that classifying enterprises is needed in order to successfully target support programmes and incentives. The new definitions are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Informal</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered with</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Registrar of Companies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment (excluding land and buildings)</td>
<td>K50,000,000</td>
<td>K80,000,000</td>
<td>K80,000,000-K200,000,000</td>
<td>K200,000,000-K500,000,000</td>
</tr>
<tr>
<td>Investment-Services and Trading</td>
<td>K50,000,000</td>
<td>K80,000,000</td>
<td>K150,000,000</td>
<td>K151,000,000-K300,000,000</td>
</tr>
<tr>
<td>Turnover</td>
<td>Unspecified</td>
<td>K150,000,000</td>
<td>K150,000,000-K250,000,000</td>
<td>K300,000,000-K800,000,000</td>
</tr>
<tr>
<td>Employment</td>
<td>1-9 workers</td>
<td>1-10 workers</td>
<td>11-49 workers</td>
<td>51-100 workers</td>
</tr>
</tbody>
</table>

Source: The Micro, Small and Medium Enterprise Development Policy, MCTI January 2009
Note: To qualify as an MSME, the legal status and total investment criteria must be met together with at least one other criterion.

The new guidelines do not distinguish between full-time and part-time workers, paid in cash versus paid in-kind workers, and between unpaid versus paid workers. It does not include firms in agriculture.

Findings from the ZBS show that over 95 percent of firms with less than 50 employees in Zambia are unregistered. Over 96 percent of firms have sales less than K150 million, and over 97 percent of firms have fewer than 10 workers. The new definitions seem too broad to enable targeted policy interventions towards a subset of firms which would benefit most from these interventions. The definitions allow mature, sustainable enterprises to avail of targeted financial and technical assistance, reducing access by others. By directing policy only towards registered firms, it also excludes the vast majority of firms where most of the labor force is employed.
Most enterprises are very small – both in terms of number of employees and volume of sales (see Table 2 and Figure 5). Of the enterprises that answered the question on sales, about 73 percent reported sales of less than K500 000 a month.\textsuperscript{20} Using exchange rates from the time of the survey, this is about US$140 per month (about US$1 680 a year). Only about three percent of the enterprises had sales of over K5 million a month. Combined with the previous evidence on the number of firms, this suggests that almost all MSMEs would be defined as informal under the current definition of informality (see Box 4). Introducing more nuanced definitions that would distinguish between the very smallest MSMEs (i.e. with no paid employees) and those in other categories would seem useful.

**Figure 5: Most MSMEs have very low levels of sales**

![Pie chart showing percent of firms by monthly sales in ZMK](chart.png)

Source: Zambia Business Survey

MSME owners have relatively little education. There is a large gap between the education of MSME owners and managers of large enterprises (see Figure 6). Most managers of large businesses have either a university or vocational education (46 percent and 48 percent respectively). Very few have less than a secondary education. In contrast, most MSME owners have only a primary or secondary education. This is especially true in rural areas, where half of the entrepreneurs have no education or only a primary school education. The percentage is slightly lower for MSMEs in urban areas, where less than 30 percent have only primary education. Less than one percent of the owners of MSMEs have a university level education.

\textsuperscript{20} About 20 percent of firms did not answer this question. For those who answered in estimated monthly sales, this was averaged over 12 months. For those who answered in dollar amounts the amount was converted to Zambian Kwacha using an exchange rate of 1 US Dollar = K3512.9 (2008 estimate).
1.4 Business/government interactions

Informality is widespread, particularly in rural areas. MSMEs participating in the survey were asked three questions about company registrations: (i) whether they are registered with the Patents and Company Registrar (PACRO) or other government institution responsible for commercial registration; (ii) whether they have an operating, trade or other business license with any local government institutions; and (iii) whether they have a taxpayer identification number (TPIN) from the Zambia Revenue Authority (ZRA). Only about one in 20 MSMEs reported that they were registered with any of the three agencies (see Table 3). This is a sharp contrast to the large businesses, all of which reported that they were registered with at least one government agency.

Among MSMEs claiming any sort of formal registration, they were most likely to report that they had an operating or trading license from a local or municipal government (about one in 20 MSMEs). Fewer reported that they were registered with PACRO (only about one in 30) or had a TPIN from the Zambia Revenue Authority (only about one in 50). Lack of registration was far more common in rural areas than in urban areas among MSMEs.

Table 3: Percent of MSMEs and large enterprises registered with each agency

<table>
<thead>
<tr>
<th>Registered with any agency</th>
<th>% of rural MSMEs</th>
<th>% of urban MSMEs</th>
<th>% of large enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered with PACRO</td>
<td>3%</td>
<td>21%</td>
<td>100%</td>
</tr>
<tr>
<td>Have operating license from local Government</td>
<td>1%</td>
<td>12%</td>
<td>99%</td>
</tr>
<tr>
<td>Have TPIN from Zambia Revenue Authority</td>
<td>2%</td>
<td>18%</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>7%</td>
<td>96%</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on data from the ZBS
Note: All variables are weighted means.

Lack of registration with various authorities is driven by low levels of earnings and lack of information (see Figure 7). Informality is often seen as a deliberate scourge that constrains growth and narrows the tax base. To better understand the reasons for informality, the ZBS asked MSME owners that were not registered with any of these agencies why this was the case. The most common reason given (37 percent) was that the business does not make enough money. In this respect, informality should be seen as a symptom rather than a cause of problems in the business environment. Waving the wand of formalisation, as an end in itself, is unlikely to generate the jobs
or income needed in rural areas. Instead, efforts to improve productivity of rural businesses can, if effective, increase formalisation and thereby broaden the tax base.

That said, there is also need for government to better facilitate formalisation. While 30 percent of enterprises reported that they did not need to be registered, 25 percent stated that they did not know how to register. This suggests that the lack of information, or inappropriately or inadequately communicated and channeled information, on how to register creates a barrier to a significant percentage of enterprises.

**Figure 7: The most common reason for not registering is that the business does not make enough**

![Figure 7](Zambia Business Survey)

Formal MSMEs are far more productive than informal MSMEs (see Figure 8). The median productivity of formal MSMEs is more than four times that of enterprises in the informal sector. Perhaps unsurprisingly, labour costs are also higher. Median labour costs for enterprises that are registered for taxes are about US$72 a month, compared to less than US$30 for enterprises in the informal sector.

Informality is a rational choice. Do enterprises in the formal sector have greater access to public goods and business support services that help make them more productive, than enterprises in the informal sector? Is there an incentive to formalise operations to obtain access to these services? In practice, differences in access to public goods are related to differences in productivity, rather than due to differences in registration status. Data indicates that services such as connection to an electric grid or the public water supply are not restricted to registered enterprises. However, enterprises that are more productive are more likely to use these services. Increasing provision of these services, and greater enforcement of registration laws, is likely to induce the more productive enterprises to formalise operations.

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21 Although the figure focuses on firms registered with the ZRA, similar patterns hold for firms registered with other agencies.

22 Note this does not include in-kind payments.
Figure 8: Registered firms are far more productive than other firms

Sales per worker and labor costs per worker are both very low among MSMEs in Zambia. The median unregistered MSME — and, as noted above, most MSMEs are unregistered — has annual labor costs of about US$300 per worker. The median registered MSME has annual labor costs of about US$850 per worker. This might suggest that low wages might make large Zambian enterprises more competitive than in many other economies in the region.

Unfortunately, this is not the case. Labour costs are far higher for larger enterprises. Based on data from the World Bank’s Enterprise Surveys, which covers manufacturing enterprises with more than five employees, the median firm reported that annual labor costs were about US$1 400 per worker. Although this is far lower than in middle-income economies in the region such as South Africa (US$7 600 a year), Namibia (US$4 700 a year) and Botswana (US$2 800 a year), it is higher than in many low-income economies. For example, annual labour costs are less than US$1 000 per worker in Malawi, Mozambique, Tanzania and Uganda. Among low-income economies in Sub-Saharan Africa, labor costs are relatively high in Zambia (see figure) — even after taking into account that per capita GDP is also high.
1.5 Factors that drive productivity

Linkages between MSMEs and larger formal enterprises are limited. Most MSMEs supply their goods and services directly to individuals (See Figure 9). Less than a quarter of MSMEs have other businesses as their customers. For farmers, business cooperatives and private outgrower schemes provide important marketing channels. Very few farmers in Zambia use these schemes. Only two percent of businesses (See Figure 9) and four percent of farms sell to private outgrower schemes and only five percent of businesses and eight percent of farms sell to business cooperatives. Even fewer MSMEs supply the GRZ directly, partly because bidding on government contracts requires formal registration.

Figure 9: Most MSME customers are individuals

![Bar chart showing the percentage of MSME customers by type. The majority are individuals (91.30%), followed by other businesses (23.60%), co-operatives (5.00%), government (2.60%), and private outgrower schemes (2.20%). Source: Zambia Business Survey.]

Large businesses have access to much more diversified markets (see Figure 10). According to ZBS, over 60 percent of large businesses supply other large businesses. These enterprises also trade directly with individuals, and also with other smaller businesses and the government.

Figure 10: The customer base for large enterprises is more diversified

![Bar chart showing the percent of large enterprises trading with various entities. Large private businesses (more than 50 workers) trade the most, followed by individuals, small private firms (11-30 workers), medium private firms (31-50 workers), government agencies, SOEs, microenterprises (less than 10 workers), parent company or affiliated businesses, and other entities. Source: Zambia Business Survey.]

23
2. The investment climate for Zambian businesses

The investment climate is broadly defined as the state of a country’s infrastructure as provided by government and the private sector as well as a country’s unique attributes or “geography”. In addition to enterprise characteristics, differences in the investment climate can have a significant effect on enterprises’ cost advantages or disadvantages and therefore their overall competitiveness.

The ZBS collected both perceptions-based data on the severity of a number of potential constraints an enterprise faces as well as quantitative data on enterprise performance. This section focuses on entrepreneurs’ perceptions about the business environment. Views on the severity of investment climate constraints are often used to frame priorities for reforms and investments. They are increasingly complemented by analysis of productivity (Section 3) and Doing Business indicators based on third party assessments of the state of services. The latter provides a more comparable cross-country perspective for a detailed range of regulation, but not an enterprise-level view of regulatory and infrastructural obstacles. Both approaches are complementary in designing appropriate policy interventions. A more detailed description of the investment climate can be found in the technical paper The business landscape for MSMEs and large enterprises in Zambia.

2.1 Enterprises’ perceptions of the investment climate

The ZBS asked enterprise owners and managers to assess the impact of 15 different types of obstacles to their businesses’ operations. In other words, how serious a constraint is each obstacle to their businesses operations? Respondents rated each obstacle on a five-point scale ranging between ‘no obstacle’ and a ‘very severe obstacle’. The rankings of these constraints are presented in Figure 11.

The constraints ranked highly by MSME owners were very different to those of large enterprises. MSME owners were most likely to indicate that access to finance (55 percent), transportation (39 percent), the cost of finance (34 percent) and access to land (32 percent) were serious constraints. Except for the cost of finance, none of these ranked highly among large enterprise managers. Moreover, factors such as tax rates and electricity, which were top concerns of large enterprise managers, were only minor concerns for MSME owners.

23 There has been some debate about the usefulness of perceptions data in assessing constraints. Firms’ benchmarks may differ by country – much as a poor family in an Organisation for Economic Cooperation and Development country may feel “poorer” than a more deprived one in a low-income country, a firm in South Africa may see corruption as a more serious problem than a firm in, say, Nigeria even if corruption is more endemic in the latter country. Benchmarks may be influenced by waves of pessimism and euphoria reflecting adverse or favorable trends. Since firms and entrepreneurs enter and exit in response to opportunities and constraints, they are endogenous to the investment climate and their opinions may not accurately reflect the severity of constraints as perceived by potential or discouraged entrants. However, researchers have shown that (e.g. Gelb, Ramachandran and Shah, 2008. What Matters to African Firms? The Relevance of Perceptions Data. World Bank: Washington DC. 2008) firms appear to discriminate between constraints in a reasonable way. Their views can provide a useful first step in the business-government consultative process and help to prioritize more specific behavioral analysis and policy reforms.

MSME owners and large enterprise managers were also asked which of these constraints had the biggest impact on their business. In Zambia, the results for the two questions, as illustrated in Figure 12, are fairly similar. Just over one quarter of MSME owners said access to finance was the biggest constraint they faced, while just less than one quarter said the same about transportation. A significant number (14 percent) of MSME owners also reported that access to land was their biggest constraint. In contrast, large enterprise managers were most likely to report electricity problems (30 percent), macroeconomic instability (15 percent) and cost of finance (13 percent) as their biggest constraints.

25 In theory, responses to this question can be quite different from responses to the questions about whether certain areas of the investment climate are serious problems (in the latter question, multiple “serious constraints” are possible, whereas in the former, the respondent must choose the top constraint). For example, suppose there is a large group of firms (say 20 percent of firms) that is very concerned about a single issue while others are not concerned at all. If the firms that are very concerned all ranked it as the biggest problem they faced, then it would rank among the top constraints based upon the percent of firms that said it was the biggest problem. However, if few of the remaining firms thought it was a serious constraint, then it would not rank among the very top concerns (i.e., for the top obstacles 35-40 percent of firms said it was a serious problem). That is, the first question measures something closer to the breadth of a problem (i.e., how many firms said it was a serious problem), while the second measures the depth of the problem (i.e., how many firms said it was the biggest problem that they faced).
Figure 12: MSME owners and large enterprise managers also had different views about the biggest problems that they faced

The differences in perceptions of the biggest obstacle appear to be mainly due to differences between the characteristics of enterprises, such as number of employees, location, foreign versus domestic owned, exporting versus non-exporting, and rural versus urban. Most notably, for several of the variables where the ranking is very different (e.g. macroeconomic environment, tax rates and electricity, which large enterprises were more likely to say were constraints; and access to finance and transportation, which MSMEs were more likely to say were constraints), the differences appear to be mostly due to observable characteristics.

While differences in most rankings between enterprises can be largely explained by differences in characteristics such as size, sector and location, there are some exceptions. There are a few differences in the perceptions of large enterprise managers that are due to unobserved differences between the two type of firms (i.e. they are not just because the MSMEs are smaller, more likely to be in rural areas, less likely to export etc.) One significant difference is that large enterprises were about 24 percent less likely to say that access to land was a serious problem than MSMEs, even after controlling for observable differences due to size, sector and location. This might be because large, more formal enterprises are more likely to have full title to their land and so are less concerned about access or that they have better access to the courts or to policymakers to help them enforce their rights.

A second significant difference concerned corruption – managers of large enterprises were about 21 percent less likely to say that corruption was a serious problem than MSME owners. Again this could reflect that large enterprises have more political power and so are less vulnerable to requests for bribes than MSME owners.
3. Enterprise performance

This section highlights the differences in performance between types of businesses and analyses the reasons for them. While there are a number of attributes that can be used as the basis for comparison, the section focuses on the differences between large businesses and MSMEs because, based on the analysis, these were the most significant. A more detailed description of productivity is found in the background paper Who’s productive in Zambia’s private sector?

MSMEs are far less productive than large enterprises, which is true throughout Africa. MSMEs produce far less output for each worker they employ than large enterprises in the same sectors. The average Zambian MSME in the agricultural and service sectors produces only about one sixth of the average large enterprise in the same sectors. The difference for manufacturing and retail enterprises is even greater – MSMEs produce about one-ninth of the amount that large enterprises do in the manufacturing sector and less than one-twelfth as much in the retail trade sector (see Figure 13). In Zambia, the ratio of MSMEs to large enterprises is much higher than that of other countries, suggesting that the low productivity of these enterprises has a relatively bigger “drag”. Unless the productivity of these enterprises is increased, it will be difficult to increase the wages of their workers and the income of their owners.

Figure 13: MSMEs are far less productive than large enterprises in the same sectors

![Bar chart showing median sales per worker in different sectors for MSMEs and large enterprises.](chart)

Source: Zambia Business Survey

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26 Performance is measured by output per worker. Labour is a common input found in most production processes. The efficiency with which firms use labour to produce goods is the single largest factor determining living standards. Increases in productivity can boost living standards because companies can increase wages by rising output.

27 Note that output is measured in value terms (i.e. in monetary terms) rather than in physical units. This is standard when comparing enterprises in sectors where quality varies.
MSMEs in Zambia are far less productive than large, formal enterprises in Zambia – something that is true throughout Africa. Unfortunately, because the ZBS is a relatively new type of survey, it is not possible to benchmark Zambia’s MSMEs against similar firms in other countries in the region. It is, however, possible to benchmark larger enterprises in the manufacturing sector in Zambia against similar enterprises in other countries in the region using data from the World Bank’s Enterprise Survey programme.

As noted in the Investment Climate Assessment, the performance of large Zambian manufacturing businesses – as measured by labor productivity - lags far behind the performance of large manufacturing enterprises in the best performing countries in both Africa (e.g. South Africa and Mauritius) and in other regions such as Asia (Thailand and Malaysia) or Latin America (Brazil, Chile and Argentina). These high performing countries, however, have higher incomes than Zambia. Higher-income countries tend to have more productive firms for a number of reasons including because the human capital of workers is higher, firms in these countries are more capital intensive, and because the investment climate is usually – although not always – better in higher-income economies (e.g. governance is better, infrastructure is more developed and access to finance is easier). It is therefore also useful to compare labour productivity in Zambia with other countries in the Sub-Saharan Africa.

Labour productivity for large Zambian manufacturing businesses is higher than in many low-income countries in Sub-Saharan Africa. The median large manufacturing business in Zambia reports that it produces about US$4,000 of value-added per worker. This is higher than in many other low-income countries in the region and elsewhere in Sub-Saharan Africa. For example, the median large manufacturing firms produces more value-added per worker than similar firms in Tanzania, Uganda, Malawi or Mozambique (see figure below).

While most MSMEs are less productive than larger businesses, there are extreme differences in the performance between MSMEs; some are very efficient enterprises with high growth potential. They are not a homogenous group of enterprises – there are large differences in their productivity (see Figure 14). Enterprises in the 25th percentile of performance in agriculture produce only US$427 worth of output per worker. Enterprises in the 75th percentile produce more than seven times that of enterprises in the bottom quartile, producing US$3,321 worth of output per worker. Similar differences exist in other sectors, with the service sector (hotels, restaurants, transport) showing the widest gap – enterprises in the top quartile have sales that are more than eight times that of
enterprises in the bottom quartile. This large gap between the best and worst performers shows that it is possible to overcome the barriers that prevent MSMEs from becoming more productive. The important questions, therefore, are what are these barriers and how can they be overcome?

**Figure 14: The difference in productivity among the most and least productive MSMEs is also large**

<table>
<thead>
<tr>
<th>Quartile Distribution of output per worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output per worker (US$)</td>
</tr>
<tr>
<td>Agriculture</td>
</tr>
<tr>
<td>Manufacturing</td>
</tr>
<tr>
<td>Services</td>
</tr>
<tr>
<td>Retail</td>
</tr>
<tr>
<td>Source: Zambia Business Survey</td>
</tr>
<tr>
<td>Note: Green bar is median. Upper value is 75th percentile and lower value is 25th percentile.</td>
</tr>
</tbody>
</table>

### 3.1 Factors that drive productivity

What makes one enterprise more efficient than another? Given the wide range in observed productivity differences within the MSME sector, identifying those factors that help MSMEs reach their potential is an important policy issue.

While some drivers of productivity are enterprise or sector specific, others affect the entire population of MSMEs. For example, enterprises of all types and in all sectors are affected by differences in access to basic infrastructure and business support services such as financial services, and distribution networks for inputs such as fertilizers. Enterprises that do not have access to basic infrastructure, whether hard (such as energy, transport or water) or soft (such as education or financial services), find it difficult to perform to their potential. Many of these constraints are particularly binding in rural areas.

While many of the drivers that determine productivity are outside the business’ control, others are not. Productivity is also affected by characteristics specific to a business and/or its manager. A range of characteristics can drive productivity at the enterprise level, and these include factors such as the experience and/or education level of the owner, the amount of capital-machinery and equipment-used, financial record-keeping, and use of cellphones and other ICT services.

This section highlights those factors that seem to have the most impact on the productivity of MSMEs. The background paper on productivity provides a more detailed explanation of the relative importance of all of these factors. Based on the ZBS, the key factors related to productivity at the level of the enterprise or entrepreneur include (not in order of priority): (i) access to water/energy;

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28 This technical paper examines determinants of total factor productivity, measured as a residual after adjusting labor productivity for the various endowments and constraints influencing firm-level performance. Multivariate regression results are presented in the chapter. Factors that are significant statistically are discussed here. For ease of exposition only the partial productivity results are presented.
(ii) access to finance; (iii) education of owner/manager; and (iv) use of technology – cellphones and internet. Productivity in agriculture is significantly affected by access to electricity and water, and access to financial services, particularly lending facilities. Non-agricultural enterprises are less affected by availability of water supply. Non-agricultural firms that have access to electricity, at least a secondary school education, banking sector access and access to lending services are more productive than others.

MSMEs that use financial services are generally more productive than those that don’t. Enterprises and farmers that use banking services are significantly more productive than other enterprises – roughly three times more productive in non-agricultural sectors. Banking services can help MSME owners manage working capital, smooth inventory management and improve their performance in other ways (see Figure 15).

Figure 15: MSMEs with bank accounts are far more productive than those without

MSMEs managed by educated owners are more productive. Many studies demonstrate that education is critical to improving enterprise productivity.\textsuperscript{29} Just one year of additional education can increase productivity in wage employment by 10 percent, even after controlling for other factors. One reason is that better educated people are more flexible; they absorb new information faster and apply unfamiliar inputs and new processes more effectively. This is true in both the agricultural and non-agricultural sectors.\textsuperscript{30} Non-agricultural MSMEs owned by people who have completed their secondary school education are 25 percent more productive that enterprises owned by people with less education. The difference in productivity between enterprises owned by people with secondary education and vocational or university education is smaller. In agriculture, more education is also associated with greater productivity.

There are strong complementarities between human capital and other forms of investment. In Zambia, where average levels of education are low, the full returns to physical investment – adding irrigation infrastructure, providing access to cellular telephone and banks cannot be realised without concomitant investments in education.

\textsuperscript{29} A Strategy for Development, Nicholas Stern, World Bank, 2002.

\textsuperscript{30} The effect, however, is statistically significant only in non-agricultural firms. The difference between firms with owners with secondary education and university and vocational education is also positive, but statistically significant. See background paper for additional discussion and description of results.
MSMEs that have access to electricity and water are more productive. For farmers, lack of available water and electricity leads to dependence on rain – most agriculture is rain-fed in Zambia. This can affect productivity significantly as it means that farmers cannot produce crops in rotation. Most farmers produce maize, the predominant food crop, but less than 10 percent of farmers produce cash crops such as cotton, tobacco or sugar, even though these could be produced in rotation with maize.

**Figure 16:** MSMEs with access to infrastructure are far more productive than those without

![Graph showing the productivity of MSMEs with and without access to electricity and water]

Basic infrastructure services that are required for agro-processing are also missing. As a result, this industry remains virtually non-existent outside urban areas. Poor infrastructure also affects the productivity of other enterprises. Retailers, for example, can only use efficiency enhancing cellular telephones or ICT when they have access to some form of energy.

The results from this study confirm the large effect that access to infrastructure has on MSME productivity (see Figure 16). Agricultural enterprises with access to public water are almost twice as productive as enterprises that do not and non-agricultural enterprises with access are one and half times as productive as those that do not. The effect of electricity on productivity is even greater. Non agricultural MSMEs with access to energy are twice as productive as those without. Productivity gains are even higher for agricultural MSMEs with access to energy. These firms are almost four times more productive than those without. This emphasizes the large gains that could be associated with improving access to basic infrastructure.
Figure 17: Firms with cellphones (left) and internet connections (right) are more productive than firms without these connections

The more productive firms use technology, especially for small retailers and service providers. Cellphone use is related to higher enterprise productivity. Enterprises that report using their cellphones to contact customers and suppliers, particularly those in the retail sector, are significantly more productive than other enterprises. Enterprises that use cellphones only for personal purposes are no more productive than average. Similarly, although very few enterprises have access to the internet, those that do are far more productive than those that do not, particularly in the non-agriculture sector, which is dominated by retailers.

4. Key development challenges

The previous two sections described the constraints to businesses based on the perceptions of entrepreneurs and the productivity of their businesses. This chapter focuses directly on the constraints and the manner through which they affect business performance.

4.1 Access to financial services

Despite the significant challenges that remain with respect to providing financial services to MSMEs in Zambia, the financial sector has been growing quickly in recent years. The ratio of domestic credit to the private sector to GDP increased from 18.7 percent at the end of 2005 to 43.0 percent at end of 2007.31 The number of bank branches increased from 173 in 2004 to 223 in 2008, and the number of ATMs increased from 54 to 295 over the same period.32 Two banks, Barclays and Zanaco, now offer point of sales (POS) services, with 633 POS locations in Zambia, and two banks have

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launched cellphone banking services. Improvements to the national payments system and the launch of the first credit reference bureau are also significant developments.

Data on financial product usage from the ZBS highlight very low usage of formal financial products by MSMEs, and uneven usage by large businesses, as illustrated in Figure 18. The chart summarises usage of four product types; transaction products (including bank accounts and money transfer services), savings (including bank accounts and other savings products), credit and insurance (including asset and life insurance) for both MSMEs and large businesses surveyed. Just 11 percent of MSMEs make use of transactions products compared to 97 percent of large businesses surveyed, while only 2.3 percent of MSMEs use credit products compared to 45 percent of large businesses. The contrast between MSMEs and large businesses is most evident with insurance products. Less than one percent of MSMEs have any insurance products, compared to around 97 percent of large businesses.

Although virtually all large enterprises have some form of formal financial service access, no more than 20 percent of all MSMEs have access to any formal or informal financial service, with less than 10 percent being formally banked. MSMEs can be divided into those that have bank accounts, those that don’t have bank accounts but have other formal financial products, those that have informal products only, and those that have no formal or informal financial products at all. Firms that have a bank account or some other financial product – whether formal or informal – are said to be financially included. In other words, according to the data, no more than 20 percent of Zambian MSMEs are financially included in any way.

**Figure 18: MSMEs are far less likely to use financial products than large enterprises are**

![Figure 18: MSMEs are far less likely to use financial products than large enterprises are](source: Zambia Business Survey)
Few banks exist outside urban areas and, as a result, MSMEs in rural areas have very limited access to finance. As shown in Figure 19, about 41 percent of MSMEs in urban areas are financially included, compared to only about 15 percent in rural areas. While enterprises that have at least one paid employee – in addition to the business owner – are far more likely to be financially included, there is a large difference between urban and rural location for these firms as well. About 50 percent of urban-based enterprises with at least one paid employee are financially included compared to only 16 percent of similar firms in rural areas. This indicates that although there is scope for growth in both urban and rural markets, it is especially significant in rural areas.

Figure 19: Very few MSMEs in Zambia are banked for business

The ZBS provides a detailed examination of the gains from extending access to banking services and lending and makes an important contribution to our understanding of the differences between MSMEs and large enterprises in Zambia. The focus on access, as opposed to usage, means that the analysis identifies what proportion of the target market can obtain or use a specific product if they choose to do so, and what proportion of the market is unable to use the product because of one or more aspects of the services/products offered. The distinction between those who have access and those who do not is crucial for both policymakers, who wish to encourage increased usage of what are thought to be merit goods, and service providers who seek to penetrate the market for commercial purposes.

The access frontier measures access by mapping supply-side data on selected existing products, with demand-side data, in this case, the ZBS. In this case, a selection of typical lowest-cost products that were currently available on the market was used for the analysis which is outlined in more detail in the background paper Demand-side analysis of access to financial services for businesses in Zambia. An analysis of access is more complex than a review of usage. Usage is directly observable either using survey data or using data from various product providers. Access, in contrast, is not.\(^{33}\)

The access frontier methodology developed by David Porteous is a useful framework to guide an analysis of access. The methodology establishes the degree of congruency between supply factors and demand conditions. The Access Frontier as an Approach and Tool in Making Markets Work for the Poor. David Porteous, 2005. See http://www.finmarktrust.org.za/Documents/AccessFrontierTool.pdf.
understand whether firms have access, key aspects of the product are overlaid with the characteristics of the MSME market.

The resulting analysis shows, for each product, the current market, versus the potential market. The potential market is further broken down into those that have access to the product now but don’t use it for whatever reason (market enablement zone), versus those that could have access to it, providing one or more variable is improved (market development zone). The fourth zone is called the market redistribution zone or supra-market zone. This zone is comprised of those who lie beyond the reach of the market mechanism because they are too poor. Individuals in this zone typically require non-market interventions, such as subsidies, to enable them to access the product under consideration. Alternatively, entirely new products would have to be introduced, with much lower cost structures, to penetrate this outer zone.

The results show that the current market for even the most affordable products is very low. The analysis included the following five products: Barclays Business, Finance Bank Savings, NatSave Ordinary Savings, Zanaco Savings, and Zanaco Xapit. Bearing in mind that only 10 percent of MSMEs are banked, 90 percent of the market remains in the potential market. In turn, the Access Frontier analysis reveals that no more than an additional six percent of the market could be served by any one of the five products in their current form. In other words, only six percent of MSMEs are in the market enablement zone.

Lack of physical access to banking infrastructure and the high cost of banking products, relative to the incomes generated by most MSMEs, emerge as the most important constraints on banking access. The constraints of trust, awareness and identification do not vary across products. However, physical proximity constraints reflect different bank infrastructure. National Savings and Credit Bank, for example, has only 27 branches across the country and physical access constraints for that bank are most pronounced – resulting in 83 percent of the MSME market being effectively excluded from NatSave’s Ordinary Savings product. Likewise, the affordability of the different products also varies, but in the most favourable case, namely Zanaco’s Xapit product, its current costs would still exclude two-thirds of the market.

A best case scenario uses a prototype of a transformational cellphone-based banking model; but even under these circumstances, the market enablement zone would expand to only 11 percent (as opposed to six percent for the best existing product). Fifty-nine percent of the market would still not be able to afford this best case product; and over half would not be able to access it, because they have no cellphone. The pricing parameters for this prototype product were loosely based on the Kenyan M-Pesa product and they have been used to derive monthly costs.³⁴ Physical access constraints have been removed, by assuming the leveraging of correspondents (e.g. retail store outlets) to provide banking services. Other constraints relating to trust, awareness and required documentation have been left unchanged.

Enhancing effective access will require not only a significant increase in banking infrastructure, including the adoption of alternative distribution strategies, but will also require fees be reduced significantly. To the extent that alternative channels are less costly, both objectives may be

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³⁴ Fees are as follows: Cash deposit: K0, airtime purchase: K0, one cash withdrawal: K3 500, one balance enquiry: K420, one transfer: K1 400. Tariffs were downloaded in June 2009 from the M-Pesa website http://www.safaricom.co.ke/fileadmin/template/main/downloads/Mpesa_forms/18th%20Tariff%20Poster(c).pdf.
simultaneously achievable. In other words, supply is most definitely not sufficient, and there is a lot of scope for market growth through the development of new products.

4.2 Access to credit

Application of the access frontier methodology to a selection of three credit products yielded an even more sobering view of the market than the one for general banking access. The analysis focused on the basic product descriptions and requirements, costs, and service channels offered among the Barclays SME loan, the Pelton group loan product, and Blue Financial Services personal loan product.\(^{35}\)

The analysis of access to the Barclays and Pelton loans reflects negligible (i.e. nearly 0 percent) access to the products, while around 17 percent of the salaried market in Zambia, corresponding to around three percent of the adult population, would be able to access the Blue Financial Services personal loan product. Examination of the basic product attributes for the Barclays and Pelton loans shows that the products do not target most Zambian MSMEs, since turnover thresholds are much higher than the levels achieved by all but about 90 percent of Zambia’s MSMEs.

The analysis highlights the importance of coordinated interventions that address obstacles systematically to enhance access in a sustainable way from the perspective of potential borrowers (to avoid over-indebtedness), lenders (to prevent losses but at the same time to increase product usage) and the financial system as a whole. A number of simultaneous constraints impact on access. Efforts to overcome some barriers are likely to impact on others (for example the increased physical presence of lenders in an area is likely to lead to a greater awareness of their products). While supply-side constraints are significant, it is worth highlighting that demand-side barriers, such as very low incomes and low levels of education, are significant too.

4.3 Infrastructure and services

Most MSMEs lack basic infrastructure such as electricity and water. Although large enterprises in Zambia have good access to infrastructure – all have electricity connections and public water supply – they were far more likely to say that electricity was a serious problem than MSMEs were. Whereas 38 percent of large enterprises said electricity was a serious problem, only 16 percent of MSMEs said the same.

This difference in perceptions, however, hides an important difference between large enterprises and MSMEs. While the problem that large enterprises face with power is reliability, most MSMEs do not even have basic access. Only six percent of MSMEs in rural areas are connected to the public grid, while only 24 percent of urban MSMEs have such access (see Figure 20). Similarly, 27 percent of rural MSMEs report having access to water primarily through shared pumps or boreholes, while 30 percent of urban MSMEs report having a water connection, mainly through municipal pipeline.

Given the strong link between enterprise performance and access to infrastructure, there would be

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\(^{35}\) Note that the target market for this product is salaried employees only, and so direct comparison with the Barclays and Pelton SME credit products is not precise. Nonetheless, MSME owners might be able to leverage personal loans directly if they have another job, apart from running a small business. Alternatively, a family member or sufficiently close associate of the MSME owner might be employed and may be prepared to obtain a loan on the business owner’s behalf. Thus, the Blue Financial Services personal loan product has been included in the analysis.
significant benefits to expanding coverage so that more MSMEs had access to infrastructure services.\(^\text{36}\)

**Figure 20:** Most MSMEs do not have access to electricity and piped water – even in urban areas along the line of rail

![](image)

Source: Zambia Business Survey

**4.4 Transportation**

MSMEs rank transport as the second highest constraint after finance. Not surprisingly, rural MSMEs are more likely (close to 10 percentage points more likely) to say that transportation was a serious problem than urban MSMEs. Infrastructure in rural areas is typically poor and many MSMEs report spending substantial amounts of time delivering their product to market.

The objective information on the survey also suggests that poor infrastructure might have a serious impact on MSMEs in Zambia. About 41 percent of MSME owners say that they take their products (see Figure 21). This raises further questions about how much time and money this activity requires. Over half of MSMEs indicated that they spend between one hour and one day transporting goods to customers. At the same time, 41 percent said that they pay nothing for transport. This would seem to confirm the very low opportunity cost of people’s time, but also the potential for marginally better and relatively cheap transport alternatives to leverage better returns for many MSMEs.\(^\text{37}\)

\(^\text{36}\) It is important to note that improved access to infrastructure can often be facilitated through encouraging and reducing barriers to private sector participation as well as through direct government interventions. This issue requires further analysis.

\(^\text{37}\) The area of transport requires further study so as to identify the relative impact of key components, ranging from hard infrastructure (road/rail), vehicles (access/cost of car, truck, bus), maintenance of fleets (quality/accessibility/cost of mechanics and of parts) and fuel.
4.5 Access to land

About 37 percent of farm-based rural MSMEs said access to land was a problem compared to 27 percent of urban MSMEs and 25 percent of non-farm based rural MSMEs. In this respect, concern about access to land appears to be particularly concentrated among farm-based businesses.

This concern might not be surprising, as smallholder agriculture dominates the rural landscape in Zambia. More than three quarters of farmers report owning less than an acre of land. The most important reason cited for this constraint is the procurement process or cost of land – more than sixty percent of enterprises cited these to be the reasons why access to land was a problem.

4.6 Regulations and governance

MSMEs and large businesses had very different views about regulatory constraints. Relatively few MSMEs complained about tax rates, tax administration, or about any areas of regulation. While this might suggest that most areas of regulation are not a serious problem for MSMEs, this is due more to the fact that most MSMEs are informal and unregistered than to the actual regulatory environment (see Table 3). For large enterprises the picture was somewhat different. While tax rates ranked relatively higher than most other constraints, less than 25 percent of enterprises were seriously concerned about tax rates. In fact, large enterprises did not generally find regulatory issues to be major problems. This is consistent with the 2007 Enterprise Survey, which found that although more enterprise managers complained about tax rates than any other area of the investment climate, less than 25 percent said it was a serious problem.

To see whether this relatively optimistic view of regulation reflects objective data on taxation and regulation, it is useful to look at objective indicators of the regulatory environment as compiled in the Doing Business report (see Table 4). Zambia is ranked 100 out of the 173 countries surveyed. While this rank is better than many African countries, it does suggest that regulation is a potentially important business constraint. For example, labour laws appear particularly onerous – Zambia ranks 135th on this indicator. The disconnection between the objective indicators from the Doing
Business report and the perceptions of managers calls for further exploration. For example, it might suggest that enforcement is lacking. Or it could indicate that Zambian enterprises are not “demanding consumers”, meaning that they are more tolerant of poor regulation.

Table 4: Doing Business indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ease of Doing Business</strong></td>
<td></td>
</tr>
<tr>
<td>Rank</td>
<td>100</td>
</tr>
<tr>
<td>Rank</td>
<td>71</td>
</tr>
<tr>
<td>Procedures (number)</td>
<td>6</td>
</tr>
<tr>
<td>Time (days)</td>
<td>18</td>
</tr>
<tr>
<td>Cost (% of income per capita)</td>
<td>28.6</td>
</tr>
<tr>
<td>Min. capital (% of income per capita)</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Starting a Business</strong></td>
<td></td>
</tr>
<tr>
<td>Rank</td>
<td>146</td>
</tr>
<tr>
<td>Procedures (number)</td>
<td>17</td>
</tr>
<tr>
<td>Time (days)</td>
<td>254</td>
</tr>
<tr>
<td>Cost (% of income per capita)</td>
<td>1,023.10</td>
</tr>
<tr>
<td><strong>Dealing with Construction Permits</strong></td>
<td></td>
</tr>
<tr>
<td>Rank</td>
<td>135</td>
</tr>
<tr>
<td>Difficulty of Hiring Index</td>
<td>22</td>
</tr>
<tr>
<td>Rigidity of Hours Index</td>
<td>60</td>
</tr>
<tr>
<td>Difficulty of Firing Index</td>
<td>20</td>
</tr>
<tr>
<td>Rigidity of Employment Index</td>
<td>34</td>
</tr>
<tr>
<td>Firing costs (weeks of wages)</td>
<td>178</td>
</tr>
<tr>
<td><strong>Employing Workers</strong></td>
<td></td>
</tr>
<tr>
<td>Rank</td>
<td>38</td>
</tr>
<tr>
<td>Payments (number)</td>
<td>37</td>
</tr>
<tr>
<td>Time (hours)</td>
<td>132</td>
</tr>
<tr>
<td><strong>Paying Taxes</strong></td>
<td></td>
</tr>
<tr>
<td>Profit tax (%)</td>
<td>1.7</td>
</tr>
<tr>
<td>Labor tax and contributions (%)</td>
<td>10.4</td>
</tr>
<tr>
<td>Other taxes (%)</td>
<td>4</td>
</tr>
<tr>
<td>Total tax rate (% profit)</td>
<td>16.1</td>
</tr>
</tbody>
</table>


Corruption did not rank among the very top concerns of either MSME owners or large enterprise managers – about 20 percent of each said it was a serious obstacle for their business. Objective indicators also suggest that corruption is a moderate concern. Although few MSMEs had utility connections or were inspected by the tax authorities, between 16 and 24 percent of MSMEs that did report that bribes were requested or expected during the transaction. Because managers are often unwilling to report bribes, this is likely to underestimate the extent of corruption associated with these transactions.

Table 5: Percent of MSMEs completing transactions

<table>
<thead>
<tr>
<th>Percent of enterprises that attempt to complete transaction</th>
<th>Percent that report bribe request during transaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get fixed line telephone</td>
<td>0.1%</td>
</tr>
<tr>
<td>Get power connection</td>
<td>0.3%</td>
</tr>
<tr>
<td>Get public water connection</td>
<td>0.7%</td>
</tr>
<tr>
<td>Have tax inspection</td>
<td>1.8%</td>
</tr>
<tr>
<td>Get fixed line telephone</td>
<td>17%</td>
</tr>
<tr>
<td>Get power connection</td>
<td>16%</td>
</tr>
<tr>
<td>Get public water connection</td>
<td>34%</td>
</tr>
<tr>
<td>Have tax inspection</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: Zambia Business Survey

Note: All variables are weighted means. Utility connections are within past two years before survey. Tax inspections were in previous fiscal year.
Based on international comparisons of corruption, Zambia does not perform well. Transparency International ranks Zambia 123rd out of 179 countries surveyed in the Corruption Perceptions Index. Rankings of governance indicators, presented in Figure 21 show that Zambia ranks in the bottom third of all 179 countries surveyed in all measures of governance, including government effectiveness. This suggests that businesses’ perspectives underestimate the pervasiveness and impact of corruption, perhaps because they are accustomed to it or are uncomfortable discussing it. It is critical that issues surrounding governance not be discounted based on the ZBS findings.

**Figure 22: Zambia does not perform well on control of corruption**

4.7 Education

Educated entrepreneurs add more value to their services/products than those with less education. Every additional year of education leads to significant productivity gains, as better educated persons can absorb new information faster and can apply unfamiliar inputs and new processes more effectively. In addition, there are strong complementarities between human capital and other forms of investment. In Zambia, where average levels of education are low, the full returns to physical capital investment – such as irrigation infrastructure and access to cellphone banking – cannot be realised without concomitant investments in education. Expanding secondary school education and vocational training in rural areas will lead to significant gains in productivity and increase in incomes for a vast majority of the population.

The GRZ’s policy has been to finance social sector interventions either through its own resources or through grant financing. GRZ has requested analytical work to identify key issues and formulate strategies for post-basic education, particularly its relation to technical and vocational training. Results from this study indicate that basic education – even primary school education – is not accessible for many rural entrepreneurs.

4.8 Business services

The ZBS indicates that owners of MSMEs are less likely to belong to formal business networks than are managers of large enterprises. Most (59 percent) of large businesses in Zambia – or one or more
of their senior management team – belong to at least one business association. They use these organisations for networking (60 percent of enterprises), getting information about customers and markets (56 percent), technology (43 percent), and suppliers and inputs (29 percent). Very few – only about 10 percent – reported no benefit from belonging to these associations. The business associations provide the managers of large businesses with information and services that are consistent with their core purpose.

In contrast, very few MSMEs belong to a formal businesses association or business networks. Instead, most MSMEs (73 percent) belong to non-business groups or organisations such as churches, men’s and women’s groups, sporting, political or social groups. Rather than getting information about the business environment from formal organisations, most MSMEs rely on informal networks. The most common ways to source business information are talking to friends or family (85 percent) and to customers (44 percent). This suggests something about potential channels for communicating information and providing business development services. It might be more effective to exploit the social networks that most MSME owners use, rather than business-oriented channels that few MSME owners use.

5. A new tool to segment the market: The Business Facilities Measure

Policy makers, service providers, donors and other market actors often need to segment businesses into groups that show differences over a defined continuum. Parsing the business landscape into component parts can help policy makers target policy, assistance, and / or products and services. To be useful, the segments must be well defined, and while related to each other within defined parameters, sufficiently differentiated to discern one segment from the next. The segments must also not be so small that they are too numerous, but also not so large that they are barely discernible from the overall market.

This can be done in many ways. One common approach is to segment the market based upon the size of the enterprises. Another is to focus on differences between registered and unregistered businesses. Other approaches such as differentiating enterprises based upon annual income, assets, business sectors, and demographic attributes, such as age of the business owners have also been used. Two methods that have been used in Zambia are classification by the number of employees and classification by registration status. These approaches, however, do not provide sufficient information to differentiate between types of microenterprises. As discussed above, over two-thirds of enterprises in Zambia have no paid employees (other than the owners) and 95% of all enterprises in Zambia may be classified as informal, since they are un-registered. Other approaches also are problematic—more than 70% of Zambian enterprises are based in rural areas, and / or trade in the agricultural sector. Thus traditional ways of segmenting the market, i.e. by size, formality, sector, or location, all yield blocks of undifferentiated enterprises, which, in turn, would complicate policy making, programme development, and service delivery.

To provide useful insight into the MSME market, FinMark Trust has developed the Business Facilities Measure (BFM), which provides a uniquely differentiated model to segment the entire landscape of enterprises in Zambia. Spanning every type, size and location of enterprise in Zambia, the BFM includes 12 segments – 1 through 8 for MSMEs, and 9 through 12 for large enterprises – that define the gradation of enterprises in Zambia. Each segment is comprised of a composite ‘picture’ of the unique set of characteristics that define each cluster of enterprises. Table 6 captures these ‘pictures’ along the continuum for MSMEs.
<table>
<thead>
<tr>
<th>BFM Cluster (Pct. of All MSMEs)</th>
<th>Urban / Rural</th>
<th>Provinces</th>
<th>Predominant Aspects of Key Variables</th>
<th>Gender</th>
<th>Marital Status</th>
<th>Age</th>
<th>Form of ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>BFM 1 (32%)</td>
<td>R</td>
<td>Western, Eastern</td>
<td>Agricultural Production, Wild Fishing, Manufacturing and Selling Household Cleaning Products, Making Table Cloths</td>
<td>M</td>
<td>Married</td>
<td>40+</td>
<td>None / Chief</td>
</tr>
<tr>
<td>BFM 2 (8%)</td>
<td>R</td>
<td>Luapula, Northern, Eastern</td>
<td>Agricultural Production, Construction, and Manufacturing and Selling Household Cleaning Products</td>
<td>M</td>
<td>Never Married, Widowed or Separated</td>
<td>30-49</td>
<td>NRC</td>
</tr>
<tr>
<td>BFM 3 (21%)</td>
<td>R</td>
<td>Northern, Western, North Western, Central</td>
<td>Agricultural Production, Mining And Excavation, Electricity, Manufacturing and Selling Household Cleaning Products, Retailing Vegetables at the Market, Brewing Local Beer</td>
<td>M</td>
<td>Married</td>
<td>18-39</td>
<td>NRC / Chief</td>
</tr>
<tr>
<td>BFM 4 (11%)</td>
<td>R</td>
<td>Southern, Eastern, Luapula</td>
<td>Agricultural Production</td>
<td>M</td>
<td>Married</td>
<td>30+</td>
<td>Driver License</td>
</tr>
<tr>
<td>BFM 5 (13%)</td>
<td>U</td>
<td>Copperbelt, Lusaka</td>
<td>Wholesaling, Real Estate, Leasing, Business Services, Manufacturing, Running Small Shops, Hotels and Catering, Finance, Information Communication Technology, Construction.</td>
<td>F</td>
<td>Never Married</td>
<td>18-44</td>
<td>Driver License, Passport</td>
</tr>
<tr>
<td>BFM 6 (8%)</td>
<td>U</td>
<td>Lusaka, Southern, Copperbelt</td>
<td>Wholesale Trade predominantly, but lots of diversity</td>
<td>F</td>
<td>Never Married, Widowed, Separated, Divorced</td>
<td>18-44</td>
<td>Passport</td>
</tr>
<tr>
<td>BFM 7 (7%)</td>
<td>U</td>
<td>Lusaka, Copperbelt, Southern, Northwest</td>
<td>Wholesale Trade, Salons, Raising Chicken, and the Hardware Trade.</td>
<td>F</td>
<td>Never Married, Divorced</td>
<td>25-29</td>
<td>Driver License</td>
</tr>
<tr>
<td>BFM 8 (1%)</td>
<td>U</td>
<td>Lusaka, Central</td>
<td>Hotels, Catering, Food and Beverages, Manufacturing, Construction, Car Motorcycle and Household Goods Repair, Transportation and Storage, Information Communication Technology, Finance, Health, and ‘Other’</td>
<td>F</td>
<td>Divorced, Separated, Widowed, Living Together / Cohabiting</td>
<td>25-49</td>
<td>Driver License, Passport (Foreigners)</td>
</tr>
</tbody>
</table>

The BFM not only divides the market into more manageable segments, but it also expresses those divisions based upon common factors that differentiate one Zambian business from another. For
MSMEs, these characteristics are related to access to and use of business facilities that contribute to enterprise competitiveness. They include, among others, attributes such as access to and use of electricity and water, levels of education, and finance.

5.1 Key trends within the MSME BFMs

Grouping the sixteen obstacles to doing business across the eight MSME BFMs showed that the only substantial changes in perception occur within the legal and regulatory cluster, which makes intuitive sense, since the BFM is a measure of robustness, or is, in other words akin to formality. In turn, the data show that legal and regulatory issues are of demonstrably greater concern to the higher BFMs.

Firms in the lower BFM groups (1 to 4) tend to be more rural than the top end BFM groups (5 to 8). The major break between BFMs 4 and 5 results primarily from the drastic reduction in the number of agricultural businesses.

When viewed through the BFM lens, there is clear evidence that the firms in the higher MSME BFM groups are more likely to have female owners than firms in the lower groups. In all four of the upper BFMs, women comprise no less than 41% of the sample, while comprising only 33% of the overall MSME population. Women are also disproportionately in wholesale/retail businesses, which tend to have greater output per worker than agricultural businesses, which are more likely to be owned by males.

BFMs 5 to 8 share common problems with variables such as tax rates, licensing and permits, labour regulations and electricity problems being perceived as the most serious at that end of the business spectrum. Conversely, BFMs 1 and 2 share common problems of crime, theft and disorder and transportation problems.

5.2 Zones of transition within the MSME BFM continuum

We gauged the potential for growth and assessed opportunities for innovation in product and service delivery, by determining where the largest potential for growth lies within two of the MSME BFM continuums. We found a clear difference between BFMs 4 and 5. Direct comparisons between the two groups shows clearly that BFMs 4 and below are rural, while BFMs 5 and above are urban. BFMs 4 and below tend to have more male owners and older owners, whereas the owners of firms in BFMs 5 and above are younger and more likely to be female. Owners of firms in BFMs 4 and below also are less educated than owners of firms in BFM 5 and above. Thus, we looked at BFMs 1 to 4 and BFMs 5 to 8 separately.

Plotting of the many different variables along the business continua has allowed us to determine at what point businesses are starting to show signs of growth and operating effectively. The ability to pinpoint these businesses can assist organisations facing the challenge of providing support and financial access to MSMEs and large firms. Furthermore the segmentation of businesses enables identification of long and short term intervention strategies. A useful tool in determining the impact points is the analysis of the “zones of transition”.

The first zone of transition in Zambia appears to be between BFMs 2 and 3, where the attainment of secondary education appears to be an important factor in moving MSMEs from the lowest two segments, at least to the third or fourth segments. Moving from a BFM 3 to segment 4 appears to have a relationship to the type of agriculture, wherein the higher BFM tends to have a higher propensity for livestock rearing, as opposed to raising crops.
Another zone of transition appears among BFM 6, 7, and 8, where two phenomena stand out. Firstly, attainment of vocational education seems to align closely with upward BFM mobility. Secondly, we see especially marked entrepreneurial attitude emerging in BFM 8, suggesting ample opportunity for more aggressive support to enterprises that will look to thrive and compete, not just survive.

Generally, the businesses in BFM 5 and above are the areas where stakeholders should most quickly see the results of their interventions at relatively reasonable costs, including many prospects for public and private sector led approaches. Businesses in BFM 5 and 6 are showing the greatest potential of becoming sustainable contributors to the economy and job creators. On the other hand, support for the lower BFM entities will require longer term strategies and significant resources, in many instances requiring systemic investments in basic infrastructure and education.

5.3 Large enterprise BFM

Although the survey methodologies between the MSME Survey and the Large Business Survey (LBS) were different, an attempt was made to derive a seamless integration of the two surveys to link the two surveys and allow analysis across them both. As expected, large businesses formed the basis for an exclusive stand-alone cluster. In order to extend the continuum and create the necessary differentiation among large enterprises, we conducted a separate analysis of the differentiating variables within the LBS data alone.

For large enterprises, access to and usage of business facilities still provided a robust basis upon which to segment the market; but these measures were taken at a higher order. So, whereas access to and usage of basic inputs, like electricity or water, offered sufficient differentiation among MSMEs, we used access to and usage of things like the Internet, email, or outsourced business services (e.g. accounting or legal services), as well as higher order financial products, such as insurance or foreign currency accounts, to yield a more insightful analysis of large enterprises, ultimately resulting in BFM 9 to 12. A summary of defining characteristics within the BFM 9 to 12 spectrum appears in Table 7.

Table 7: Aspects of key variables – BFM 9-12

<table>
<thead>
<tr>
<th>BFM Cluster (Pct. of all large enterprises)</th>
<th>Predominant aspects of key variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Provinces</td>
</tr>
<tr>
<td>BFM 9 (18%)</td>
<td>Lusaka, Southern, Copperbelt</td>
</tr>
<tr>
<td>BFM 10 (22%)</td>
<td>Lusaka, Copperbelt, and small</td>
</tr>
<tr>
<td></td>
<td>distributions across several</td>
</tr>
<tr>
<td></td>
<td>others</td>
</tr>
<tr>
<td>BFM 11 (26%)</td>
<td>60% in Lusaka, and some Southern</td>
</tr>
<tr>
<td></td>
<td>arms</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>BFM 12 (34%)</td>
<td>Evenly split between Lusaka and</td>
</tr>
<tr>
<td></td>
<td>Copperbelt, with a small</td>
</tr>
<tr>
<td></td>
<td>percentage in Eastern</td>
</tr>
</tbody>
</table>
5.4 Key trends within the large enterprise BFMs

Concerns about access to and cost of finance, along with electricity, are common to most businesses along the large business BFM spectrum. However, unlike the MSME BFMs, the relative importance of all other problems tends to diverge substantially from one large BFM segment to the next. So, for example, the macroeconomic environment is substantially more important to BFM 12s than to any other BFM group. Similarly, BFM 11s seem to feel the bite of crime, theft, disorder and corruption much more than any of their counterparts.

Among all large enterprises, access to land only ranked 11th out of 16 options for business obstacles. Nonetheless, agriculture remains an important sector, even through BFMs 9, 10, and 11, with only BFM 12 showing any significant diversification into other sectors. Nonetheless, anecdotal information and other studies would confirm the existence of several larger firms in the higher value-adding crops and export-oriented agricultural businesses, whereas their smaller MSME counterparts predominate in basic food crops mostly for domestic sale and consumption. Of those who claimed that land was an obstacle, regardless of BFM, the procurement process and cost far outweigh other factors.

Looking at access to finance as an obstacle to doing business, we see the most concern among BFMs 9 and 12. We suspect these trends reflect two different sets of impetuses. For BFM 9s, their perceived high cost of finance may reflect their relatively weak bargaining positions with the banks. For BFM 12s, the seriousness of this obstacle may reflect less on the price of finance per se, but on its cost, relative to overall firm profitability. Also, as the access to finance paper illustrates, even large businesses transact heavily in cash (deposits and withdrawals), which are typically among the most expensive banking transactions.

5.5 Implications arising from the BFM analysis

The BFM offers public, private, and donor stakeholders a targeted and nuanced approach to delivering policy, support and services to the full range of MSMEs and large enterprises in Zambia. The methodology enables easier and more vigorous identification of MSMEs that show the greatest promise for growth and improved competitiveness in the short to medium term. Similarly, the BFM has revealed priority interventions for large enterprises that could yield the greatest benefits to them.

This segmentation approach complements more traditional ways of analyzing the business landscape, especially among MSMEs. Consistent with the productivity analysis in the previous section, which showed large differences in output per worker across microenterprises, the BFM shows that not all ‘informal’ enterprises are the same, and that not all ‘microenterprises’ are survivalists.

The zone of transition analysis tells us that BFM 5 enterprises, estimated at about 13% of businesses nationwide, represent the ‘sweet spot’ of high potential, but experience low service penetration. Although markedly more urban than their lower BFM counterparts, 60% of BFM 5 businesses still occur in rural areas, meaning that use of this segmentation methodology need not leave rural enterprises out, but instead encourages a national spread, albeit with the rural component focusing on the fringe towns of Lusaka and Copperbelt provinces and their neighbouring locales. Several characteristics of this segment would indicate that many would fall in the more easily achieved financial service access ‘market enablement zone’, and therefore could be reached more easily and quickly than lower segments.
Interventions in the lower four BFM segments, making up 77% of the MSME market, will require systemic, cross-sectoral, and cross-ministerial cooperation and solutions, and thus will command greater depth and breadth of resource commitments that are likely to cost more and take longer to show any results. For example, the lower MSME BFM enterprises generally do not have access to and do not use electricity. Such strong evidence creates a compelling case to look at business infrastructure generally, and electricity specifically, as a potentially major boost to overall MSME competitiveness.

Meanwhile, the 12% of MSMEs in the much smaller BFM 6, 7, and 8 segments are relatively more urbanised, better educated, and into value-adding businesses, thus making them excellent candidates for quick and relatively light and less expensive interventions that could leverage substantial outcomes, both for the enterprises themselves, as well as for those providing new services to them.

The BFM tool can also be used to set an agenda to improve the productivity of large businesses. Coupled with the descriptions of each of these four upper BFMs, key stakeholders and support agencies may target specific audiences within the large business segment as a whole.

Many of the most important large business challenges, like taxes, customs and trade regulations, and the macroeconomic environment, would require GRZ leadership and direct involvement. Yet others, such as a better educated workforce, the cost of finance, and even crime, theft and disorder, are opportunities for private sector leadership, in a cooperative stance with the GRZ.
6. Conclusions and implications

The universe of Zambian businesses is highly dualistic, reflecting extreme differences in the profile and performance of firms. One “world” is comprised of MSMEs – most of which are tiny, microenterprises. Most are informal, owner-operated and have no employees that are paid in-kind or in-cash. Many MSMEs are more akin to home-based, income-generating activities than to clearly structured businesses. Most MSMEs are located in rural areas (81 percent), and operate in agricultural production (70 percent) or wholesale/retail trade (21 percent).

Within the world of MSMEs, there are important distinctions that have implications for policy and programme support. Using the BFM analysis, the first group, BFM 1-4, makes up 77% of the MSME market and can be thought of as single owner, operator “survivalists”. The second group, BFM 5, includes 13% of MSMEs and represents a “sweet spot” of high potential enterprises that experience low service penetration. Although markedly more urban than their lower BFM counterparts, 60 percent of BFM 5 businesses are in rural areas. The third group, comprising 16 percent of MSMEs, includes BFM 6, 7, and 8. This group is relatively more urbanised, better educated, and adds value in their business.

The other world is composed of a small number of large businesses (a few thousand enterprises) that employ a fraction of the labour force (seven percent) and produce the bulk of industrial output. Most “large” Zambian enterprises are relatively small, with close to half having between 51 and 70 employees – just above the notional cut off of 50 employees for medium-sized enterprises. Only about one-third has more than 100 employees and only 2.5 percent have over 500 employees. Virtually all large enterprises are formal, and most (75 percent) are limited liability companies. In contrast to MSMEs, large enterprises are much more diversified: 14 percent operate in agriculture, nine percent in wholesale/retail trade and 24 percent are in manufacturing.

There is a huge productivity gap both between large, Zambian businesses and their international/regional competitors and between large, Zambian businesses and Zambian MSMEs. When benchmarked against other countries, labour productivity of Zambian firms is substantially lower, whereas unit labor costs are often higher, rendering Zambian firms relatively “uncompetitive” in the global and regional market. At the same time, the domestic market is characterised by low levels of competition, such that many large enterprises offset their higher costs by charging higher prices – without eroding market share. As a result, large Zambian businesses tend to cream the market and enjoy a larger market share than would be expected based on their productivity.

Zambian MSMEs are far less productive than large businesses when measured by output per worker. Workers in the average microenterprise in the agricultural and service sectors produce about one-sixth of their counterparts working in large firms, and the difference for workers in manufacturing and retail firms is even greater. Workers in manufacturing microenterprises produce about one-ninth of the amount their counterparts in large firms and one-twelfth as much as in those in retail trade.

The poor productivity of Zambian MSMEs is largely driven by low levels of connectivity to key inputs – both hard infrastructure (energy, transport, water and ICT) and soft infrastructure.

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(information, knowledge and financial services). This is illustrated when firms are disaggregated by location: businesses along the line of rail are 30 percent more productive than firms who are off the line of rail – largely because businesses on the line of rail have access to essential infrastructure. Conversely, non-agricultural firms in rural locations are 37 percent less productive than their counterparts in urban areas. “Soft” infrastructure is also important: MSMEs that use financial services are more productive than those who don’t – in non-agriculture sectors, MSMEs using financial services are roughly three times more productive than those that do not. Likewise, education is important for productivity, as non-agricultural MSMEs owners that have completed secondary school are 25 percent more productive than their counterparts who lack a secondary school education.

A multitude of factors constrain business productivity: while a single constraint might be overcome, a “web of constraints” remains binding. In such an environment, the challenge of achieving scale is formidable. As a result most Zambian businesses are tiny, highly fragmented and largely uncompetitive. One way of overcoming the plethora of constraints is to vertically integrate, and many large businesses have taken this route to achieve scale. While this strategy can be effective, it is challenging to implement. Vertical integration requires specialised knowledge, additional capital and fragments management’s focus. In addition, vertical integration further increases barriers to entry and inhibits the development of independent businesses that might otherwise provide backward/forward linkages and other essential services and inputs to MSMEs. While vertical integration can be an effective “coping strategy” for individual businesses, it can signal broader problems with the investment climate.

The overall structure of the private sector is, in itself, a challenge to growth and poverty reduction. The lack of competition within the formal sector has a negative effect on the rest of the economy, as the formal sector is a critical – and high cost – source of goods and services that fuel the broader market. In addition, the ratio of MSMEs to large enterprises is much higher than that in other countries, suggesting that the low productivity of MSMEs has a relatively bigger “drag” on the overall economy. Finally, the structure of the private sector limits employment in formal sector, and many MSMEs are trapped in a low-productivity cycle that limits opportunities for growth.

6.1 What does it mean for public policymakers and private service providers?

The Government of Zambia is determined to make it easier to start and grow a business, and this report can inform these efforts. There are numerous initiatives underway designed to reduce the cost of starting a business, increase the efficiency of existing businesses and boost the productivity – or competitiveness – of businesses and industries more generally. The material in this report, as well as the technical background papers and the raw data underlying them, can help the government to better understand the profile and productivity of Zambian businesses. This, in turn, can help the government to design and implement more nuanced, effective, approaches – be they policy or programmes – to encourage business growth and diversification.

At the same time, there is a growing and increasingly diversified service industry, and this report can help service businesses design new products and market them more effectively. The information in this report can help businesses gauge the market’s demand for new services, facilitate product development and refine marketing and implementation strategies. The data and analysis underlying this report is intended to be as useful to the private sector as it is to the public sector.
Policymakers need to adopt different approaches when trying to reduce the constraints to MSME growth than they do for larger businesses. While this statement might seem obvious, it is seldom understood or effectively implemented in many countries. The recent MSME policy represents progress in this direction, and this can be complemented by more nuanced approaches – that take into account the needs of MSMEs – in all sectors (ranging from hard infrastructure such as energy, water and transport to “soft” infrastructure such as education and investment climate reform).

**Given the breadth of problems that MSMEs face, it is important to be selective when tackling constraints.** While detailed recommendations are beyond the scope of this report, it is worth highlighting that the viability of resolving a constraint depends on both the technical and political ability to fix the given problem (ranging from the design of a policy/regulation through to its implementation.) In this sense, a two-phased approach to targeting constraints can be effective. While it is important to focus on those constraints that are most costly, or binding, to important segments of the business population (e.g. MSMEs, exporters), it is also useful to focus on those constraints that are easy to fix, relative to those that are more difficult.

**This report provides a first step in the process of selecting constraints to alleviate.** Specifically, the information provided on the profile, productivity and perceptions of businesses can help to identify high-cost constraints that are most common to certain categories of businesses (e.g. rural versus urban, micro versus large). The findings from this report, combined with other sources of information, can be used to identifying high priority constraints that are (relatively) easy to resolve.40

**The communication programme for this report can be used to develop concrete recommendations that can be used by government, the private sector and donors.** In particular, it is hoped that the discussions surrounding this work will generate specific outcomes, that if achieved would improve access to/reduce costs of key services. The methods used to achieve those outcomes will also be discussed, and it is expected that many of the proposed approaches will incorporate elements of private provision. Specifically, the breadth and depth of constraints to MSMEs requires experimentation with out of the box approaches, as well as more traditional policy reforms. Notably, stimulating competitive connecting industries that provide services, such as transport, education or information, can be an effective means of improving the productivity of MSMEs.

The following areas represent priorities that, if achieved, could improve the productivity of Zambian businesses:

- **a) Increase access to hard infrastructure.** The productivity analysis shows that agricultural and non-agricultural firms are far more productive when they have access to infrastructure such as electricity, transport, cellphones and water. Coverage among MSMEs for these services is currently very low. Even in provinces along the line of rail, only about six percent of rural MSMEs and 25 percent of urban MSMEs are connected to the power grid. Similarly, only 31 percent of rural MSMEs and 32 percent of urban MSMEs have access in these provinces. Access for both services is lower for firms in other provinces.

  Transportation infrastructure is a serious constraint, especially in rural areas, that needs to be better understood. MSME owners were more likely to say that transportation was a serious problem than any area of the investment climate – excluding access to finance. Almost half of

40 The ZBS team is available to discuss the process of selecting priority constraints and, should there be interest, assist with this approach. Specifically, the communication of the ZBS results can be designed so as to build consensus on the selection of constraints.
the 41 percent of MSME owners that take their products to customers or markets reported that they spend between one hour and one day transporting them. Because the definition of transportation is broad, further work is needed to identify the key drivers of this constraint. For example, there is a tendency to focus on roads, which are clearly important, but so too is the cost of fuel, access to fuel, the price of vehicles/parts, the ease of sourcing vehicles/parts and the ability to keep them maintained. Understanding the relative importance of these composite pieces, and the viability of resolving them, is essential. It is worth emphasizing the potential for approaches that stimulate the private provision of transport services – or inputs to transport services. Zambia’s experience with the mini-bus industry is illustrative.  

**b) Improve access to basic education.** MSMEs with better educated owners are more productive than other MSMEs in both the agricultural and non-agricultural sectors. Many of the MSME owners, however, only have basic levels of education – especially in rural areas. About half of MSME owners in rural areas have only a primary education and about 45 percent have only a secondary education. Very few have any vocational training in rural areas and virtually none have a university education in either urban or rural areas. Consultative processes will be used to identify the types of education most needed by different segments of the market as well as the range of delivery mechanisms that can be used to provide education services (e.g. public sector, private sector or Civil Society Organizations.).

In addition to the direct effect of improving education, there are also strong complementarities between education and other forms of investment. The return to improving physical infrastructure – whether for irrigation or access to cellphone banking – will be lower unless concomitant investments in education are made.

**c) Improve access to finance.** Access to finance is the area of the investment climate that is the greatest concern to MSME owners in Zambia. Close to 60 percent of MSME owners said that access to finance was a serious constraint on their operations. Concern was particularly high among the smallest microenterprises and among farm owners. Consistent with MSMEs’ perceptions, the productivity analysis in this report also indicates that access to financial services and bank credit is a serious constraint on MSME performance in Zambia.

Physical access – or lack thereof – to bank branches is a key constraint to the use of financial services. About 40 percent of MSMEs do not have access to bank branches that can provide these services. Although a transformational cellphone based banking model might alleviate the constraints imposed by limited physical access to bank branches, more than 50 percent of MSME do not have access to a cellphone. Therefore, recommendations to stimulate mobile banking and other innovative approaches need to be complemented by recommendations to improve access and reduce costs to ICT.

While physical access to financial services is important, a far greater constraint is that most MSMEs are not productive enough to be able to afford access to the most basic financial services or loans. Estimates based on the ZBS suggest that between 67 and 83 percent of MSMEs do not generate enough revenue to qualify for the basic banking services provided by

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41 The authors understand that some years ago, when there was a dearth of public transportation, the GRZ reduced tariffs on mini-buses. This led to a transformation in the industry, wherein mini-buses were imported and a vibrant public transportation system quickly evolved, expanding from mini-buses to large buses, which now also make long haul trips to various destinations.
existing providers. Even if a transformational cellphone based product, such as one similar to the Kenyan M-Pesa money transfer product, were introduced, about 59 percent of MSMEs would not qualify for this service. Even fewer firms qualify for bank loans – only about seven to eight percent make enough to qualify for loan products currently offered by Pelton and Barclays Banks.

Simply improving physical access to financial services or cellphones will not resolve the access to finance constraint. The performance – or productivity – of MSMEs must also improve. The productivity analysis in this report suggests several important areas of the investment climate that need be improved to increase the productivity of MSMEs in the country.

d) Improve access to business information and services. Another way of improving firm productivity is to improve the flow of information and knowledge to existing/potential MSMEs. For example, even if they had physical or cellphone access to financial services and were productive enough to qualify for these services, almost 73 percent of MSMEs would be prevented from accessing loans because they do not keep adequate business records. Helping MSME owners keep business records, identify more profitable lines of business, develop business plans, and improve general business administration could allow them to increase productivity and make it easier for them to gain access to financial services. Likewise, many MSMEs do not have access to information that could improve their productivity, such as potential markets, current prices or sources of inputs. Efforts to stimulate an industry wherein these services are provided, on a for-profit basis, by companies that have an incentive to “know their customer” and meet his/her needs are worth exploring.

To provide MSMEs with these services, policymakers will have to improve the delivery of these services – whether through the public sector, the private sector, the social sector or some combination of these. While few MSME owners belong to business networks, most belong to social networks. This emphasizes that delivery can be expanded through existing social networks such as churches, men’s and women’s groups or sporting and social groups.

This list is by no means exhaustive. The intent is to whet the appetite and stimulate a discussion on key constraints and ways of ameliorating them. The communication programme for this report is an opportunity for key stakeholders to develop recommendations that can improve the productivity of Zambian businesses.
Appendix: Zambia Business Survey – design, sampling and methodology

The Zambia Business Survey is a demand-side national survey. It comprises two surveys: one being a survey of micro, small and medium enterprises (MSMEs) and the other being a supplementary survey of large businesses (LBS). The ZBS sampled close to 5 000 formal and informal businesses between September and December 2008, covering both urban and rural areas across all nine provinces in the country. The survey instrument drew upon the methodologies of both FinMark Trust’s FinScope Small Business Survey and the World Bank Enterprise and Rural Investment Climate Surveys.

The methodologies used for each of these surveys are described below. More details about the methodology and fieldwork are available in the field reports. It is important to note that all the information supplied by the respondents from both surveys have been kept confidential and anonymous.

The ZBS MSME Survey

For the purposes of the survey, MSMEs are defined as businesses with 50 employees or less. This definition was in line with the GRZ’s definition at the time the survey was conducted, as outlined in their draft MSME policy. Agreement on this definition was reached in consultation with the survey’s partners and other key stakeholders.

The MSME component of the ZBS was designed to be a nationally representative survey, covering urban, peri-urban and rural areas in all nine provinces. The sample was selected through rigorous area sampling, using a methodology based on the International Labour Organization’s three-stage sampling method. In contrast to other methods that target areas where businesses are normally located (or use signs, advertisements, business directories, or lists provided by government agencies), this approach ensures that small, home-based and informal businesses are fairly represented in the final sample. Most enterprise surveys in Africa draw from a sample of highly visible enterprises; hence there is a dearth of information on the profile of and issues faced by MSMEs, particularly informal businesses. The ZBS represents a deliberate attempt to correct this imbalance and build a nationally representative sample of MSMEs from which to draw conclusions about the profile, performances and needs of MSMEs in Zambia.

To ensure that the sample of MSMEs was representative of the entire population, the sampling was conducted in the following way. First, 320 Enumeration Areas (EAs) were randomly selected from the sampling frame, which was based upon the 2000 Census. These EAs constituted the first-stage sampling units or Primary Sampling Units (PSUs). The sampling frame was stratified based on province and whether the enumeration area was rural or urban. There are nine provinces in Zambia which are further subdivided into districts. For statistical purposes each district is sub-divided into Census Supervisory Areas (CSAs) and these are in turn subdivided into EAs. Enumeration Areas are statistical demarcations of the country used in area-based sampling. Weights were calculated at the household level to take into account the stratified sampling.

Once the EAs were selected, the survey firm that was contracted to undertake the fieldwork for the survey, The Steadman Group, updated the 2000 Census data, using maps for boundary identification, by creating an updated list of all households and buildings in the EA, through an intensive pre-fieldwork listing exercise. For each household, based on the Central Statistical Office’s definition as members who live in the same or different structures but cook from one pot, the survey firm conducted a pre-fieldwork listing exercise during which it gathered information on all household members and determined whether the household had any individuals that ran their own business (including farms). The household therefore represented the secondary sampling unit of the survey. The households selected for interview were identified using a systematic epsem (equally probability selection) procedure with a total of 12 households being selected per EA. This methodology provides a self-weighting sample. Benchmark weighting was used to adjust the gender proportions in the survey results.

Target respondents who owned and ran their own businesses were then randomly selected from these lists and interviews were set up with the eligible respondents. In households with multiple individuals running eligible businesses, a kish grid was used to identify the correct respondent. A total of 4800 interviews were conducted across all nine provinces, as detailed in Table 6.

### Table 8: Respondent coverage of the ZBS MSME Survey

<table>
<thead>
<tr>
<th>Province</th>
<th>Number of enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>570</td>
</tr>
<tr>
<td>Copperbelt</td>
<td>975</td>
</tr>
<tr>
<td>Eastern</td>
<td>525</td>
</tr>
<tr>
<td>Luapala</td>
<td>330</td>
</tr>
<tr>
<td>Lusaka</td>
<td>555</td>
</tr>
<tr>
<td>Northern</td>
<td>420</td>
</tr>
<tr>
<td>Northwestern</td>
<td>345</td>
</tr>
<tr>
<td>Southern</td>
<td>780</td>
</tr>
<tr>
<td>Western</td>
<td>300</td>
</tr>
<tr>
<td><strong>Total interviews</strong></td>
<td><strong>4800</strong></td>
</tr>
</tbody>
</table>

As a supplement to the ZBS MSME survey, a small survey of 161 large enterprises with more than 50 employees was conducted. As with the MSME survey, this definition of large businesses was in line with the GRZ’s definition as outlined in its draft MSME policy at the time the survey was designed.

Similar, although not identical, survey instruments were used for the two surveys. In contrast to the MSME survey, firms for the large business survey were randomly selected from lists provided by the Central Statistical Office and the Zambia Development Agency. In addition, several other eligible firms not appearing on both lists were identified by the research firm and used as substitutes as required. Although random, the survey is not nationally representative in the same way that the MSME survey is. In particular, it will only be representative to the degree that the sampling frame it was based upon is nationally representative. Moreover, because the sampling methodologies were so different and because nearly all of the large firms claimed to be registered meaning there is little variation in this survey, no attempt was made to merge the two datasets in the econometric analysis below.

Another important difference between the two surveys is the characteristics of the respondents. Whereas the respondents in the MSME survey were people that owned and ran the MSMEs (i.e., the entrepreneurs), the respondents in the large enterprise survey were professional managers that are
involved in running the firm, but are not necessarily the owners. For this reason, many psychographic questions were omitted from the large business survey. Table 7 provides a breakdown of the positions held by the respondents of the large business survey.

Table 9: Positions held by respondents of the large business survey

<table>
<thead>
<tr>
<th>Position held</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountant</td>
<td>48</td>
</tr>
<tr>
<td>Finance and Administration Manager</td>
<td>20</td>
</tr>
<tr>
<td>Principal/Director/Head Teacher</td>
<td>6</td>
</tr>
<tr>
<td>Managing Director/Partner</td>
<td>64</td>
</tr>
<tr>
<td>Corporate Deputy Manager</td>
<td>2</td>
</tr>
<tr>
<td>Marketing Manager</td>
<td>1</td>
</tr>
<tr>
<td>Consultant</td>
<td>1</td>
</tr>
<tr>
<td>Human Resource Manager</td>
<td>5</td>
</tr>
<tr>
<td>Chief or Assistant Executive Officer</td>
<td>3</td>
</tr>
<tr>
<td>Operations and Public Relations Manager</td>
<td>6</td>
</tr>
<tr>
<td>Program Facilitator/Coordinator</td>
<td>2</td>
</tr>
<tr>
<td>Technician</td>
<td>1</td>
</tr>
<tr>
<td>Sales Officer</td>
<td>1</td>
</tr>
<tr>
<td>Head of research</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total number of respondents</strong></td>
<td><strong>161</strong></td>
</tr>
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