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Competitive Small and Medium Enterprises

A diagnostic to help design smart SME policy

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COMPETITIVE INDUSTRIES GLOBAL PRACTICE

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About this document

The primary audiences of this document are policymakers focussed on economic development, leaders from the private sector, investors, colleagues from the World Bank and other development professionals that work on various aspects of Small and Medium Enterprises (SMEs) in countries around the world. Therefore, the starting point of this paper is a constant and repeating series of questions from some of World Bank client countries on how better to view, manage, and make successful their SME sector.

SME policy is a critical space because in most countries the highest concentration of economic activity happens here. Moreover, these enterprises have a significant potential to create jobs and shared prosperity at scale. However, the SME development and policy making is difficult. The SME space tends to be highly complex – with heterogeneity in firm size, specialisation, spatial dispersion and performance. Moreover, in many countries SMEs, for a large part, operate in the informal sector compounding complexity.

The key contribution of this paper is to provide empirical evidence based on secondary research that SMEs vary widely in terms of their contribution to economic output and growth. One of the implications is that countries, particularly in middle and higher income countries, would benefit from smart SME policy design that would reward performance while being equal opportunity. In other words, there is need to create a segmented and focused approach for SME development while being inclusive. The paper follows this up with a diagnostic framework that policymakers can use to analyse SMEs in their respective geographies and provides some high level guidelines and examples on what those policies might look like.

This paper acknowledges that there is significant variation in the definition of SMEs across geographies. There is also a significant difference between the characteristics of the SME space across geographies in terms of sector mix, integration in the global supply chains, level of informality and other factors. This makes it very difficult to make any general assertion for SMEs as a whole. This paper was specifically scoped not to do deep SME sector studies for a large number of countries (which would be taken-up future research). Instead, the paper arrives at general conclusions that are backed up by frequent observations across many countries, particularly focused on middle and higher income economies.

The focus of the paper is to take the insights on SME mix and segments to practical implications for developing countries around the world. The paper attempts to do this by proposing a diagnostic approach that client countries and regions can use to assess their SME sectors and tease out firms' contribution to the local economy. Guidelines and specific examples of policies based on the insights in the paper have been provided. Lastly, the paper includes some areas of future research that are required on the subject. Specifically, there is a need to do primary and secondary research specific to a few select countries and locations to test and improve the policy recommendations.

We are grateful for valuable comments and feedback from our colleagues and expert peer reviewers including Mariana Iootty, Jungkiu Choi[1], Ganesh Rasagam, Hamid Alavi, Luke Jordan and many others who have contributed to this study.

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[1] COO, Retail Banking Products and Segments, Group Consumer Banking, Standard Chartered Bank

Contents

Executive Summary

Small and Medium-sized Enterprises (SMEs) have been the subject of increasing attention by policy-makers in national governments and international institutions in both developed and developing countries (Box 1). This is not surprising. SMEs account for a lion's share of the enterprises in most economies, and employ significant numbers of people. They are also thought to be an engine of new growth and innovation.

For instance, data from 27 countries in Europe indicates that firms that employ less than 250 people account for about 99 per cent of the total enterprises, 67 per cent of employment and 58 per cent of gross value added in an economy. United Nations Industrial Development Organisation (UNIDO) estimates that SMEs represent over 90 per cent of private business and contribute more than 50 per cent of employment and of GDP in most African countries. In addition to accounting for a major share of economic activity at any given point, SMEs also drive the GDP and the productivity growth of the economy. The growth is mainly fuelled in two ways. First, the entry and exit of firms that makes an economy dynamic, primarily happens in the small and medium firm ecosystem. Secondly, and more importantly, within-firm productivity improvement among SMEs is a major driver of productivity growth in the overall economy. There is, however, large variation in within-firm productivity growth across SMEs. In fact, the difference can be staggering. For instance, in the United States, the number of net new jobs (6 million) created by 6 per cent of SMEs surpassed the total net new jobs (5.8 million) created by the whole economy during 2004-08.

We explain the significant variation observed in SME performance by segmenting the small and medium firm population, which tends to be highly complex – with heterogeneity in firm size, specialisation, spatial dispersion, and performance. Many SMEs fail within a few years of establishment, and many of the surviving SMEs do not grow much beyond their starting size. Looking at data across OECD and Latin American developing countries, using secondary sources and Enterprise Survey data, we find that by the seventh year since starting up, 60 per cent of firms have exited, around 20 per cent remain self-employment or single proprietor firms, 15 per cent are small and medium firms but with low or stagnating growth. The last segment accounting for less than 5 per cent of the cohort have a strong growth history and good growth prospects – and are a powerful engine of new growth and innovation.

We call these Competitive SMEs. It is this small group of competitive SMEs that make a disproportionate economic contribution. Furthermore, these firms often have needs and challenges that are not easily addressed by economy wide broad SME policies. For instance, they may have relatively bigger need for finance at an early age, something traditional banks are wary to fund or they may need support on internationalisation, which may not be a big concern for a vast majority of firms. Lastly, it is often the competitive SMEs that have the ability to complement large firms and together propel growth in economic productivity. However, they may need support for this matchmaking to happen.

There have been other studies on high growth firms which have been variously named such as gazelles (Box 2) and high impact companies (HICs). These studies typically take an economy-wide view and include both large and small firms. We have a pure SME lens and are specifically targeting SME policy makers, private sector leaders, investors and the World Bank operations staff to provide

them with some guidelines and tools to use the insight of competitive SMEs to better inform decision making.

The key message here is that government policies should focus on enabling high potential enterprises to grow rather than merely increasing the number of firms in the economy. The policy question is how to get maximum impact from limited government resources to develop competitive SMEs, while remaining inclusive? As many studies have shown, governments often fail if they try to pick winners (firms that the government thinks will succeed) and also increase risk of capture. So policymakers have to design smart policies that are arms-length and equal opportunity, but unlock the potential of competitive SMEs.

The concept of competitive SMEs is more relevant to middle and higher income countries. Once a country reaches lower middle income and above status, the SME policy could be made smarter by enabling competitive SMEs. For most developing countries, a two-pronged approach to support competitive SMEs is recommended.

The first pillar is a set of policy themes that reward outcome and impact, while the second pillar is about the process of policy design, delivery, monitoring and iteration. Examples on first pillar include improving a firm's strategy and execution through management capacity building and improving the firm's productivity and innovation. There are other examples of competitive SME policy development that policymakers can learn from (Box 3 and 4). This could be a good starting point; however each country will need to make its own judgements about how to approach its SME sector given the prevailing conditions. Systematic and country-specific analysis is important because the appropriate policy will vary across countries, depending on their economic structure, policy environment and level of development.

This is where the second pillar comes in, which deals with the process of policy design and delivery. In particular, we propose a four step structured country diagnostic tool. First, understand firm demography in the country: what contribution do small and large firms make to economic outcomes? Given the structure and performance of the economy, which types of firms have the largest potential to generate incremental growth? Second define competitive SME in the context of firm demography, identify the group of competitive SMEs and quantify their economic materiality. How does this group compare with international benchmarks? Third, what are the policy priorities in supporting the growth of these competitive SMEs? How do the relevant dimensions of the policy environment benchmark against other countries, and what can be learned from the policy experience in other countries? Lastly, these firms need to be tracked, incubated and supported. The effectiveness of government initiatives and institutions focused on SME development could be measured against the fate of these firms over the years. This would also inform the government's future strategy for improving SME productivity.

Taken together, this diagnostic is intended to provide policy-makers with guidance on how to balance and focus their SME policy so as to better contribute to economic performance. We believe that smart policy that focuses on strengthening competitive SMEs, in a way that is complementary to the development of larger firms, will make the strongest contribution to national economic performance.

1. Introduction

Based on various academic and public policy work (some are referenced in this paper), it is commonly acknowledged that small and medium-sized enterprises (SME) are an engine for growth and employment, in both high income and developing countries. The supporting intuition for this focus is fairly straightforward. SMEs account for most of the enterprises in an economy (Ardic et al. (2011)), and for a meaningful share of employment and national income (Ayyagari (2007)).

SMEs are often treated synonymously with innovation and entrepreneurship, which is increasingly seen to be an important source of growth. For example, SMEs are thought to be a source of Schumpeterian-style creative destruction, in which innovative new firms are born to absorb resources from poorly-performing firms. Particularly in times of high unemployment and intense competition from a range of new competitors (leading many large firms, particularly in advanced economies, to reduce staff), focusing on SMEs is seen as an attractive model.

Because of these and many other reasons, SMEs have received an increasing share of policy attention as a potential engine of economic growth and development over the past decade. In both developed and developing countries, substantial investments are being made by national governments, international institutions, and donors, in collecting data on SMEs, undertaking policy-oriented SME research, and implementing a wide range of policy and spending initiatives on SMEs.

Given the importance of this area of policy, it is important to ensure that SME policy is well calibrated and focused in order to ensure that it makes the maximum contribution to national economic performance. The aim of this paper is to provide some structured guidance to policy-makers with respect to two key questions: what is the respective contribution of SMEs versus other firms, and how should SME policy best be configured?

This paper proceeds in three steps. The first is to better understand the economic contribution of SMEs. It turns out that a relatively small group of SMEs – the group of *competitive SMEs*[2] that grow strongly over time – make a disproportionate contribution to overall economic performance. This suggests that smart policy should address key challenges and enable growth of competitive SMEs. The majority of existing policy focus comprises of assisting the establishment of SMEs, and general improvements in the business environment. This analysis complements the existing policy focus and takes it further to direct attention to a more specific set of growth drivers to enable the firms that matter disproportionately – the competitive SMEs, while remaining inclusive and avoiding market distortion.

The second step is to develop a perspective on how best to complement the policy focus on competitive SMEs with that on larger firms. Competitive SMEs that are dynamic and innovative do make a sizeable contribution to the national economy. However, large firms also make a material contribution to innovation, employment, and overall productivity and income growth. And there is an important complementary relationship between competitive SMEs and large firms. Policy-makers need to structure policy appropriately to develop a healthy eco-system of firms.

The third step is to make this analysis actionable by policy-makers. To do this, we develop an initial SME policy diagnostic. What are the factors that policy-makers should consider in developing a

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[2] Defined in Section 2.4

sense of the priorities for policy action; how important is the SME contribution in their country context, and what sort of policies should be pursued to capture this value? What are some examples on how some countries have already initiated policies that support competitive SMEs? We believe that a better understanding of how to encourage SME growth has the potential to make a substantial contribution to national economic performance.

BOX 1: Definition of SME

The definition of SMEs varies from country to country, and often even within countries. For example, the IFC MSME Country Indicator examines the formally registered Micro, Small and Medium-sized Enterprises (MSME) in 132 economies, out of which 12 have no exact definition on MSME, and 26 economies have more than one MSME definition (i.e. different definitions among statistical institutions, financial institutions and government agencies)[3].

The SME[4] definition in most countries typically includes the following variables:

- Number of employees (the most common attribute, used in 115 of the 120 economies)
- Assets / Turnover / Capital investment (often used in conjunction or as supplement to the number of employees attribute, being used in 61 out of the 120 economies)
- Industry (definition of SMEs differ across different industries in 26 of the 120 economies)
- Others (some countries also have other peculiarities in defining SME, such as ownership)

While each economy defines SME differently with their individual legal or regulatory considerations, we attempt to standardize the definition for research and analysis purpose. Given that number of employees appears to be the most common and straightforward variable used in defining SME, we propose the following standard definition for micro, small and medium enterprises based on number of full-time employment:

- **Micro: Less than 10 employees** (82 of the 120 economies define "Micro" with 10 as threshold value (< or ≤ 10 employees).
- **Small: 10 – 49 employees** (75 of the 120 economies distinguish "Small" and "Medium" with the threshold value of 50.
- **Medium: 50 – 249 employees** (46 of the 120 economies use 250 as upper bound for medium-sized enterprises. Other threshold values such as 100, 200 are used less frequently).

This definition of SME is the most common one, and also consistent with that used by the European Union, though EU definition also includes firm's turnover and asset value.

In Section 2 of this paper, the definition of competitive SME will be deduced and introduced through empirical studies based on primary and secondary data.

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[3] Khrystyna Kushnir. 'Companion Note for the MSME Country Indicators: How Do Economies Define Micro, Small and Medium Enterprises (MSMEs)?'IFC and the World Bank. http://www.ifc.org/msmecountryindicators
[4] "SME" in this paper includes Micro enterprises, and thus will be used interchangeably with "MSME".

2. The contribution of competitive SMEs

This discussion is aimed at better understanding the nature and extent of the contribution made by different type of SMEs – a sector that tends to be complex with heterogeneity in firm size, age, specialisation and performance.

2.1 SMEs grouped together form a major pillar of an economy; but vary significantly among themselves

SMEs, as a group, account for a significant share of economic activity at any point of time. They also support economic growth in a significant way through churn and within-firm productivity growth. However SMEs are very diverse and looking at them collectively hides important insights. In this section, we will see that in reality only a small percentage of SMEs account for disproportionate share of SME's contribution to an economy.

2.1.1 SMEs account for significant share of economic activity

Firms that employ less than 250 full-time employees (FTEs) account for a significant share of total number of enterprises in an economy, total number of jobs and gross value added. While exact numbers vary across countries, as an illustration, we present the evidence from Europe as estimated by Ecorys for the European Commission[5]. Based on enterprise data of 27 European countries in 2012, SMEs collectively accounts for 99.8 per cent of the enterprises, 67.4 per cent of employment and 58 per cent of gross value added in the region (Table 1). Data from less developed countries show a similar pattern: United Nations Industrial Development Organisation (UNIDO) estimates that SMEs represent over 90 per cent of private business and contribute more than 50 per cent of employment and of GDP in most African countries. The micro firms (less than 10 FTEs) account for a reasonable share of economic activity - 92 per cent of all enterprises, 30 per cent of jobs and 19 per cent of gross value added.

Table 1: SME Estimates of EU-27 (2012)

	Micro (<10 FTE)	Small (10-49 FTE)	Medium (50-249 FTE)	SMEs (<250 FTE)	Large	Total
# of Enterprises	19,143,521	1,357,533	226,573	20,727,627	43,654	20,771,281
Per cent of enterprises	92.2 per cent	6.5 per cent	1.1 per cent	99.8 per cent	0.2 per cent	100 per cent
# of Employment ('000)	38,396	26,771	22,310	87,477	42,319	129,796
Per cent of employment	29.6 per cent	20.6 per cent	17.2 per cent	67.4 per cent	32.6 per cent	100 per cent
Employee per Enterprise	2.0	19.7	98.5	4.2	969.4	6.3
Gross Value-added(GVA) (Billion EUR)	1,307	1,144	1,136	3,588	2,592	6,179

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[5] Paul Wymenga et al (2012). 'EU SMEs in 2012: at the crossroads - Annual report on small and medium-sized enterprises in the EU, 2011/12'. Ecorys. http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/supporting-documents/2012/annual-report_en.pdf

Per cent of GVA	19 per cent	19 per cent	20 per cent	58 per cent	42 per cent	100 per cent

Source: EU SMEs in 2012: at the crossroads - Annual report on small and medium-sized enterprises in the EU, 2011/12

2.1.2 SMEs support economic growth through churn and within-firm productivity growth

In addition to accounting for major share of economic activity at any given point, SMEs also drive the GDP and the productivity growth of the economy. The growth is mainly fuelled in two ways. First, the entry and exit of firms that makes an economy dynamic, primarily happens in the small and medium firm ecosystem. Secondly, and as we will see more importantly, within-firm productivity improvement among some SMEs is a major driver of productivity growth in the overall economy.

Entry and exit of firms

One of the striking findings from the analysis of firm demographics in many economies is that there is a high degree of churn. Longitudinal evidence shows a consistent pattern across countries of a high proportion of firms entering or exiting every year. For example, according to Singapore's Department of Statistics, 22,826 businesses were formed in Singapore during 2012 and 22,497 businesses ceased operation in the same period. There were nearly 154,000 businesses in the country in 2012. This implies nearly 30 per cent of all firms are either entering or exiting at a given point.

The entry and exit of firms is what Joseph Schumpeter had in mind in terms of the process of creative destruction, in which resources are reallocated from poorly performing firms who exit to more productive new entrants. This process has a positive effect on national level outcomes. An empirical study using firm-level panel data from Taiwanese Census of Manufacturers (Aw, et al. (2001)) also supports that firm turnover contributes to industry productivity growth.

Many firms do not survive for more than a few years. Across a wide range of countries studied, about 20-40 per cent of newly-established firms fail within two years and only 40-50 per cent of new firms survive for more than seven years (Bartelsman et al. (2003)). Particularly in countries with low costs to firm entry, such as the US, there is a lot of experimentation – the successful firms remain while the unsuccessful exit.

A few large firms also fail either spectacularly or gradually and are often restructured or merged in the process. However, the entry and exit of firms remains dominated by small firms.

Within-firm productivity growth

Productivity gains that come from 'within-firm' productivity growth are more important than allocation effect achieved through entry and exit of firms. Baily et al. (1996) estimated that within-firm productivity (TFP) growth contributed half of TFP growth in the manufacturing sector in the 1980s, whereas net entry accounted for only about 25 per cent. Similarly the OECD (2004) found that the contribution of entry and exit of manufacturing firms accounted for around 20-40 per cent of labour productivity growth in several OECD economies, and that within-firm productivity growth was the more substantial driver. There was some variation across countries, but this was a consistent finding.

2.1.3 There is large variation in within-firm productivity growth across SMEs

When it comes to SMEs, there is no such thing as an average or representative firm, even within a specific industry subject to the same external conditions. There is a substantial amount of firm-level variation within an industry (Bartelsman et al. (2009)). At any point in time, SMEs account for a mix of young and old firms, growing and static firms, micro and small or medium, and high and low productivity firms.

When it comes to within-firm productivity growth of SMEs, we have two observations. First, there is substantial variation across the SME community in terms of their growth profile. Second, SMEs that grow robustly after establishment are a small subset of all SMEs, but contribute disproportionately to overall economic performance.

Based on a study of US firms by the US small business association, it was found that a small subset of all SMEs classified as high impact companies (HIC) accounting for 6 per cent of all US firms surpassed the total net jobs created by the whole economy (Exhibit 1, 2). If we also include high impact companies classified as large firms, these 6 per cent firms created 184 per cent of net new jobs created in the country over a five year period. Half of these came from small and medium firms. Rest of the 94 per cent firms - majority of them are SMEs – lost 4.9 million jobs during the five year period.
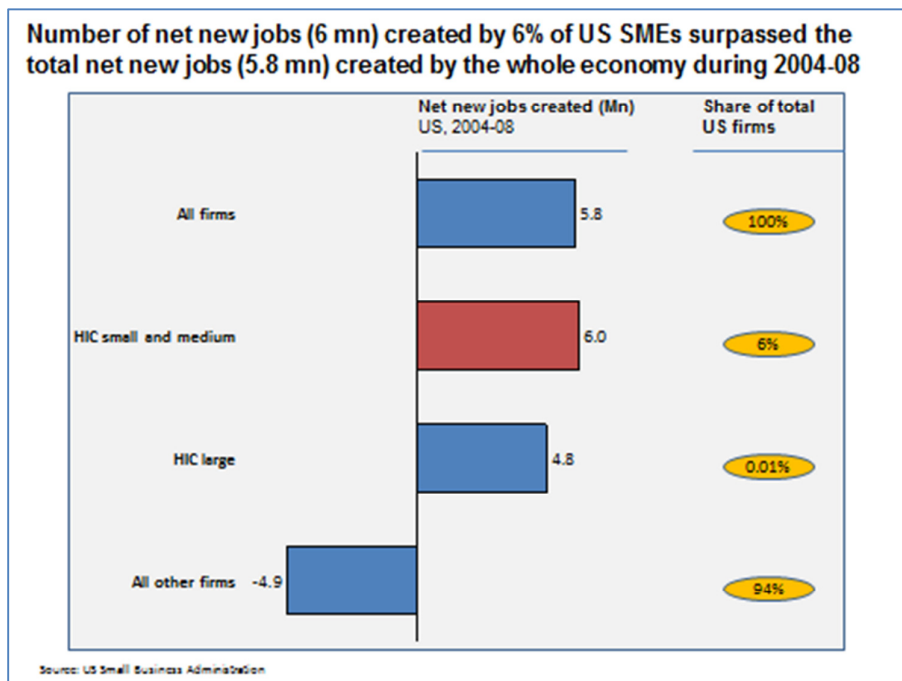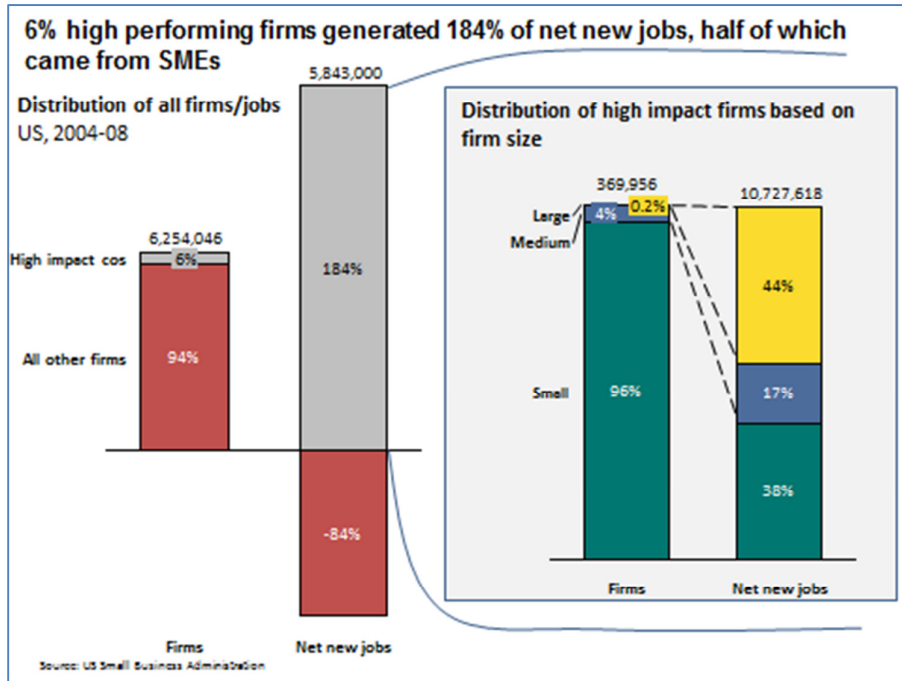
Exhibit 1

Number of net new jobs (6 mn) created by 6% of US SMEs surpassed the total net new jobs (5.8 mn) created by the whole economy during 2004-08

Exhibit 2

2.1.4 This difference across SMEs is explained through the different growth paths SMEs take

What explains this huge divergence between jobs created by a set of SMEs and jobs destroyed by another set? Exhibit 3 serves as a conceptual illustration on the growth path that enterprises typically go through. A significant share of all new enterprises exit early and the remaining surviving firms also follow different growth paths. We categorise these firms into three groups: the ones that remain small (self-employed or lifestyle firms); the ones that grow moderately (moderate or capped growth firms); and the ones that demonstrate high growth (high growth or competitive firms).

Exhibit 3
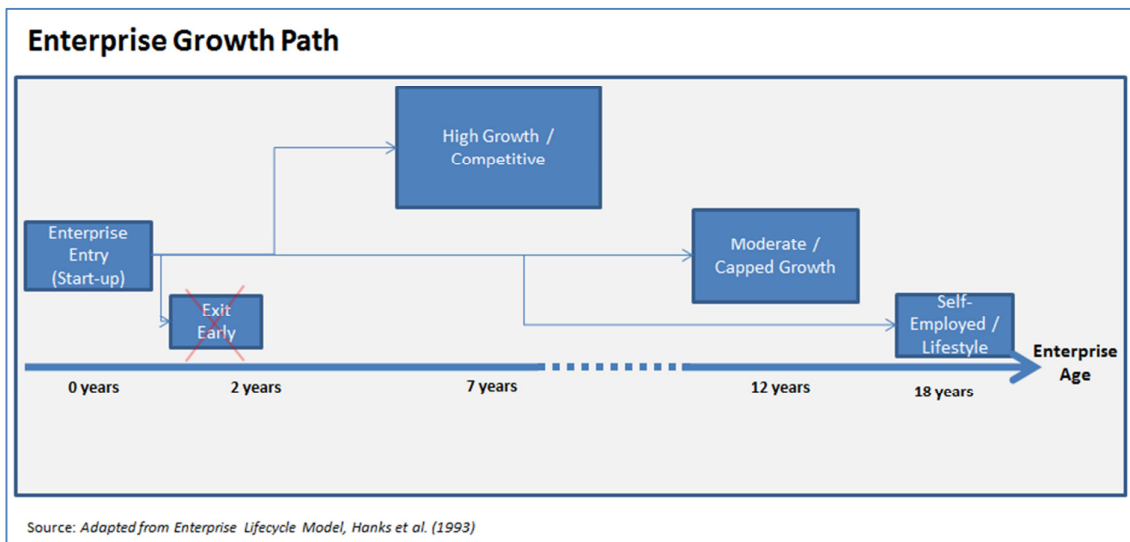
We will first look at the three different types of surviving firms, followed by an empirical analysis of their proportional distribution within a cohort of SMEs.

Self-employed or lifestyle firms

Many firms are started by people who want to be able to exercise more control over their working life, but have no aspiration to grow – or to hire additional staff. They may survive for longer time, but they choose to remain small both in terms of staff strength and sales revenue. These firms are identified as the "Life-style" by Hanks et al. (1993), the empirical study finds that these firms do not grow much since their inception, though they may stay in business for a relatively long time (average about 18 years).

The qualitative evidence is that many SMEs do not have meaningful growth aspirations. Many SMEs are effectively self-employment situations. They have no real growth intent beyond their original level. Evidence from the Global Entrepreneurship Monitor (GEM (2011)) finds that independence and autonomy is a strong motivator for launching firms (income and growth motivations were very much secondary). As a side note, this is why measures of entrepreneurialism are necessary but not sufficient since they only capture the establishment of firms, not their subsequent growth (which is concentrated in only a small proportion of firms). Be it by choice or by circumstantial constraints, firms in this category remain small even if they survive for long.

Firms with moderate or capped growth

This group includes SMEs that grow modestly beyond their establishment size over a period of 5-7 years. A recent US study found that firms employing less than 20 people were concentrated in services sectors such as accounting, retail, and real estate, where the minimum efficient scale was quite low (Hurst & Pugley (2011)). The survey evidence reported finds that most of these firms serve an existing market with an existing product (rather than bringing an innovation to market), and have limited growth aspirations. Similar to the "Capped growth" identified in Hanks et al. (1993), these firms may generate higher revenue and stay in business for longer as compared to some younger firms in expansion, but their growth in employment is lower due to circumstantial reasons.

High growth or competitive firms

The last group of SMEs are the high-growth firms; say those with a CAGR of 10 per cent over 7 years. According to Hanks et al. (1993), firms go through significant expansion and achieve maturity in around 7 years. It is typically these firms which undergo tremendous growth in the first few years and would grow to a much bigger scale to become a medium – large sized enterprise. It is not surprising that majority of firms in this group are small and medium companies given the fact that SMEs account for majority of firms in most economies. We call these Competitive SMEs.

2.2 Defining "Competitive-SMEs" – small subset of firms that disproportionately contribute to jobs and productivity

From the perspective of economic contribution it is this group of dynamic, young growing SMEs that are of particular interest, and we term them as 'competitive SMEs'. Given large differences in definition of SMEs worldwide, it is expected that different governments and other parties would

define competitive SMEs differently based on local conditions. For the purpose of this report, we use the classification and identification of competitive SMEs based on the following 3 dimensions:

- **Firm Age**: Young firms (e.g. less than 7 years old) – because the evidence consistently suggests that firm age is a strong predictor of growth prospects. It is much less likely that old firms will start to grow strongly late in their lives.
- **Historical Growth of firm:** Firms that have grown (in headcount) by at least 10 per cent p.a. over at least the past 3 year period. It may be argued that attributes other than employment, such as revenue and productivity, are also important indicators for company growth. However, in the context of young firms, we assume that significant increase in employment shows an increase of healthy demand of the company's products or services. As such, for simplicity sake, we are of the view that growth in employment is a good indication of healthy growth of the firm.
- **Growth Prospect of sector**: The firms should be in sectors (or economies) with projected growth rates that make continued growth rates of at least 10 per cent a year on a sustained basis plausible. If the firm is in a globally exposed sector, we need to look at global sector growth rates. Definition of sector here should be as granular as possible. The reason for not focusing on competitive firms in otherwise stagnant sectors is because these firms typically increase their market share with limited impact on market size.

These classification matrices are not meant to be prescriptive and definitive. It serves as an indicative guideline for government to assess their own country's firm demographics and economic dynamics.
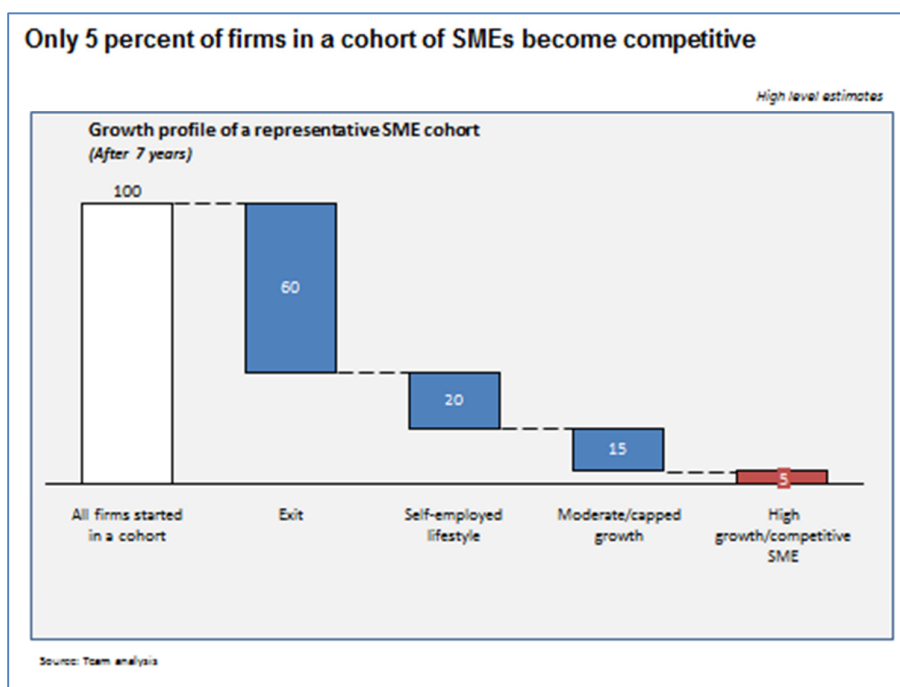
2.2.1 Only about 5 per cent of firms in a cohort of SMEs become competitive

We explain the significant variation observed in SME performance by segmenting the small and medium firm population, which tends to be highly complex – with heterogeneity in firm size, specialisation and performance. Many SMEs fail within a few years of establishment, and many of the surviving SMEs do not grow much beyond their starting size. Looking at data across OECD and Latin American developing countries, using secondary sources and Enterprise Survey data, we find that by the seventh year since starting up, 60 per cent of firms have exited, around 20 per cent remain self-employment or single proprietor firms, 15 per cent are small and medium firms but with low or stagnating growth (Exhibit 5). This small group of firms called Competitive SMEs make a disproportionate economic contribution and are powerful engines of new growth and innovation.

It is difficult to precisely estimate the ratio of firms in a cohort of SMEs that exit, stagnate or remain in self-employment situations because of wide differences across countries and lack of cohort wise data (most of the SME data is census data). The precise distribution will vary depending on the time period, the economy, the industry sector and many other factors. Therefore, these estimates are high level. However, there is enough evidence that these are directionally correct, which should be sufficient for policymakers to utilise the insight of competitive SMEs to refine their current SME strategies. As far as exiting firms are considered, Bartelsman et al (2003) estimated that only about 30 – 50 per cent of total entering firms in a given year survive beyond the seventh year. This is very similar to the information from the US Bureau of Labor Statistics. BLS estimates that more than 60 per cent of firms fail within 7 years (Knaup and Piazza (2007)), based on data of 212,182 new firms in 10 sectors established in Q2 1998 across the country. For the high growth and competitive firms, we analysed data from the World Bank Enterprise Survey in several Latin America countries. The

proportion of SMEs experiencing high growth after 7 years is estimated to be in the range of 3 to 5 per cent. For instance, we estimate the per cent of firms in a cohort that become competitive beyond seven years to be 3.2 per cent in Mexico and 4.8 per cent in Argentina[6]. Similarly, a study was conducted by Statistics Canada in 2006 to assess job creation in relation to firm growth and firm size, based on firms that opened or closed during the period of 1993 to 2003[7]. The study shows that only about 4 per cent of firms experienced hyper-growth (defined as growth of 150 per cent over 4 years or cumulative annual employment growth rate of about 10.5 per cent), and they contributed to about 45 per cent of the net job creation during the period. We have already presented the data on American firms, where 6 per cent of SMEs were identified as high growth firms. For the moderate or capped growth firms, based on the same analysis of the World Bank Enterprise Survey as noted above, we estimated that firms in this category constitute about 12 - 16 per cent of the entire SME cohort, with median around 15 per cent. By deduction from the previous groups, the firms in self-employed/lifestyle category constitute about 20 per cent of the population.

Exhibit 5

Only 5 percent of firms in a cohort of SMEs become competitive

High level estimates

Growth profile of a representative SME cohort
(After 7 years)

100

60

20

15

5

All firms started in a cohort | Exit | Self-employed lifestyle | Moderate/capped growth | High growth/competitive SME

Source: Team analysis

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[6] The analysis was conducted on small firms (with less than 100 full-time employee at firms' inception), and aged between 7 and 15 as of 2010 (the year that data was collected). High growth firms are defined as firms who increased their employee strength by more than 50 people. As the data was only on firms that survived more than 7 years, we assumed estimates from Bartelsman et al and BLS for firm exit rate.

[7] Similar to our enterprise growth profiles, this study also categorise firms into 4 groups according to their employment growth rate during the first 4 years (i.e. 1993 – 1997) of the study period: hyper growth firms: those with at least 150 per cent growth in employment; strong growth Firms: those with between 50 and 150 per cent growth in employment; slow growth Firms: those with between 0 and 50 per cent growth in employment; or declining Firms: those with negative employment growth.

In summary, though the exact numbers vary across time period and regions, one consistent finding is that around 5 per cent of all established small firms in the economy demonstrate consistent high growth, and make disproportionate economic contribution. The Global Entrepreneurship Monitor also notes that the small group of 'high impact entrepreneurs' create a disproportionate amount of growth (4 per cent create 40 per cent of jobs). Bartelsman et al. (2003) estimate that the average US manufacturing firm that has survived for more than 7 years is about 65 times larger than at establishment in terms of headcount. Given the distribution of growth profiles, and that some firms do not grow much, this suggests that some surviving firms grow at remarkable rates over sustained periods.

The SMEs that do grow strongly are also responsible for a disproportionate amount of innovation and new economic activity. These firms are more likely to invest, to export, to undertake R&D, and to drive change in the economy – drawing resources into productive uses and away from other, less productive parts of the economy.

Related evidence on the growth profile of firms also finds that it is not so much that small firms can grow quickly as much as young firms (who tend to be small). Young firms are more likely to grow than are old firms. Haltiwanger et al. (2010) present findings from the U.S. that it is the young firms that matter for growth in employment (it is not due to firm size). However, there is an indication that this relationship may be weaker in developing countries where there are some limitations on growth (which delays the growth process of intrinsically strong firms).

BOX 2: Competitive SME and the "Gazelles"

Like most ideas, the notion of "competitive SME" builds from learning of the past. In late 1970s, David L. Birch's 52-page report *The Job Generation Process* first tossed out the idea that many small but fast growing firms are contributing greatly to job creation. In the decades that followed, with increasing attention on small firms among researchers and policy-makers, Birch coined the term "Gazelles" to describe a small group of high-growth firms that generated most of the new jobs in the economy. The term "Gazelles" is used in contrast to "Elephant", which are firms with large employment share but few new jobs; and "Mice", which are small firms with little growth. Specifically, Birch et al. (1995) defined Gazelles as "a business establishment which has achieved a minimum of 20% sales growth each year over the interval, starting from a base-year revenue of at least $100,000". There have been other variations of this definition, but they are all evolved around the concept of consistent firm growth over a period of time.

Many of the subsequent studies on firm size, growth and contribution to employment have supported or extended the idea on Gazelles, and showing that Gazelles are typically young and small firms, and as a small portion of firms in the economy, they generate disproportionally huge amount of net new jobs[8]. Based on a recent study released by the US Small Business Administration (Spencer L. & Tracy Jr. (2011)), over 4-year periods from 1994 – 2008, 6.3 per cent (approximately 350,000) of all US companies are categorized as Gazelles, 99.5 per cent of them has less than 500 employees (94 per cent have less than 20 employees), and they account for all the net new jobs created in the economy.

Though most definitions of Gazelles do not limit the firms to be SMEs, SMEs certainly constitutes a significant proportion of these high-growth Gazelles. So, there are areas of complementarity and a few differences in our focus and approach vis-à-vis the Gazelles. First of all, our analysis is more confined to the SME space, while the looser definition of gazelles includes bigger firms as well. Secondly, the competitive SME approach is focused on SME policy making and is targeted towards government agencies responsible for SME development. Third, we have tried to put on a more practitioners' lens in looking at SME policies. Section 3 and 5 of this paper focus on how governments should approach to devise smart policies to support SMEs, so as to maximize economic impact while remain socially inclusive and provides some examples.

2.3 Relevance of Competitive SMEs to policymaking

In this section we present evidence that public policies matter, when it comes to developing competitive SMEs. We also highlight that competitive SMEs are more relevant as economies move from being low income country to lower middle income country. Competitive SMEs also might face challenges that are specific to their needs and are not shared by large number of other SMEs in the market.

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[8] Magnus Henrekson and Dan Johansson (2009) 'Gazelles as Job Creators – A Survey and Interpretation of the Evidence'. Research Institute of Industrial Economics. http://www.ifn.se/Wfiles/wp/wp733.pdf

2.5.1 There is evidence that public policies matter, when it comes to developing competitive SMEs

The evidence on the distribution of growth profiles across firms has direct implications for policy-makers. It suggests that, in many countries, SME policy should ensure adequate support for the growth of these competitive SMEs, as it is this group of firms that will make the most material contribution to economic outcomes. But is there evidence that such policies actually work?

There is indeed evidence that government policies matter in development of competitive SMEs. However, it is recommended that some low income and lower middle income countries are better off first pursuing broad business climate improvement agenda and basic reforms.

Exhibit 6 reports data from Bartelsman et al. (2003) for a range of countries. The average US manufacturing firm that has survived for more than 7 years is about 65 times larger than at establishment in terms of number of employment. This is about double the rate of growth observed in the UK and Italy, and many times more than the growth rates experience in Germany and France.
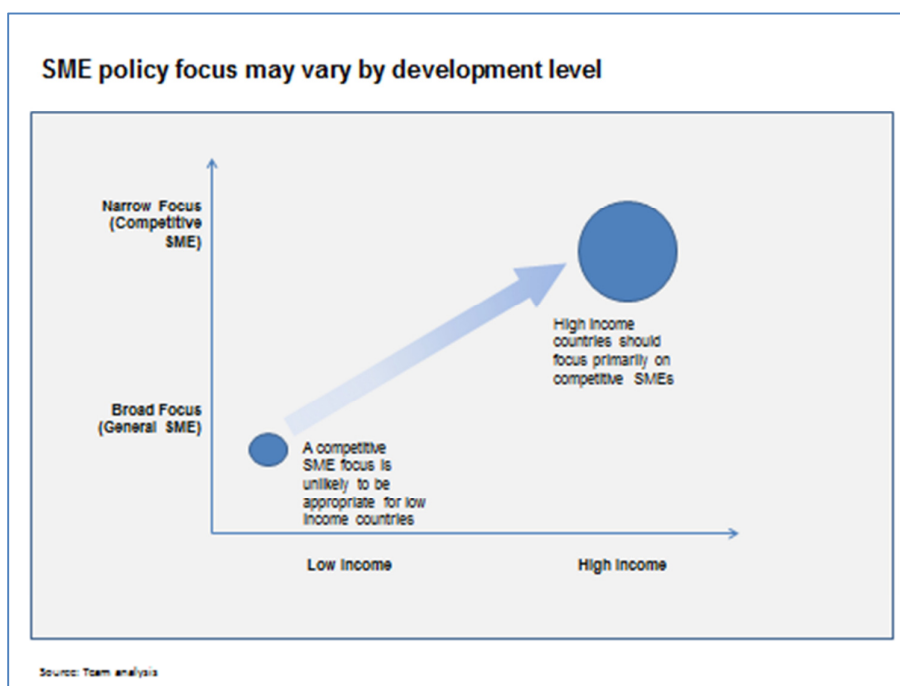
Exhibit 6
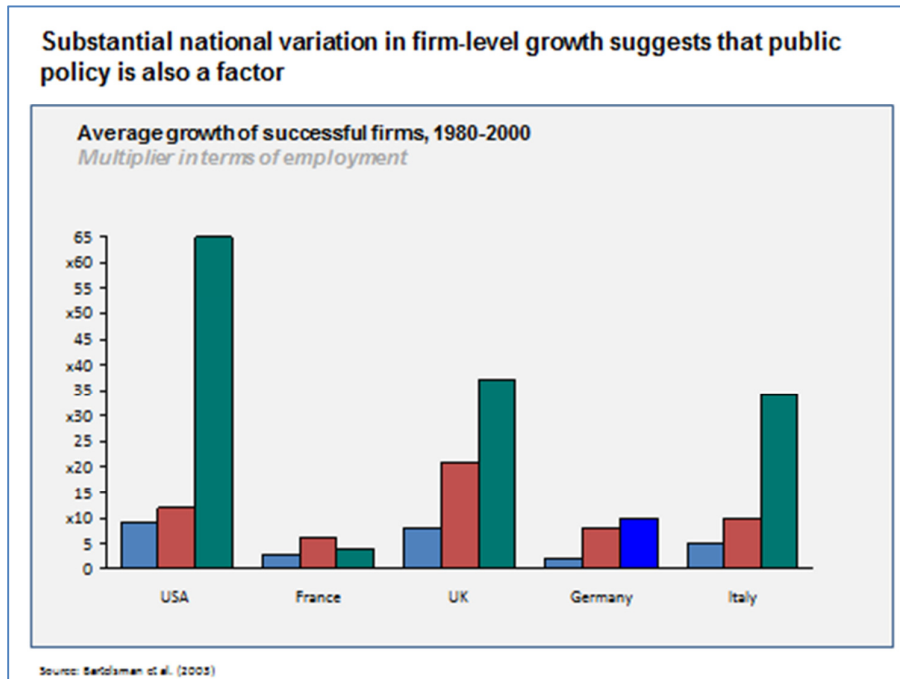
This substantial national variation in firm-level growth suggests that public policy is also a factor. There is likely cross-country variation in management capacity and attitudes towards entrepreneurial activity, but it seems unlikely to expect that these factors explain the observed differences. It is also important to note that the higher growth rates in the US as compared to Europe may be attributed to the relative smaller start-up size in the US (due to lower costs to entry).

In some countries, the approach to SME policy is trying to do too much, and is too thinly spread, rather than focusing on the limited number of vital contributions that it can make. It seems that a significant share of the policy effort has been broadly focused on the whole SME sector rather than more tightly focused on the subset of SMEs that are likely to make a real difference.

But it is important to note that this argument for policy focus on competitive SMEs has greater force in middle and high income countries. This argument may be weaker for low income countries where there are significant barriers to business entry (enterprise intensity is much lower in poorer countries). In these lower income countries there is greater value in removing these barriers to entry – and in allowing the informal economy to be formalised (Acs et al. (2008), de Soto (2000)). There is greater benefit from stimulating entrepreneurial activity. In addition, it is likely that a greater degree of public sector capacity is required to operationalise a tight focus on competitive SMEs. But as countries develop through middle and high income status, an increased focus on competitive SMEs will become appropriate.

Exhibit 7

SME policy focus may vary by development level

Narrow Focus (Competitive SME)

Broad Focus (General SME)

High income countries should focus primarily on competitive SMEs

A competitive SME focus is unlikely to be appropriate for low income countries

Low Income

High Income

Source: Team analysis

2.5.2 There are specific difficulties faced by these firms that small firms typically do not face and hence there is a need for more informed government action

Competitive SMEs, as we have defined, are well performing young firms with robust growth potential. In general, they are more favourable candidates for bank loans compared to other small firms. However, access to finance may still be an issue for these firms especially in early stage of their growth (where banks are too risk averse). Secondly, while these firms generally have access to bank finance, sometimes there is a mismatch between the amount of fund they need to grow quickly and what banks, which are bound by their policies, are willing to provide. The second area where competitive SMEs struggle more than other small firms is on access to cutting edge knowledge and expertise related to internationalisation. This is especially true for competitive SMEs in smaller countries where internationalisation is a key source of growth for firms that want to escape the stagnation trap. Thirdly, in some countries, these trail blazing firms do not have knowledge and awareness of best in class management practices and latest technology, and take longer to reach their potential.

2.5.3 Governments should develop an approach to create policy and initiatives to develop competitive SMEs

The answer to this question depends on the country context. In rest of the paper, we try to cover three areas which will throw light on how the governments can approach policies and initiatives to develop competitive SMEs.

- First, we discuss the complementary relationship between large firms and competitive SMEs. Economic policies focused on competitive SMEs must be informed by the ecosystem in which these SMEs operate, especially their relationship with large firms
- Second, we propose a diagnostic approach for policymakers to better understand the lay of the land to inform final policies
- Lastly, we provide a few themes and examples that some countries such as Singapore are adopting to develop their competitive SMEs

3. The complementary relationship between competitive SMEs and large firms

The previous discussion has noted the economic contribution that competitive SMEs can make, and the ways in which a more focused SME policy might be able to generate economic value. But policy-makers should not approach SMEs independently of other parts of the economy. Large firms also make an important contribution to the economy. And there is a valuable, complementary relationship between competitive SMEs and larger firms. Policy-makers should design firm-level policy to ensure that strong economic contributions are being made by competitive SMEs and also that the policy is structured in a way that the complementary nature of the relationship is captured.

Part of this is a question of policy balance, to ensure that policy efforts are being directed in the best way. Some basic arithmetic shows why this is important: a country need economic improvements across a great many (thousands) of SMEs to get a material improvement in national GDP, whereas the same growth in just a few large firms may be more significant. For example, a 10 per cent increase in the exports of New Zealand's largest exporter is about 1 per cent of GDP; it would take many thousands of SMEs to deliver this scale of economic improvement. And there are limits to the capacity of small firms to deliver this improved performance, relative to larger firms. It is a difficult, risky area of policy.

The right balance needs to be struck in order to make the maximum potential contribution to national economic performance. In many countries, it will be the larger firms that are well-placed to make a strong contribution; every country should be assessing the contribution that SMEs are likely to make to economic and social development relative to other types of firms (e.g. MNCs), given the nature of the firms that the country has and what it is trying to achieve.

3.1 Large firm contribution

But although SMEs, and particularly competitive SMEs, make a strong contribution to national economic performance, large firms also make a very substantial contribution. And policy needs to be balanced to recognise the material contribution made by these large firms. Consider the following observations.

3.1.1 GDP, employment, and productivity

Although there is some variation across countries, large firms commonly account for more than half of employment and GDP (despite accounting for a very small share of the number of enterprises). As examples, the Malaysian government notes that 99.2 per cent of Malaysian firms are SMEs, accounting for 56 per cent of employment and 31 per cent of GDP; in Singapore, SMEs account for over 99.4 per cent of firms and about 50 per cent of value-added GDP. In general, as noted earlier, firms employing more than 250 people account for less than 1 per cent of the number of enterprises. And about 80-90 per cent of firms employ less than 20 people; but this may account for only 15-20 per cent of total employment in many economies.

Therefore, large firms are important drivers of economic performance. In the US, the McKinsey Global Institute (MGI) estimates that the MNCs that have grown more rapidly than the non-MNC over the past decade. Although the US MNCs account for less than 1 per cent of US firms, they comprise 11 per cent of US private sector employment growth and 31 per cent of real private sector GDP growth. They generate strong labour productivity performance, and account for 74 per cent of private sector R&D spending. In addition these large MNCs pay significantly higher wages than their smaller counterparts.

And the labour productivity of SMEs is lower than for other firms. E.g. as shown in Table 1, the productivity (as measured by revenue per employee) of large companies (with more than 250 FTE) are 1.5 times of the SMEs (with less than 250 FTE), and 2 times of that of the micro firms (with less than 10 FTE). The lower level of labour productivity likely reflects lower levels of capital intensity in SMEs, as well as lower levels of TFP – human capital, organisational and technical best practice etc. It also reflects the sectoral composition of SMEs; there are fewer SMEs in the manufacturing sector, which tends to have higher levels of labour productivity than the services sector. Economies of scale and scope help larger firm achieve higher productivity.

Indeed, recent studies suggest that SMEs have not been a key part of the rapid income convergence story in many developing countries. Recent research by Dani Rodrik (2012) suggests that convergence has been driven through the manufacturing sectors, as emerging markets industrialise. Manufacturing tends to be relative scale intensive, which makes it less likely to be dominated by small firms. To this extent, it is likely that rapid growth has been driven by the larger firms that tend to populate the manufacturing sector; these are the firms that can absorb and use foreign technology, and scale up as they expand into both domestic and export markets. This was true of the East Asian tiger economies over the past few decades, and is also the case for China; although some of the local firms started off as SMEs, they scaled up rapidly.

The evidence is also persuasive with respect to advanced economies. As an extreme example, consider the size of the Walmart effect on aggregate US productivity - a large firm that used IT to redesign its distribution system had a huge impact on aggregate US productivity growth in the 1990s. And the McKinsey study on productivity in Japan (Kondo et al. (2000)) found that the large, globally exposed Japanese firms had productivity twice as high as the non-traded sector (which is fairly fragmented in Japan and dominated by small firms).

3.1.2 Research and innovation

There is a mixed picture with respect to the relationship between firm size and investment in research and innovation. In terms of the more easily measurable R&D spending, large firms invest

much more. According to the OECD's STI scoreboard, firms with less than 50 employees spend 10 per cent of the total business spending on R&D despite accounting for a substantial share of the number of enterprises [R&D spending of 0.21 per cent v 1.8 per cent of sales for firms employing more than 50 employees].

There are several plausible reasons for this. There is an element of fixed costs to investing in R&D, which SMEs may struggle to cover; there is a need for absorptive capacity; and R&D is more likely to occur in manufacturing than in the services sector (where SMEs are more common). However, large firms spend more on R&D because they are larger; the relationship between firm size (in terms of revenues) and R&D spending is positive, but relatively small.

When innovation is defined more broadly, however, competitive SMEs make an increasingly important contribution. Lerner (2010) describes the changing business models around innovation over the past few decades, and the move away from large industrial research labs to more of an out-sourced models in which the new, disruptive innovations often took place in relatively small, young firms – and which were often purchased subsequently by the larger firms. But particularly in sectors like IT, it is the young, small firms that have generated the breakthrough innovations.

3.1.2 International engagement

International engagement is also commonly linked to firm size; large firms are much more likely than SMEs to engage in exporting or to invest abroad. Small firms find it more difficult to expand overseas than large firms. A large body of qualitative case study work identifies several of the key reasons for this lower level of international economic activity: lack of investment in foreign market research, absence of management capacity, the need to be able to scale up to fulfil larger orders, and the need for larger balance sheets to cope with the various risks (e.g. exchange rate volatility).

The relatively low level of international engagement by SMEs is one contributing reason to the relatively weak labour productivity performance that was described above (as there is a causal relationship between firm-level international engagement and firm-level productivity).

3.2 The complementary nature of the relationship

So SMEs, competitive SMEs, and large firms all make significant contributions to national economic performance. The overall view in the literature seems to be that there is no systematic relationship between firm size and the economic contribution that is made by firms. Rather it is important that all parts of the economy are making strong contributions; sustained economic performance required a balanced set of growth engines (rather than being overly reliant on particular parts of the economy). The mix will vary by country, according to their particular circumstances (there is no universally appropriate number).

Competitive SMEs have the potential to make a meaningful contribution to the economy – and with appropriate policy settings, it is possible that this contribution could be strengthened further. In addition to the direct economic contribution that SMEs make, their behaviour and performance also has the potential to make a broader contribution to the economy in several ways.

Firstly, SMEs are a source of economic value to larger firms in a variety of ways. For example, to an increasing extent large firms use small firms as their innovation lab (they do their R&D in an out-sourced way, as noted above). So the contribution of small firms may be bought and used by large

firms. SMEs can also be helpful even if they are not the vehicle that delivers the improved economic outcomes.

Second, because SMEs account for a substantial share of the economy, the performance of these firms matters for the overall competitiveness of other firms. The services sector, for example, impacts on the competitiveness of the traded sector – and it is important therefore that small firms in this sector perform well in order for the large firms to perform at peak potential.

Relatedly, SMEs may provide additional competitive intensity, offering new products and services that compete with the larger firms – and provide a spur for them to remain productive and to innovate. Bartelsman et al. (2003) note that sectors with high rate of entry by new firms have different characteristics, suggesting that incumbents face a greater degree of contestability. And SMEs can improve the quality of governance by providing contestability, and making it less likely for large firms to engage in rent-seeking activity. A dynamic SME sector reduces the chances of economic sclerosis.

Third, SMEs can provide employment opportunities that would otherwise not exist and may be a way of introducing flexibility into relatively rigid labour markets. SMEs may also help address regional employment issues in areas where other firms choose not to locate (SMEs may be the only source of economic activity). Some of these benefits may be particularly pronounced in periods of economic volatility or crisis, and to this extent might provide some additional resilience.

4. Towards smart policy: a proposed diagnostic

As we have discussed, policy needs to be focused on competitive SMEs, particularly as countries graduate from low income to middle income status, and to encourage complementary contributions from these SMEs and from large firms. For most developing countries, a two-pronged approach to support competitive SMEs is recommended.

The first pillar is a set of policy themes that reward outcome and impact, while the second pillar is about the process of policy design, delivery, monitoring and iteration. Examples on first pillar include improving a firm's strategy and execution through management capacity building and improving the firm's productivity and innovation. There are examples of competitive SME policy development that policymakers can learn from (Box 3 and 4). This could be a good starting point; however each country will need to make its own judgements about how to approach its SME sector given the prevailing conditions. Systematic and country-specific analysis is important because the appropriate policy vary across countries, depending on their economic structure, policy environment and level of development.

This is where the second pillar comes in, which deals with the process of policy design and delivery. In particular, this section begins to develop a four step structured country diagnostic tool. These are questions to be asked; not all of them will be able to be answered with adequate data support. But it provides a structured approach to thinking about SME policy, and serves as a guide to the type of research and data collection required in the future (a forward research agenda).

A key element of the diagnostic is to construct appropriate peer groups to enable sensible international benchmarking. Countries have different models, and there is no single model of best practice that all countries should emulate. The US model, for example, exists in a very different environment as compared to the European model, emphasising models of disruptive innovation to a greater extent than Europe. In other words, this is both a qualitative exercise as well as a quantitative exercise.

The proposed diagnostic proceeds in four parts:

4.1. Develop a firm map

Historical materiality

Analyse contribution to GDP, employment, and productivity contribution from firms of different sizes. Also analyse the change in contribution across a time period. This analysis will need to ensure controls for sector composition of the economy, as the contribution from firms in different sectors will be closely related with the type of 'production function' that the sector has.

This contribution can be benchmarked internationally to provide a sense of similarities and differences in the demographic structure. When comparing the SME's contribution across countries, it is important to make adjustments for currency exchange and inflation using appropriate country and sector level deflators. The choice of countries to be included in the benchmarking exercise is also important. It should be noted that more research is required to determine whether higher per capita income is correlated with higher SME contribution to GDP. More research is also required to understand if higher SME contribution to GDP is indeed desirable. One hypothesis is that formality drops with income growth and more SMEs are officially registered and counted as part of GDP and hence their contribution might look higher

Potential/prospective materiality

By sector, examine economic performance (particularly productivity levels) and benchmark against international data. Is there a systematic relationship between productivity performance in specific sectors (relative to relevant benchmarks) and are small or large firms are over-represented in that sector? If there is, this might suggest that there is potential for improved performance from a particular firm demographic.

Where are the identified sectoral growth prospects; based both on an assessment of national competitive advantage and on sectoral growth patterns in other similar countries. Are these sectors dominated by large or by small firms?

Variation in productivity levels across sectors. Is there scope for SMEs/large firms to contribute simply by converging to international benchmarks?

Data/Information requirement for diagnostic

To perform the proposed diagnostics, information might be required at three levels: firm level data that provides quantitative insights of the firm characteristics in the economy; surveys and qualitative analysis of firms that reflect the pain points of SMEs in the economy; and government policies that allow us to understand the current strategic direction and initiatives for SME development.

1. **Firm level quantitative data**

   The following data should be obtained for all small and medium-sized firms in the local economy. In some cases, the industrial census may only be able to provide us with the following data for a large but significant sample, while in other cases obtaining firm level data may be even more difficult. In such cases, the corporate tax database could serve as a reasonable source and proxy for most of the variables we need.

Variable	Description
Sector	The industry sector/subsector that the firm is in. This information is required to categorize the firms, and to apply controls for sector composition.
Location	The specific geographic location of where the firm primarily operates in. This would help to understand the distribution and concentrations of firms in a region, more specific location (e.g. based on postal code) would be preferred.
Firm inception year	The year in which the firm started operation. This information is used to determine the age of the firms.
Output	The annual production output (in monetary value or production quantum commonly used in the particular sector) of the firm. The firm's output value, i.e. the sales revenue is an indication of the firm's size and scale, relative to other firms in the same industry sector. The growth of output/output value should also be derived.
Number of employees	The total number of full-time employee in the firm. The firm's employee strength indicates the size of the company. Together with output, the firm's productivity can be derived as output / number of employee. The growth of employee number should also be derived.

   All these data should be obtained as a stock figure, i.e. as a snapshot of time. For output and employee number, a historical base year figure or time series data in the past several years should be obtained to observe growth pattern.

2. **Surveys and qualitative analysis (e.g. the World Bank Enterprise Survey)**

   While the firm-level data provides quantitative measure of productivity for all firms in the economy, surveys of sample firms may provide more qualitative insights about the challenges faced by the firms.

   In this regard, the World Bank Enterprise Survey, which is a firm-level survey of a representative sample of an economy's private sector, could be a good source of

information. The surveys cover a broad range of business environment topics including access to finance, corruption, infrastructure, crime, competition, and performance measures. The firm-level information of representative businesses provides more microscopic view of the companies in the economy.

Correspondingly, the World Bank Doing Business report would also provide insights on the business regulations and their enforcement at subnational or regional level. It would also be a good source of information on general business environment level, complementary to the Enterprise Survey at firm-level.

3. **Government policy plans**

   Clear understanding of the existing government policies and initiatives form an important input to the diagnostic process and help interpret many findings from the quantitative and qualitative analysis. These typically include
   - Central government SME policy, strategy and specific initiatives (e.g. Malaysia SME Master Plan 2012-2020);
   - Local government SME strategy and initiatives;
   - Central bank SME policy and initiatives. Access to finance (working capital, term loans and equity) is one of the core issues faced by SMEs and central banks typically have stated strategy, regulations and initiatives to help solve this from a banking sector point of view.

4.2. Defining and identifying competitive SMEs

The key activity here is to define the criteria for being shortlisted as competitive SME in the context of firm demography. We have indicated a three-part definition above based on age, growth and sector prospects. These can be tweaked so that a manageable number of high growth high potential small and medium firms are identified. Once criteria are defined, the list of a reasonable number of Competitive SMEs can be created.

Some key questions at this stage would include: what is the industry mix of these firms? And how does this growth trajectory compare to other countries at a similar stage of development? How large is the competitive SME sector compared to countries at a similar stage of development (in terms of contribution to GDP, employment)? In countries at a similar stage of development, in which sectors are competitive SMEs most commonly found (e.g. in IT)?

If the national data does not exist, could do some outside-in selection to identify and size the competitive SME sector based on the international experience.

4.3. Policy priorities to support competitive SMEs

The evidence on SME growth suggests several key factors that impact on firm growth. Benchmarking national performance on various metrics will provide an indication of strengths and weaknesses, and assist in prioritising policy action on the most relevant constraints. Aspects of this will be populated with 'hard data'. But it could usefully be supplemented by qualitative survey work, to better understand the perspectives of SMEs as to the key constraints on growth.

The key factors include:

- Capital markets including the financial depth and the VC market
- Internationalisation including growth in exports by SMEs and size distribution of exporting firms
- Business environment for SMEs including labour market flexibility and compliance costs (how easy is it to register, operate and grow an SME)

The output from the diagnostic will inform the design and weighting of SME policy. Table 2 begins to frame the policy goals, resource provision and regulatory emphasis separately for Competitive SMEs (Autio et al. [9]). The data to populate this diagnostic may not be complete; answering the series of questions may require an investment in collecting data to better understand firm growth dynamics, the behaviour and performance of competitive SMEs, and to identify the major constraints on firm growth.

Table 2

	SMEs Policy	High-Growth Entrepreneurship Policy
Policy Goals		
Objectives in relation to entrepreneurs	Entice more people to become entrepreneurs	Entice the right people to become entrepreneurs
Objectives in relation to entrepreneurial firms	Increase the number of new entrepreneurial firms	Increase the growth of entrepreneurial firms
Objectives in relation to operational environment	Facilitate the environment for small business operation	Facilitate the environment for entrepreneurial firm growth
Resource Provision		
Source	Mostly from public sources	Combination of public and private sources
Type of financial re-sources	Grants, subsidies, soft loans	R&D loans and innovation grants, business angel finance, venture finance, IPOs
Dominant service	Basic (standard) advice for firm creation, business planning, small business operation	Experience-based advice for venture finance; strategic planning, internationalisation; organisational growth
Resource distribution principle	Ensure equal access for everyone (re-source spread)	Select promising recipients (resource focus)
Regulatory Emphasis		
Life cycle focus	Remove bottlenecks to new business entry	Remove bottlenecks to entrepreneurial firm growth
Compliance bottleneck addressed	Reduce cost of compliance for small businesses	Smooth compliance requirements for growing firms
Fiscal regulations	Reduce VAT for small firms	Accommodate dramatic changes in firm scale; treat share options neutrally
Attitude toward failure	Avoid failure, bankruptcy	Accept firm failure and bankruptcy, but reduce the related economic and social cost
Links to other policy do-mains	Industrial policy, social policy, labour policy	Industrial policy, innovation policy, labour policy

The critical thing here is for governments to come up with inclusive policy while maximizing economic and social impact from limited government resources? As many studies have shown, Governments often fail if they try to pick winners (firms that the government thinks will succeed) and also increase risk of capture. Some of this can be solved by simultaneous engagement with many firms at a sector, value chain or cluster level. The risk can be further mitigated by dynamic planning, stage-gate funding and by leveraging new forms of media to inject greater transparency.

Another point to note is that the initiatives are not necessary all through public policies or government actions, as observed in many other instances. Working with private sectors or strengthening private sector capacity might be more effective and efficient in delivering the results.

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[9] http://www3.imperial.ac.uk/pls/portallive/docs/1/52835696.PDF

For example, a credit bureau for SME could be established to provide an independent evaluation of the financial stability of small firms, and it would help to address some of the challenges in accessing to finance. A credit bureau for SMEs will also run into the constraint of accessing too many SMEs with limited resources and they may be best suited to start their coverage with Competitive SMEs.

In addition, as Khan pointed out in his research (Khan 2009), for companies to become competitive, balance between price and quality needs to be achieved through acquiring "tacit knowledge" that can only be learnt by doing, and the pace of absorbing the tacit knowledge depends on the level of effort put in by the firm. The key take away for policy makers is that the financing instruments made available to firms should focus on rewarding, inducing or requiring the firms' level of effort and quality, and it must also be balanced against political statement and firm structures.

Lastly, as a "quality control checklist" for designing SME policies, the following should be answered to ensure the proposed policy addresses the "competitive SMEs":

- Will the competitive SMEs (i.e. the 5% of firms) need and want the proposed initiative?
- Will the competitive SMEs be benefited from the initiative?
- Will the competitive SMEs be benefitted more than the rest of firms?

4.4. Monitoring, evaluation and incentives to support the new approach

The number of registered SMEs in most countries tends to be very high. The number is also in flux with a large number of firms entering and exiting. For example, the city-state of Singapore, ranked 39 in the World by GDP, has approximately 154,000 firms. Of these, around 30 per cent of firms are either brand new or are in the process of exiting - 22,826 businesses were formed and 22,497 businesses ceased operation in Singapore in 2012. Tracking and closely monitoring competitive SMEs, is therefore, a more practical way for government authorities to manage the SME portfolio of the economy. It is also a critical step to monitor and evaluate Competitive SME policies.

We recommend that the short list of competitive SMEs be tracked over the years. The effectiveness of government initiatives and institutions focused on SME development could be measured against the fate of these firms over the years. This would also inform the government's future strategy for improving SME productivity. We reiterate the point made in previous subsection that the policies must remain inclusive and the field should be level playing. We also reiterate that focusing on competitive SMEs is not a substitute for *economy wide reforms to make doing business easier for all businesses, which is often a big enabler for the SME sector*. However, given limited financial and human resources at disposal of governments, it will help to track, monitor and aim to make high potential SMEs globally competitive. Box 3 and 4 cover some specific examples and ideas.

To take ownership of this research and policy agenda, we also suggest that a Project Management Office (PMO) be established in a relevant government agency. This policy areas cuts across many government agencies, and coordination is required. In addition, without sustained and focused effort, smart policy is unlikely to be fully effective.

5. Concluding remarks

There has been renewed policy and research interest in SMEs over the past decade or so. This is welcome; SMEs can make a valuable contribution to national economic performance.   But this

paper has argued for a more focused, better balanced approach to SME policy so as to maximise the contribution to national economic outcomes. The goal is to ensure that all parts of the economy are set up to make a strong contribution to income, productivity, and employment growth.

In particular, this paper has argued for a tighter focus on efforts to support competitive SMEs. The guiding thought here is that firm-based policy ought to be guided by materiality; given limited policy and fiscal resources, policy should be tightly focused on the areas that will contribute the maximum amount to overall economic performance; jobs, innovation, GDP, and so on.

This policy effort needs to be supported by a research agenda: for example, greater efforts to assemble diagnostic data on how to assess the relative importance of SMEs and the nature of the policy agenda. Investing in relevant data and research to better inform these specific questions would add value.

For most developing countries, a two-pronged approach to support competitive SMEs is recommended. The first pillar is a set of policy themes that reward outcome and impact, while the second pillar is about the process of policy design, delivery, monitoring and iteration. Government policies should focus on enabling high potential enterprises to grow rather than merely increasing the number of firms in the economy (Table 2).

Examples of key policy themes include improving a firm's strategy and execution through management capacity building, and improving the firm's productivity and innovation (Box 3 and 4). The concept of competitive SMEs requires the government to prioritise resources towards fewer firms since covering hundreds of thousands of firms is not practical. However, the final policies and actions must remain inclusive, reward performance along with good governance, and avoid capture and market distortion.

BOX 3: Case Study: Competitive SME policy themes and examples - Singapore

The problem statement for policy-makers is to: **how to get maximum impact from limited government resources to develop competitive SMEs, while remaining inclusive?** As many studies have shown, Governments often fail if they try to pick winners (firms that the government thinks will succeed) and also increase risk of capture. So policymakers have to design smart policies that are arms-length, equal opportunity, but unlock the potential of competitive SMEs.

While monetary grants and subsidies are common tools that the government agencies may deploy, these are not the only approaches. For example, some of the programs initiated by the Singapore government taps into the resources and expertise available in the market, creating incentives for scalable and strong SMEs to grow.

Ranked No. 1 in the World Bank's "Doing Business" survey consistently, Singapore government is famed for its business-friendly policies and pro-business attitude. Various government agencies and statutory boards have programs and schemes targeted at different industries with different objectives. Following are some examples from Singapore that could serve as reference for designing policies and programs to support competitive SMEs.

1. **Grants to improve productivity – Enhanced Mechanisation Credit (MechC) Scheme**

This grant is open to all Singapore-registered construction contractors, aimed at helping them to improve productivity and adopt new technology. Administered by Building & Construction Authority (BCA) of Singapore, and recently enhanced with higher cap and larger funding amount in 2013, this grant reimburses contractors up to 70 per cent of the costs incurred in purchasing or leasing equipment that results in productivity improvements.

This scheme looks at rewarding "throughput" rather than "inputs", and it rewards only those who have already demonstrated significant productivity improvement (i.e. at least 20 per cent manpower saving). As such, it encourages the firms to become more productive and hence more competitive in the process, and incentivizes those who have achieved positive results. The scheme has certainly benefited many small contractors, resulting in as much as 400 per cent improvement in productivity for some.

2. Equity financing for successful startups – Startup Enterprise Development Scheme (SEEDS)

To assist young (less than 5 years) and prospective (demonstrating high growth potential with clear scalability for the international market) entrepreneurs to grow, the scheme provides co-investment options with another third party investors. Specifically, SPRING SEEDS Capital (SSC), a wholly-owned subsidiary of SPRING Singapore, will match the sum invested by third-party investor(s) dollar-for-dollar up to a maximum of $1 million, thereby taking an equity stake in the investee.

Government is not directly involved in the private sector capital market actions. Qualified VCs have full autonomy to choose, are incentivized to invest more because of higher returns due to co-financing, yet have to bear the risk if the startup fails. It helps the prospective SMEs to tackle both the challenges of access to finance and access to expertise. This scheme has helped many local startups to grow and expand in the international market.

3. Non-financial assistance/consulting for international expansion – IP for Internationalisation Program

IE Singapore provides training and consultancy services on protecting and maximizing intellectual property rights for Singapore companies who wish to venture abroad, through strategy, research, training and online resources.

This program, among many others that championed by various Singapore government agencies, are aimed to develop a pool of knowledge and experiences in a certain domain area (e.g. IP) that all firms can tab on, or serve as a common platform to create a more vibrant environment for aspiring businesses to grow.

By providing more publicly available resources required by growing SMEs, no firms are excluded from the benefits that government offers, yet only the more competitive ones will utilise these resources to their advantage to create more value in the economy.

BOX 4: Case Study: Competitive SME policy themes and examples - South Korea

The South Korea economy has grown rapidly into the 10th largest economy power in recent years, and SMEs have made significant contribution. They account for 99.5 per cent of the total businesses, 77 per cent of people employed and 50 per cent of the value add in the economy. There have been over 100 SME policies since 1960s, with themes shifting as the economy developed.

In recent years, the focus has been on strengthening SME competitiveness, internationalisation and establishing win-win cooperation between large businesses and SMEs.

1. **"Purchase-Guaranteed New Product Development Programme" - SMBA**

Through this program, the Small and Medium Business Administration (SMBA) supports SMEs' new product development with up to 500 million KRW funding after receiving voluntary demand from the public organisations or large firms.

The government (i.e. SMBA) marries the demand and supply from large and small firms respectively, institutionalizing the collaboration in the complementary eco-system. Government funding is spent on product innovation with a tested market demand, to support SMEs that have demonstrated scalability. According to the SMBA's 2009 Report, this programme has been very effective for SMEs in lowering development cost and in substituting previously imported products with nationally produced ones. Participation has steadily increased with over 170 purchasing organisations taking part in 2008.

2. **"Hidden Champion Initiative" – Korea Import-Export Bank (Eximbank)**

As the official export credit agency of Korea, the Korea Eximbank developed this program to provide policy assistance to facilitate high-potential SMEs' development towards becoming a leading global export company. As the state-run bank, Eximbank will provide both financial and non-financial support to selected SMEs throughout the stages of business activities including product development, production, and overseas sales.

Though the selection process might be challenged on the ground of fairness and effectiveness, the concept behind this initiative is to give special attention to more competitive firms in the market, and provide targeted resource aid to facilitate their growth.

BOX 5: Case Study – Competitive SME policy themes and examples - Malaysia

Ranked number 1 in ease of doing business among 49 upper middle income countries by the World Bank Doing Business, Malaysia has fairly vibrant private sector, and the Malaysian SMEs have been at the forefront of economy development even before the country's independence.

With the vision of "creating globally competitive SMEs across all sectors that enhance wealth creation and contribution to social well-being of the nation" and to become a high income nation by 2020, the Malaysia SME Master Plan 2012 – 2020 clearly articulated 4 goals and 32 initiatives to change the SME landscape in the country. The philosophy adopted in this master plan is very much in line with the concept of competitive SME.

The four stated goals are:

a) increase business formation
b) expand number of high growth and innovative firms *(similar to competitive SME approach)*
c) raise productivity *(this goal is also embedded in the competitive SME approach)*
d) intensify formalization

The following two initiatives (from the 6 High Impact Programs (HIPs)) serve to illustrate how they achieve the goals of expanding number of high growth and innovative firms and of raising productivity. Though these initiatives are yet to crystalize as specific policies, they are helpful in reflecting the thought process of policy designing.

Malaysia is developing the **Technology Commercialisation Platform** (TCP) to encourage innovation. Under this program, the current incubation facilities are integrated under one national platform; programme managers are incentivised upon successful commercialisation; and SMEs and potential financers are better linked. As we can observe, the design of the TCP project focuses on identifying the most competitive and innovative firms. The second example is the **Catalyst Programme,** which aims to create home-grown champions through a targeted approach with support in the area of financing, market access and human capital development. The program has transparent selection criteria and exit mechanisms and design supports the development of the most competitive firms.

6. Areas for future research

This paper attempts to establish the concept and definition of competitive SMEs, and proposes a step-by-step approach in devising smart SME policies that focus on supporting the growth of competitive SMEs while remaining inclusive. Given the wide difference in the SME space across different countries, we consciously adopted a generic approach for our analysis and diagnostic. In practice, each country or location will need to define and diagnose competitive SMEs specific to prevailing conditions.

As the firms differ significantly in many aspects such as geographic location, industry sector, level of economic development, position in the value chain, their characteristics and needs in policy support also vary greatly. As such, the main area of focus for subsequent research should be to zoom into several specific regions/countries or specific industries or both. Deeper regional studies are required to answer pertinent questions on competitive SMEs, such as where they are located and which industry sector they are in, what are their needs and what policy measures have been proven effective (and ineffective).

In relation to the above, it might also be interesting to analyse the relationship between SME's contribution to employment, GDP and productivity and the country's income level, to understand if it is a good thing to have higher share of GDP come from SMEs in an economy, or if there is an optimal composition between small and large firms.

Another important area that is not covered in this study is on the informality of economy and business setup, particularly in less developed countries. Informal businesses, which are typically small, also contribute to economy and job creation. This is particularly relevant for Africa, where their contribution to jobs can be significant. Devising relevant policies and formalizing these businesses would also be an area of interest for future studies.

More importantly, we believe that the future work in this area should be done in partnership with a few clients both to deeply study competitive SMEs in a specific region and to develop and test interventions. The in-depth learning from experiences of competitive SME policy implementation, such as the implementation arrangement, cost and return, and impact evaluation methodology would also be of great value to many other clients.

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