

# Is Small Still Beautiful?

**Literature Review of Recent Empirical Evidence on the Contribution of SMEs to Employment Creation**



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Jan de Kok

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This project has been commissioned by the  
International Labour Organisation (ILO)  
and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)



# Foreword

There is vast agreement on the direct link between job creation and poverty reduction, but there is some controversy concerning the question about who creates jobs. A widely spread assumption is that small and medium sized enterprises (SMEs) can play a key role in employment creation.

Partly based on observations in industrialized countries, key arguments in favour of SME promotion are that the sector provides most of the jobs, creates most of the new jobs, and has the highest employment growth rates. Other important arguments say that SMEs play an important role in training young people, acting as a seed bed for the development of entrepreneurial talent, enhancing competition and hence generating external benefits on economy-wide efficiency, innovation, and aggregate growth.

Any of these stipulations must however bear in mind that the enterprise structure and the characteristics and features of SMEs in developing countries differ strongly from industrialized countries. Many of the small enterprises in developing countries are informal firms of micro size with a low productivity that are born out of necessity and operate in crowded market segments with low entry barriers. These firms are probably not able to perform the social and economic functions outlined above. They may not always be the optimal solution to promote growth and job creation, but may still help to secure livelihoods.

The discussion on the role of SMEs in job creation has gained additional relevance in the context of the current global crisis and the low employment creation conditions of the recovery process. Different types of anti-crisis policy measures in the form of pro-SME interventions have been justified on the basis of the important contribution that SMEs can make to confront the crisis and to contribute to post-crisis job creation and renewal of growth challenges.

Based on the above mentioned rationale, donor agencies and governments have provided multi-billion dollar support programs for this sector in developing and developed countries which underlines the importance to regularly analyse the impact of these programs. Therefore, this study tries to review the literature of the past five years concerning credible empirical evidence on the role of SMEs in employment creation in developing countries. In a nutshell this publication tries to answer the question whether small is still beautiful by summarising and interpreting recent evidence for policy makers and practitioners.

This study was commissioned as a joint effort by the International Labour Organization (ILO) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). Jan de Kok led the team of Panteia/EIM researchers who conducted the study. The research work benefitted by the discussion and comments made at a technical seminar held in Geneva on November 21, 2012 and by the ILO/GIZ's team composed of Mario Berrios and Markus Pilgrim (Small Enterprise Programme, ILO) and Kristin Hausotter, Georg Schaefer and Eva Weidnitzer (Sector Project Employment Promotion in Development Cooperation, GIZ).

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# Executive summary

## **Poverty reduction through job creation by small and medium-sized enterprises**

Despite the progress made in combating poverty, poverty remains a major concern in the developing world. An important strategy to combat poverty is creating new jobs. In developed countries, small and medium-sized enterprises (SMEs) play a major role in the job creation process. It is often assumed that this will also be the case in developing and emerging countries. Based on this assumption, many governments and donor organisations provide multi-billion dollar support programmes for this size class.

Is this assumption correct? Do small and medium-sized enterprises indeed play a major role in the creation of new jobs and the reduction of poverty in developing and emerging countries? To answer these questions, we have performed a literature review of recent empirical studies. Our literature review shows that there is still too little empirical evidence available to either support or deny this claim. On the one hand, empirical evidence indicates that the role of SMEs is considerable when compared to the role of large enterprises. On the other hand, however, these comparisons are not yet complete: we do not really know to which extent other sources of employment also contribute to the employment growth in countries. Based on these findings, one could argue that we know that SMEs play an important role in the creation of new jobs, but that we just don't know how important.

## **Comparisons between SMEs and large enterprises suggest that 'small is still beautiful' ...**

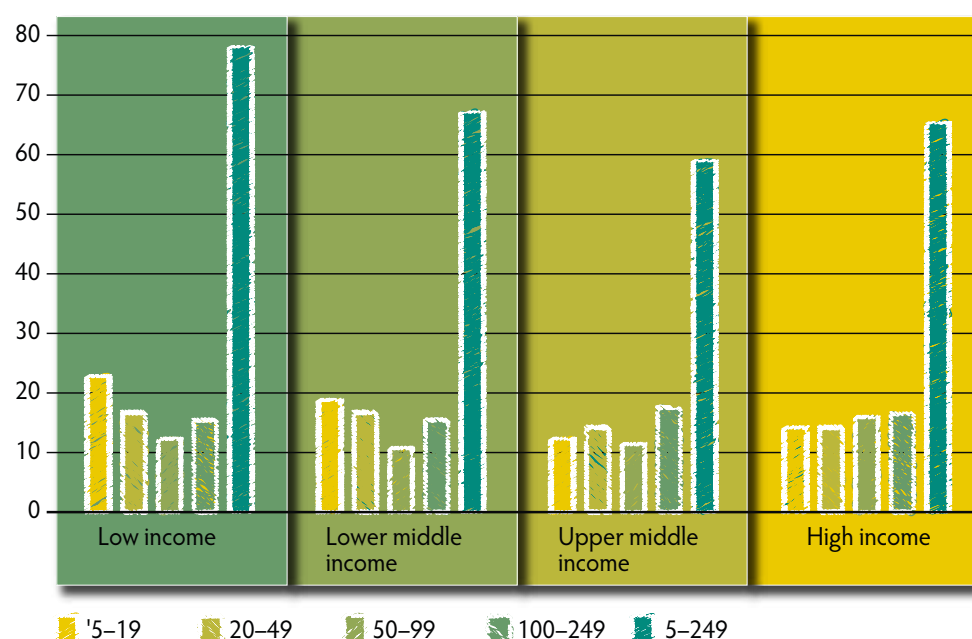
The employment share of the SME size class varies considerably between countries. Nevertheless, in most developing and emerging countries enterprises from the SME size class (containing formal, non-agricultural SMEs from the private sector) employ more people than large enterprises (Figure 1).

In addition, SMEs also play an important role in the job creation process. For example, in the majority of developing and emerging economies, more than 50% of total employment creation in the private sector can be attributed to the size class of enterprises with less than 100 employees. At the level of individual enterprises, evidence shows that the employment growth rate tends to decrease with firm size. This implies that employment growth rates are highest for the smallest enterprises.

**Figure 1**

Employment shares across countries from different income groups, by size class (medians\*)

Source: Ayyagari et al. (2011), Table 2.



\* Within each income group, the median employment shares for different size classes may refer to different countries; hence, the median employment share for the size class of 5-249 employees may differ from the total of the median employment shares of the underlying size classes.

Notes: the data refer to employment in the formal, non-agricultural private economy; firm size is based on the number of full-time employees; micro enterprises are excluded; based on data from 98 countries.

### ... these comparisons are, however, not complete ...

The available evidence is largely based on the results of enterprise surveys. One of the limitations of enterprise surveys is that they cannot include employment effects of firm entry on job creation and of firm exit on job destruction. This is particularly relevant for the SME size class, because firm entry and firm exit typically occur within this size class.

If SMEs are to play a major role in the reduction of poverty by creating new jobs, the creation of new jobs is in itself not sufficient: poverty will only be reduced to the extent that earnings are sufficient to cover basic necessities. This raises the question to which extent SMEs provide sufficient earnings and how the earnings in SMEs compare with earnings in larger firms. Unfortunately, only a few studies have examined the earnings differential, and the existing studies usually compare formal jobs to informal jobs (rather than jobs in SMEs versus jobs in large enterprises). The scant evidence suggests that smaller firms indeed pay lower wages than larger firms.

While studies on the wage differential between SMEs and large firms are hardly available, for many other aspects of the quality of jobs even less empirical information is available. In fact, the number of empirically sound studies that examine differences in quality aspects of jobs between SMEs and larger enterprises are so limited that it is not possible to draw any conclusions, other than that smaller enterprises tend to pay lower wages and that job security is lower.



### **... and comparisons with other employment sources are lacking**

With a few notable exceptions, available empirical studies tend to be restricted to formal, non-agricultural enterprises from the private sector. In addition, they tend to exclude self-employed and micro enterprises. There is no question that these studies provide valuable insights regarding differences between smaller and larger firms, within this specific enterprise population. They do, however, exclude many other sources of employment, such as public organisations, agricultural enterprises (self-sustaining farming as well as larger agricultural enterprises), micro enterprises, self-employment and/or informal enterprises. Especially in developing and emerging countries, formal SMEs and large enterprises account for only a small share of total employment. The fact that we cannot compare the role of the SME size class in job creation to these other sources of employment, is probably the largest gap in our current knowledge of the role of the SME size class.

### **Policy recommendations**

Policies that aim to reduce poverty through the creation of new jobs may pay specific attention to SMEs. Improvements in their access to finance, and in the business environment and market conditions in general, may have a positive effect on the number of jobs created by SMEs. Especially in the long run, policies to stimulate the entry of new enterprises can also have positive employment effects.

At the same time, it is clear that policies to reduce poverty should not be restricted to the SME size class. In many developing countries, a large share of employment can be found with micro enterprises, the informal sector and agricultural enterprises. Policies should also target these enterprises.

# 1 Introduction

## Poverty reduction through job creation

Despite the progress made in combating poverty, poverty remains a major concern in the developing world. More than 1 billion people around the world have to live on less than US\$1.25 a day (Chen and Ravallion, 2010). Due to the global economic crisis since 2008 and increases in food prices, this situation has recently become even more worrying<sup>1</sup>. According to the latest World Development Report from the World Bank (World Bank, 2012b), currently 200 million people are deprived of work and an even greater number is not being able to lift themselves out of poverty despite the fact that they are working (“working poor”).

An important strategy to combat poverty is creating new jobs. Job creation in the private sector has already proved to be the main driver in the fight against poverty. It is the main cause of reduction of poverty in the developing world; over the past 30 years private sector development has contributed to a sharp decline in the share of the population in the developing world living below the poverty line from 52% to 22% (World Bank, 2012c).

It is often assumed that small and medium-sized enterprises, or SMEs, play a major role in the job creation process. As a result, many governments and donor organisations provide multi-billion dollar support programmes for this sector. At the same time, it is acknowledged that there is in fact little empirical evidence regarding the role of SMEs in job creation in the developing world (Ghani et al., 2011a).

## Distinguishing facts from myths: reviewing the recent empirical literature

The purpose of this study is to present an overview of the current state of knowledge regarding the role of SMEs in the job creation process. This is done by reviewing recent empirical evidence over the past five years. This review will, first of all, focus on the current role of SMEs, given the institutional framework<sup>2</sup> in which SMEs have to operate. The institutional framework within which SMEs operate is known to have a considerable impact on the performance of SMEs. Therefore, this review will also consider how changes in the institutional framework may improve the potential of SMEs to create additional employment: what is the impact of SME support programmes?

The literature review focuses on providing an answer to the following four questions:

- ▶ What is the role of the SME size class in employment levels?
- ▶ What is the role of SMEs and the SME size class in employment creation?
- ▶ What is the quality of the jobs that are provided by the SME size class?

---

1 The alarming rise in food prices in 2007 resulted in “problems with food supply and inflation, increasing poverty and reducing real wages in parts of the developing world” (World Bank, 2012b, page 59).

2 The institutional framework consists of the systems of formal laws, regulations, and procedures, and informal conventions, customs, and norms, that shape socioeconomic activity and behaviour in a country.

- What is known about the effect of interventions to support employment creation through SME development?

At the same time that this study was carried out, a comparable study was being undertaken by the International Finance Corporation (IFC). The IFC study focused on the importance of the private sector for job creation and poverty reduction in developing countries (IFC, 2012a). Independently from our literature review, the IFC study broadly reaches similar conclusions. We will refer to the IFC study throughout the report, as the evidence of both studies is reinforced.

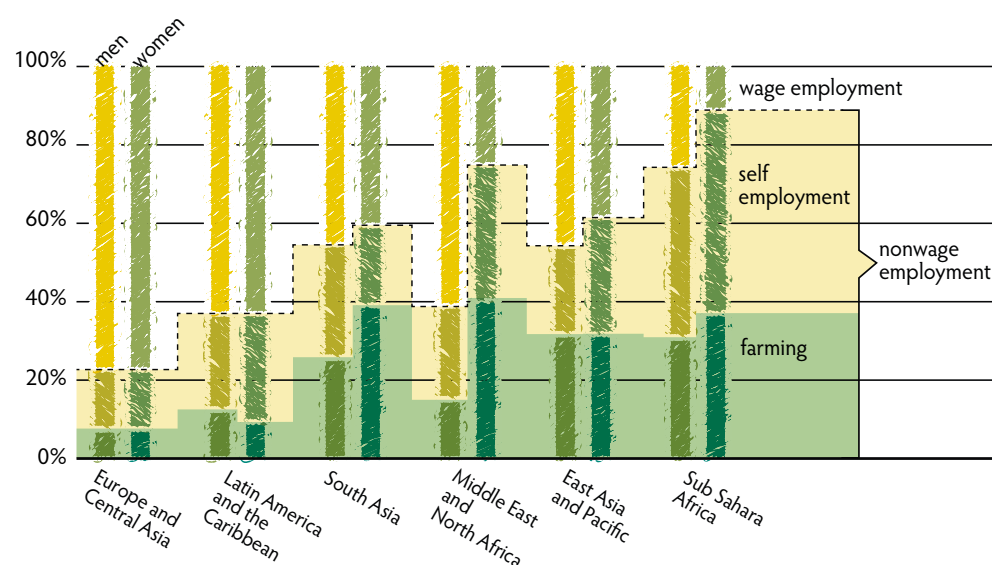
### Demarcation of the study: formal enterprises from the non-agricultural private sector

Jobs are created by all kinds of enterprises, irrespective of their size (micro, small, medium or large), the nature of their economic activities (agriculture, non-agricultural private sector or the public sector) or whether they belong to the formal or the informal economy<sup>3</sup>. In addition, people may also be self-employed. The distribution of employment across these types of enterprises varies widely across countries. A recent study by the World Bank shows that in Europe and Central Asia, wage employment (employment in formal and informal enterprises, excluding farming) accounts for the largest share of all jobs, however, in other regions this share is (much) lower (World Bank, 2012b). The share of wage employment is especially low in Sub-Saharan Africa (Figure 2) where farming and self-employment account for the largest share of total employment.

**Figure 2**

Distribution of total employment across farming, self-employment and wage employment, by region and gender

Source: World Bank (2012b)



Ideally, the current study should compare the role of the SME size class, not only to the role of large enterprises, but also to the role of micro enterprises and self-employed workers. This comparison should include formal as well as informal enterprises and should be made for all sectors. Unfortunately, this is not feasible as the studies that examine the role of different enterprise size classes in the job creation process tend to focus on the non-agricultural private sector of a country. In addition, most of these studies exclude micro enterprises and informal enterprises.

<sup>3</sup> A more elaborate discussion on the demarcation of this study is included in Chapter 2.

Consequently, the findings presented in this publication tend to be restricted to the non-agricultural private sector of countries, excluding the informal economy and the micro size class. This implies that a considerable share of total employment in developing and emerging countries is not included (Figure 2). As a result, the scope of the conclusions and recommendations of this study is limited, particularly with respect to low-income countries.

### On the methodology of the literature review

The literature review has been undertaken in a structured manner<sup>4</sup>. First of all, relevant search terms have been identified that cover the topics of the main research questions. This resulted in a list of 181 different search terms (see Annex II). The next step was to enter combinations of the relevant search terms into seven scientific databases. This yielded a total of 119 papers that were published between 2007 and 2012. Thirty percent of the publications are from 3 sources: 22 working papers from the World Bank, 8 working papers from the Inter-American Development Bank and 7 articles from the scientific journal Small Business Economics.

The final criterion was whether the identified papers possess a solid empirical base. This has resulted in a total of 46 key articles on the quantity and quality of jobs in SMEs around the world. The importance of the World Bank's work is even more pronounced amongst the key pieces, where they account for more than 30% (15 of the 46). Table 1 provides an overview of the distribution of the key papers according to the research question and level of development of the countries involved.

**Table 1**

Distribution of identified key literature according to research question and coverage of countries

Source: Panteia, 2012.

Research question	Coverage of countries			
	Developing	Emerging	Developed	All countries
1 SME employment creation	6	5	6	10
2 Factors explaining firm growth	10	11	6	14
3 Quality of jobs in SMEs	4	5	3	10
4 Results SME support programs	8	9	1	16
<b>Total</b>	<b>25</b>	<b>28</b>	<b>14</b>	<b>46</b>

Note: the numbers in the various rows and columns do not add up to 46, as an article may discuss various research questions and employ data of different countries at the same time.

### Outline

The structure of this report is as follows; Chapter 2 discusses various definitions of the SME size class and presents the theoretical framework of this study. Next, Chapter 3 explores the number of jobs provided by SMEs around the world, while Chapter 4 examines the potential of SMEs to generate new jobs. In the latter chapter we differentiate between three levels of aggregations: job creation at the level of size classes, at the level of individual enterprises and at country level. Thereafter, we study the quality of

<sup>4</sup> A more detailed explanation of the search methodology can be found in Annex I.

these jobs in Chapter 5, where we consider various aspects of job quality, such as decent earnings and job security, in order to adequately capture the potential role of SMEs in poverty alleviation.

Job creation by SMEs can be stimulated by means of generic policy measures (which might affect all enterprises, e.g. by improving the educational system, fighting corruption, improving infrastructure, preventing energy fails, etc.) and measures specific for SMEs. Chapter 6 examines relevant literature on the latter issue. We aim at identifying best practices for interventions promoting employment creation in SMEs. Chapter 7 discusses the main conclusions and directions for future research.

## 2 Theoretical framework

In this chapter we will focus on the economic and social benefits of SMEs, not only in the short but also in the long run<sup>5</sup>. First, however, we will discuss how the SME size class tends to be defined and measured in empirical studies.

### 2.1 Defining the SME size class

#### Official definitions versus statistical measures

Many official definitions of the SME size class are based on a combination of multiple indicators, dealing with the size of the workforce, sales volume and/or the amount of capital invested. See, for example, the official definition of the International Finance Corporation (IFC) of the micro, small and medium size classes in Table 2 and the definition from the European Commission in Table 3. For statistical purposes, however, size classes are usually defined by only one indicator: the number of employees. The threshold that is used to distinguish the SME size class from the size class of large enterprises varies between countries and between studies. The most common upper thresholds are 100 and 250 employees, but many other thresholds are used, ranging from 50 (for example in Bermuda, Jamaica and Malawi) to 500 (for example in Canada, New Zealand, USA and Yemen) (Kushnir et al., 2010)<sup>6</sup>.

**Table 2**

A definition of micro, small and medium-sized enterprises, according to IFC

Source: IFC (2012b)

Indicator	Size class*		
	Micro	Small	Medium
Employees	< 10**	10<50	50<300
Total Assets	<\$100,000	\$100,000 < \$3 mln.	\$3 mln.< \$15 mln.
Total Annual Sales	<\$100,000	\$100,000 < \$3 mln.	\$3 mln.< \$15 mln.

\* An enterprise is classified into a specific size class if it qualifies for two of the three indicators mentioned in this table

\*\* Another IFC publication explicitly states that micro enterprises should employ at least one employee (Kushnir et al., 2012), which excludes self-employed.

5 Short-run benefits refer to all economic and social benefits of the enterprises from the SME size class that occur within a period of one year, while long-run benefits refer to all economic and social benefits that occur after one year.

6 These statistics are based on the MSME Country Indicators database, which is the result of joint work of IFC's Access to Finance and Sustainable Business Advisory (SBA) and World Bank-IFC Global Indicators and Analysis. This database records the number of formally registered micro, small and medium enterprises for 132 different economies (see [www.ifc.org/msmecountryindicators](http://www.ifc.org/msmecountryindicators)).

**Table 3**

A definition of micro, small and medium-sized enterprises, according to the European Commission

Source: European Commission (2006)

Indicator	Size class*		
	Micro	Small	Medium
Headcount: Annual work units**	< 10	<50	<250
Annual turnover	≤ €2 mln.	≤ € 10 mln.	≤ € 50 mln.
Annual balance sheet total	≤ €2 mln.	≤ € 10 mln.	≤ € 43 mln.

\* An enterprise is classified into a specific size class if it qualifies for the headcount indicator and either one of the other two indicators (annual turnover OR annual balance sheet total).

\*\* The headcount includes employees, persons working for the enterprise being subordinated to it and considered to be employees under national law, owner-managers and partners engaged in a regular activity in the enterprise and benefiting from financial advantages from the enterprise. Full-time, part-time and seasonal staff are included, where part-time and seasonal staff are counted as fractions of an annual unit.

### Are micro enterprises part of the SME size class?

In developed economies, the definition of the SME size class tends to include micro enterprises<sup>7</sup>. This is, however, not a universally accepted definition. The IFC, for example, explicitly distinguishes “SMEs from microenterprises by having a minimum number of employees. SMEs can be further divided into small enterprises (SEs) and medium enterprises (MEs)” (IFC, 2012b, page 1)<sup>8</sup>.

In this study, we prefer the more restricted definition, where the SME size class contains only small and medium-sized enterprises and no micro enterprises. The reason for this choice is that most empirical studies on enterprises in developing and/or emerging economies exclude micro enterprises from the analysis. This is the case for almost all of the empirical studies that we have identified for this literature review. The main reason for the absence of micro enterprises in these empirical studies is that it is very difficult to identify and survey micro enterprises (in many developing and emerging economies, micro enterprises are often not registered). Only a few studies include micro enterprises and/or self-employed; this is the case for studies on job creation by new enterprises, and for studies that are based on household surveys rather than enterprise surveys.

In the remainder of this report, we will use the abbreviation “SMEs” to refer to the group of small and medium-sized enterprises and the abbreviation “MSMEs” to refer to the group of micro, small and medium-sized enterprises. The exact thresholds that are used to demarcate these different size classes depends on the specific study reviewed<sup>9</sup>.

### Empirical studies are often restricted to formal enterprises from the non-agricultural business economy

Size class definitions usually apply to all enterprises, irrespective of the kind of economic activities that these enterprises carry out or their legal form. The majority of studies on SMEs, however, are restricted to enterprises that are active in the non-agricultural

7 See e.g. the OECD's Glossary of statistical terms at <http://stats.oecd.org/glossary> or the websites of Eurostat and the US Small Business Administration.

8 This definition is taken from a brief note on small and medium enterprises. It is not clear to which extent this definition is applied throughout all IFC studies and publications.

9 The most common threshold is the threshold that is used in the World Bank Enterprise Surveys, which are used in many of the empirical studies that we have identified. The World Bank Enterprise Surveys use a lower threshold of five employees (Ayyagari et al., 2011).

business economy. This excludes both public organisations as well as agricultural enterprises. In addition, the large majority of empirical studies are restricted to registered enterprises<sup>10</sup>. This is done for the same reason that micro enterprises are excluded: it is difficult to include informal enterprises in an enterprise survey.

Are registered enterprises by definition formal enterprises? Or, vice versa, are unregistered enterprises by definition informal enterprises? The discussion on how to define the informal sector is still ongoing (ILO, 2012a). A common element in all definitions seems to be that the informal sector includes unregistered enterprises, but whether or not this is the only defining characteristic of the informal sector is still open for debate. For example, the Fifteenth International Conference of Labour Statisticians (15<sup>th</sup> ICLS) concluded that “The informal sector may be broadly characterised as consisting of units engaged in the production of goods or services with the primary objective of generating employment and incomes to the persons concerned” (ILO, 2012a, page 11). According to this characterisation of the informal sector, the registration of enterprises is just one of the possible indicators. Unincorporated private enterprises<sup>11</sup> and/or enterprises that employ only a few people may also be considered as part of the informal sector (ILO, 2012a). Several empirical studies therefore exclude micro enterprises from their samples, because size is used as an indicator for informality<sup>12</sup>.

## 2.2 Short-term and long-term perspectives on the benefits of SMEs

### The short-term perspective: SMEs as providers of paid employment

Small and medium-sized enterprises provide paid employment, which generates income for the employed and thus helps to reduce poverty<sup>13</sup>. This can be seen as the main short-term benefit of small and medium-sized enterprises. Of course, this benefit is not specific for enterprises from the SME size class, but applies to all enterprises, irrespective of their size and their formality.

In regards to the formality of enterprises, there are several additional benefits associated with the formal sector<sup>14</sup>. First of all, formal enterprises pay taxes and fees to local and national authorities, which can be used to pay for fundamental inputs for development, such as infrastructure and education<sup>15</sup>. In addition, formal enterprises have greater access to formal credit institutions and foreign markets and may benefit more from legal protection (for example, of physical and intellectual property rights).

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10 Formality of enterprises is not the same as formality in jobs: employment in the informal sector is an enterprise-based concept and informal employment is a job-based concept. Therefore, the formal sector may include informal jobs (for example, contributing family workers). (ILO, 2009)

11 An enterprise is unincorporated if it is not constituted as a separate legal entity independently of its owner(s) and does not maintain a complete set of accounts.

12 For example, Ayyagari et al. (2011) report that the sample frames for the countries that participate in the World Bank Enterprise Surveys impose a minimum enterprise size of 5 employees “so as to limit the surveys to the formal economy” (Ayyagari et al., 2011, page 6, footnote 4)

13 Poverty will be reduced to the extent that earnings are sufficient to cover basic necessities. This may not always be the case with paid employment.

14 These are benefits for society and the enterprises, not necessarily for the employees.

15 The importance of these benefits will depend on the efficiency of the public sector, the level of corruption and other factors.



These benefits may be available to all formal enterprises, independent of their size. This implies that the importance of formal SMEs as providers of employment, depends on the employment share of formal SMEs. This is the topic of Chapter 3.

### **Employment growth: creation of new jobs by micro enterprises and SMEs**

In relative terms as well as in absolute terms, it is often argued that micro enterprises and SMEs are an important source of new jobs. The relative importance of micro enterprises and SMEs refers to differences in employment growth rates between micro enterprises, SMEs and large firms. For developed countries, it is by now a well-established finding that, on average, smaller firms have higher employment growth rates than larger firms. In section 4.3 we will review the current findings for emerging and developing countries.

The absolute importance of micro enterprises and SMEs for employment refers to the differences in employment growth shares: the share of the actual number of new jobs that are created by micro enterprises and SMEs (when compared to large enterprises). Even if micro enterprises and SMEs have relatively high growth rates, their absolute importance will not be great if they only represent a small share of total employment. The absolute importance of micro enterprises and SMEs is therefore determined by two factors: their employment growth rate and their current employment share. Comparable information on the absolute importance of SMEs is presented in section 4.2 (this information is not available for micro enterprises).

Enterprises of all size classes can create new jobs, however, this is not the only source of job growth: new jobs can also be created when a new enterprise is started. Most enterprises start out small, however, a small share of these start-ups may show a rapid growth in the first few years and this small group of fast-growing young enterprises may account for a large share of total job growth. Recent studies show that this is indeed the case, at least in developed countries (Sheets and Sockin, 2012). Since most of these fast-growing young enterprises belong to the MSME size class (at least when they start to grow), their job growth is largely attributed to this size class.

### **The long-term perspective: the MSME size class as source of competition and innovation.**

The entry of new firms does not only have direct effects in the form of job creation. In addition, the entry of new firms may improve the overall competitiveness and innovative capacity of the industry to which the start-ups belong. This can result in indirect employment effects within other firms (see Methodological note 1). It is even conceivable that spill-over effects to other industries will occur, to the extent that other industries benefit from the improved products of a specific industry. There are, however, also negative effects associated with the entry of new firms. Competition and market selection result in crowding-out of incumbent firms (Fritsch, 2008) and particularly in a high failure rate of new firms: a very large share of firms that enter the market no longer exist after five years. Consequently, the full magnitude of all of these direct and indirect effects only becomes apparent after several years.

### Methodological note 1: Employment effects of new firms

In the discussion of employment changes caused by the entry of new firms, two dimensions are relevant: the time horizon (short-term versus long-term) and where the employment changes originate from (direct versus indirect).

Suppose that several new firms enter the market in year  $t$ .

- ▶ The short-term effects refer to employment changes (due to the entry of these new firms) in year  $t$ . The long-term employment effects refer to all employment changes in years  $t+i$  ( $i=1, 2$  etc.) that are caused by the entry of these firms.
- ▶ Direct effects refer to employment effects that occur within the new firms themselves. Indirect effects refer to employment effects that occur with other firms. Notice that it is not possible to directly measure these indirect effects.

Both short-term and long-term effects are a combination of direct and indirect effects:

- ▶ Short-term effects include direct effects (the new jobs that are created by the firms that entered the market in year  $t$ ) as well as indirect effects (mostly job losses by other firms that have had to reduce their workforce or exit the market in year  $t$ ).
- ▶ Long-term effects also include direct effects (job growth as well as job losses by the firms that entered in year  $t$ ) as well as indirect effects (positive as well as negative).

Whether the long-term employment effect of new firms is positive or not, is therefore, mainly an empirical question which is difficult to answer. Thus far, the results of empirical studies indicate that the indirect long-term effects on employment growth are considerably larger than the direct short-term effects. The net long-term employment effects of firm entry tend to be positive. However, this does not always hold: studies have found several regions where the net long-term employment effect was negative (Fritsch, 2008; Fritsch and Mueller, 2008; Van Stel and Suddle, 2008).

### New enterprises as indicator of entrepreneurship

The most common indicator of entrepreneurship tends to be the number of self-employed workers and/or the number of established business owners. This represents, however, a static view on entrepreneurship. More often now, researchers are using a more dynamic perspective by considering indicators on the start-up rate of new enterprises<sup>16</sup> and/or the rate of young enterprises<sup>17</sup> to measure entrepreneurship. According to this dynamic perspective, entrepreneurship is not about managing existing enterprises, but about starting new ventures. Therefore, the entry rate of new firms is an indicator of the level of entrepreneurship in a country.

The population of entrepreneurs is very heterogeneous. Entrepreneurs vary considerably, regarding objectives, motivation, skills and knowledge, etc. More often now, studies on the prevalence and effects of entrepreneurship are distinguishing between different types of entrepreneurs, because the economic effects of entrepreneurship not only vary between regions, but also between different types of entrepreneurship, such as necessity-based entrepreneurship versus opportunity-based entrepreneurship. Recent evidence suggests that opportunity-based entrepreneurship is more closely related to

16 The ratio between the number of new enterprises and the size of the adult population. See e.g. Balamouni-Lutz et al. (2011) and Autio (2007).

17 The ratio between the number of young enterprises and the number of workers (Ghani et al., 2011b).

economic growth than necessity-based entrepreneurship. In section 4.4 we will discuss recent findings concerning developing and emerging countries.

Another important issue regarding the measurement of entrepreneurship, is whether entrepreneurship indicators are restricted to the formal economy and incorporated enterprises (as is the case with the World Bank indicator on new business registrations) or also include the informal economy and unincorporated enterprises (as is the case with data from the Global Entrepreneurship Monitor). This issue is analysed further in section 4.4.

### **Business dynamics and job reallocation**

As argued above, the processes of firm entry and exit are assumed to stimulate competition and innovation. These processes of entry of new firms and exit and adaptation of incumbent firms stimulate the reallocation of factors of production from less profitable to more profitable ventures (Haltiwanger et al., 2010). The reallocation of jobs is often measured by the job reallocation rate, which is the combination of job creation and job destruction. While it is not the objective of this study to review literature on the efficiency of the business dynamics, studies regarding job reallocation (and in particular job destruction) also provide useful insights into employment security, which is an important aspect of the quality of jobs. These aspects will be discussed in Chapter 5.

### **The quality of jobs**

Achieving a high quality of jobs is both a means to an end and an end in itself. First of all, for those employed, the quality of a job has a significant effect on the quality of life. Secondly, the quality of jobs is related to the productivity of the workforce. As such, improving the quality of jobs is one of the means to improving productivity and stimulating economic development. This causality works both ways, as improved levels of productivity and economic development create more possibilities to improve the quality of jobs.

In this study, we therefore not only search for empirical facts regarding the short-term and long-term employment effects of small and medium-sized enterprises, but also regarding the quality of jobs in the SME size class. When the SME size class is compared to the size class of large enterprises, there is a concern that the quality of jobs provided by SMEs is lower than those provided by large enterprises. Another comparison might be to compare the SME size class with micro enterprises, or to compare formal with informal enterprises, but these comparisons are made less often.

### 3 The contribution of the SME size class to employment worldwide

The importance of the SME size class as provider of current employment follows from the employment share of the SME size class. In this chapter we present available statistics on the SME employment share. These statistics show that in the majority of developing and emerging countries, the SME size class (enterprises with 5 to 249 employees) provides more jobs than large enterprises, but that considerable differences exist between countries and regions. In the final section of this chapter possible explanations are reviewed. First, however, we discuss the relative importance of SMEs and large enterprises when compared to informal and/or micro enterprises.

#### 3.1 Employment contribution of informal and micro enterprises unclear

Quantitative data on the number of enterprises (and their size) in the informal sector is hardly available. For example, in a recent study amongst 132 countries to collect data on the number of enterprises, only 16 of these countries could provide estimates on the size of the informal sector (Kushnir et al., 2010). To make matters worse, differences in the definition of the informal sector make it very difficult to compare the available data. We therefore, do not provide comparable information on the employment share of the informal sector as compared to the formal sector. Nevertheless, it is clear that in many countries employment in the informal sector is considerable (World Bank 2012b). For example, India is reported to have approximately 1.6 million registered MSMEs, compared to 26 million unregistered MSMEs (Kushnir et al., 2010).

Recently, more information has become available regarding the number of micro enterprises. Based on the MSME Country Indicators<sup>18</sup>, it is estimated that globally 83% of all MSMEs belong to the size class of micro enterprises (Kushnir et al., 2010, page 2).

These findings suggest that informal and/or micro enterprises account for a considerable share of total employment within the non-agricultural private sector. Comparative data containing estimates or observations of this employment share is however hardly available. The literature search that we conducted for this study predominantly found empirical studies that were restricted to SMEs and large enterprises in the formal economy. An exception is a recent study by Fox and Sohnesen (2012) on employment in 13 countries from Sub-Saharan Africa. Fox and Sohnesen (2012) used the results of nationally representative household surveys to analyse the distribution of primary<sup>19</sup> employment across the following five employment sources: family farming, wage employment in agriculture,

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18 This database records the number of formally registered micro, small and medium enterprises for 132 different countries. These statistics are gathered by various institutions using different methods, applying different definitions and distinguishing different (numbers of) size classes. The indicators included in the database are therefore, not always comparable across countries and across time. Nevertheless, for 93 of the countries included in this database it is possible to differentiate between the number of micro, small and medium enterprises.

19 In case people have several sources of income, primary employment refers to their main source of income.

informal enterprises<sup>20</sup>, formal enterprises in the private sector and formal enterprise in the public sector. By far the largest source of employment in these countries is the agricultural sector, which accounts for close to 70% of the primary employment<sup>21</sup>. Informal enterprises are the second-largest provider, offering 15% of the total primary employment. Formal enterprises in the private sector (SMEs as well as large enterprises) account for 9% and public enterprises for 4%. For this region, therefore, it is clear that employment by SMEs and large enterprises in the formal economy accounts for only a small share of total employment. We have not found comparable information for other regions.

Based on the studies discussed in this section, we have to conclude that the employment contribution of informal and micro enterprises remains unclear (with the exception of Sub-Saharan Africa). In the next section, we compare the employment contribution of SMEs in the formal economy to that of large enterprises, but keep in mind that a considerable part of total employment within the non-agricultural private sector (as well as all employment in the agricultural sector) is excluded from this comparison.

### 3.2 SME size class provides more jobs than large enterprises

In a recent study, Ayyagari et al. (2011) have combined different waves of the World Bank Enterprise Survey to analyse the contribution of the SME size class to employment in the formal non-agricultural private economy, excluding micro-enterprises. Their data includes information for the years 2006–2010 for 99 countries<sup>22</sup>. This makes it the most comprehensive study to date regarding the employment contribution of different size classes in emerging and developing countries<sup>23</sup>.

An important finding from this study is that the employment share of the SME size class is considerably large in the majority of developing and emerging countries (Figure 3). This is true independent of whether the SME size class is defined as SME99 (which includes all enterprises with 5 to 99 employees) or SME250 (which includes all enterprises with 5 to 250 employees). The median employment share<sup>24</sup> of the SME250 size class across these countries is 67%.

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20 This includes self-employed, micro enterprises and unincorporated enterprises.

21 This is a weighed average across all 13 countries.

22 This study is set up as a cross-country comparison. It does not contain longitudinal analysis on the effects of the financial crisis that started in September 2008.

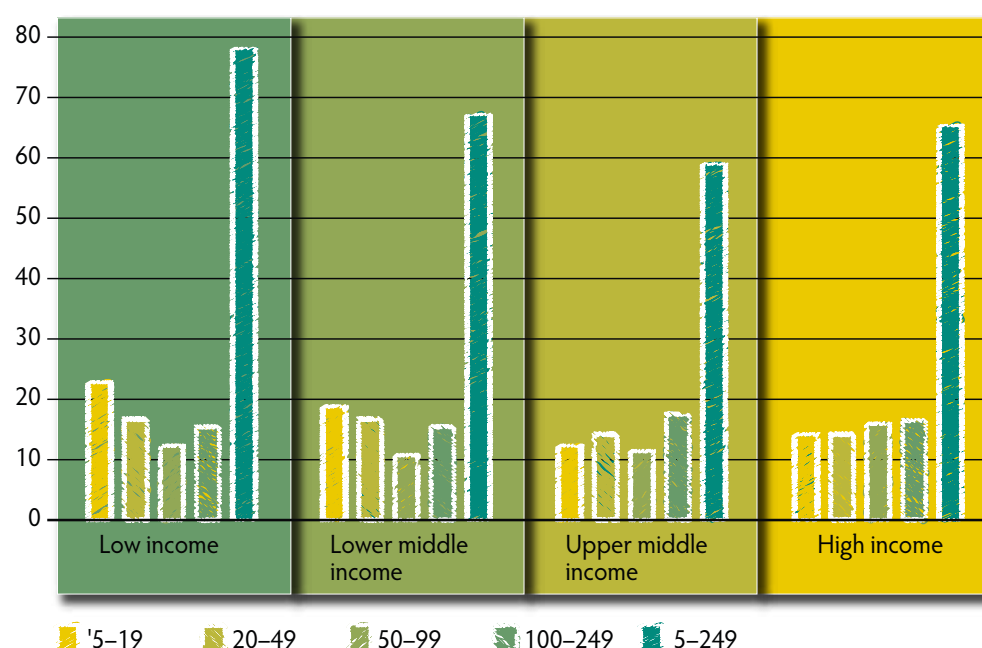
23 In another publication, Ayyagari et al. (2007) analyse the SME employment share in manufacturing, for 54 to 76 countries. Some of the findings from this earlier study seem to be inconsistent with the study from 2011. According to Ayyagari et al. (2011), the data from the latter study are superior, amongst others, because they are not restricted to the manufacturing sector and cover more (developing) countries. We therefore, do not include the findings from Ayyagari et al. (2007) here. In 2013, an update of Ayyagari et al. (2011) became available, which contains more recent data and includes five additional countries (Ayyagari et al., 2013). This update, however, only distinguishes three size classes (5–19 employees; 20–99 employees; 100 or more employees) instead of the five size classes that are included in Ayyagari et al. (2011). In this chapter we prefer to use the publication from 2011, since this provides a better insight into the differences between size classes.

24 The median employment share can be found by arranging the employment shares from all countries from the lowest to the highest value, and picking the middle value. The median can be used as an alternative measure to the average; an important advantage of the median is that it is much less affected by outliers in the data than the average.

**Figure 3:**

Employment shares across countries from different income groups, by size class (medians\*)

Source: Ayyagari et al. (2011), Table 2.



\* Within each income group, the median employment shares for different size classes may refer to different countries; hence, the median employment share for the size class of 5–249 employees may differ from the total of the median employment shares of the underlying size classes.

Notes: the data refer to employment in the formal, non-agricultural private economy; firm size is based on the number of full-time employees; micro enterprises are excluded; based on data from 98 countries.

### SME employment share shows U-shaped relation with country income

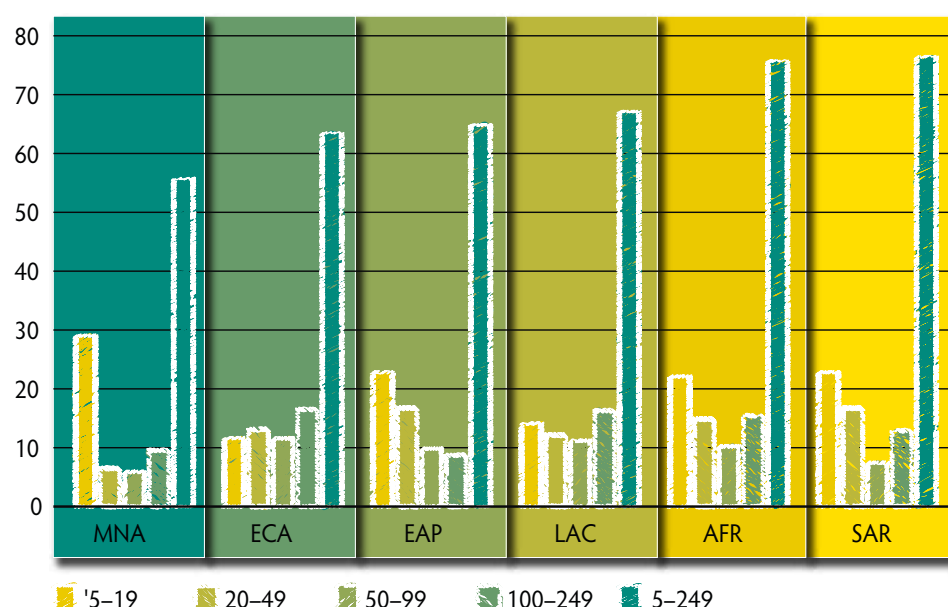
The cross-country variation in the employment share of the SME250 size class is partly related to differences in welfare levels. Within the group of developing and emerging countries, the employment share of the SME size class tends to decrease with a country's average income level, however, it increases again for the developed countries. This applies in particular to the employment share of enterprises with 5 to 19 employees (Figure 3).

### The missing middle phenomenon

When we compare the employment shares of different size classes within the SME250 size class (Figure 3), it is clear that low income and lower-middle income countries show a different pattern than countries with higher income levels. As compared to the latter group, low income and lower-middle income countries tend to have relatively few enterprises with 50 to 99 employees. This is known as the “missing middle” phenomenon. Figure 4 shows that this phenomenon is particularly visible in the Middle-East and North Africa, where it concerns enterprises with 20 to 99 employees (Aterido et al., 2011; Aterido et al., 2010; Dinh et al., 2010).

**Figure 4:**  
Employment shares across re-  
gions\*, by size class (medians\*\*)

Source: Ayyagari et al. (2011), Table 2



\* MNA=Middle East and North Africa; ECA= Eastern Europe and Central Asia; EAP= Eastern Asia and the Pacific; LAC=Latin America and the Caribbean; AFR=Africa Region; SAR= Southern Asia Region

\*\* Within each region, the median employment shares for different size classes may refer to different countries; hence, the median employment share for the size class of 5–249 employees may differ from the total of the median employment shares of the underlying regions.

Notes: the data refer to employment in the formal, non-agricultural private economy; firm size is based on the number of full-time employees; micro enterprises are excluded; based on data from 98 countries.

Two explanations for this phenomenon are possible. First of all, in developing countries the share of necessity-based entrepreneurs is relatively high. These entrepreneurs are less motivated to pursue growth than opportunity-based entrepreneurs. This could result in a relatively high share of micro enterprises (not included in Figure 3 and Figure 4) and small enterprises (and hence, a relatively low share of medium-sized enterprises). Secondly, the missing middle phenomenon may also be related to institutional factors. Those entrepreneurs that do want to grow may be hampered due to various institutional factors (i.e. lack of access to finance, poor infrastructure, corruption, regulatory framework including rigid employment laws). The institutional framework appears to be more constraining in developing countries than in emerging and developed countries (IFC, 2012a). This would explain why relatively few small enterprises manage to grow into medium-sized enterprises. These two factors may reinforce each other.

### MSME employment share is higher than SME employment share

By definition, the employment share of the MSME size class is larger than the employment share of the SME size class<sup>25</sup>. Generally speaking, the employment share of micro enterprises in developing countries is greater than in developed countries (World Bank 2012b, figure 9, page 105). This is consistent with the results from Ayyagari et al. (2011), who report that the employment share of enterprises with 5–19 and 20–49 employees is higher amongst low income and lower middle-income countries.

<sup>25</sup> The employment share of the MSME size class relates employment in MSMEs to employment in large enterprises, and the employment share of the SME size class relates employment in SMEs to employment in large enterprises. The employment level in large enterprises is the same in both definitions, but in the case of the MSME employment share it is related to a larger group of enterprises than in the case of the SME employment share.

### 3.3 Differences in employment share of SME size class explained

Generally speaking, a large employment share of the SME size class can be explained in two different ways: either as a sign of a very competitive economy (where new entrants more than compensate for successful SMEs that outgrow the SME size class); or as a sign of an economy that contains incentives for firms to stay small and where failing enterprises are kept alive against better odds. So, having a large SME size class in itself does not guarantee good jobs or a substantial contribution to creating new jobs.

Ayyagari et al. (2007) have examined which of these two explanations seems to be most relevant for the countries with a relatively large employment share of the SME size class. To this end, they examined the relationship between the SME employment share and various indicators of the business environment. For their sample and for the manufacturing sector, they find that the SME employment share increases if entry costs are lower, propensity registration costs are lower and credit information sharing is more efficient. These results suggest that "large SME sectors are robustly associated with a competitive business environment that facilitates entry, eases the establishment of property rights and fosters access to external finance by providing for more efficient credit information sharing" (Ayyagari et al., 2007, page 429). This leads to clear policy suggestions for governments that want to increase the employment share of their SME size class. It is however, not clear to which extent these results also apply to the non-agricultural formal economy as a whole and to developing and emerging countries, since their data mainly focuses on manufacturing enterprises in developed countries.

### 3.4 Conclusion

Based on the publications that we have identified in our literature search, it is possible to make a world-wide comparison of the employment shares of the SME size class (consisting of enterprises with 5 to 249 employees) and the size class of large enterprises within the formal non-agricultural private economy. The median employment share of the SME size class is 67%. This tells us that in the majority of countries, the SME size class employs considerably more people than the size class of large enterprises. Amongst developing and emerging countries, the employment share of the SME size class tends to decrease with a country's average income level, but it increases again for the developed countries.

The employment distribution within the SME size class varies between regions and between country income groups. In particular, low income and lower-middle income countries tend to have relatively few medium-sized enterprises with 50 to 99 employees (the "missing middle" phenomenon).

Far less information was obtained regarding the employment share of the SME size class as compared to informal enterprises, micro enterprises, self-employed and/or agricultural enterprises. Recent statistics from the MSME Country Indicators database show that the large majority (83%) of all MSMEs are micro enterprises. This concerns the number of enterprises, however, and not the number of people employed.



For one region (Sub-Saharan Africa) information is available regarding the employment share of formal enterprises<sup>26</sup>, agricultural enterprises<sup>27</sup> and informal enterprises<sup>28</sup>. The results show that the agricultural enterprises account for close to 70% of the primary employment, while informal enterprises offer 15% of the total primary employment. Employment in formal enterprises (which include SMEs as well as large enterprises, and private as well as public enterprises ) accounts for only a small share of total employment in Sub-Saharan Africa. From the perspective of poverty reduction, the small size of the formal sector in this region means that policies that aim to reduce poverty should not focus exclusively on the formal sector.

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26 These include formal enterprises in the private sector and in the public sector.

27 These include family farming and wage employment in agriculture.

28 This includes self-employed, micro enterprises and unincorporated enterprises.

## 4 The contribution of SMEs to employment growth

### 4.1 Short-term contribution versus long-term contribution

The main question for this chapter is: What is the contribution of SMEs to employment growth, in the short run as well as the long run?

#### Short-term contribution

The short-term contribution of SMEs consists of job creation by (incumbent and/or new) SMEs in a certain year. This contribution can be determined at two different levels of aggregation: the level of individual enterprises and the level of size classes<sup>29</sup>. The SME size class is defined as the population of all enterprises of a certain size at a specific point in time. However, enterprises can cross the boundaries of this size class at any moment. Enterprises that currently belong to the SME size class may have been either large enterprises or informal enterprises in the previous period, or they did not yet exist; likewise, enterprises that belonged to the SME size class in the previous period may currently belong to the size class of large enterprises or have ceased to exist. Changes in the employment level of a certain size class can therefore be attributed to either one of the following two causes:

- Changes in the level of employment of individual enterprises: job creation and destruction by enterprises (including entry and exit of enterprises);
- Changes in the classification of enterprises in size classes: the population effect.

Section 4.2 analyses empirical studies at the size class level: which share of net employment changes can be attributed to the SME size class amongst developing and emerging countries? The next section discusses recent empirical studies at the level of individual enterprises, where employment growth rates of individual enterprises are related to firm size and other determinants.

#### Long-term contribution

The long-term contribution of SMEs not only includes the direct job creation of SMEs, but also spill-over effects that occur due to increased competition and innovation (as mentioned in Chapter 2). These effects can only be observed at macro-economic level over a longer period of time. Section 4.4 reviews recent empirical studies from this perspective.

For the general arguments that are presented in this section, it does not really matter whether we refer to the SME size class or the MSME size class as the arguments apply equally to both. However, once we discuss and compare the results of recent empirical

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<sup>29</sup> A further distinction can be made between job creation at firm level and establishment level. Firms can own a single establishment or various establishments. Most empirical studies measure changes in employment, firm age and other variables at the establishment level, not accounting for the fact that that particular establishment may be part of a larger firm. Only two studies take firm level variables into account (Haltiwanger et al., 2012; Bigsten and Gebreeyesus, 2007). However, in the case of developing countries, this does not bias the results as over 90% of the firms constitute a single establishment (Aterido et al., 2011; Bigsten and Gebreeyesus, 2007).

studies, it is important to be clear about the population under investigation. With the exception of the study by Fox and Sohnesen (2012), all of the identified studies that we discuss in this chapter are restricted to formally registered SMEs and large enterprises from the non-agricultural private sector<sup>30</sup>. Most of these studies exclude micro enterprises and informal enterprises, with the exception of the empirical studies on developed economies that are discussed in sections 4.2 and 4.4. Since the studies on developed economies include micro enterprises, they analyse the contribution of the MSME size class rather than the SME size class.

## 4.2 Employment growth shares: the contribution of the SME size class

Which share of the net employment creation in a country can be attributed to the SME size class? Although this seems a fairly simple question, it is actually difficult to provide an accurate answer. This is mainly because it requires very detailed information regarding all employment changes<sup>31</sup>. In addition, once data is available, there are various methodological challenges that have to be overcome (see Methodological note 2).

It is not surprising therefore, that accurate information on the contribution of various size classes is only available for developed countries. Recent studies into the employment contribution of the MSME size class in the US and the EU make use of administrative or census data that cover all enterprises of the formal sector, including entries and exits. The general picture that emerges for these countries is that the majority of net job creation in the formal, non-agricultural private sector can be attributed to the MSME size class<sup>32</sup> (Neumark et al., 2011; De Kok et al., 2011).

### Positive results available, but exact magnitude remains unclear

The best study to date regarding the employment contribution of different size classes in emerging and developing countries, is the study by Ayyagari et al. (2013). What makes this study unique, is that it offers comparable information on employment growth for SMEs and large enterprises for 104 different developing and emerging countries. This study is based on enterprise surveys, which means that it does not include employment effects of firm entry (job creation) and firm exit (job destruction), and that the outcomes are estimates (rather than measurements) of the total employment contribution of different size classes. Nevertheless, the results from Ayyagari et al. (2013) provide a valuable insight into the net employment creation that can be attributed to the SME size class in developing and emerging economies.

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30 The majority of the empirical studies on developing and emerging countries that are discussed in sections 4.2 and 4.3 are based on enterprise or establishment surveys. These studies tend to exclude self-employed workers and/or micro enterprises. A few exceptions are the publications by Bigsten and Gebreeyesus (2007) and Gebreeyesus (2009), both based on census data on the manufacturing sector in Ethiopia, and Fox and Sohnesen (2012) which is based on household surveys in Sub-Saharan Africa. The empirical studies on developed economies that are discussed in section 4.2 are based on administrative data.

31 Usually, employment growth is defined as changes in permanent full-time employees. Temporary jobs are excluded from the analysis.

32 The MSME size class includes all registered enterprises that employ less than 250 employees. The results for the US are based on classification by average size, the results for Europe on dynamic classification (see Methodological note 2 for explanation).

### **Methodological note 2: The decomposition of employment changes across size classes**

Various studies have been conducted to determine the role of the SME size class in employment creation, using different datasets and different methodologies. As it turns out, the choice for a specific dataset and methodology has a significant impact on the outcomes. Regarding the data, it matters whether administrative or census data is available that covers the whole population, or whether enterprise surveys are used (which tend to exclude entry and exit). Another relevant issue is whether the data refers to establishments or enterprises. (Haltiwanger et al., 2010).

Regarding the methodology, the main problem is how to deal with firms that cross size class boundaries. To which size class should the job creation or loss of these firms be attributed? The main solutions to this problem are classification by base-year size, classification by average size and dynamic classification. Suppose a firm grows from 240 to 280 employees and that the upper size class boundary of the SME size class is 250. Classification by base-year size would attribute the growth of 40 employees to the SME size class (because the firm belonged to the SME size class at the beginning of the period); classification by average size would attribute the growth of 40 employees to the larger size class (since, on average, the firm employs 260 employees), while dynamic classification would attribute the growth of 10 employees (from 240 to 250) to the SME size class and the remaining growth of 30 employees to the large size class. Classification by base-year size gives results that are most favourable to small firms. The results of classification by average size and dynamic classification are similar to each other. A main advantage of dynamic classification is that it is the only method that can be applied without access to micro data: annual macro statistics on the number of enterprises and the employment levels for each size class suffice (De Kok and De Wit, 2013). This method has recently been used to determine the contribution of the SME size class for the EU (De Kok et al, 2011).

Ayyagari et al. (2013) estimate the net employment creation that can be attributed to each size class<sup>33</sup>. These add up to the total employment creation, which makes it possible to determine the share of each size class in the total employment change. The results indicate that, for the majority of countries, more than 50% of total net employment creation can be attributed to the smallest size classes (of enterprises with 5 to 99 employees). This applies not only to developed countries, but also to emerging and developing countries (Figure 5).

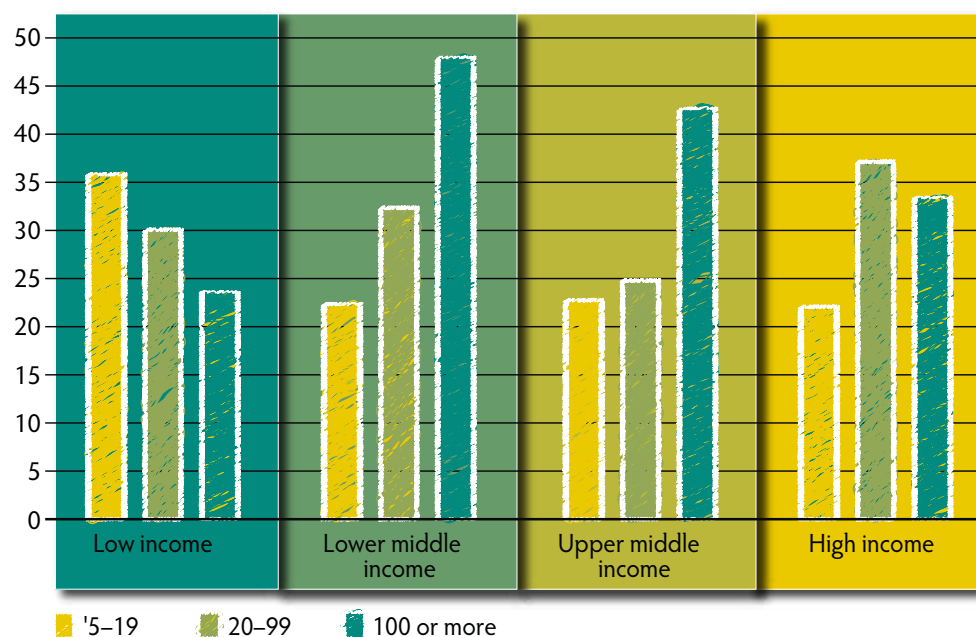
There are differences between different country income groups, but the differences between regions are considerably larger (Figure 6). The South-Asian region stands apart from the other regions, because of the very low share of employment creation that is reported for the largest size class. For the size class of 100 or more employees, a share of less than 3% is reported. This indicates that, in the median country in this region, employment levels in the largest size class remained more or less the same.

33 Three size classes are distinguished (5–19 employees; 20–99 employees; 100 or more employees). We use the results presented in the appendix, which are based on classification by average size. Ayyagari et al. (2013) also present results based on classification by begin size, however these are biased towards the smallest size class (regarding the size class of enterprises with 5–19 employees, the median share in net employment creation is 45% according to classification by begin size and 25% according to classification by average size).

**Figure 5:**

Share of total employment creation by size class, across countries from different income groups, for countries with a net increase in employment (medians\*)

Source: Ayyagari et al. (2013), appendix A, panel A.



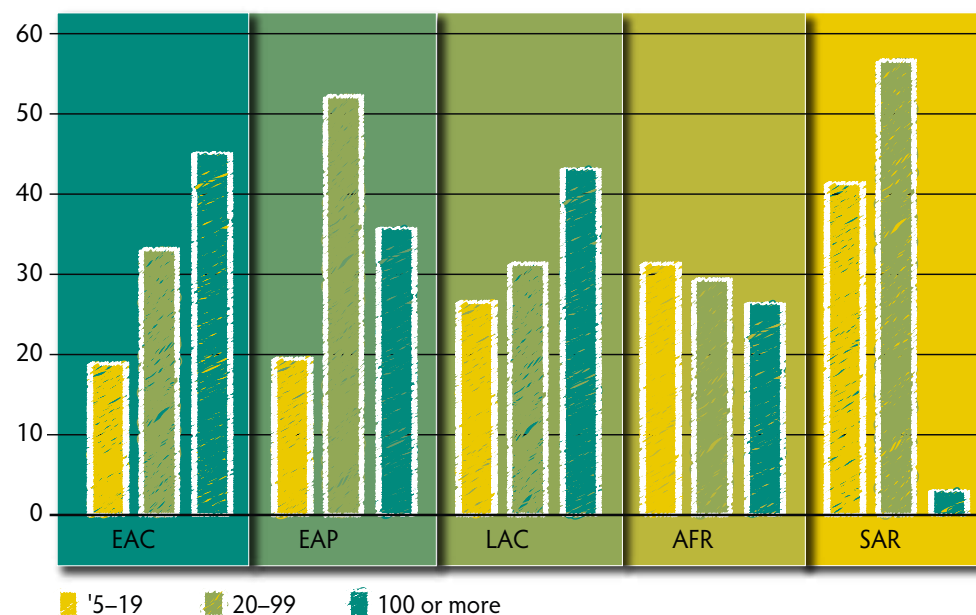
\* Within each income group, the median employment creation shares for different size classes may refer to different countries; hence, the median employment creation share for the three size classes may not add up to 100%.

Notes: the data refer to employment in the formal, non-agricultural private economy; firm size is based on the number of full-time employees; micro enterprises are excluded; based on data from 81 countries; employment creation by size class is calculated according to classification by average size over a two-year period.

**Figure 6:**

Share of total employment creation by size class, across regions\*, for countries with a net increase in employment (medians\*\*)

Source: Ayyagari et al. (2013), appendix A, panel A.



\* ECA= Eastern Europe and Central Asia; EAP= East Asia and the Pacific; LAC=Latin America and the Caribbean; AFR=Africa Region; SAR= Southern Asia Region. Due to lack of data, MNA (Middle East and North Africa) is not included;

\*\* Within each income group, the median employment creation shares for different size classes may refer to different countries; hence, the median employment creation share for the three size classes may not add up to 100%.

Notes: the data refer to employment in the formal, non-agricultural private economy; firm size is based on the number of full-time employees; micro enterprises are excluded; based on data from 81 countries; employment creation by size class is calculated according to classification by average size over a two-year period;

## The case of Ethiopia

Our literature search found almost no examples of country-specific studies on the contribution of different size classes to net employment growth. The only exceptions found are two studies on employment growth in the formal manufacturing sector in Ethiopia. These studies were possible, because census data is available for manufacturing for a considerable time period. A unique advantage of this dataset is that it includes entries and exits. The interpretation of 'entry' is however, somewhat different than usual: since the census is limited to establishments of at least 10 employees, entry means that an enterprise has employed at least 10 employees for the first time. It seems likely that such enterprises already existed for a number of years and simply passed the threshold of 10 employees.

Based on these data, Bigsten and Gebreeyesus (2007) present mean employment growth rates for five different size classes. They report that mean employment growth rate drops sharply with size class; from +6% for firms with 10 to 19 workers and 1.7% for firms with 20 to 49 workers, to -2.8 % for firms with 250 or more workers. This large size-class effect is most likely due to the methodology applied (classification by base-year size, applied over a period of 2 to 7 years). Nevertheless, these results suggest that the relative employment growth is highest for the smallest firms. This is confirmed by Shiferaw and Bedi (2010) who use the same data. They show that in absolute terms 32% of the net job creation can be attributed to the size class of small enterprises (with 10 to 50 employees). This is much larger than their share in employment levels<sup>34</sup>, so relatively speaking small enterprises contribute the most (the ratio between job growth and employment levels is highest for the size class of small enterprises). In absolute terms, however, they contribute less to net employment growth than medium-sized and large establishments.<sup>35</sup>

## The role of entry and exit

The contribution of the MSME size class to net employment growth is closely related to the net employment effect of the processes of entry and exit. Haltiwanger et al. (2010) even conclude that in the US, the large employment contribution of the MSME size class is explained entirely by these business dynamics. This raises the question which factors affect the entry of enterprises. Literature stresses the role of institutional factors and the business environment. This is discussed further in Chapter 6.

## 4.3 Employment growth rates: the contribution of individual SMEs

This section discusses the results of empirical studies that explain the employment growth rates of individual enterprises. It aims at answering the following research question: Which factors affect how (and how much) individual SMEs contribute to employment growth?

The literature search has identified 14 recent empirical publications that studied this

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34 On average, small manufacturing establishments in Ethiopia account for 15% of employment in formal manufacturing.

35 It is not possible to use Ayyagari et al. (2011) to verify these findings, since Ethiopia is not amongst the 99 countries covered by Ayyagari et al. (2011).

topic in the context of developing and emerging countries. Analysing the employment growth rate of individual SMEs is not without methodological challenges, but different solutions have been suggested to overcome these challenges (see Methodological note 3). Together, these publications have identified various determinants of employment growth. Broadly speaking, two types of determinants can be distinguished: firm and owner characteristics, and the characteristics of the business environment that the firm operates in. Paragraph 4.3.1 shortly discusses recent empirical evidence regarding the effect of firm and owner characteristics on SME employment growth rates, while 4.3.2 discusses the impact of the business environment and institutional factors.

### 4.3.1 Firm and owner characteristics

Recent empirical studies have identified various firm and owner characteristics that are related to the employment growth rates of individual enterprises (SMEs as well as large enterprises). We will discuss the impact of firm size, firm age, firm strategies, other firm characteristics and owner characteristics. For an overview see Table 4.

**Table 4**

The effect of firm and owner characteristics on the employment growth rates of enterprises

Source: Panteia, 2012

Factor	Description	Effect on employment growth rate of individual enterprise
Firm size	Size of the firm (employees)	–
Firm age	Age of the firm (years)	–
Firm strategies:		
► Innovation	The introduction of new products or production processes	+
► Export orientation of the firm	Being active and selling one's products in international markets	+
► Capital intensity	The level of capital and/or fixed assets	+
Other firm characteristics:		
► Location	Whether the firm is located in a densely populated area (i.e. a big city)	0
► Human capital	Knowledge and skills of the workers, acquired through formal training	+
► Ownership	Whether the firm has foreign owners	+
► Export orientation of the sector	The share of production of a sector that is exported	+
Owner characteristics:		
► Owner age	Age of the firm owner (years)	+
► Human capital	Knowledge and skills of the owner, acquired through schooling, training and/or previous business experience	Mixed

Note: the "+" sign refers to a positive effect on SME employment growth rates, while a "–" implies that the respective factor has an adverse impact on SME employment growth rates. "0" means that there is no statistically significant effect, according to the recent empirical literature. "Mixed" implies that there is mixed evidence on the effects on the respective factor.

## Firm size

Many empirical studies that cover the developing world find that smaller firms grow faster than large firms, which is contrary to Gibrat's Law<sup>36</sup> (Aterido et al., 2007; Bigsten and Gebreeyesus, 2007; Gebreeyesus, 2009; Dinh et al., 2010; Ayyagari et al., 2013; Jung et al., 2011; Aterido et al., 2011). The inverse relationship between firm size and growth even holds within the micro firm size class in developing countries (Gebreeyesus, 2009). Also, employment growth rates are significantly lower for single-establishment enterprises, once other firm characteristics are accounted for (Dinh et al., 2010).

The only exception is a recent study on Southern Asia, where firm size does not seem to be related to the employment growth rate. Friesenbichler (2011) finds no firm size effect when using the standard growth rates<sup>37</sup>. It is not clear whether this result is specific for developing countries in Southern Asia, or that this result is due to differences in the methodology applied.

The negative relationship between firm size and employment growth is largely similar to results from studies covering the developed world (Neumark et al., 2011; De Kok et al., 2011).

## Firm age

Generally, studies on both developed and developing countries concur that young firms grow faster than older firms (Aterido et al., 2007; Bigsten and Gebreeyesus, 2007; Dinh et al., 2010; Ayyagari et al., 2013; Jung et al., 2011; De Kok et al., 2011; Haltiwanger et al., 2012). One explanation for this finding is offered by the Jovanovic's passive learning model (Jovanovic, 1982). This model argues that entrepreneurs learn most when they enter the market. This will allow them to improve the efficiency of the production process, which will subsequently boost firm growth. Therefore, the reasoning is that firms will grow faster in the beginning of their life cycle.

The negative relationship of employment growth with both firm age and firm size, may very well be caused by the employment effects of new firms. New firms are by definition young, and the large majority of new enterprises start out as a SME. For the US, Haltiwanger et al. (2012) show that once firm age is controlled for, the growth rate of enterprises is no longer related to their initial size. The results of Ayyagari et al. (2013) suggest that this is not the case for the majority of developing and emerging countries: their results indicate that even after controlling for firm age, small firms have higher employment growth rates.

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36 Gibrat's Law states that the growth rate of a firm is independent of its initial size; the probability of a given growth rate (during a specific time interval, within a certain industry) is the same for all firms. Investigating the relationship between firm size and firm growth can be regarded as a test of Gibrat's Law.

37 He does find a positive firm size effect when using a Birch-corrected growth rate, but this may be consistent with the absence of a firm size effect in the case of a standard growth rate. This is due to the fact that the Birch-corrected growth is obtained by multiplying the standard growth rate with a firm size indicator (see Methodological note 3): if the standard growth rate does not depend on firm size, it stands to reason that the product of the standard growth rate and firm size is positively related to firm size.



## **Firm strategies**

Recent studies have found support for the positive effects of innovation, export orientation and capital intensity.

Innovation can be defined as the introduction of new products or services, production or management processes, design, quality and/or working conditions. Introducing new products can lead to the conquering of new markets, and thus increased production. Adopting novel technology in production processes may lead to cost advantages. Consequently, the firm can charge lower prices and boost sales. Innovators therefore, enjoy a higher growth potential (Gebreeyesus, 2009) although innovation can also have negative effects on the employment level of individual firms (improving labour productivity means that fewer employees are needed to obtain a certain production level), the positive effects (due to an increased demand for products) are assumed to dominate.

Empirical evidence shows that enterprises in developing and emerging countries that invest in R&D and innovate, are more likely to grow (Gebreeyesus, 2009; Jung et al., 2011; Stone and Badawy, 2011). In Brazil for example, innovating firms experience around 11 percentage points higher employment growth, compared to non-innovators (Kannebley Jr. et al., 2010). In particular, process innovations have a large impact on employment growth in Brazil. This is consistent with theory, as cost advantages result in increased sales. Kannebley Jr. et al. (2010) did not find a positive effect on employment for product innovations (the introduction of technologically superior products). However, the study measured the impact of innovations on employment growth only two years after the introduction and since conquering a new market takes time, the gains of product innovation may take longer to materialise.

The positive effect of innovation is confirmed by studies on developed countries. De Kok et al. (2011) find that in Europe innovative firms experience higher employment growth rates, when controlling for various enterprise, country and workforce characteristics. One explanation for this finding is that innovativeness is related to internationalization. The merits of being active in international markets will be explained subsequently.

Several empirical studies find that exporters tend to grow significantly faster in terms of employees, when compared to similar firms that do not engage in exporting activities (Aterido et al., 2007; Dinh et al., 2010). Apart from the increased sales, exporting goods or services to other countries offers firms a learning experience. Through exposure to new, international markets, firms can improve their capabilities and further pursue firm growth (Jung et al., 2011). In addition, being active in international markets enhances the level of competition that firms face, which encourages innovation and productivity growth (Stone and Badawy, 2011).

Finally, capital intensity and investments in physical assets are positively related to employment growth (Bigsten and Gebreeyesus, 2007; Friesenbichler, 2011) These findings suggest that access to credit, which enterprises need to invest in their capital stock and modernize their production process, may have a positive effect on employment growth.

## Other firm characteristics

Being located in a large city can offer various advantages: a better availability of infrastructure and larger markets for skilled labour, raw materials and output. In addition, more populated areas increase the possibilities for learning and imitation through labour turnover and interaction with suppliers, as well as a better matching of skills across a bigger pool of workers. Each of these advantages can have a positive effect on productivity levels. However, large agglomerations can also have adverse effects, such as congestion (World Bank, 2012b).

Within Ethiopia, Bigsten and Gebreeyesus (2007) find that the location of a firm does not have a significant impact on its employment growth. Friesenbichler (2011) reaches the same conclusions for a group of six developing countries from Southern Asia. This seems to suggest that the disadvantages of being located in a large city compensate for the advantages, although it cannot be ruled out that the available location indicators are not specific enough<sup>38</sup>.

Within the Middle East and North Africa region, Stone and Badawy (2011) find evidence that offering workers formal training increases the probability of becoming a high growth SME<sup>39</sup>. Positive effects of training on the job are found by a study by the International Finance Corporation (2012a).

Foreign-owned firms tend to have higher employment growth rates. This is the case for countries in different stages of development (Aterido et al., 2007; Dinh et al., 2010).

Export activities are also believed to have a positive effect on employment growth rates. Exporting has a positive effect on the productivity of enterprises (because they operate on a competitive global market) and allows them to grow (World Bank, 2012b). This relationship is confirmed by Jung et al. (2011). For a sample of Uruguayan firms, they show that employment growth of individual firms is positively related to the export orientation of individual firms (the share of exports in total sales). In addition, the employment growth is also higher for individual firms that are active in an export-oriented sector (a sector where a relatively high share of production is exported). This positive effect of the export orientation of the sector is independent of the positive effect of the export orientation of the individual firm. Their interpretation of this result is that firms that belong to an export-oriented sector are part of a regional value chain. In Latin America, the MERCOSUR countries are important players in the global market for natural resources. Uruguay, as a small and open emerging country, is also part of this economic partnership. Various sectors (e.g. food and agro energy products) benefit from this extra-regional demand by increased exports. For small firms, it would be advantageous to be located in such a regional value chain. It indeed enhances the probability of becoming a high growth firm, as has been established by the analysis of Jung et al.

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38 Bigsten and Gebreeyesus (2007) and Friesenbichler (2011) only differentiate between two locations: in or nearby the capital city (or a city with more than one million inhabitants, in the case of Friesenbichler), or otherwise. If the location effect would be most pronounced between rural areas on the one hand, and small and large towns on the other hand, this may not be captured by their location indicators.

39 Informal training and on the job training are not included in this study.

## Owner characteristics

Little evidence was found regarding the relevance of owner characteristics for employment growth rates. Gebreeyesus (2009), who studies micro enterprises in Ethiopia, found that the age of the owner matters: businesses run by older entrepreneurs grow faster than those run by younger owners. According to this study, the level of human capital (measured by previous business experience and formal education) does not have a significant impact on firm growth. In contrast, Fox and Sohnesen (2012) report that the earnings of self-employed workers are highly correlated with the educational level: having completed primary education results in significantly higher hourly earnings (based on data for Tanzania, Rwanda and Ghana).

### 4.3.2 Business environment characteristics

The quality of the institutional framework does not only influence the SME employment share of a country, it also affects the employment growth rate of firms once they have entered the market (IFC, 2012a). Below we shortly discuss the factors that appear to be the most constraining to employment growth of SMEs, according to recent empirical evidence. See Table 5 for an overview.

**Table 5**

The effect of business environment characteristics on the employment growth rate of enterprises

Source: Panteia, 2012.

Factor	Description	Effect on employment growth rate of individual enterprise
Access to finance	The ease for small firms of getting a loan	+
Quality of infrastructure	The reliability of the power network*	+
Simple business regulations	The amount of time that SMEs need to deal with government officials and to adhere to the regulatory framework**	+
Low level of corruption	The amount and frequency of bribes paid to corrupt officials	Mixed

\* The reliability is measured by the amount of power outages. A decrease in the number of power outages (which represents an increase in the quality of infrastructure) has a positive effect on employment growth rates.

\*\* Business regulations are simpler if they require less time from SMEs.

Note: the "+" sign refers to a positive effect on SME employment growth rates, while a "-" implies that the respective factor has an adverse impact on SME employment growth rates. "0" means that there is no statistically significant effect, according to the recent empirical literature. "Mixed" implies here that there is mixed evidence on the effects on the respective factor.

## Access to finance

Small firms are likely to face liquidity problems, as they are considered expensive to serve, thus less attractive to formal banks (IFC, 2012a). The bulk of recent empirical literature finds that alleviating credit constraints would boost small firms' growth (Aterido et al., 2007; Gebreeyesus, 2009; Dinh et al., 2010; Nkurunziza, 2010; Aterido et al., 2011; Fox and Sohnesen, 2012). Employing World Bank data concerning firms in developing and emerging countries across the globe, Dinh et al. (2010) has identified access to finance as the most binding constraint on firm growth.

## **Infrastructure**

Aterido et al. (2011) and IFC (2012a) find that power shortages, rather than transportation problems, is the dimension of infrastructure that hinders firm growth most. Large firms may be less affected by failing electricity, as they are more likely to have an alternative source of power (i.e. a private generator). Recent empirical evidence (Aterido and Hallward-Driemeier, 2010; Aterido et al., 2011) reveals that more power outages are associated with a higher employment growth of micro enterprises, while SMEs and large firms are negatively affected. This finding holds for countries in different stages of development. Their explanation for this relationship is that poor infrastructure may lead to the allocation of production to less efficient firms, which may substitute labour for capital.

## **Business regulations**

Various studies confirm that the regulatory framework can be especially constraining for small and medium-sized firms. The reasoning for this is that micro firms are small enough to remain below the radar of the officials, while large companies have attained a sufficient size to lobby and shape regulations in their favour (Aterido et al., 2011). This leaves SMEs to be disproportionately affected by the regulatory burden. This reasoning is confirmed by empirical analysis (Aterido et al., 2007). In Sub-Saharan Africa, SMEs' employment growth slows down if they have to spend more time dealing with government officials (Aterido and Hallward-Driemeier, 2010).

## **Corruption**

Bribes lead to increased costs of doing business and thus hinder firm growth. Perhaps surprisingly, Aterido et al. (2007) find that while corruption hampers employment growth in medium and large firms, it is associated with higher growth rates of micro firms (despite the fact that micro firms report corruption as one of the top constraints). They offer no explanation for this finding, but in a later study (focussing on business regulations) they suggest that micro firms experience a lower level of enforcement, which may result in some production being diverted to them (Aterido et al., 2011). Likewise, if SMEs and large enterprises are more exposed to corruption than micro enterprises, this might explain the opposite effects of corruption on growth rates of micro enterprise (positive) versus medium and large firms (negative).

Other recent empirical studies do not find a significant relationship between corruption and employment growth rates of SMEs (Aterido and Hallward-Driemeier, 2010; Aterido et al., 2011).

These results concern the effects of corruption at the level of individual enterprises. At a higher aggregation level, Kushnir et al. (2010) report that in countries where firms are asked more frequently to make informal payments (bribes), the number of MSMEs increases.

## 4.4 Long-term benefits of the SME size class

Recent studies indicate that the long-term benefits of the SME size class may be considerably larger than the short-term benefits. This is due to the positive effects of business dynamics (the processes of entry and exit): the entry of new firms may improve the overall competitiveness and innovativeness of the industry to which the start-ups belong.

In 2008, a special issue of the scientific journal *Small Business Economics* dealt exclusively with this issue. Amongst others, the articles included in this issue show that the size and the sign of the long-term benefits vary between countries and regions. Generally speaking, the long-term employment effects of firm entry tend to be positive, but for some regions the long-term employment effect turned out to be negative. The studies included in this issue are restricted to OECD countries; as yet, comparable studies have not been performed for developing or emerging countries. Nevertheless, a recent study (Ghani et al., 2011b) suggests that the overall effect of new firms on employment growth may also be positive in emerging countries.

In a specific country case, for the formal manufacturing sector in India, Ghani et al. (2011b) find that region-industries (i.e. a specific industry within a specific region) with higher rates of entry in 1989, experienced stronger local job growth in the formal sector over the next two decades. More specific, they have examined the relationship between initial entrepreneurship in a region-industry and the employment growth between 1989 and 2005<sup>40</sup>. Their results suggest that a 10 percent increase in initial entrepreneurship in a region-industry in 1989 was associated with a 1.4 percent higher employment growth to 2005<sup>41</sup>.

### The relationship between firm entry and economic development

The studies that we discussed so far show that firm entry levels (as indicators of entrepreneurship) are related to a country's GDP per capita and employment growth. However, it matters a great deal which indicator is used. In particular, it matters whether entrepreneurship is measured as entry of new enterprises in the formal sector, or if entry into the informal sector is also taken into account. The World Bank, for example, uses the annual average entry density<sup>42</sup> as a measure for (dynamic) entrepreneurship. When these indicators are used, a positive relationship between entrepreneurship and average income can be reported (Bali moune-Lutz et al., 2011; Ghani et al., 2011b; Klapper and Love, 2011). In contrast, the Global Entrepreneurship Monitor (GEM) uses indicators of the intent to start an (informal or formal) enterprise and/or the involvement in setting up an (informal or formal) enterprise to measure entrepreneurship<sup>43</sup>. This includes incorporated, as well as unincorporated enterprises. When these indicators are used, a negative

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40 Entrepreneurship is measured as the number of young establishments per 1.000 workers in the formal manufacturing sector. Employment growth is measured as the ratio between employment levels in 2005 and 1989.

41 If the number of young establishments per 1.000 workers in the formal manufacturing sector increases with 10%, the ratio between employment levels in 2005 and 1989 increases with 1.4% (Ghani et al., 2011b, table 3, column 3).

42 The number of newly registered limited-liability firms in a specific year as a percentage of the country's working age population.

43 An often used GEM indicator is the TEA, which stands for Total Early-stage Activity. TEA assesses the percentage of the adult population (aged 18–64) who are either a nascent entrepreneur or owner-manager of a new business.

relationship between the share of new and young enterprises and GDP per Capita tends to be found for developing and emerging countries (see Bosma et al., 2008).

How can we explain these different results? Perhaps, the difference between the formal and informal sector correlates with differences between necessity-based and opportunity-driven entrepreneurship. In a sample of 20 emerging countries and 24 developed countries, Valliere and Peterson (2009) find that necessity-based entrepreneurship occurs much more frequently amongst emerging countries (4,4% on average)<sup>44</sup> than amongst developed countries (1,2% on average)<sup>45</sup>. Fox and Sohnesen (2012) report that in Tanzania and Republic of Congo (urban area's only), self-employed workers are more often pushed into self-employment than pulled into entrepreneurship. This relationship is however not very strong. Using a related measure called low-expectation entrepreneurship, Autio (2007) shows that large differences exist between China and India, two of the largest developing economies. The rate of high-expectation entrepreneurs (expecting to employ 20 or more people) is more than 1,5% (of the population of 18 to 64 years old) in China, which is the highest share of all 34 countries in the sample. In India, in contrast, it is only about 0,2%, one of the lowest scores (Autio, 2007, page 18).

It is conceivable that necessity-based entrepreneurs start out as self-employed and are less likely to register themselves. Instead, opportunity-based entrepreneurs are much more likely to go through the effort of registering a limited-liability enterprise. If this were the case, the data from the World Bank suggests that prevalence of opportunity-based entrepreneurship is positively correlated with GDP per Capita, which is consistent with the results from Valliere and Peterson (based on GEM). In fact, Valliere and Peterson (2009) suggest that the U-shaped relationship between the GEM-indicator of entrepreneurship<sup>46</sup> and GDP per Capita might be due to differences in opportunity versus necessity-based entrepreneurship: the U-shape is attributable to the high prevalence of necessity-based entrepreneurship in emerging economies, and the high prevalence of ambitious entrepreneurship in developed economies.

## 4.5 Conclusion

Regarding the employment contribution of the SME size class, the general conclusion may be formulated as follows: "Small is still beautiful", at least within the context of formal enterprises from the non-agricultural private sector. The results of recent studies show that the SME size class may be considered to be the main job engine, not only for developed countries but also for emerging and developing countries. This is partly because of the positive employment effects of business dynamics (the processes of entry and exit)

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44 Valliere and Peterson (2009) use GEM data, where the Total Early-stage Activity (TEA) is divided into two categories: necessity-based entrepreneurship and opportunity-based entrepreneurship. Necessity-based entrepreneurship thus measures the percentage of the adult population (aged 18–64) who are either a nascent entrepreneur or owner-manager of a new business, out of necessity.

45 For developed as well as emerging countries, the share of opportunity-based entrepreneurship tends to be higher than the share of necessity-based entrepreneurship. The difference between these two types is however much larger for developed countries: the ratio between opportunity-based entrepreneurship and necessity-based entrepreneurship is 4,7 amongst developed countries and only 1,8 amongst emerging economies.

46 They use the Total Early-stage Activity (TEA).

and partly because of the growth performance of incumbent enterprises. The size of each of these parts will very likely differ between countries.

Regarding the employment contribution of individual enterprises, the literature review has identified various factors that impact the employment growth of individual SMEs. Amongst firm characteristics, firm size and firm age have an adverse effect on the growth of the number of employees. This is consistent with the passive learning model (Jovanovic, 1982). On the other hand, training employees<sup>47</sup>, innovation, exports and high capital intensity are found to boost SME employment growth. The business environment that a firm operates in, matters as well. It is recognised that a low quality institutional framework hampers SMEs from growing into medium-sized and large companies, causing the “missing middle” phenomenon (Dinh et al., 2010). Among the institutional factors, lack of access to finance has been identified as one of the biggest constraints to firm growth by the bulk of the empirical literature. Regulatory burden and poor infrastructure also negatively affect SME employment growth.

Many, but not all of the findings here are supported by several empirically sound studies. Particularly relevant are the studies that are based on World Bank Enterprise Surveys, which cover around 100 countries. Studies based on this dataset can control for differences between countries, by including macro-economic characteristics of the business environment (Aterido et al., 2007; Aterido and Hallward-Driemeier, 2010; Dinh et al., 2010; Kushnir et al., 2010; Aterido et al., 2011; Ayyagari et al., 2013). Thus, differences between countries can be explained by differences in the business environment. The focus of these papers is on the effects of these factors. Generally speaking, the business environment is most deficient in Sub-Saharan Africa (Aterido and Hallward-Driemeier, 2010), but otherwise these studies do not include elaborate discussions on country differences (and to which extent these can be explained by differences in business environment). At a general level, however, Aterido and Hallward-Driemeier (2010) conclude that “average enterprise-level employment growth rates are remarkably similar across regions. This is true despite significant differences in the quality of the investment climate in which these enterprises operate.”

In addition, most studies include firm size as one of the explanatory variables of employment growth, but do not examine whether firm size moderates the effect of other variables (for example: is the effect of innovation on employment growth different for small and large firms?). A few notable exceptions are the studies by Aterido et al. (2007), Aterido and Hallward-Driemeier (2010), and Aterido et al. (2011). Their results show that it is important to control the heterogeneity within the SME size class. Both prevalence and effects of business regulations differ between size classes, even within the SME population. This is often ignored in other studies, which either ignore micro firms or combine them with small firms into a single size class.

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47 The human capital of employees is positively related to employment growth. Regarding the human capital of the employer (business owner), the results are mixed.

## 5 The quality of jobs in SMEs

### 5.1 Lack of studies on job quality in SMEs

The quality of jobs concerns the well-being of employees. In the context of development strategies, providing work alone may not be enough to effectively address poverty issues. The earnings of the new job need to be above the poverty line of a country, in order for people to sustain themselves and their families. Other aspects, such as the provision of retirement benefits or insurance against accidents or illness are also important. This chapter examines available evidence on the quality of jobs provided by SMEs in emerging and developing countries.

There is a broad consensus that the quality of jobs is a multidimensional concept that covers many different aspects, varying from wages, job security, formal training and (flexibility in) working hours to health implications of work, work autonomy and the meaningfulness of work. There is, however, less agreement regarding which exact dimensions should be distinguished and which indicators should be used to measure the quality of jobs. This has long been debated in various scientific fields and by various organisations (De Kok et al., 2011; ILO, 2012b). For our literature review, we therefore, used various search terms that are related to different aspects of job quality or decent work, based on the ILO (2012b)<sup>48</sup>.

The quality of jobs has often been studied, however, mostly from the perspective of employees (based on employee surveys or on case studies). These studies generally do not examine to which extent the job quality varies between enterprises of different sizes. The studies that do account for firm size are mostly concerned with jobs in developed countries. The results of our literature review indicate that there are hardly any empirical papers on the relationship between firm size and (aspects of) the quality of jobs in developing or emerging countries. Only a handful of studies have been identified and most of them are related to wages (4) or employment security (3). Only one study has been found that discusses other aspects of job quality<sup>49</sup>.

### 5.2 Adequate earnings

For developing countries, empirical studies emphasise the wage gap that exists between those who work in the formal and in the informal sectors. Informality is widespread in many developing and emerging countries, which justifies a careful examination of a potential difference in earnings (Ayyagari et al., 2007).

Bucheli and Ceni (2010) compare the wages of formal and informal employees in Uruguay using data from a household survey. They find that most informal workers are employed in (informal) micro enterprises with fewer than 10 employees. For this case, their

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48 Please refer to Annex II for an overview of the search terms that we have used.

49 In addition, De Kok et al. (2011) report information on various aspects of job quality for a group of 37 European countries, including four emerging countries (Albania, Romania, Serbia and Turkey). This study also examines differences between size classes, however, only at the aggregate level of all 37 countries. As such, it does not provide information on the relationship between firm size and quality of jobs for emerging countries.



analysis confirms a general held view that workers in informal enterprises earn less than workers in formal enterprises.

Likewise, Messier and Floro (2008) examine differences in the earnings of workers in formal and informal employment in urban Ecuador. On average, workers in formal employment are more likely to have adequate earnings than workers in informal employment (a person's earnings are considered adequate if they are enough to support themselves and one other family member above the poverty line). There are some exceptions, however, related to the sector where the informal employment occurs. In particular, informal transport drivers are more likely to have adequate earnings than workers in formal employment. However, this mostly comes at the cost of very long working hours.

It may be the case, however, that this difference between informal and formal employment is caused by an underlying difference in earnings between small and large enterprises. This is at least suggested by Falco et al. (2011). Having studied the urban labour markets of Ghana and Tanzania, they find a wage gap between the informal and formal sector, but this wage gap disappears once they correct for human capital, firm size and employee characteristics. Rather than being employed in the formal or informal sector, it is the size of the firm that determines the level of earnings of a worker. Earnings rise with firm size for workers with similar characteristics and this holds for the formal as well as the informal sector.

There are many studies available that confirm the presence of a firm size wage gap (see e.g. World Bank, 2012 and De Kok et al., 2011 for an overview). Nevertheless, De Kok et al. (2011) note that at least in the developed countries a non-linear relationship exists between firm size and earnings; in various European countries micro enterprises pay a higher average wage than small firms. The results mentioned before suggest that it is not likely that this relationship will also exist in developing and emerging countries.

### 5.3 Stability and security of work

Another dimension of job quality is stability and security of work. This is related to whether the worker can expect to have a reliable and long-lasting employment relationship (ILO, 2012b). There is some evidence that this aspect differs between firms of different sizes.

The level of employment security is lower amongst employees of start-ups. New firms are more likely to fail and exit the market when compared to incumbent firms. Since new companies generally start off with being small, this implies that the rate of entry and exit is higher amongst the SME size class. Therefore, one may expect that employees in the SME sector tend to have less stable and secure jobs, when compared to workers in larger enterprises.

Scant empirical evidence for emerging and developing countries confirms this reasoning. For a sample of 16 emerging and developed countries, Haltiwanger et al. (2010) find that gross job reallocation rates (the sum of the absolute values of job creation and job destruction) are higher amongst smaller firms and decrease with firm size. The gross job

reallocation rate also varies between sectors and countries, but the size-class effect is much stronger<sup>50</sup>.

Only two studies regarding job reallocation rates in developing countries have been identified (Shiferaw and Bedi, 2010; Klapper and Richmond, 2011). For Ethiopia, gross job reallocation rates increase with the share of small establishments in an industry, indicating that job creation and destruction rates are higher amongst smaller establishments<sup>51</sup> (Shiferaw and Bedi, 2010). Klapper and Richmond (2011) examine job creation and job destruction in Côte d'Ivoire. Their results suggest that in Côte d'Ivoire, entry and exit of enterprises account for a relatively large share of total job creation and job destruction rates, as compared to the emerging and developed world. Unfortunately, their study does not compare job creation and job destruction rates across size classes.

Further evidence for the relationship between firm size and employment security is found for Chile, where worker flows in micro firms (1–10 employees) account for a larger share of employment than worker flows in larger firms (Landerretche, 2007). Although worker flows should not be confused with job flows (and therefore cannot be compared directly with the results from Haltiwanger et al., 2010), these findings do suggest that employment security is lower amongst micro enterprises than it is amongst larger enterprises.

## 5.4 Other aspects of job quality

Only one study has been identified that compares job quality aspects of SMEs and large firms in the formal sector with regards to other aspects of decent work. Based on data of the World Bank Enterprise Surveys, the International Finance Corporation (2012a) has undertaken an empirical investigation into the amount of formal training offered by firms of different sizes. They find that SMEs are less likely to offer training to their workers (Figure 7) than larger firms. This is consistent with evidence from the developed world (De Kok et al., 2011). The IFC report also stresses that the amount of companies investing in their workers' education is higher in developed countries.

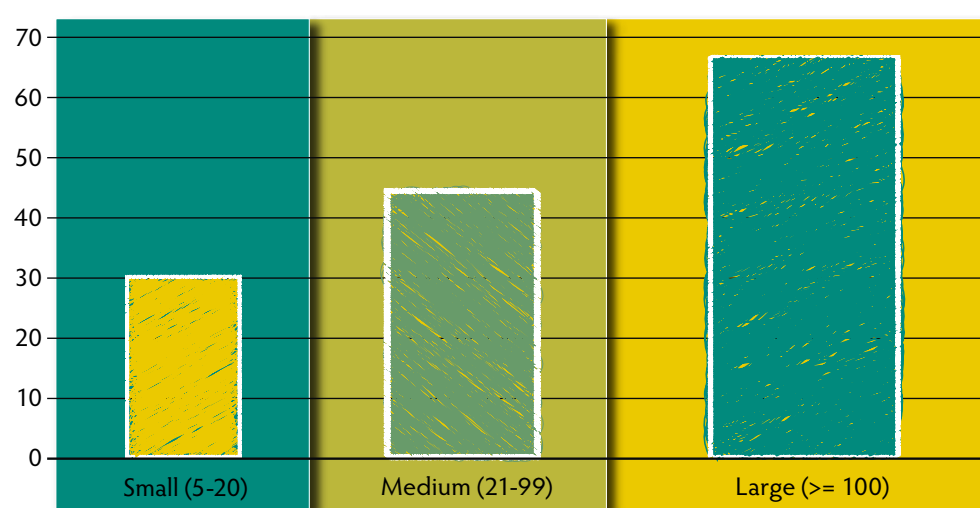
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50 Variance analysis (Anova) is used to analyse the variation in the gross job reallocation rates. The available data includes observations for different countries, sectors and size classes, for several years. Amongst others, the results show that 47% of the variance in gross job reallocation rates can be explained by the size class.

51 Shiferaw and Bedi (2010) use the following firm size classification; small: 10–49 workers; large: 50 or more workers. Firms employing less than 10 workers are not included in their database.

**Figure 7:**  
Percentage of firms offering training to their workers, by size class

Source: IFC (2012a), Figure 14



Regions included are Sub-Saharan Africa (SSA), Eastern Asia and the Pacific (EAP), Europe and Central Asia (ECA), and Latin America and the Caribbean (LAC).

In addition, the literature search identified a study (for Chile) that compares quality aspects of jobs of self-employed (who are classified in the informal sector) with employees in the formal sector (Cassar, 2010). This study examines the relationship between job satisfaction and employment characteristics such as income, job protection and health and safety conditions at the workplace (including work-related injuries and workplace facilities such as adequate toilets and clean water). In this study, job protection refers to formal arrangements that aim to protect employees against negative shocks related to employment (this includes, for example, entitlements to sick leave, retirement benefits or having a permanent contract). By definition, self-employed lack any kind of job protection. In addition, the results show that self-employed workers are also worse off in terms of their workplace facilities. In contrast, employees in the formal sector are more likely to do dangerous and heavy work and suffer from accidents. No explanation is offered for this finding. Despite the fact that self-employed workers are deprived from decent workplace facilities, which are highly valued by Chilean workers, being self-employed does not yield a lower amount of job satisfaction. This suggests that Chilean workers derive a self-employment utility premium from being independent, just as their counterparts in industrialised countries.

## 5.5 Conclusion

Regarding aspects of job quality, there is hardly any empirical data on job quality in different size classes in the developing world. The few studies that have been identified, mainly confirm that size class differences that are reported for developed countries are also found in emerging and developing countries: small enterprises pay lower wages than larger enterprises and the level of job stability and security is lower amongst SMEs. This is the result of employees being more likely to lose their job due to the firm going out of business. The number of empirical studies on this subject is however too small to allow for general conclusions. Before we can determine whether policies that aim to stimulate job creation by SMEs will provide better jobs and effectively address poverty issues, more research is needed in this area.

## 6 Support for SME development

An important question for governments and donor organisations is whether interventions to support and promote SMEs can stimulate job creation and contribute to poverty reduction in developing countries. Additionally, there's the question of how effective and efficient pro-SME interventions are. In this chapter we will discuss the main conclusions from recent empirical studies on this topic. We will start, however, with a brief overview of the main rationales behind SME development policies<sup>52</sup>.

### 6.1 The rationales behind SME development

Governments use different rationales to explain why SME support programmes should be developed and implemented and why pro-SME interventions should be applied. Generally speaking, these rationales can be divided into two main categories: rationales based on economic arguments and/or on social arguments.

#### **Economic and social arguments in favour of SME support programmes**

The economic arguments point out that SMEs are faced with several constraints, making it hard for SMEs to operate on a “level playing field” with large enterprises. SMEs often lag behind larger firms in performance due to constraints, such as: business environment constraints (including lower access to finance and non-competitive real exchange rates), inability to exploit economies of scales in production and imperfect information regarding market opportunities, new technologies and methods of work organisation (World Bank, 2011).

Some of the constraints that SMEs<sup>53</sup> face may even be due to existing regulations. For example, SMEs suffer more from cumbersome bureaucratic procedures for setting up, operating and growing a business. These constraints are more burdensome to them than to their larger counterparts (World Bank, 2011a).

Many governments also introduce SME support programs to address social and developmental challenges, such as poverty reduction, job creation, and promotion of strategic industries and promoting exports (World Bank, 2011a). In most developing countries the SME size class accounts for a large share of employment in the formal non-agricultural private economy (see Chapter 3). Furthermore, it has been stated that the ability of SMEs to develop, invest and grow, becomes an important factor for job creation and poverty reduction (World Bank, 2007; see also Chapter 1).

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<sup>52</sup> In this study, the terms 'development policy' and 'support programme' are used as synonyms. Instruments refer to specific methods used to achieve a desired effect. A policy or programme can include various instruments. An evaluation study can evaluate one or several programmes.

<sup>53</sup> This concerns SMEs from the formal economy. Informal enterprises may not be affected by administrative burdens.

## 6.2 Classification of identified evaluation studies

### Literature search identified a limited number of evaluations

The literature search that we conducted found 15 recent empirical papers that contained methodologically sound quantitative evaluations of SME development policies for developing countries. Given the large budgets that are available world-wide for SME support programs, this is a very low number. To a certain extent, this may be due to the fact that our literature search was limited to evaluations written in English. Another explanation is that many programmes are only evaluated qualitatively, or not at all. For those SME support programmes for which evaluations in English are available, our literature search showed that many of these studies (qualitatively) evaluate the process of the support programme(s) but not the outcome in economic terms. These evaluations are not included in this chapter, since our study is focusing on outcome evaluations on employment effects.

### Selection of evaluated SME support programmes not representative

Given the small number of evaluation studies that we identified, the results that we present in this chapter cannot be easily generalised. It is very likely that they are not representative for the population of all SME support programmes that were in place during the past five years. For example, the restriction to English evaluation studies may result in an underrepresentation of programmes that are not conducted in English speaking countries. In addition, newly developed innovative programmes are also likely to be underrepresented in our small sample (due to a lack of time to evaluate the outcomes of recently implemented programmes).

Nevertheless, it remains important to discuss the outcomes of the evaluation studies that we have identified (in terms of employment effects), as these studies may very well provide the best evidence available regarding the effectiveness of SME support programmes. For this discussion, two dimensions turned out to be relevant: the topics of the support programme and the policy level.

In section 6.3 we will discuss recent evidence regarding the effectiveness of SME development programmes. This will be followed by a short description of some of the empirical results regarding employment effects and pro-SME interventions. It should be noted however, that many comprehensive programmes or SME-support programmes combine different policies and instruments on different levels and that empirical results are therefore not to be generalised.

## 6.3 How effective are SME development programmes?

### 6.3.1 Do SME programmes lead to new jobs?

The literature review has identified a total of 15 recent empirical studies on pro-SME interventions. Out of all impact evaluations, 7 studies explore the employment effects

of the respective programmes<sup>54</sup>. Four evaluations find that the pro-SME interventions did not have an impact on the level of employment of the beneficiary firms, whereas 2 studies report an increase in the number of jobs. Moreover, a comprehensive study that evaluates multiple SME programmes in Central and South-America (Lopez and Tan, 2011), reported mixed evidence. The remainder of this section serves to discuss the recent empirical evidence in more detail, highlighting the reasons why employment effects were or were not encountered.

Regarding the studies that do find that the respective SME programs lead to job creation, one of the studies did not use a control group (Dalberg, 2010), which makes the evidence less credible. Castillo et al. (2010) made use of a fitting methodology and examined the impact of a program that co-finances technical assistance services to SMEs in Argentina. They found that participation in the program led to an average increase in employment of 14%. Employment continued to expand in the second and third year after the firm had received support. In Mexico participation in any SME program yielded on average an increase in employment of 5–6% (Lopez and Tan, 2011). However, the found effects only appeared after 3 to 4 years after programme entry. These findings highlighted the need to track firm performance over a longer period (more than 2 years after programme completion) to accurately capture the effects of SME interventions (Lopez and Tan, 2011).

Since many evaluations take place shortly after closing the programmes, these studies will very likely underestimate the final effects. This is the case for various impact evaluations which report no significant employment effects (Bruhn and Zia, 2011; Karlan and Martin Valdivia, 2011). Nevertheless, Aivazian and Santor (2008) tracked business performance for 4 years after programme completion for the evaluation of a World Bank credit programme in Sri Lanka and did not find any significant results with respect to employment. In Ethiopia, Rijkers et al. (2008) examined a programme that incorporated different types of pro-SME interventions (access to credit, training, subsidised machinery). However, the beneficiary firms did not significantly create more jobs than the control group. For seven SME programmes in Chile, no employment effects were found (Lopez and Tan, 2011). The researchers suspect that this may have been caused by the fact that participating firms already had higher employment levels prior to the treatment, and therefore, benefited from the programmes by increasing their productivity but still keeping employment constant.

All in all, so far little evidence is available on the job creation effects of SME programmes. This is mainly because studies do not take employment variables into account or only measure them for a limited amount of time (up to two years). In order to provide a better answer to the question **“Do SME programmes lead to new jobs?”**, much could be improved in the area of data collection on employment levels of participating firms.

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54 The total of 15 studies includes 3 reports that evaluate programmes to support micro-enterprises, which did not have any employees in the pre-programme period. The main objective of these interventions is to boost revenues and raise family income, rather than increase the number of workers employed. This may explain why these studies do not incorporate the employment effects of the respective measures.

### 6.3.2 Other positive effects?

Lopez and Tan (2011) found several positive effects for providing funds for technology projects and R&D in Chile and fiscal incentives for R&D in Mexico. There are also several other empirical studies that found positive effects on firm performance and investment levels of SMEs if access to finance would be improved (Aivazia and Santor, 2008; World Bank 2012; Karlan and Valdivia, 2011). Lopez and Tan (2011) came to the conclusion that SME support programmes of all types generally do work with regard to improving business performance and boosting revenues. Their study also showed positive effects on wages and labour productivity for different types of support programmes. However, results vary per country and programme .

Evidence is mainly inconclusive regarding programme impact on economic efficiency (Aivazian and Santor, 2008). However, from the research discussed in Chapter 4 we see that enterprises that perform better on innovation, exports and revenues grow faster in terms of jobs. It is due to this that we can state that well executed SME support programmes that support innovation and business performance effectively are likely to contribute to the number of jobs in developing countries.

The impact of pro SME interventions in a developing country is largely dependent on the needs of the SME sector, the political commitment of the local government and the quality of the executing agency and team. The size of the firm, characteristics of the entrepreneur (gender, education etc), type of sector and age of the enterprise are all factors that influence outcomes. Bloom et al (2010) for example showed that small enterprises in developing countries are mostly hampered by a lack of access to finance (up to a 100 employees), but larger enterprises with more than a 100 employees suffer mostly from a lack of formalised management practices and problems with decentralising decision making. For the latter group access to management training and business coaching will most likely have a greater impact on growth.

### 6.3.3 What about the cost-effectiveness of SME support programmes?

In the recent literature very few cost-benefit assessments of SME support programmes have been produced. As a matter of fact, most impact evaluations only examined the effectiveness of the respective programme (i.e. whether the intervention has an impact on business performance), but did not engage in any cost-benefit assessment. Only 3 out of 15 identified evaluations performed an analysis to determine whether the outcomes of the SME support programme outweighed its costs (Table 6).

**Table 6**

Number of empirical papers that examine the effects of different types of SME programmes

Source: Panteia, 2012.

	Employment	Cost-effectiveness
Business environment	0	1
Financial instruments	1	0
Fiscal instruments	1	0
Information and counselling	0	0
Training	2	1
Other instruments	3	1
Multiple programs	1	0
<b>Total</b>	<b>7</b>	<b>3</b>

Karlan and Valdivia (2011) examined the cost-effectiveness of business training for micro entrepreneurs in Peru. Although the training did not have any impact on employment levels, it did lead to higher business knowledge and increased client retention rates for the microfinance institution that offered the training. The improved client retention rate generated a significantly higher net revenue than the marginal cost of providing the training and thereby, improved cost-effectiveness.

A project undertaken by the World Bank to create a better business environment in Rwanda was evaluated as cost-effective (World Bank, 2012a). This programme consisted of various reforms to strengthen the business environment, reforms within the utility services sector and the liberalisation of the tea industry. The benefits included in the analysis (FDI and tea export earnings) were significantly larger than the costs, resulting in a positive Net Present Value of the project. The evaluation reported that the programme also yielded other benefits at macroeconomic level, such as job creation and poverty reduction. However, these gains were neither quantified nor taken into account in the cost-benefit analysis. Moreover, the project management was deemed cost effective.

The remaining impact evaluation performed a limited analysis of the cost-effectiveness of the SME support programme due to lack of data. This concerned the programme for the development of industrial districts in Brazil, a so-called cluster programme. Dalberg (2010) found that the programme's budget and duration fell short to reach cluster self-sustainability in terms of cost-effectiveness.

Due to the scarce availability of cost-benefit assessments, the scope of our literature review is limited regarding conclusions on the cost-effectiveness of pro-SME interventions.

### 6.3.4 Key success factors

There are common characteristics within successful interventions. Effective SME support programmes balance a good design structure with a highly efficient execution. Important aspects are that these programmes (Dalberg, 2010):

- ▶ address the managerial and operational needs of companies;
- ▶ provide comprehensive support to reach long-term sustainability;



- ▶ identify clear and measurable objectives and specific activities at the outset of the intervention;
- ▶ develop long-term partnerships with effective intermediaries such as financial and training organisations with the capacity of complementing or working with a broader framework of needs;
- ▶ set intermediate milestones reflecting more explicit outcomes for the development of a resilient result framework, enhancing the programme's overall impact;
- ▶ work with business membership organisations to increase their capacity to continue providing services after the programme intervention. In the case of developing countries this may mean assisting in the founding of such organisations.

Rather than identifying a specific type of pro SME intervention it is recommended that these aspects are safe guarded and attention is given to the full SME support framework for each type of intervention.

## 6.4 Evaluation results

Governments may support SME development through either generic and/or specific policies (De Koning et al., 1992)<sup>55</sup>. Generic policies focus on all fields of policy where the specific conditions and constraints of the SME size class are taken into consideration. Generic policies can be executed by intervening in the (external) business environment, which will impact all enterprises. Since constraints resulting from market and institutional failures in the business environment affect SMEs more, a positive impact of such policies may be higher for SMEs than for large enterprises (which can rely more on their own resources). For example, large enterprises may be able to put back-ups in place for power outages, while SMEs cannot afford this. Therefore, improvement of the power grid is of greater importance for SMEs.

Specific policies are geared to compensate the weaknesses of SMEs and to ensure that the strengths of SMEs are fully exploited. These policies can target different trajectories or fields which aim to improve business performance, for example, by stimulating exports, cooperation or innovation. These specific policies can also be geared to specific groups of SMEs, such as manufacturing SMEs, Start-ups, fast growing SMEs etc.

Few empirical studies were identified that evaluate generic policies. A possible explanation for the lack of evaluations of generic policies is that quantitative evaluations of generic policies are more complex than quantitative evaluations of specific policies. The difference may also be due to the nature of generic policies. Generic policies do not target employment growth of (specific groups of) SMEs. Instead, they aim to improve macro-economic performance of the enterprise population as a whole. Therefore, evaluation studies are more likely to examine macro-economic performance rather than the impact on employment growth of individual enterprises.

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<sup>55</sup> Our terminology differs from the original terminology in De Koning et al. (1992), who distinguished between integrative (=generic) and functional (=specific).

### **Direct employment effects are unknown for generic policies**

Some of the evaluation studies that we identified evaluate generic policies. The World Bank (2012a), for example, evaluated a broad programme to improve the competitive climate and streamline the national business environment in Rwanda (including access to finance). Some aspects of this programme were geared specifically to SMEs, but a large part of the programme was aimed at improving the business environment for all enterprises.

None of the identified evaluation studies evaluated the impact of these generic policies on employment growth of individual enterprises. Nevertheless, the evaluation results showed that these particular policies may be seen as good practices on how to stimulate access to finance for SMEs, which is a condition for firm growth and job creation.

### **Some evidence on employment effects of financial and fiscal instruments**

There are some studies that measure effects of financial and fiscal instruments on employment levels.

The bulk of recent empirical literature finds that alleviating credit constraints would boost small firms' growth (Aterido et al., 2007; Gebreeyesus, 2009; Dinh et al., 2010; Nkurunziza, 2010; Aterido et al., 2011; Fox and Sohnesen, 2012; Dinh et al., 2010). An important finding that emerges from these studies is that the positive effect of having a loan or external finance on employment growth is the largest for micro and small firms. From several studies it becomes clear that government support can play an important role in improving access to finance for SMEs in developing countries (Mazanai and Fatoki, 2011; World Bank, 2012a).

An example of a best practice is an SME-support programme from Argentina where a subsidy (up to 50% of real expenditures on professional services and technical assistance) was given to SMEs with a good fiscal and social track record. This SME support programme actually took place during an economic crisis, but showed positive results on employment (+14,3%) and a positive, although smaller, impact on real wages (+1,4%) and the probability of exporting (+1,8%) (Castillo et al, 2010).

For Mexico, Lopez-Acevedo and Tinajero (2010) provide empirical evidence that fiscal incentives for innovation resulted in more employment. The main objective of this programme was to increase annual spending on research projects and technology development. An explanation of these positive results may be found in pre-selection. Only SMEs that had already invested in research and development applied for these tax returns.

### **No evidence on employment effects through information and counselling**

This is a rather broad category of instruments, with a wide range of advisory services. Business support organisations, for example, generally play an important role here. No recent studies were found regarding direct employment effects. Lopez and Tan (2011) found positive effects on sales, labour productivity and wages from technical assistance

programmes that provided support to business processes such as marketing, product design, production processes, ICT, environmental issues etc.

### **Limited evidence on employment effects through training**

An additional instrument is business training<sup>56</sup> for both for entrepreneurs and employees. This type of instrument is often geared to specific weaknesses of SMEs and can for example be a condition for receiving other types of support. Empirical evidence of the effects of this type of instrument on employment rates in developing countries over the past five years is lacking, although there is some recent evidence on the positive effect of training on 'self-employment' levels and the indirect effects on employment after several years of finishing the training (McKenzie and Woodruff, 2012).

### **No evidence on employment effects through other instruments**

Governments may either select a single instrument for obtaining objectives or provide a package of instruments in which different instruments strengthen each other to reach the set policy objectives (De Koning, 1992). Some other types of instruments are "network formation", "value chain promotion", "cluster development", and comprehensive programmes where different instruments are combined. Evaluating these comprehensive programmes is a daunting task in itself, considering it is very difficult to find control groups and distinguish between the different parts of the programmes. Lopez and Tan (2011) mainly found positive effects on sales, labour productivity and wages for cluster programmes, where inter-firm cooperation is promoted. So-called comprehensive programmes showed positive effects in both Chile and Peru. Similar programmes in Colombia and Mexico showed mixed results however, and were most effective for manufacturing industries. Clear evidence on direct effects on employment is lacking.

## **6.5 Conclusion**

This literature review shows that there are few sound empirical evaluations<sup>57</sup> where effects can be directly related to a certain type of instrument or policy. Evaluations take place after programmes close and mostly evaluate 'classic types' of instruments. Current information on pro-SME-interventions is too limited to perform a meta-analysis or provide an overview of innovative or 'new' types of instruments.

There is no single ideal pro-SME intervention, however, there are important reasons for developing countries to support SMEs since a majority of the evaluations show positive results on pro-SME interventions within these countries. From the reports and articles we reviewed it can be argued that, in order to develop a competitive SME sector, governments and donor organisations need to concentrate their efforts mostly on the following components, while carefully keeping the afore mentioned key success factors in mind:

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<sup>56</sup> This regards training of entrepreneurs or employees specifically geared for improving business operations, e.g. training outside of the regular educational system.

<sup>57</sup> It should be noted that this review has been limited to evaluations from the past 5 years that were available in English.

- 1 Creating a favourable business environment by removing macroeconomic and institutional obstacles that affect SMEs disproportionately and build support capacity through business support organisations.
- 2 Resolve market failures in financial markets, by providing sufficient access to finance for SMEs.

Following these two components policymakers should identify and tackle the specific needs of SMEs or sub-groups of SMEs with, for example, (complementary) non-financial measures for stimulating technology development and innovation, as the market often does not provide enough stimulus for innovation.

## 7 Summary and recommendations

This chapter starts with a summary of the main findings from the recent empirical publications that we have identified. The literature review also identified various research gaps (such as a lack of data on certain topics and/or certain sectors of the economy) and suggestions on how to improve certain methodologies. These will be discussed in Section 7.2. Many of the publications that we have identified also include policy recommendations, based on the outcomes of their research. The final section of this chapter includes an overview of these policy recommendations.

### 7.1 The role of SMEs in job creation: main findings

This study set out to examine four research questions, based on a literature review of recent empirically sound studies. The literature review resulted in a long-list of 119 empirical studies, from which a short-list of 46 key pieces was selected. We summarise the main findings from these publications.

#### **What is the role of the SME size class in employment levels?**

Although considerable variation between countries exists, in terms of employment levels the SME size class is the dominant size class in countries across the world. For the majority of developing and emerging countries, the share of the SME size class (defined as formal enterprises with 5 to 250 employees) employs more than half of the total employment in the formal private sector (defined as all non-agricultural enterprises from the business sector with at least 5 employees). The median employment share of the SME250 size class is 67%

Keep in mind, however, that this only refers to a comparison of SMEs to large enterprises in the formal, non-agricultural private sector. In many countries, this accounts for less than half of the total employment. Particularly in Sub-Saharan Africa, micro enterprises, the informal sector and agricultural enterprises provide employment to a substantial share of the labour force, not only now but also for the foreseeable future.

Nevertheless: assuming that micro and small enterprises also dominate in the informal and agricultural sectors, it seems justified to conclude that across all sectors of the economy, micro, small and medium enterprises account for the largest share of employment.

#### **Business dynamics: what is the role of SMEs and the SME size class in employment creation?**

Regarding the employment contribution of the SME size class, there is evidence that “Small is still beautiful”. Available studies suggest that more than 50% of total employment creation in the formal business economy<sup>58</sup> can be attributed to the smallest size classes (enterprises with 5 to 99 employees). This seems to be the case for the majority of all developing and emerging countries..

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<sup>58</sup> This includes all formal enterprises with at least 5 employees in the business sector; agriculture and the public sector are excluded, as are all enterprises with less than 5 employees and all informal enterprises.

At enterprise level, the evidence that small enterprises perform better than large enterprises is more convincing. Generally speaking, the available studies suggest that smaller and younger enterprises grow at a faster rate than larger and older enterprises, even when other firm characteristics and characteristics of the business environment are taken into account.

Apart from size and age, innovation, exports and high capital intensity are found to boost employment growth. The business environment that a firm operates in matters as well. It is recognised that a low quality institutional framework hampers SMEs from growing into medium-sized and large companies, causing the “missing middle” phenomenon (Dinh et al., 2010; IFC, 2012a). Among the institutional factors, lack of access to finance has been identified as one of the biggest constraints to firm growth by the bulk of the empirical literature. Regulatory burden and poor infrastructure also negatively affect SME employment growth.

### **What is the quality of the jobs that are provided by the SME size class?**

Almost no empirical evidence is available on job quality of different size classes in the developing world. Nearly all of the studies that were identified in our literature search concern only two aspects of job quality: adequate earnings and stability and security of work. The few studies that have been identified, mainly confirm that size class differences that are reported for developed countries are also found in emerging and developing countries: small enterprises pay lower wages than larger enterprises and the level of job stability and security is lower among SMEs. This occurrence is due to the fact that employees are more likely to lose their job due to the firm no longer existing.

How does this help us in answering the question whether a policy based on job creation in SMEs will provide better jobs and effectively address poverty issues? This all depends on where the additional employees that will be employed by the SMEs originate from. If SME support policies increase employment in SMEs at the cost of employment in large enterprises, then most people involved (and the economy as a whole) will very likely be worse off. If, however, employment increases in the SME size class in the formal economy results from decreases in employment levels amongst micro enterprises, informal enterprises and/or agricultural enterprises, then the studies on remuneration of employees suggest that the employees involved will be better off (at least in terms of income).

### **What is known about interventions to support SME development?**

There is no single ideal pro-SME intervention; instead, a majority of evaluations shows positive results of various kinds of pro-SME interventions in developing countries. From the reports and articles we reviewed it can be argued that, in order to develop a competitive SME sector, governments and donor organisations need to mostly concentrate their efforts on the following components, while carefully keeping certain key success factors in mind; first governments need to create a favourable business environment by removing macroeconomic and institutional obstacles that affect SMEs disproportionately and build support capacity through business support organisations. Secondly

governments in developing countries need to resolve market failures in financial markets, by providing sufficient access to finance for SMEs. Thirdly governments need to identify and tackle specific needs of SMEs with (complementary) non-financial measures. Specific focus should be on stimulating technology development and innovation, as the market often does not provide enough stimulus.

## 7.2 Research recommendations

### **Collect employment data on other sectors of the economy**

The literature review has shown that studies regarding the contribution of SMEs to employment growth in developed and emerging countries (as discussed in Chapter 4) tend to be based on enterprise surveys (in contrast to studies regarding the quality of jobs that are mostly based on household surveys). This has important consequences for the generalisation of the results: the results are restricted to the population of registered enterprises from the non-agricultural private sector. In addition, most of these studies exclude micro enterprises.

Further research on the relevance and employment growth of different types of enterprises therefore requires additional data and different methods of data collection. Once such data is available, a more complete picture can be presented on the role of different groups of enterprises in the job creation process: not only the role of large enterprises and formal SMEs, but also of informal SMEs, formal and informal micro enterprises and agricultural enterprises.

### **Refrain from using 'classification by base-year size' to determine contribution of SME size class to employment growth**

As we have discussed in section 4.2, it is difficult to determine which share of the net employment creation in a country can be attributed to the SME size class. An important problem in this respect is how to deal with firms that cross size class boundaries. The main solutions to this problem that have been suggested in the past are classification by base-year size, classification by average size and dynamic classification. According to recent studies, the results of classification by base-year size are biased towards the smallest size class. These studies therefore, suggest the use of another classification method instead (Neumark et al., 2011; De Kok et al., 2011; Haltiwanger et al., forthcoming).

These insights are very recent, which may explain why only one of the empirical studies amongst developing and emerging countries that we have identified has applied either classification by average size or dynamic classification. A general recommendation for future empirical studies is therefore to avoid using 'classification by base-year size' in studies regarding the contribution of the SME size class to employment growth. We recommend using 'dynamic classification' instead. Although this method leads to similar results as 'classification by average size' and it has not yet received as much attention as 'classification by average size', it does have one major advantage: dynamic classification is the only methodology that can be applied without access to micro data. Annual macro statistics on the number of enterprises and the employment levels for each size class

suffice to determine the contribution of different size classes to employment growth (De Kok and De Wit, 2013).

### **Be more precise on how the regulatory framework is measured**

Various empirical studies indicate that an adverse regulatory framework has a negative effect on the employment growth rates of SMEs (Aterido et al., 2007; Aterido and Hallward-Driemeier, 2010). It is however not always clear how the regulatory framework has been measured (which indicators have been used). As a result, it remains unclear exactly which types of business regulations are most constraining to firm growth. We therefore recommend that future studies should be more precise regarding the indicators used and (if possible) to differentiate between the different dimensions of the regulatory framework (such as employment protection, taxes, start-up regulations, etc.).

### **Regional differences in long-term effects of business dynamics**

Recent empirical studies amongst developed countries show that the long-term employment effects of firm entry tend to be large, but that they vary between countries and regions. While in most countries and regions the net effects of firm entry on employment growth tends to be positive, for some regions the long-term employment effects turned out to be negative (see section 4.4).

This makes it very relevant to study the size and sign of these long-term effects for various developing and emerging countries and regions. A lack of adequate data however, may make this very difficult. It is worthwhile to examine if World Bank entrepreneurship indicators can be combined with country-level indicators to allow for research into this relationship.

### **Investigate job quality of SMEs**

So far little empirical findings exist on the job quality of SMEs in developing and emerging countries. The literature review did not identify any empirical evidence on the following dimensions of the job quality (ILO, 2012b):

- ▶ employment opportunities;
- ▶ decent working time;
- ▶ combining work, family and personal life;
- ▶ work that should be abolished;
- ▶ equal opportunity and treatment in employment;
- ▶ safe work environment;
- ▶ social security, and
- ▶ social dialogue, employers' and workers' representation.

There are a few studies on job quality (usually based on household surveys), but these studies tend to ignore the size class dimension. For future household surveys, we



recommend to include a few questions regarding the number of employees in the establishment and whether or not the establishment is thought to be a formal enterprise. This information may then be used, not only to differentiate between job quality of formal and informal enterprises, but only between job quality of micro, small, medium and large establishments.

### **Coordinating role for national statistical offices**

In many countries, multiple SME support programmes coexist. Firms can participate in various programmes simultaneously. While the availability of multiple interventions is beneficial for small firms, it poses an additional challenge to the impact evaluation of the respective policies. Often it is unclear in what other programmes a firm has participated, which can bias the results of an impact evaluation study (Lopez-Acevedo and Tan, 2011).

A solution to this problem might be to create a central database that gathers relevant data on the different SME programmes in a specific country. This should at least contain an up-to-date overview of all on-going support programmes that are (partly) publicly financed and for each programme a list of all participating enterprises and organisations. Such a database could be constructed and maintained by the national statistical office, but also by a national institute or department that monitors the progress of support programmes.

Alternatively, questions on participation in support programmes could be included in annual surveys of the statistical bureau. Researchers could then use these data to compare the performance of different SME programmes. In addition, having access to these data will facilitate the assignment of an appropriate control group for an impact evaluation.

### **More employment evaluations of SME support programmes are needed, over a longer time**

The literature search only identified seven evaluations of SME support programmes that included the employment effects of these programmes. There is clearly a need for more evaluations that include employment effects.

In addition, to improve the quality of such impact evaluations, we recommend gathering data for a longer period after the implementation of a programme. Many programmes only track outcome variables for a relatively short amount of time, while the quantitative effects of certain interventions only show after approximately 4 years and may continue to increase over time (Lopez and Tan, 2011). Measuring outcome variables of interventions up to 10 years will help to capture the lagged and long-term effects of interventions. This will allow donors and governments to better assess the impact of their policies. Considering that many evaluations take place shortly after closing the programmes, these evaluations will very likely underestimate the final effects.

At the same time, it is obvious that evaluations over longer periods are more complex and therefore, more costly and that the political relevance of (and interest in) evaluations after such a long period may very well be lower. We therefore recommend that qualitative evaluations take place shortly after completing the programme or pro-SME

intervention, but quantitative analysis may better be postponed until at least 4 years after the programme is completed.

### **Cross-country policy review on SME support programmes**

There are many differences in the methodologies that are applied to evaluate SME support programmes. This makes it difficult to compare the results, even for similar programmes. We therefore recommend that international organisations develop a standard of which set of methodologies are suitable when evaluating programmes (or, at least on how to report on the outcomes of these programmes).

Perhaps even more important, is that we recommend that if evaluation studies are published in a language other than English, that an English executive summary will be published separately. This would facilitate the identification of key success factors and regional differences that contribute to success or failure.

## **7.3 Policy recommendations**

The policy recommendations of the identified empirical studies refer to three main recommendations: improve the business environment, improve access to finance, and stimulate the entry of new enterprises.

### **Improving the business environment and market conditions**

Various studies stress the adverse effects of a low quality of the institutional framework on employment growth of SMEs (Aterido et al., 2007; Gebreeyesus, 2009; Dinh et al., 2010; Nkurunziza, 2010; Aterido et al., 2011). Alleviating the constraints that currently hinder SMEs from growing into larger firms will generate more growth at firm level and consequently a higher level of job creation within a country (IFC, 2012a). Governments can play an important role here by:

- ▶ Improving upon the quality of legislation; improve clarity, enforcement and education/information on legislation, and remove redundant legislation.
- ▶ Making it easier to start a new enterprise, for example by providing good information and 'one-stop-shops' for founding a new business.
- ▶ Reducing administrative burdens for new and existing SMEs, by improving administrative processes, simplifying procedures etc.

It should be borne in mind that business regulations are not a negative factor per definition. A low administrative burden is good for SMEs who have limited capacity and manpower. However, a good quality of business regulation and enforcement of business regulation is also necessary for creating a 'level playing field' for SMEs and for improving working conditions and quality of SMEs.

### **Improve access to finance**

According to Balamoune-Lutz et al. (2011), "African countries can gain substantially from policy interventions aimed at developing information on borrowers and creditors, as this would facilitate identification of profitable activities and increase access to credit for

new entrepreneurs." (page 12). They suggest to focus on three interventions: (1) design and enforcement of legal rights, especially targeting assets that can serve as collateral; (2) fostering competition in the banking sector, especially in terms of access to credit; (3) developing and strengthening institutions and mechanisms for access to creditor and borrower information. As the authors argue, "It is particularly important to design and enforce property rights that enable entrepreneurs to utilize their durable assets, such as land, to secure bank loans. In most African countries, this is not possible as households do not have formal titles to their land, and the constraint is often particularly severe for women-headed households" (page 14).

### **Stimulating job growth in the long run by stimulating entry of new enterprises**

As discussed in Chapter 2, in the long run the effects of new business formation on employment generation tends to be positive. This is mainly because it stimulates competition and innovation. The additional employment that is generated may be generated by the newcomers (job creation by new/young enterprises) but also by the incumbent enterprises (job creation by growing enterprises).

Policies that aim to stimulate entry of new firms should make sure that they do not disturb the selection processes that follow. For example, policies that support new entrants with specific subsidies distort the selection process because they hinder incumbent enterprises. Fritsch (2007) therefore argues that "any policy that supports new firms after they have been set up may be considered as being questionable. Policy directed at stimulating entry....should abstain from any interference with fair competition" (page 13).

It would be too simple to assume that more entrepreneurship is always better for a country's welfare. Overall, the importance of opportunity-based entrepreneurship and/or ambitious entrepreneurship suggests the need for greater selectivity and focus on national entrepreneurship policy. It is however, notoriously difficult to 'pick the winners'. Instead of trying to do so, governments can do a number of things to facilitate entrepreneurial choice by appropriately qualified individuals and solve problems faced by growing firms (reduce regulatory burdens, etc.; Autio, 2007) and by establishing favourable conditions for knowledge transfer, including adequate intellectual property protection and a well-functioning venture capital market (Valliere and Peterson, 2009). These policies may not only improve the share of opportunity-based entrepreneurs, but also increase the survival rates of all enterprises.

# Annex I:

## Methodology of literature review

In this annex we will describe how the literature review has been performed.

### Step 1: Identification of relevant search terms

The purpose of the literature search is to identify recent publications that deal with one of the following four main research questions:

- 1) What is the role of the SME size class in employment creation?
- 2) Which factors affect how (and how much) individual SMEs contribute to employment growth?
- 3) What is the quality of jobs provided and created by the SME size class?
- 4) What is known about interventions to support SME development?

Accordingly, appropriate search terms have been designed in order to capture all relevant recent material on these subjects. The primary objective was to be as complete as possible, i.e. to minimise the probability that relevant publications would be missed, because a certain search term was not included. As a result, the list of search terms included many synonyms for certain terms (for example, more than 20 different search terms were suggested that could refer to SMEs, such as SME, SMEs, small and medium-sized enterprises, small enterprises, micro enterprises, small and medium firms, small and medium companies, etc). The final list includes 181 different search terms, which are listed in Annex II.

### Step 2: Selection of relevant sources

The literature search has been conducted within the following on-line sources:

- ▶ [www.ideas.repec.org](http://www.ideas.repec.org). The Research Papers in Economics (RePEc) database currently contains over 1.2 million research pieces, including working paper series from universities across the world and international organisations such as UNU-wider, OECD, ILO and the World Bank. The literature search would be restricted to articles, papers and book chapters from 2007–2012.
- ▶ [www.jstor.org](http://www.jstor.org). The literature search in Journal Storage (JSTOR) would be restricted to articles from 2007–2012, from the following disciplines: economics; development studies; political science; public policy & administration.
- ▶ [www.gemconsortium.org](http://www.gemconsortium.org). The website of the Global Entrepreneurship Monitor.
- ▶ [www.3ieimpact.org/evidence/impact-evaluations](http://www.3ieimpact.org/evidence/impact-evaluations). The International Initiative for Impact Evaluation database includes literature on pro-SME interventions.
- ▶ [www.enterprise-development.org/page/library/](http://www.enterprise-development.org/page/library/). The DCED Knowledge Portal contains literature on private sector development.

- ▶ [www.ifc.org/ifcext/resultandimpactblog.nsf](http://www.ifc.org/ifcext/resultandimpactblog.nsf). The Open Source Study: Assessing Private Sector Contributions to Job Creation and Poverty Reduction. This is an open source study on SME employment creation around the world.
- ▶ [www.worldbank.org/reference/](http://www.worldbank.org/reference/). In particular, recent papers of the Financial and Private Sector Development Department of the World Bank may be related to our topic.
- ▶ <http://search.proquest.com/>. The database ABI/Inform contains, among others, various SME journals.

Whenever the search options of the respective source permitted, our objective was to apply a Boolean search methodology that would include all of the predetermined search terms (for example, by searching for (entrepreneurship OR SME OR private sector) AND (developing OR emerging OR third world OR emergent OR underdeveloped OR undeveloped OR in transformation OR least developed OR low income OR middle income) AND (countries OR nations OR economies OR world) AND (employment OR job OR firm OR business) AND (creation OR development OR addition OR generation OR growth OR development OR net growth rate OR promotion)).

### **Step 3: Application of the methodology**

We have explored the seven databases mentioned above and have hereby set the time frame between 2007–2012 to only find recent articles. We aimed to make use of all search terms that were determined up front, by searching for them in the abstracts of the publications included in the databases. However, due to limitations within the search options of the respective databases, it was not feasible to include all possible synonyms in all sources at once. Therefore, we had to test and adapt search terms in order to come up with smart combinations.

Whenever a specific search resulted in an acceptable number of publications (no more than 200 titles), the titles and abstracts of these publications were read to filter out any papers that turned out to not be relevant. The remaining publications were saved. In case a search yielded an unmanageably large number of articles (more than 200 titles), we adapted the search terms in order to narrow down the results. Where the narrowing down of the number of results did not work out (i.e. still a very large number of articles), we chose instead to examine the first 200 results.

In case the amount of papers in the respective database was very small (for example in the GEM database), we chose instead to explore the website manually, thereby, identifying the most relevant articles.

### **Step 4: Final selection of relevant papers**

The previous steps yielded a total of 119 papers. 30% of the publications are from three sources: 22 working papers from the World Bank, 8 working papers from the Inter-American Development Bank and 7 articles from Small Business Economics.

The final step in the search methodology approach consisted of reading the full text of the identified papers. Based on its content, we established whether this paper would

provide an adequate answer to one of our research questions. Hereby, the main criterion was whether the paper had a solid empirical base, implying the following:

- usage of micro-level data (at the level of individual enterprises or households);
- description of data collection process;
- an empirically sound methodology.

In case the paper did adhere to these criteria, we considered it as a key piece and have reported relevant findings in this literature review.

The literature search identified a total of 46 key articles on SME employment creation around the world. The importance from the World Bank is even more pronounced amongst the key pieces, where they account for more than 30% (15 of the 46). Table 7 provides an overview of the distribution of the key papers according to the research question and the level of development of the countries involved. Please note that the table need not add up, as an article may discuss various research questions and employ data from different countries at the same time.

**Table 7**

Distribution of identified key literature according to research question and coverage of countries

Source: Panteia, 2012

Research question	Coverage of countries			
	Developing	Emerging	Developed	Total
1 SME employment creation	6	5	6	10
2 Factors explaining firm growth	10	11	6	14
3 Quality of jobs in SMEs	4	5	3	10
4 Results SME support programs	8	9	1	16
<b>Total</b>	<b>25</b>	<b>28</b>	<b>14</b>	<b>46</b>

According to the objective of our study, we differentiate the discussion of empirical evidence and implications according to the level of development of a country. In order to distinguish between developed, emerging and developed countries we have used the United Nations classification of countries, which is based upon per capita income<sup>59</sup>. We classified high income countries as developed countries. Countries that fall into the upper middle income range are defined as emerging economies. Lastly, we assume that lower middle income and low-income countries are developing nations. The only exception to this rule is India, which is part of the lower middle income countries, but is also considered a BRICS country and should therefore, be classified as an emerging economy.

<sup>59</sup> The United Nations classification of countries can be found at [http://www.un.org/en/development/desa/policy/wesp/wesp\\_current/2012country\\_class.pdf](http://www.un.org/en/development/desa/policy/wesp/wesp_current/2012country_class.pdf)

## Annex II: List of search terms used

SMEs, entrepreneurship, private enterprises	Employment creation, poverty reduction	Empirical papers	Developing countries	Comparison of main findings with developed world
Synonyms	Synonyms	Synonyms	Synonyms	Synonyms
Entrepreneurship	employment creation	empirical evidence	developing countries	stage of development
SME's	employment development	evaluation	developing economies	stages of development
SMEs	employment addition	results	developing nations	level of development
SME	employment generation	result	emerging countries	developed countries
entrepreneurial activities	employment growth	impact	emerging economies	developed nations
entrepreneurs	job creation	quantitative studies	emerging nations	developed world
small business	job development	study	countries in development	industrialized countries
small and medium-sized enterprises	job addition	report	nations in development	first world
small and medium sized enterprises	job generation	analysis	economies in development	first world countries
small and medium enterprises	job growth	evidence	third world	first world nations
small and medium businesses	create jobs	supportive evidence	third world countries	first world economies
small and medium business	employment	assessment	third world nations	developed economies
small and medium firms	jobs	assessing	third world economies	industrialized economies
small and medium companies	economic development	findings	emergent nations	advanced countries
micro enterprises	alleviate poverty	surveys	emergent countries	advanced nations
micro firms	diminish poverty		emergent economies	advanced economies
micro companies	poverty reduction		underdeveloped nations	high income countries
small and medium-sized businesses	net job growth rate		underdeveloped countries	high income nations
small and medium sized businesses	net employment growth rate		underdeveloped economies	high income economies
small and medium-sized companies	firm growth		third world development	
small and medium sized companies	business growth		undeveloped countries	
small firms	employment promotion		undeveloped nations	
small businesses	job promotion		undeveloped economies	
small companies			undeveloped world	
small enterprise development			developing world	
SME development			emerging world	
start ups			emergent world	
young firms			countries in transformation	
established firms			nations in transformation	

SMEs, entrepreneurship, private enterprises	Employment creation, poverty reduction	Empirical papers	Developing countries	Comparison of main findings with developed world
private sector			economies in transformation	
			least developed countries	
			least developed nations	
			least developed economies	
			low income countries	
			middle income countries	
			low income nations	
			middle income nations	
			low income economies	
			middle income economies	
			LDCs	
			LDC's	



Question 1 (size class)	Question 2 (key characteristics)	Question 3 (quality of jobs)	Question 4 (results SME support)
Synonyms	Synonyms	Synonyms	Synonyms
size class	variables	quality jobs	support
firm size	factors	quality employment	programme
	characteristics	job quality	program
	key characteristics	job satisfaction	programmes
	parameters	work quality	programs
	determinants	decent work	contribution
		decent job	promotion
		better jobs	promote
		working hours	interventions
		equal opportunity	subsidies
		adequate earnings	government support
		decent earnings	policy
		productive work	initiatives
		decent working time	projects
		work-life balance	measures
		stability work	policy schemes
		security work	encouragement
		safe work environment	encourage
		social security	target
		social dialogue	best practices
		employers representation	good practices
		workers representation	
		rights at work	
		employment opportunities	

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