

The background of the page is a black and white photograph of a cable-stayed structure, likely a bridge or a large architectural canopy. The image shows a dense network of white cables radiating from a central point, creating a complex geometric pattern. The cables are supported by a central vertical pillar. The overall aesthetic is clean and modern, with a focus on structural design.

# The growth challenge

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This report reviews the policy environment and support structures supporting SME growth in nine countries. It draws on the Virtuous Circle of Enterprise Growth framework and builds on a series of interviews with policymakers and SME advocates.

# The growth challenge

Prepared for ACCA by Delta Economics





## Contents

Executive summary	4
1. Introduction	5
2. A conceptual framework for SME development and support	7
3. Methodology	11
4. Literature review	12
5. Key indicators: business population and contribution to GDP	18
6. Flagship business support schemes	20
7. Clusters: level and manner of localisation	27
8. Funding provision	30
9. Balance of public and private support	33
10. Conclusions	37
References	43

## Executive summary

Over 99% of the world's businesses are micro- or small and medium-sized enterprises (SMEs). Depending on the country and its stage of economic development, the businesses in this study can account for between 10% (Nigeria) and 60% (China) of national GDP and between 16% (Singapore) and 68% (China) of all exports. The OECD reports that SMEs globally account for around 30% of all exports, which Delta Economics estimates as having a value of US\$470bn (Delta Economics 2014). Assuming the steady state of growth in world trade at current forecasts of nearly 1% annually to 2017, this will rise to nearly US\$520bn by 2017. If the proportion of exports accounted for by SMEs increases through current policy then this contribution to the world economy will be larger.

The study covers nine countries: China, India, Nigeria, South Africa, Singapore, the US, the UK, Germany and France. All these countries face different challenges relating to their stage of economic development and the role that entrepreneurs are able to play in stimulating economic growth and development.

The framework used here to assess enterprise policy and the institutional frameworks to support business growth is the Virtuous Circle of Enterprise Growth. This has four stages, which relate to the growth of an enterprise and the applicable policies. It is not, however, a rigid set of stages but must be seen more as a fluid, interconnected and iterative set of policy and environment inputs, which inform and relate to the whole process of the growth of enterprises and wider economic development.

The research demonstrates that the process that takes the entrepreneur out of self-employment and/or 'necessity entrepreneurship' and through to sustainable, job-creating and growth-oriented enterprise is vital for both wealth and value creation.

The research shows that policy to support SME growth should not be seen as linear, and nor should policy be seen simply as the regulation of individual entrepreneurial actions. Enterprises, irrespective of their geographical location or stage of development, require different support from the same infrastructures as they grow. The balance of public and private sector funding should change as the returns from any support move from public to private. Similarly, the fiscal system must work to encourage private sector investment at an early stage where returns in the long term accrue to the private sector or to the social sector (as in the case with philanthropy). This requires tax incentives to promote and sustain a culture of re-investment.

All countries in the study have policies and a balance between public and private support that can broadly be placed within the Virtuous Circle framework. How sophisticated each stage is in its development is partly a function of how long there has been a focus on enterprise and enterprise policy. For example, the US appears from this research to have the most sophisticated structure, taking entrepreneurs through the process of business growth to re-investment through business angel activity stimulated through the tax system. Alternatively, countries such as Singapore, because they are small,

operate tight cluster policies for big data, biotechnology and information technologies. These policies have allowed the relatively fast agglomeration of professional and financial services, venture capital, legal support and education and training, alongside high enterprise birth rates.

The policy implications of the Virtuous Circle are that governments should view enterprise development as an evolutionary, iterative and non-linear process. This means their having direct involvement at the earliest stages to develop enterprise culture and provide skills training, innovation support and small-scale finance. The effects are positive in generating greater labour market participation through enterprise and potentially higher levels of innovation and commercialisation. As a business grows, and as the incentives for private investment grow, there is less need for direct financial involvement by the government and in the most sophisticated Virtuous Circle structures, government support takes a facilitative role and is combined with tax incentives and regulatory frameworks that stimulate long-term investment. This investment is at two levels – an enterprise level through growth, innovation and employment and an individual level where the entrepreneurs themselves have incentives to invest in early-stage ventures, whether in the social or economic space.

# 1. Introduction

This report is a review of enterprise policy and institutions in nine countries. Five of these are developed nations: the UK, Germany, France, the US and Singapore; four are emerging: China, India, South Africa and Nigeria. These countries were selected on the basis of their different approaches to enterprise policy, stages of development and size.

Fieldwork for the report was conducted between March 2013 and September 2013, a time when there was some evidence that Europe and the US, in particular, were pulling out of flat or negative economic growth, although this new-found optimism was balanced by the threat of slower growth elsewhere, particularly in emerging Asian countries. The primary material for the country studies was taken from documentary sources and interviews. The economic climate may have influenced some of the qualitative information. In order to counter this, the report includes a survey of literature and quantitative data to substantiate the qualitative findings.

## AIMS AND OBJECTIVES

The report aims to establish the critical success factors for policy and infrastructures to support the growth of small and medium-sized businesses. It reviews the size of the business base, looks at skills and innovation support in the education and training systems, reviews access to finance structures, access to mentoring and support networks and the balance between public and private sector support, and concludes there are many common features of enterprise policy. In particular, the need for support for the commercialisation of research,

enterprise training and access to finance is a recurring theme. Within the overall aim are a number of specific objectives.

- To develop a conceptual framework that aims to balance public and private support for enterprise growth, to move the debate on enterprise support from one that assumes businesses grow up in stages akin to a growth 'escalator' to one where the process is seen as iterative and non-linear. In other words, to allow for the possibility that public support structures can move from direct support at the outset to stimulation of reinvestment in venture capital trusts, business angel investment and even venture philanthropy as ways of putting money back into the enterprise-growth process.
- Through a literature review, to assess the contribution of policy towards innovation, skills development and training, access to finance and mentoring.
- To establish the stages of development of enterprise policy in each of the countries, by reviewing documentary evidence.
- To interview policymakers and practitioners in each of the countries to assess the effectiveness of the policy structures in each country.
- To draw conclusions about policy generally and at a country level from a summary of all the evidence.

## DEFINITION OF SMES

For the purposes of this report, micro-enterprises are defined as businesses with fewer than 10 employees. Small businesses have 10–49 employees and medium-sized businesses 50–249 employees. As regards employment figures, this is consistent with both the EU and International Finance Corporation (IFC) definitions of an SME. Most jurisdictions also use sector and turnover criteria in defining SMEs. Thus in the EU a micro enterprise must have turnover of less than €2m and a small enterprise's turnover cannot exceed €10m. In any case, the 250 employee threshold is the most common at the global level (Kushnir et al. 2010).

## REPORT STRUCTURE

### A conceptual framework and the role of SMEs

The background chapter, 'A conceptual framework for SME development and support', places the debate on enterprise growth policy within the context of economic growth and job creation. This chapter describes the 'Virtuous Circle of Enterprise Growth' and illustrates the changing balance between public and private sector support in ensuring not only that businesses grow, but also that they put resources back into the enterprise economy both as they grow and once they have grown. It argues that there are critical differences in the challenges that policy faces in different countries, depending on a country's stage of development or the economic growth challenges it faces.

### **Methodology**

This chapter discusses the approaches used in order to study business support as well as the hypotheses to be tested. The report is based on documentary and online evidence, including a review of the literature on business support. This is complemented by expert interviews, case studies and supporting quantitative and survey data using Delta Economics' proprietary data sources.

### **Literature review**

This chapter reviews the academic literature on policy structures and their effectiveness, including literature on the importance of innovation, skills, finance, networking, and balancing public and private sector support. The results are presented as a meta-analysis of the dominant contributions to specific areas of analysis examined for the purposes of this report.

### **Key indicators: business population and contribution to GDP**

This chapter uses key indicators to review the importance of SMEs in the countries studied and demonstrates that SMEs account for the majority of employment, irrespective of country.

### **Flagship business support schemes**

Business support schemes vary in their implementation but there are four key areas in which business support is relevant, regardless of a country's stage of development: business birth, business growth and sustainability, enterprise context (education and training, finance, innovation) and enterprise climate (institutional and economic). This section demonstrates that appropriate education, innovation, business birth strategies and networking policy are highly supportive

at the initial stage of growth, while access to research and skills remains important as businesses grow. Business support is often seen in these terms simply because it is an area where government policy can be strongest, since the incentives for private sector involvement are lower at this stage. It is argued that fiscal policy has a role throughout the cycle in stimulating R&D, recruitment and investment/re-investment.

### **Clusters: level and manner of localisation**

This chapter enumerates at a regional level the support structures in the public and private sector that contribute to successful regional clusters. It demonstrates that the stages in the Virtuous Circle are represented regionally as well as nationally and that the secret of the success of many regional policies can be attributed qualitatively and historically to cluster policy that reflects the Virtuous Circle approach.

### **Funding provision**

It is finance that ensures that the Virtuous Circle is effective. What is important is that the role of government becomes progressively less obvious as businesses grow – for example, SBA (Small Business Administration) in the US, and the German KfW (Bank for Reconstruction and Development) support structures providing guarantees and co-investments alongside commercial banks. These are models that work well regionally and nationally to support enterprise growth. These structures become less visible as the potential for private sector returns increase.

### **Balance of public and private support**

This chapter looks at how the Virtuous Circle of Enterprise Growth balances private return against public return, and structures funding accordingly. At the earliest stage of a business the public returns are greater than the private returns so there is greater public support, implemented as business birth-rate policy. As the business grows and becomes more established, the private returns increase and thus the role for government is to step aside from direct funding and provide support through the taxation system to encourage business growth, investment and, critically, re-investment in the enterprise cycle.

### **Conclusions**

The concluding chapter summarises the interviews in relation to policy and argues that a 'one size fits all' approach to policy is not appropriate. Business support interventions that view enterprise growth as iterative and connected rather than as a linear process ensure that the wealth created by enterprise feeds back to generate more enterprise opportunities and growth.



## 2. A conceptual framework for SME development and support

Over 99% of the world's companies are either micro- or small and medium-sized businesses (all 'SMEs' for the purposes of this report). Depending on the country and its stage of economic development, these businesses can account for between 10% (Nigeria) and 60% (China) of national GDP and between 16% (Singapore) and 68% (China) of all exports. The OECD reports that SMEs globally account for around 30% of all exports, whose value Delta Economics estimates as US\$4.8 trillion (Delta Economics 2014).

Assuming a steady state of growth in world trade at Delta's current forecasts of nearly 1% annually, this will rise to nearly US\$520bn by 2017. If the proportion of exports accounted for by SMEs increases through current policy initiatives (such as the export guarantee schemes that operate in France and Germany), then this contribution to the world economy could increase further.

There is no doubt that SMEs have a substantial role to play in creating jobs, economic growth and innovation but this role varies depending on whether a country is fully developed or emerging. Accordingly, this report looks at both the developed and the developing world. Although the definitive link between entrepreneurship and economic growth is still to be proven (Hessels et al. 2012), there is evidence that the role of internationalisation is vital in developed world economies in determining the value of SMEs' contribution to economic growth (Romer 2000, Audretsch and Acs 2005).

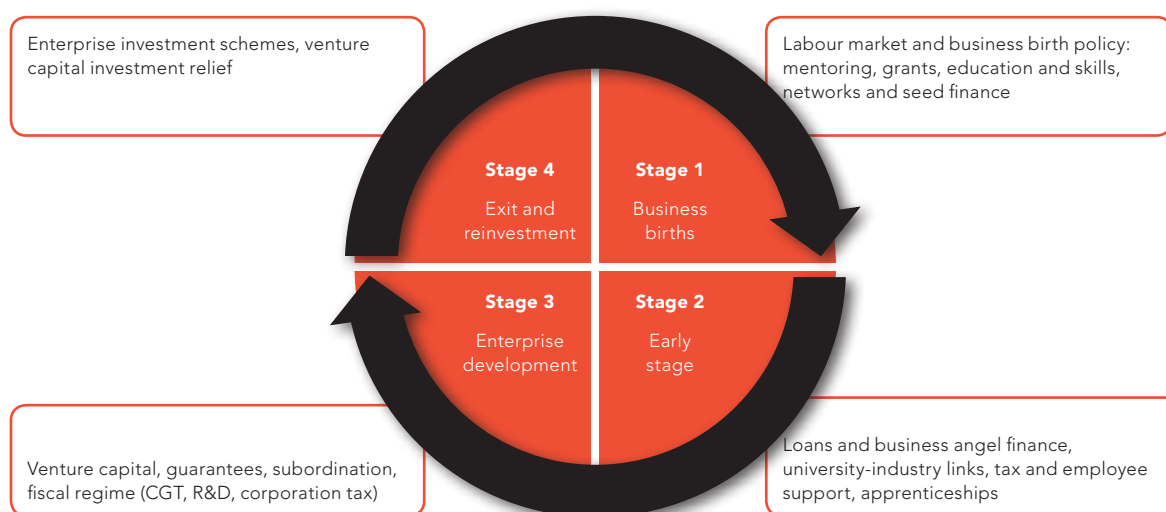
International comparisons of SME support mechanisms often choose Germany as a benchmark. Its economy has been an engine of growth for the Eurozone since 2010 and its export momentum contrasts with the relative introversion of many economies elsewhere in Europe or North America. Germany, as is well documented, is heavily reliant on its so-called 'Mittelstand' businesses: small and medium-sized businesses that are independently (often family) owned, that are rooted in their region but globally ambitious and long-term in their thinking. They are reflective of the 'German model': highly export-oriented, highly innovative and effectively financed. The strength of these businesses, it is argued, has been a major contribution to Germany's economic success since the 2007–8 global financial crisis.

It is not, however, the German model that is the focus of this report.. Rather, the emphasis is on comparing the structures, systems and policy frameworks in the nine countries to ascertain which ones support enterprise growth and, hence, economic growth. This report develops a generalised/ stylised framework for enterprise growth – a 'virtuous enterprise circle' – and applies that to identify where country-specific enterprise characteristics are supported and developed. It defines where there are gaps and looks at how policy can address them.

Enterprise policy, it is argued, falls into four stages, which are common to all countries studied and are illustrated in Figure 2.1.

- Business birth rate strategies (coaching, mentoring and network support alongside education and training and innovation).
- Policies for sustainable growth at the early stage (loans, guarantees and seed finance alongside institutional support).
- Support for 'gazelle' growth (20% growth year on year) and enterprise development (formal venture capital, private equity and business or commercial banking).
- Institutional frameworks for exit or reinvestment of profits, including frameworks for financial stability.

**Figure 2.1: The Virtuous Circle of Enterprise Growth**



For stages 1 and 2 – business births and early stage development – the early literature focuses on identifying how businesses developed, the geographical distribution of those business and the effectiveness of business birth-rate policies. At these stages, the regional and sectoral clustering effects are strong, in emerging as well as developed nations. Clustering will depend on the interplay between the R&D and managerial capacities of the businesses themselves and the agglomeration of activity to support business development (for example, professional services, finance and networking structures). Effective business birth-rate strategies in themselves are no guarantee of business growth.

For stages 2, 3 and 4 – early stage, enterprise development, and exit and reinvestment – the emphasis is on funding provision and public-private sector balance. The prevalence of private sector growth finance, such as that from business angels and venture capitalists, needs to be coupled with policies or structures targetting investors through advisers. There are variations between countries in how these connections manifest themselves. For example, in emerging markets, private sector finance is initially more likely to take the form of microfinance. The available structures need to change to enable business growth rather than business dependency – in other words, they may include equity and debt alongside advisory support. Across the

world, the research suggests that public support through funding is more effective if it is provided through the private sector, for example through guarantees and co-investment, and there is strong evidence to suggest that public sector engagement should be aimed at plugging an 'equity gap' where there is a market failure, rather than providing growth finance where this could be done through bank loans. Non-financial support aimed at developing investment readiness can help generate 'deal flow' for finance providers.

## THE REPORT AND THE VIRTUOUS CIRCLE OF ENTERPRISE GROWTH

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This report argues that there are four overlapping stages within the Virtuous Circle of Enterprise Growth. Thus, for example, fiscal incentives have a role at each stage: at stage 1 their role is to encourage private investment into new start-ups in the form of mentoring and some seed capital; at stage 2 their role is in stimulating business angel investments; at stage 3 they ensure that venture capital funds have resources, that expenditure on research and development is rewarded and that entrepreneurs themselves will have incentives to introduce external growth finance through capital gains tax relief. At stage 4 their role is vital and ensures that not all the value that is created through enterprise growth accrues to the individual owners but is instead reinvested, to create both more wealth for the individual entrepreneur and economic growth and wealth for society. In fact, the iterative nature of the policies at each stage means that the policies can and should overlap.

The Virtuous Circle suggests that enterprise growth must be seen as non-linear and iterative. There are two key aspects of this. First, the process is cyclically linked to the business cycle and re-visits similar issues at different stages as the business grows. Second, as a business gets beyond the need for direct public support it increasingly requires tax incentives to encourage reinvestment – either in the form of business development or in the process of individual investment in new enterprises by successful

entrepreneurs. This moves away from the linear perspective, which sees entrepreneurs as being led up an enterprise growth escalator, visiting an issue once at each stage. One crucial flaw with the staged approach is that entrepreneurs are often encouraged to exit at stage 4 of the process and remove their money and know-how from the system. Of course, that can happen at any stage, but a rigid model reinforces that as an accepted pattern of business behaviour. The reinvestment part of the US tax system is an example of the non-linear approach, as it encourages entrepreneurs to keep investments in the business after stage 4.

The mix between public and private provision varies depending on where the return is greatest. For example, at the birth-rate stage returns are largely public or social (for example reduced unemployment or greater self-employment) and thus support is primarily instigated and maintained through the public sector, not just for enterprise support but also as part of labour market policy (such as the unemployment-to-self employment and mini-jobs schemes in Germany and their equivalents in the UK and US). The ratio of support becomes biased towards the private sector as the potential for private return increases. At the final stage, where the role of successful entrepreneurs becomes critical (for example, through business angel finance or through coaching and mentoring), the key is to create effective frameworks through the regulatory and tax regime and provide incentives rather than direct financing.

## CHALLENGES IN INCORPORATING THE MODEL

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Although the ultimate goal for policymakers should be to create a Virtuous Circle, the challenges vary depending on the following factors.

A country's initial stage of economic development. Evidence suggests that there is much higher early-stage entrepreneurship and own-account work (through self-employment or the informal economy) in developing economies than in developed economies. According to Delta Economics' qualitative interviews database, the policy challenge is to turn this vulnerable, 'necessity' and often temporary entrepreneurship into sustainable businesses.

Entrepreneurs' incentives for going into and staying in self-employment. In economies where high and persistent structural unemployment has been a challenge, such as Germany during 2000–10, policymakers focus on self-employment and a business creation strategy as part of efforts to make the labour market less inflexible and to offer more opportunities for people to move back into work. In the interviews conducted for this research there was considerable praise for this approach, which has been emulated in the UK and France, among others. Entrepreneurship as a labour market strategy and business creation strategy suffers, however, if businesses are not supported by mechanisms that allow them to become sustainable.

## ENTREPRENEURS AND SMES AS A ROUTE TO GROWTH

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This model goes beyond that of the 'holistic' approach proposed by Roper and Hart (2013) or the 'growth escalator' proposed by Harding et al. (2002). Nor is it simply the 'Entrepreneurial Ecosystem' proposed by the World Economic Forum, which looks only at the start-up structures necessary to create an entrepreneurial environment. It builds on work by Acs et al. (2013) in providing a framework that allows us to examine enterprise policy in a framework of a 'national system of entrepreneurship.' Acs et al. (2013) argue that the national system of resource allocation is driven by individuals pursuing market opportunities. Institutions, they argue, serve only to regulate the outcome of individual actions.

This approach assumes that all entrepreneurship is individual, but, as research by Delta Economics (2013) suggests, entrepreneurs across the world have multiple objectives; they are not motivated by just one thing, and use different support structures at different stages in their development to help them achieve their objectives (ACCA –Delta 2012). For example, an entrepreneur will be motivated by the desire to make money, the desire to have autonomy over time and the desire

to exploit a market opportunity at once. The approach taken for this report emphasises the need for interdependency between all levels of policy support, not just through tapered financing, but also through fiscal incentives for R&D or investment from entrepreneurial gains (as is the case with the R&D tax credit or the Enterprise Investment Scheme in the UK). This allows not just business growth but also development and investment for the future.

So for policymakers, irrespective of geography, as has already been illustrated in Figure 2.1 above, the challenge for policy has to be to provide a framework that allows the entrepreneur to set up a sustainable business that can fulfil its growth potential. As Roper and Hart (2013) argue, this can take many forms, from mainstream policy initiatives (including enterprise culture and education) through to targeted SME measures to support particular sections of the entrepreneurial and SME community (for example, those concerned with a particular innovation or sector) (Roper and Hart 2013). Unlike that of Roper and Hart, this research allows for a process that is iterative and non-linear; one that facilitates a virtuous circle of public and private sector interaction and does not allow businesses to grow without creating economic wealth.

### 3. Methodology

This research uses the Virtuous Circle of Enterprise Growth framework to examine enterprise policy and institutional frameworks to support business growth in the following countries: the UK, the US, Germany, France, Singapore, China, South Africa, Nigeria and India. This country focus allows learning from structures in developed and emerging markets to be understood. While it is accepted that the different stages of development of these countries mean that generalisation is difficult, there are sufficient commonalities to make comparisons interesting and useful.

The report sets out to achieve the aims and objectives laid out in the introduction and as defined in the terms of reference, by using multiple methodologies.

Literature review: the literature review examined the major policy-related publications and journals concerned with enterprise policy and links to economic growth over the past 20 years. JSTOR and search techniques were used to extract articles that focused on key aspects of enterprise policy. The literature review is presented both as a discussion and as a meta-analysis of the articles that are most important in the context of this report, giving quantitative results from the articles reviewed, where possible.

Documentary and online evidence: the literature search was supported by a comprehensive search of policy and institutional information about enterprise frameworks in each of the countries. A similar approach was used to establish detail on education and training, innovation and finance structures in each of the countries, as well as the balance between public and private provision of support.

Online evidence was structured into a detailed meta-analysis of regional clusters in each of the countries, enumerating their size and structure in terms of numbers of start-ups, growth businesses, professional advisers, sources of formal and informal venture capital, banks and education and innovation structures and links.

Expert interviews and case studies were conducted, including interviews with at least one policy practitioner and one professional or financial services adviser.

Supporting quantitative and survey data was obtained where relevant: the authors have used Delta Economics proprietary data sources to support narrative in the text, as appropriate.

## 4. Literature review

### THE GROWTH AND POLICY CHALLENGES

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'The entrepreneurial idea has gone mainstream, supported by political leaders on the left as well as on the right, championed by powerful pressure groups, reinforced by a growing infrastructure of universities and venture capitalists and embodied by the wildly popular business heroes such as Oprah Winfrey, Richard Branson or India's software giants' (Wooldridge 2009).

The purpose of this chapter is to discuss the link between entrepreneurs and growth businesses in a global context, through a brief overview of the literature. The study covers nine countries, all of which face different challenges according to their stage of economic development and the role that entrepreneurs are able to play in stimulating economic growth and development. It is clear from interviews that taking the entrepreneur out of self-employment and/or necessity entrepreneurship and through to sustainable, job-creating and growth-oriented enterprise is vital for both wealth and value creation (Delta Economics 2008).

Many major research projects and studies have attempted to address the issue of the link between entrepreneurship and economic development and growth.

The Global Entrepreneurship Monitor has suggested a 'U'-shaped relationship between entrepreneurial activity in the general population in specific countries and per capita GDP (Wennekers et al.

2005) This suggests that lower levels of income will generate higher levels of subsistence (or 'necessity') entrepreneurship that are a reaction to a failure of the labour market to produce sustainable jobs.

The links between innovation and long-term economic development have spawned a literature which looks both at the relationship between innovation and economic growth (Freeman and Louca 2001) and at approaches linking innovation to stages of economic development. Michael Porter (1990, 1998), for example, argues that economic development can be seen in three phases: the factor-driven stage where much activity is driven by high rates of agricultural self-employment, the efficiency-driven stage where larger companies exploit economies of scale in larger markets, and the innovation stage, which is marked by individually led innovative activities either in firms or by individuals acting entrepreneurially outside firms (see also Romer 1990).

Attempts to link economic development and entrepreneurship are reviewed by Acs and Laszlo (2009) who suggest that, at the factor-driven stages of a country's development, entrepreneurship is of 'poor' quality and a reaction to labour market failure, while at the innovation stage it is of a higher quality, generating wealth in the context of a developed economy. This approach, also adopted by the International Labour Organisation (ILO) (Harding 2010a), highlights the importance of institutional frameworks as drivers of entrepreneurship and economic development

Yet these interpretations are fraught with difficulties since they are predicated upon a definition of entrepreneurship that is 'heroic' and focus on innovation as a mechanism for generating economic wealth. While innovation is of course critical, this approach does not explain how individuals react to under-development through entrepreneurship. In other words, it does not explain how an innovation-driven developed economy based on sustainable enterprise can be created out of one where the majority of the population live on less than US\$1.25 a day.

Wooldridge (2009), writing in *The Economist*, explores some of the myths around entrepreneurship: entrepreneurs do not always set up large businesses, they can be found anywhere, they are not misfits, they are not all young, venture capital is only a part of the mix for supporting and developing entrepreneurial entities and many entrepreneurial firms focus on processes rather than products (such as online delivery, for example). He goes on to argue that the contract between employers and employees is changing, meaning that more workers need to have entrepreneurial skills to survive in the labour force – in essence, we are all required to be entrepreneurs. (See also the discussion of entrepreneurs and entrepreneurship in Harding 2006a). More than this, there is a growing awareness that social enterprises have a vital role to play in 'fixing' some of the world's most intractable social and environmental problems (Bornstein 2004).

## LITERATURE REVIEW DEFINITIONS

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This means that a more inclusive view of entrepreneurship is needed – one that acknowledges that the ‘heroic’ concept is, perhaps, not fit for purpose in understanding the role that individuals across the world play in their own labour market engagement as well as in building sustainable enterprises. Thus for the purposes of this report the following definitions are used.

The Entrepreneur: defined as a ‘change agent’ who can thrive either individually or in an employed context. They fix personal, economic, social or environmental problems through enterprise activity or their own labour market engagement.

Entrepreneurship: the process of setting up an activity or venture, whether in the social, environmental or economic/technological space, which becomes economically and financially sustainable.

Sustainable development: forms of progress that allow entrepreneurs to meet the social, environmental or economic needs of communities without compromising the capacity of future generations to do the same (Buckley et al. 2009).

Growth business: the organisational form (either private sector commercial, private sector but not for profit, or public sector) that enables the business or company to contribute its full potential to Gross Value Added, Employment or GDP. The literature often uses a rate of growth of 20% year-on-year to classify an entity as a growth business. In fact, the ACCA–Delta Economics survey (2012) showed that many enterprises in their start-up phase need to grow more quickly than this in order to be sustainable.

## POLICY LITERATURE

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The ‘economics of entrepreneurship’ literature has focused on entrepreneurs and small businesses and their contribution to economic growth and development since Birch (1979) first established that small businesses are the predominant providers of jobs in the American economy. As a result, many studies have focused on job creation as a means of measuring growth and this, to a large extent, has justified policies to support entrepreneurs and their growth paths (see, for example, Storey 1994 and Autio 1997). This is the labour market and business births part of stage 1 of the Virtuous Circle of Enterprise Growth discussed above. The emphasis of enterprise policy is to increase the sustainability and growth of entrepreneurs and their businesses. At the one level this means addressing ‘demand side’ issues that prevent individuals from setting up businesses, such as fear of failure, lack of skills or lack of awareness of entrepreneurship as a career option.

It is only recently that policy structures to generate growth have been seen as more than individual aspects of policy. As the literature survey below shows, this means having infrastructures, funding, fiscal measures and a balance of public and private support that develop, even rebalance, as businesses themselves grow.

## INNOVATION AND COMMERCIALISATION: COMPLEMENTARITIES BETWEEN THE INNOVATION AND ENTERPRISE POLICY LITERATURES

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While the long-term impact of technology, innovation and knowledge on economic growth is well understood (Fagerberg, J. 1987; Romer, P 1990; Bergheim and Hofmann 2005; Freeman and Louca 2001) and while entrepreneurs are known to be a critical part of that process<sup>1</sup> the two literatures of innovation and entrepreneurship have different emphases. Innovation policy literature has focused on understanding and measuring innovation as a process of change and, hence, how companies, countries and economic systems adapt to or assimilate that process of change. The assumption is that effective change management in itself engenders profitability and therefore a contribution to economic growth. For these authors, the most important resource for any economy is knowledge and the most important process is learning and the steady accumulation of intangible knowledge assets and cumulative competencies (Nelson and Winter 1982; Lundvall 1992; Harding 2007). Knowledge transfer is critical to the process of learning and the relative efficiencies of national systems can therefore be measured in terms of knowledge outputs such as patents, citations, strategic alliances, knowledge workers and so on (Furman et al. 2002; Kitson et al. 2004; Malecki 2004; Cooke 2007). Differences in outputs as

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1. This understanding goes back to Schumpeter (1939). Reflecting the uncertainty at the time as to whether innovation was exogenous (ie external to the market system) or endogenous (ie generated from within the system) he argued that the effect of entrepreneurship is to create new products, processes, export markets, sources of raw materials or organisational structures.

measured can be explained in terms of the intrinsic differences between Capitalist 'systems' – those with more rigid labour markets such as the Rhineland system are likely to produce 'incremental innovations' while those with more flexible labour markets, such as the Anglo-Saxon system, more likely to produce 'radical' innovations (Hall and Soskice 2001).

Enterprise policy literature has tended to focus on understanding entrepreneurs themselves – how they make their decisions, allocate resources, calculate risks and access finance, on the supply side (Casson 1982; Blaug 2002; Reynolds et al. 2005) and, on the demand side, how their ideas originate and the importance of social capital in the development of entrepreneurial networks and clusters at a regional level (Saxenian 1996; Beugelsdijk and van Schaik 2005; Iyer et al. 2005; Beugelsdijk 2007). Only recently has there been an attempt to integrate a theory of entrepreneurship into a theory of economic growth (Audretsch et al. 2006) and although the intellectual heritage of this work is in the innovation literature cited above, it uses 'enterprises' (ie start-up rates) rather than enterprising activity as its proxy for the amount of activity and uses established smaller firms to estimate relative investments in and production of knowledge or the impact of policy on start-up behaviours.<sup>2</sup>

## **POLICY INFRASTRUCTURES**

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As Table 4.1 presents, there are groupings in the literature corresponding to various stages of the Virtuous Circle of Enterprise Growth, which can in turn be mapped against actual policy measures.

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2. See Acs (2006), Storey (2006), and Stam et al. (2007). These authors argue that the greater ambition and growth potential exhibited by entrepreneurs, the greater the association with economic growth in a country.



**Table 4.1: Meta-analysis of key literature**

Author, year and publication	Paper title	Scope	Method	Results
Reynolds, Storey and Westhead (1994), <i>Regional Studies</i> 443–56	‘Cross-national Comparisons of the Variation in New Firm Formation Rates’	To look at the variation of birth rates of new firms across Europe, comparing how rates vary between different countries.	Analysing regional data of France, Germany, Italy, Ireland and UK.	The average new firm birth rates and the regional variation patterns are broadly similar. The underlying factors affecting birth appear uniform across countries
Strotman (2007), <i>Small Business Economics</i> , 87–104	Entrepreneurial Survival	To look at determinants of new-firm survival in the manufacturing sector of Baden-Wuerttemberg (Germany) from 1981 to 1994.	Analysing official annual and monthly industrial data for companies with at least 20 employees.	The larger an industry’s minimum efficient scale, the worse the sectoral demand-conditions, and the narrower the market, the higher the dynamics of foundation within an industry are.
Wynarczyk (2013), <i>Journal of Small Business and Enterprise Development</i> 258–78	Open Innovation in SMEs	To assess the impact of open innovation practices on the innovation capability and export performance of UK small and medium-sized enterprises (SMEs).	Analysis of a sample of 64 SMEs in the UK – grouped by their innovation patterns.	International competitiveness of SMEs is highly dependent on the cumulative effects and interrelationship between two key internal components, R&D capacity and managerial structure and competencies, coupled with two external factors, open innovation practices and the ability of the firm to attract government grants for R&D and technological development.
Hessels, van Stel (2011), <i>Small Business Economics</i> 255–68	Entrepreneurship Export Orientation, and Economic Growth	The relationship between a country’s prevalence of new ventures and its rate of economic growth is investigated, while taking into account new ventures’ export orientation.	Analysis of national data of a sample of 34 countries over the period 2002–8.	On top of a positive relation between entrepreneurial activity in general and subsequent macroeconomic growth, there is an additional positive effect of export-oriented early-stage entrepreneurship in higher-income countries. However, there is no such additional effect in lower-income countries.
Mason, Harrison (2011)	Annual Report on the Business Angel Market in the United Kingdom: 2009/10	To examine business angel investment activity and to estimate the overall size of the market.	Analysis of the networks of the British Business Angel Association (BBAA) and LINC Scotland. Data from 147 individual business angels.	Number of angels has remained virtually unchanged and the number of investments has increased slightly. Angels invested in slightly higher proportion of deals. But amount invested by business angels has declined by around by 25%.
Bosma and Stam (2012)	Report prepared for the OECD/DBA International Workshop on ‘High-growth Firms: Local Policies and Local Determinants’	Local policies for High-Employment Growth Enterprises (HEGEs.)	Based on i) a conceptualising of local policy aimed at HEGEs; (ii) an overview of the relevant empirical evidence and (iii) results of interviews with a mix of policy makers, managers of business accelerator programs, and private stakeholders from several OECD countries.	In many cases generic entrepreneurship policies are complementary to high-growth entrepreneurship policies, because they increase the pool of potential ambitious entrepreneurs. Nonetheless, there are several kinds of generic entrepreneurship policies that conflict with high-growth entrepreneurship policies, especially those policies that favour the self-employed and small firms, and in that way provide opportunity costs for entrepreneurs to hire employees (beyond a certain firm size).
Levy, Lee, Peate (2011)	How the Government Can Support the Development of More High Growth Firms?	Aims to answer: i. What barriers do high growth firms, and potential high growth firms, face to growth? ii. How does current government policy begin to address these barriers? iii. How can government best target these barriers in future?	UK Literature Review.	The UK government needs to ensure that fiscal policy for firms stimulates growth, not displacement; maintains commitment to financial reform to ensure capital for potential high-growth firms; develops local economic capacity.

**Table 4.2: Finance and Funding sources**

Author, year and publication	Paper title	Scope	Method	Results
Berger, Udell (2006), Journal of Banking & Finance, 2945–66	A More Complete Conceptual Framework for SME Finance	To propose a more complete conceptual framework for analysis of SME credit availability issues.	Literature review.	The framework implicit in most of the literature is oversimplified, neglects key elements, and often yields misleading conclusions. A common oversimplification is the treatment of transactions technologies as a homogeneous group, unsuitable for SMEs, which tend to be less transparent, and as a result putting large institutions at a disadvantage in lending to opaque SMEs.
Beck, Demircuc-Kunt (2006), Journal of Banking & Finance, 2931–43	Small and Medium-Size Enterprises: Access to Finance as a Growth Constraint	To present recent research on access to finance by small and medium-size enterprises (SMEs).	Literature review.	The literature suggests that a competitive business environment, of which access to finance is an important component, facilitates entry, exit and growth of firms and is therefore essential for the development process. A focus on improving the business environment for all firms is more important than simply trying to promote a large SME sector, which might be characterised by a large number of small but stagnant firms.
Fraser, Bhaumik, Wright (2013), Enterprise Research Centre	What Do We Know About the relationship between Entrepreneurial Finance and Growth?	To examine the extant literature to identify stylised facts, relationships between flow of finance and its correlates or associations, and also relationships that are not unambiguous and require further exploration	Literature review.	Future research would address two broad themes. First, there is a need to address the issue that lies at the heart of the policy debate, namely, that of the financing constraints of firms. Second, there is a need to examine the relationship between financing and firm growth.
Mason, Harrison (2002) Journal of Business Venturing, 211–36	Is it Worth it? The Rates of Return from Informal Venture Capital Investments	To analyse the returns to informal venture capital investment in the UK.	Analysing data on 128 exited investments from a survey of 127 business angel investors in the UK.	Distribution of returns was highly skewed, with 34% of exits at a total loss, 13% at a partial loss or break-even, but with 23% showing an IRR of 50% or above. Trade sales were the main way in which business angels harvest their investments. The median time to exit for successful investments was four years. Large investments, large deal sizes involving multiple co-investors, and management buyouts (MBOs) were most likely to be high-performing investments.
Mason, Harrison (2001), Regional Studies, 663–8	Investment Readiness: A Critique of Government Proposals to Increase the Demand for Venture Capital	To provide a critique of the Consultative Document's definition of investment readiness and outline a programme to enhance investment readiness among SMEs.	Analysis of Consultative Paper from HM Treasury and the Small Business Service.	For the new emphasis on demand-side policy, the concept of investment readiness itself needs to be defined and understood in much greater detail. The challenge of developing an effective integrated programme of support for companies seeking to become investment ready, and hence realise their development potential through an appropriate funding structure, will require more than minor 'bolt-on' adjustments to the existing package of support measures and policy fulfilment structures.
McGlue (2001), Venture Capital, 45–58	The Funding of Venture Capital in Europe: issues for Public Policy	To consider the key questions facing public policymakers in the European Union in developing policies to stimulate venture capital.	The paper considers the experience of instruments at both European and national levels and some of the policy debates.	Venture capital will not succeed in promoting growth unless an appropriate framework exists also on the demand side to support the emergence of growth companies; and that venture capital in Europe must be complemented by the growth of entrepreneurial finance from other sources, notably business angels.

**Table 4.3: Networks and referrals**

Author, year and publication	Paper title	Scope	Method	Results
Newbert, Tornikoski (2012), <i>Small Business Economics</i> 141–59	Supporter Networks and Network Growth: A Contingency Model of Organizational Emergence	To test the direct and interactive effects of the characteristics of nascent entrepreneurs' supporter networks and network growth on organisational emergence.	Analysing the PSED I (Panel Study of Entrepreneurial Dynamics I), a longitudinal dataset of individuals involved in the process of starting a business who were identified from a random digit dialling telephone survey of 64,622 adults in the US of 18 years of age, or older.	The governance and content of the supporter network, along with network growth, are important in predicting organisational emergence, and the structure and content of the supporter network may inform the need for network growth.
Brüderl, Preisendörfer (1998), <i>Small Business Economics</i> , 213–25	Network Support and the Success of Newly Founded Businesses	Tests the hypothesis that those entrepreneurs who can refer to a broad and diverse social network and who receive much support from their network are more successful.	A study of 1,700 new business ventures in Upper Bavaria (Germany).	The study found that network support increases the probability of survival and growth of newly founded businesses.
Ostgaard, Birley (1996), 37–50	New Venture and Personal Growth Networks	To explore the effectiveness of personal networks in terms of firm performance and growth.	Analysis of a sample of owner-managed companies less than 10 years old operating in two English counties: 241 in Cambridgeshire and 181 in Avon.	There is a link between the entrepreneur's networking behaviour and the growth of the firm. Employment growth appears to be significantly related to time spent developing contact with all the strategic interest groups included: customers, suppliers, and investors.
Hoang, Antoncic (2003), <i>Journal of Business Venturing</i> , 165–87		To examine network-based research in entrepreneurship in three areas: content of network relationships, governance, and structure.	Literature review.	To address unanswered questions on how network content, governance, and structure emerge over time, more longitudinal and qualitative work is needed. Theory building in this field would benefit also from a greater integration between process- and outcome-oriented research.

## 5. Key indicators: business population and contribution to GDP

### BUSINESS POPULATION DATA

There is a marked difference between the business populations in emerging economies and those in developed world economies. Birth rates and failure rates are higher in emerging economies, which is unsurprising since much of the activity in those countries is 'own account' employment (ie self-employment) that is often funded through informal finance, such as family and friends, as well as through microfinance, and such businesses operate on a subsistence basis (Harding 2010a). Developed-world economies tend to segment their business structures into 'self-employment' or 'sole trader' and have policies for these that are different from the 'enterprise growth' strategies that apply to businesses that are established. In the developed world, business birth rate strategies are increasingly seen as labour market policies for supporting self-employment; in emerging economies enterprise policy focuses on structures to turn self-employment into sustainable business growth, but the relevant institutional frameworks are frequently underdeveloped.

Table 5.1 gives some key indicators of the business population in the countries studied for this report. It shows that self-employment is significantly higher and the ease of doing business rankings are significantly lower in emerging economies. This suggests that emerging economies face substantial challenges in creating environments whereby their businesses can survive.

**Table 5.1: Business population data: An overview of SME entrepreneurship indicators and economic significance**

Country	Entrepreneurship indicators	Economic significance of SMEs
China	SMEs as proportion of all firms: 99% (2011) Ease of doing business ranking: 91 out of 185 (2013) Level of self-employment as % of working-age population: N/A Net increase in business population: 6.9% (2007–11)	Contribution to GDP: 58% (2013) Contribution to exports: 69% (2013)
France	SMEs as proportion of all firms: 99.8% (2011) Ease of doing business ranking: 34 out of 185 (2013) Level of self-employment as % of working-age population: 9% (2010) Net increase in business population: -4.5% (2007–11)	Contribution to GDP: 56% (2013) Contribution to exports: 42% (2013)
Germany	SMEs as proportion of all firms: 99% (2011) Ease of doing business ranking: 20 out of 185 (2013) Level of self-employment as % of working-age population: 11% (2012) Net increase in business population: 0.6% (2007–11)	Contribution to GDP: 53% (2013) Contribution to exports: 56% (2013)
India	SMEs as proportion of all firms: 95% (2013) Ease of doing business ranking: 132 out of 185 (2013) Level of self-employment as % of working-age population: 51% (2013) Net increase in business population: 4.7% (2007–11)	Contribution to GDP: 17% (2013) Contribution to exports: 40% (2013)
Nigeria	SMEs as proportion of all firms: 80% (2013) Ease of doing business ranking: 131 out of 185 (2013) Level of self-employment as % of working-age population: N/A Net increase in business population: N/A	Contribution to GDP: 10% (2013) Contribution to exports: 30% (2013)

Country	Entrepreneurship indicators	Economic significance of SMEs
Singapore	<p>SMEs: as proportion of all firms: 99% (2013)</p> <p>Ease of doing business ranking: 1 out of 185 (2013)</p> <p>Level of self-employment as % of working-age population: 14.8% (2009)</p> <p>Net increase in business population: 4.8% (2007–11)</p>	<p>Contribution to GDP: 40% (2013)</p> <p>Contribution to exports: 16% (2013)</p>
South Africa	<p>SMEs as proportion of all firms: 91% (2010)</p> <p>Ease of doing business ranking: 39 out of 185 (2013)</p> <p>Level of self-employment as % of working-age population: 61% (2010)</p> <p>Net increase in business population: -3.8% (2007–11)</p>	<p>Contribution to GDP: 40% (2012)</p> <p>Contribution to exports: N/A</p>
UK	<p>SMEs as proportion of all firms: 99% (2013)</p> <p>Ease of doing business ranking: 7 out of 185 (2013)</p> <p>Level of self-employment as % of working-age population: 14% (2013)</p> <p>Net increase in business population: 0.7% (2007–11)</p>	<p>Contribution to GDP: 51% (2013)</p> <p>Contribution to exports: 46% (2013)</p>
US	<p>SMEs as proportion of all firms: 99.7% (2011)</p> <p>Ease of doing business ranking: 4 out of 185 (2013)</p> <p>Level of self-employment as % of working-age population: 9.2% (2013)</p> <p>Business births: 0.3% (2007–11)</p>	<p>Contribution to GDP: 52% (2013)</p> <p>Contribution to exports: 22% (2013)</p>

## SME'S CONTRIBUTION TO GROWTH

Policymakers have focused on SME growth for decades: to create jobs, to create economic growth, to create competitiveness (through innovation and R&D) and, most recently, through the role that they play in external trade. The contribution to GDP and to trade is illustrated in Table 5.1 alongside the current and future value of the contribution to trade by the SME sector to exports. The forecast values are based on Delta Economics' (unpublished information) own estimates of trade growth over the next five years.

Table 5.1 makes it clear that the contribution to both trade and GDP are significant. Averaged across the countries, Delta Economics (unpublished) data suggests that the current value of SMEs contribution to trade is US\$412bn. India and Nigeria are the countries where the contribution to GDP is the smallest but this can be accounted for by the dominance of own-account working and vulnerable micro-enterprises in the SME community in these countries alongside the dominance of businesses that are very large in terms of contribution to GDP. What is interesting is that even though the contribution to GDP is limited in these countries, their contribution to exports is larger, suggesting that there is scope to increase their contribution to GDP as well.

## 6. Flagship business support schemes

Business support schemes vary in their implementation but can be categorised into four key areas: business birth, business growth and sustainability, enterprise context (education and training, finance, innovation) and enterprise climate (institutional and economic). Each country has a specific method of implantation, for example the emphasis on regional clustering in France or on education, training and finance in Nigeria. Emerging economies tend to have a closer focus on the infrastructural aspects of business support (such as basic education and training) and micro-finance) while developed world economies focus more on regulation, tax and growth finance.

The policies covered are grouped in relation to the stages of the Virtuous Circle of Enterprise Growth: education and the stimulation of innovation, for example, are seen as prerequisites at stage 1; policies in these areas have a dominant role to play, alongside policies to stimulate business births.

### **CASE STUDY: EDUCATION, FUNDING AND SUPPORT: THE TIBBETTS GROUP UK**

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The Tibbetts Group (TGL) sells clutch kits and transmission components to suppliers of the automotive market and has been operating for more than 30 years. The Group currently sells more than 80,000 units a month and attributes its success to the high levels of service and quality provided to all stakeholders of the business.

Owing to slow growth in the past two years, TGL has this year bought a new business in order to expand. The new business supplies the automotive after-market with bespoke parts, which are then sold on to suppliers of automotive manufacturers, eg Ford, with room for eventual expansion into the aerospace market as well.

In a conversation with Jonathan Tibbetts, managing director, and Steve Wilkinson, financial director, funding and support and education were discussed in depth.

On funding, UK banks are not very willing to lend money and even with a very good business plan in place they will not often fund seed businesses. Initial start-up funds are often gained from family and friends before the banks will help with the next stage of finance. For high-growth businesses extra funding can be gained from

re-mortgaging property and TGL have found that owning property has put them in a good position to be able to do this. A lot of start-ups do not succeed owing to a lack of access to credit from the banks, coupled with the fact that early-stage businesses can drain resources very quickly..

On the subject of support, the flagship support structures for TGL are the local Chamber of Commerce and UK Trade and Investment (UKTI), with accountants used as the main private support system for advice. Owing to the growing numbers of private businesses, accountancy is thriving in the UK because SMEs need support. Looking at education, there seems to be a skills gap in business and enterprise, which means that the UK has lost some of the entrepreneurial expertise it once had. There was a government programme in place a few years ago that encouraged small businesses to ensure that their staff had English and Maths GCSEs and this was implemented at TGL. This programme was developed to enable employees to build their skills set, improve their employability and feel self-satisfaction. It was a good programme and should have been given a much higher profile. Further work is required to ensure that the UK revisits its policy on the provision of structured work experience, while also building teaching on basic finance and business knowledge into the education system.

**Table 6.1: Education**

Country	Policy and outcomes
China	Strong emphasis on commercialisation of science through entrepreneurship training. Examples of enterprise programmes include the Entrepreneurial Foundation for Graduates and support for Global Enterprise. Since the 2008 global financial crisis, Chinese leaders have decided to restructure the economy through spending on investment in innovation. In 2011, R&D investment stood at US\$138bn and in that year 41% of all degrees awarded by Chinese institutions were in a STEM subject (Science, Technology, Maths and Engineering).
France	Initiatives to encourage students to be more entrepreneurial are developing across all French regions. Typically, France does not have business and enterprise built into the education system at secondary level but the growing importance of SMEs is changing this. The higher education system, on the other hand, is an important provider of business support. There are 83 universities in France, each of which has a business incubator dedicated to the support and transfer of academic research and technology into spin-off start-ups. Each incubator holds around 100 technology-based start-ups.
Germany	Dual scheme of apprenticeships; regional and local programmes promote enterprise education. The German government is investing US\$150m to get EU students into Germany in a scheme that matches them with companies for apprenticeships. The scheme has 33,000 vacancies for apprentices.
India	India's National Innovation Council (NInC) was set up in 2010 to focus on innovation in every sphere of economic activity. It works to develop innovation through the education system and helps to develop networks through university innovation clusters. The NInC has identified and is seeking to facilitate the development of 20 University Innovation Clusters across the country, where innovation would be seeded through Cluster Innovation Centres.
Nigeria	In July 2013, the Nigerian government finalised plans to introduce entrepreneurship education into secondary schools. The Nigerian Educational Research and Development Council (NERDC) and the United Nations Industrial Development Organisation (UNIDO) are proposing to include entrepreneurship into the curriculum via 34 vocational education subjects.
Singapore	Singapore is home to some of the finest business and enterprise centres in the World. SPRING Singapore supports innovation through five research and polytechnics centres as well as providing grants relating to consultancy, training and certification. SPRING also allows local SMEs to apply for the Innovation and Capability Voucher, which supports SMES in paying for services in productivity, human resources and financial management, as well as technical feasibility studies, technical support and knowledge development, aiming to encourage SMES to start upgrading in these areas in order to enhance their capabilities.
South Africa	The Sector Education and Training Authority (SETA) works to develop skills in enterprise across all major sectors. The National Skills Development Strategy is the most recent development in higher education and training. It helps to create partnerships between employers, public education institutions and private training centres so that all South Africans have the skills and education to help develop the economy. In October 2013, the Itron Learning University in South Africa received accreditation from the Energy Water Sector Education and Training Authority (EWSSETA) The accreditation establishes Itron as part of a drive to develop a skilled workforce in South Africa.
UK	As well as well-integrated university courses, the UK has the National Council for Graduate Entrepreneurship, the Prince's Trust Enterprise Programme and the National Centre for Entrepreneurship. These all aim to promote social enterprise and create a thriving small-business environment. The UK is well known for its involvement in social enterprise and a lot of effort is directed towards evolving these sorts of network. The National Council for Graduate Entrepreneurship's North West HE Enterprise Champions Project started in 2008 and resulted in 296 new graduate start-ups, 313 new jobs, and 761 students and graduates assisted with converting their entrepreneurial aspirations into tangible outcomes. A later project ran from 2010 to 2013 and the full results from this are still pending.
US	The US is highly regarded as a centre of entrepreneurship. Education in enterprise is inbuilt into the schooling system. As the US has the most highly regarded universities in the world, with the most available funding, gaining the skills to get a product to market is facilitated much more than it would be elsewhere. Many universities have excellent business incubators and the mentors to be able to guide the most enterprising individuals. According to the University Business Incubator Index, the Global Top List for 2013 showed that 15 of the top 25 university business incubators are in the US.

**Table 6.2: Flagship support schemes: Innovation**

Country	Policy and outcomes
China	The Entrepreneurship Foundation for Graduates (EFG) was established in 2006 as a non-profit public foundation dedicated to promoting entrepreneurial culture, advancing entrepreneurial practices and encouraging graduate entrepreneurship. The foundation aims to access talent and innovation from the country's National University Science Parks and Hi-tech Enterprise Incubators and provide the necessary support for increasing the number of successful entrepreneurs.
France	The Innovation Agency (OSEO, now part of BPIFrance) is responsible for helping companies grow and become more innovative and competitive. In 2012 the agency financed around 84,000 enterprises.
Germany	The German system of technology transfer provides either complete or partial funding for research depending on how close to market implementation an innovation is. Regional policies support innovation focus and clustering, with heavy support through regional governments and European sources. The 'pure' research institutes such as the Max Planck Institutes have 100% funding from public sources but do very little applied research. The AN-Institutes, by contrast, are 90% oriented towards applied research and commercialisation and receive only 10% of their funding from either the region or the Federal Republic.
India	India's National Innovation Council (NInC) creates cluster innovation centres where entrepreneurs, researchers and investors are connected. The Department of Science and Technology (DST) has several schemes and funds for fostering innovation. The DRDO (the R&D arm of the Ministry of Defence) aids the commercialisation of defence technologies for commercial markets. In January 2014, the NInC launched the India Inclusive Innovation Fund (IIIF), which will invest in innovative ventures that are scalable, sustainable and profitable. These ventures must address social needs in the areas of healthcare, food, nutrition, agriculture and education.
Nigeria	There is an absence of an efficient patent system in Nigeria and university research centres could function more efficiently. Despite this, there is a growing trend for ICT firms to locate innovation centres in Nigeria. IBM is set to establish an innovation centre in the first quarter of 2014.
Singapore	The SMART Innovation Centre provides grant programmes to students in the form of innovation grants, explorer grants, educational programmes and networking opportunities for entrepreneurs and researchers. Innovation grants are available up to S\$250,000 and Explorer grants up to S\$50,000.
South Africa	With an increase in foreign direct investment (FDI) into Africa of nearly 7% to US\$56bn in 2013, around US\$10.3bn went to South Africa, according to the United Nations. Most of this rise was in new investment in the consumer goods sector. South Africa has also attracted good inward investment over recent years in the IT and technology industries and was the African continent's top FDI recipient in 2013, as an important emerging economy. The Innovation Hub, established in 2001, is Africa's first internationally accredited Science and Technology Park and is the largest business cluster in South Africa, aiding the development of ICT, biosciences, green technologies and industrials.
UK	Innovate UK brings businesses, entrepreneurs and academia together every year. The Technology Strategy Board (TSB) and UK Trade and Investment (UKTI) collaborate to organise this annual event, which is aimed at inspiring entrepreneurs and sharing knowledge. Between August 2012 and March 2013, rounds 1 and 2 of the TSB's Biomedical Catalyst Fund saw £96m invested in 115 companies.
US	The Office of Entrepreneurial Development (OED) is within the US Small Business Administration, which coordinates private sector and US government programmes to support entrepreneurs within the US. The Small Business Development Centres (SBDCs) help to foster SME growth through business advisory services, including for the development of business plans, manufacturing assistance, financing, exporting and importing, procurement and market research, plus many other crucial areas of assistance. There are now over 900 sites across the US, as the programme becomes increasingly integrated. SCORE provides free business mentoring on finance and accounting, operations, strategy and planning, sales and marketing, technology and IT as well as an industry- or sector-focused mentoring service. The Women Business Centres (WBCs) are a network of almost 100 educational centres designed to assist women with comprehensive training and counselling in the process of developing their businesses.



### **CASE STUDY: INNOVATION, IP AND SUPPORT: DR OPIA, DELTA STATE UNIVERSITY, NIGERIA**

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In Nigeria, academics are handicapped by weakness in the institutional structures necessary to boost innovation-based research. Progress is slow and can be quite limited owing to a lack of funding for commercialising innovative and creative projects. It is not unusual that when a researcher comes up with an idea or an inventive product, the government does not provide the requisite support that will facilitate a start-up based on the product but would rather leave the researcher to take the major responsibility for getting the product out of the laboratory and deciding what should be done.

As an example, Dr Opia is himself an inventor of a new game of football. He sought government support for using an existing government-owned stadium and organising an exhibition game to showcase the attributes of this new game, but has received a rather disappointing response. Despite using his own money to fund the

development of the prototype, no support was given for the live performance to demonstrate the game or for the development of software required for the production of related video games.

As in many areas of its national life, Nigeria typically depends upon foreign imports from developed and emerging economies such as the US, UK, Germany, Japan, China and India. For as long as the country can continue to rely on such imports, there is little or no motivation to encourage the emergence of domestic start-ups based on intellectual property. As well as a lack of government support, the entrepreneur is also handicapped by the poor attitude of the private sector to innovation in Nigeria. Attracting private sources of sponsorship and finding professionals to help with intellectual property rights is notoriously difficult.

To continue Dr Opia's personal example, to raise the required finance for the exhibition of the game Dr Opia has approached friends and family for support. In this way he has raised

US\$600,000 seed capital, which he hopes will enable him to undertake basic steps that will attract investors and stakeholders across the industry. With this fund, he plans to acquire land in the US to establish a small training facility where two teams of players will be trained to play the game. He has decided to start by organising the exhibition game in the US from 2015 because innovation is deeply embedded in American culture. Note that all the financial risk has been taken by the entrepreneur and his private backers.

Dr Opia has several recommendations. He urges the government to set up an independent 'Nigerian Opportunities Commission' with the aim of providing support that is free from direct government patronage. He has also pointed out that the patent and copyright systems need to be improved; and that private investors need to be encouraged to be courageous in undertaking innovative research as well as supporting innovation, as this will be the key for driving entrepreneurship and building the presence of SMEs within Nigeria.

**Table 6.3: Flagship support schemes: self-employment and business births**

Country	Policy and outcomes
China	China has had dramatic growth in the numbers of self-employed entrepreneurs and policymakers have announced fresh moves to boost growth. On the other hand, SMEs have seen profit growth slow this year as labour costs continue to rise and access to finance weakens. In August 2013, China suspended VAT and turnover tax for small businesses with monthly sales of less than ¥ 20,000 (approximately US\$3,250).
France	Help for entrepreneurs is provided by the Business Start-up Agency (APCE) and Chambers of Commerce; there are mechanisms for job-seekers to set up businesses through start-up advisory scheme NACRE and its support network. Rates of 'Entrepreneurial intention' (measured as the share of the adult population intending to start a business in the near future) grew from 14% in 2010 to 18% in 2011, which should lead to an increase in France's levels of entrepreneurial activity.
Germany	All SMEs are required to register with Chambers of Commerce, which provide networking, trade and advisory support; Ich AG and Mini-jobs are means of stimulating employment through entrepreneurship. Since 2009, German SMEs of all sizes have been increasing in numbers, employment and gross value added. There were 2,086,668 SMEs in Germany in 2012.
India	The National Small Industries Corporation works to promote, aid and foster the growth of small industries and related SMEs. The NSIC has been successful in modernising and upgrading technology in order to help small businesses to internationalisation. The NSIC has seven Technical Services Centres in India; each aimed at supporting businesses start and develop in specific sectors. Business births between 2007 and 2011 equated to a rate of 4.7%, with particularly high rates of growth within manufacturing, food processing, pharmaceuticals, IT, the service sector and the textile industry.
Nigeria	SMEs are central to economic growth in Nigeria. Nonetheless, there are failures in the areas of business education, formal money provision and business support. According to the International Journal of Scientific and Engineering Research, in 2012, 60% of all business failure was due to poor management practices, with start-up operators going into business with little or no experience of working within a business environment. Infrastructural problems and high running costs also restrict business development and the government is doing little to improve the situation. The Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) is Nigeria's main support system and in 2013 committed to helping generate five million jobs between 2013 and 2015. This is to be achieved through the National Enterprise Development Program (NEDEP) set up by the Minister of Industry and Trade and Investment. The Annual Management Retreat in November 2013 resolved that it would fast-track the National Enterprise Fund (NEF), refocus its efforts on the Industrial Development Centres and reduce the number of stringent conditions for gaining access to finance by SMEs.
Singapore	The country ranks at number 1 for ease of doing business, according to the World Bank. Even so, SMEs can often struggle to attract international investment money and thus business failures have occurred over the past few years. It takes just one day and S\$260 to register a business in Singapore, encouraging a healthy increase of 4.8% in the business population between 2007 and 2011. As well as the provision of various loans and grants – Innovation and Capability Voucher, Productivity and Innovation Credit, Capability Development Grant and government-backed loans – SPRING Singapore provides self-help guides on customer service, financial management, human resources, marketing and productivity so that SMEs have the tools to run efficiently.
South Africa	The Small Enterprise Foundation has a microcredit programme aimed at micro-enterprises. It is a not-for-profit microfinance institution that helps to work towards alleviating poverty by creating a supportive environment for businesses through credit and savings services. SME support is heavily weighted towards micro enterprises and a major barrier to business growth is the regulatory environment. The number of active clients under this programme in 2012 was 87,273 and this figure rose to 96,460 in 2013, indicating the impact of this programme. With 82% of South African enterprises being micro or very small (as defined by the National Small Business Act) this Foundation is central to alleviating poverty and encouraging small business growth.
UK	There are two main UK-wide initiatives. The Enterprise Finance Guarantee (EFG) scheme, launched in 2009, is a loan scheme that provides a government guarantee to boost the credibility of small business loan applications. This scheme is open to businesses with an annual turnover of no more than £41m, ensuring that plenty of start-ups and early stage growth businesses have access to finance. The Enterprise Capital Funds (ECFs) launched in 2006 provide equity finance to SMEs through the use of government funding as well as private sector investment. There are now 12 active funds operating with commitments equating to nearly £ 400m, of which £240m has been provided for by the government.
US	The US Small Business Administration (SBA) is a government-run body that provides financial support to entrepreneurs and small businesses. One of its key schemes is the Guaranteed Loan Program, which sets the guidelines for loans; these are then paid by the SBA's partners – lenders, community development organisations and micro-lending institutions. There is the Bonding Program, which can guarantee bonds for contracts up to US\$5m and in some cases up to US\$10m. A Venture Capital Program is run by the SBA's Small Business Investment Company (SBIC) Program – a public-private investment partnership. SBICs supplement the capital they raise from private investors with low-cost, government-guaranteed debt and lend money to qualifying smaller companies.

**Table 6.4: Flagship support schemes: networking and advisory**

Country	Policy
China	Substantial networking and referral through Chinese Business Angel Network (CBAN) rather than through policy. CBAN is the first organised angel investors network in China.
France	The Réseau Entreprendre start-up network offers loans; the Sérnaphone database lists available financial and technical help for French businesses at home and abroad; CER (Council of business leaders, management and accounting experts) provides professional and legal services.
Germany	Networking is facilitated through regional clusters and chambers of commerce; further support is provided through the technology transfer system (eg through Fraunhofer, An-Institutes, Steinbeis institutes).
India	Chambers of Commerce or trade bodies promote SME growth. There is also the India Trade Promotion Organisation, which is the core government agency for promoting external trade. This agency enables businesses to engage in investment and technology transfer as well as trade fairs and events. Professional services are readily available in India and are contracted for specific projects requiring mentoring, training and consultancy.
Nigeria	SMEDAN collaborates with trade groups, NGOs and several government bodies to connect entrepreneurs and help spread knowledge.
Singapore	The Singapore Dynamic Business Networking (SDBN), the Business Networking Singapore (BNS) Meetup Group and the Singapore Online Business Association (SOBA) provide some of the opportunities for business owners and entrepreneurs to network.
South Africa	Universities are a targeted point of entry for business networking. There are programmes set up to enable the commercialisation of research that has been done by medical professionals and scientists.
UK	There is an embryonic mentoring scheme at start-up; business networking and advisory services operate through innovation centres and hubs; Business Link helplines; there is provision of funding for lending through banks and provision of tax credits and tax relief/incentives through the advisory sector.
US	There is a strong networking environment to facilitate connections between entrepreneurs and business owners. No central government programme exists but, instead, there are local government advisory and development centres, which vary from state to state.

**Table 6.5: Flagship support schemes – fiscal policy**

Country	Policy and outcomes
China	Since 1 August 2013 there has been VAT and turnover tax relief for small businesses with turnover of less than ¥20,000. The move is expected to benefit more than six million small companies and boost the employment and incomes for millions of people.
France	There are research tax credits (Credit Impôt Recherche (CIR)); debt finance is the most commonly used form of finance; there is a large private equity market. There is 30% relief on expenditure for the first €100m and 5% thereafter; 1,500 companies receive investments from private equity per year, on average; 80% of credit lines are granted to SMEs.
Germany	German SMEs finance their investments primarily through equity (54%) and bank loans (29%). The capital ratio of German SMEs increased continuously since 2005 and now stands at 20.7%.
India	With the 12th Five-Year Plan the government announced a more than doubling of the budget allocation for SMEs from Rs110bn to Rs240bn. There is also a new procurement policy, making it mandatory for central government offices and PSUs to source 20% of everything that they need from micro and small businesses.
Nigeria	The Nigerian government has approved a plan to recapitalise the Bank of Industry, a development-centred finance institution. It tripled its total capital from about US\$1.57bn up to US\$4.72 bn.
Singapore	The government offers several tax incentives to small businesses and entrepreneurs to try to build more companies and generate jobs. These include: tax exemptions for start-ups, development and expansion incentives, investment allowances, a pioneer incentive scheme, a productivity and innovation and credit scheme, and industry-specific tax incentives.
South Africa	The International Finance Corporation, established in 2006, works to help entrepreneurs and smaller business in South Africa access finance and training. The IFC's partners have made US\$192 million in loans to SMEs and there are now 11,300 more SMEs accessing finance.
UK	R&D tax credits; Enterprise Investment Scheme (EIS); capital gains tax relief; entrepreneurs relief. There is up to 150% tax relief for path-breaking research investment leading to commercialisation; this is available only to loss-making businesses.
US	Tax incentives for businesses include a Special Allowance for certain properties acquired in 2009, deferred income from cancellation of certain indebtedness, five-year carry back of operating losses of small businesses, temporary increase in limitations on expensing of certain depreciable business assets, temporarily reduced recognition period for built-in gains tax, and incentives to hire unemployed veterans and 16-to-24-year-olds.

## SUMMARY OF TABLES

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Commercialisation of science, enterprise education and promotion of research and development are common across all countries. The structures tend to be more developed in developed nations, but interestingly research by both GEM and Delta Economics suggests that businesses in emerging economies are not likely to be less innovative than their counterparts in the developed world and in some cases may be more innovative (Prowess 2006, Harding 2006b; Delta Economics 2011, Delta Economics 2012). This is because the scope for doing something that is new-to-market is greater in those countries.

The key elements of policy from the Virtuous Circle stage 1 (education, networking, skills development, enterprise promotion and R&D support) are common to all countries but they differ in the extent to which they feed through into a growth cycle. For example, Nigeria lacks a patenting system that would stimulate R&D; China has rapid growth in the number of self-employed entrepreneurs, but the lack of profitability among this segment has given cause for concern. Similarly, in Singapore, the ease of doing business is excellent but small businesses have difficulty accessing international finance.

Governments generally have measures for promoting SME networking, but according to interviews conducted for the purposes of this research, policies such as those that exist in Germany, whereby companies have to register with Chambers of Commerce, appear to be among the most effective in guaranteeing that SMEs have access to networks that they can then use as a route to growth or exporting. In countries where these networking policies are coupled with fiscal policies to encourage investment (for example, as highlighted in the UK or the US studies) the result is an effective enterprise growth virtuous circle that functions properly to allow businesses to grow and wealth to be reinvested. Clearly, each country in the study would point to other policies designed to have similar impact but cross-interview triangulation suggested that Germany's policies were seen as particularly effective.

## 7. Clusters: level and manner of localisation

The essence of cluster policy is that it supports the development needs of the region, building on historical industrial strengths while allowing a concentration of new businesses to develop in a unique, innovative and competitive way alongside traditional industries. In other words, as one interviewee argued, 'Regions are a microcosm of what should be happening at a national

level'. All countries covered in this study had cluster policies (see Table 7.1) and there was no evidence that such clusters in emerging economies were less technology-/innovation-oriented than those in more developed countries. India's surgical instrument cluster is highly innovative but is combined with a structure that allows social and community interests to be taken into

account in order to link any employment to economic development as well as enterprise growth. Singapore's focus on biotech is supported by highly innovative supply chains. What is important is that all elements of the Virtuous Circle of Enterprise Growth should be visible at a regional level.

**Table 7.1: Regional clusters**

Country	Cluster	Cluster Industry Focus	Number of companies	Employment	Funding, support and research
China	Beijing Zhongguancun Science Park	Technology	189 listed: 113 domestic and 76 overseas firms	Nearly 1,000,000	Pilot credit loan services programme for a set of innovative enterprises with expected revenue of more than one billion yuan (US\$158.2m). This programme is run by the Business Management Department of the People's Bank of China, Beijing Banking Regulatory Commission and the Administrative Committee of Zhongguancun Science Park.
France	Paris Cap Digital	Digital content & services	Over 700 members	350,000 jobs, 6.2% of total salaried employment, 20,000 businesses, 18,000 researchers, 20,000 graduates	Since 2006: €935m invested of which €375m came from public funding and € 560m from private funding
Germany	Munich Biotech	Biotechnology	262,129 SME biotech companies, 26 non-SME biotech companies, 53 CROs, 29 pharma and 25 others	9,000	€40m from Federal Ministry of Education and Research and €10m funding from the Bavarian Ministry of Economic Affairs, Infrastructure, Transport and Technology; Industry to match this funding; €100m approximately in the next five years. Munich was one of the winners of the Leading-Edge Cluster Competition from 2010. BioM venture capital fund set up in 2010.
India	Baruipur Baruipur Surgical Instrument Cluster	Surgical instruments	650	15,000 (2006)	Research areas: metal engineering, electro-chemical research (though no access to R&D institutions). INR34.45 lakh in 2004–7 from MSE-CDP for 'Soft Intervention' (awareness creation, confidence building, capacity building); support from a 'special purpose vehicle' – a society set up to undertake collective decisions on behalf of the cluster.
Nigeria	Otigba Computer hardware	ICT	5,000	10,000 (2004)	Research areas: computers, components, printers, mobile phones. Support from CAPDAN (Computer and Allied Products Association of Nigeria) with a membership of more than 3,500 enterprises registered. Aside from an influx of engineering graduates there is little evidence of university–industry links. Poor state support exists, with municipal government sometimes even hostile.

Country	Cluster	Cluster Industry Focus	Number of companies	Employment	Funding, support and research
Singapore	Singapore Biotech	Biotechnology	50 biomedical sciences, 30 research institutes	5,000	Research areas: medicines, medical devices. Government: translational & clinical research (TCR) – up to S\$25m per project, Competitive Research Programme (CRP) – up to S\$10m per project, Health Services Research Competitive Research Grants (HSR-CRGs). Public–Private: Roche’s Singapore Hub for Translational Medicine, Bayer Healthcare’s S\$14.5m in five projects, GSK’s Academic Centre of Excellence. Private: GSK’s S\$8m for research, Lonza’s CHF10m for biopharmaceutical development services platform.
South Africa	Cape Town Cape Clothing and Textile Companies (CCTC)	Textiles	9		The Clothing and Textiles Competitiveness Improvement Programme (CTCIP) is a medium-term World Class Manufacturing Support programme designed to enhance and build competitive capabilities. There are currently nine CCTC firms participating in this programme. Over the period of 2012–14 the cluster aimed to expand this support to 15 CCTC firms as of 2013.
United Kingdom	Cambridge Silicon Fen	ICT	1,525	53,000 (2013)	Research areas: ICT, life sciences and physical sciences. Multifunctional organisations provide a diversity of roles: human and capital resources, administrative, informational and scientific and technological infrastructure, eg Cambridge Consultants. Public equity funding is key – in the 1990s changes in legislation paved the way for public offerings, creating funding opportunities for venture capitalists and syndicates. Over 50 separate business and technology networks: entrepreneur groups – Ideas Space, Makespace, Cambridge Pitch and Mix, Cambridge Mobile App Group; investor support groups – Great Eastern Investment Forum and Cambridge Capital Group; sector and industry groups – Cambridge Network, Cambridge Wireless and One Nucleus. The backdrop of academia is important.
United States	San Francisco Silicon Valley	High technology		1,200,000 (2012)	Despite the economic climate post-recession, Silicon Valley Angel Investment has increased significantly. As a measure of the effectiveness of the cluster, more firms opened up than closed in every year since 1995, apart from the period between 2009 and 2010, which saw substantial closures. Investments into the Valley are supported by substantial legal, financial and professional service agglomeration, giving the cluster its benchmark status globally.

Regionally based supply chains feed business growth because of the agglomeration effects and because of the potential to build on historical regional strengths (see, eg Fritsch, M. 2012; Buenstorf et al. 2013). Where there is this agglomeration of professional services, finance, innovation centres, training and a balance of small and medium-sized businesses alongside

larger businesses, regional specialisms emerge that create and enhance world-class innovation while fuelling global competitiveness. This is not unique to the developed world: some of this regional focus is strongest in emerging economies, with countries such as Nigeria developing their SME policies around regional clusters with a specific sectoral focus rather than trying

to develop inappropriate innovation-based strategies that are more relevant to a developed-world context. Similarly, structures such as the Anglo-Zimele microfinance and venture capital structure in South Africa reinforce the importance of the role of the largest, global corporations and corporate venturing in developing appropriate methodologies for SME growth.

**Table 7.2: Regional policy structures**

Country	Policy and outcomes
China	Pilot programme to provide unsecured credit loan service for eligible technology enterprises via a joint working group formed by the Business Management Department of the People's Bank of China, Beijing Banking Regulatory Commission and the Administrative Committee of Zhongguancun Science Park. For innovative enterprises with expected revenue of more than one billion yuan (US\$158.2m).
France	At the end of 2012, as part of the 'National Pact for Competitiveness, Growth and Employment', the French government decided to launch a third phase (2013–18) of its policy of consolidating innovation clusters. With more than 600 foreign companies established in France, the aim is to intensify the economic impact of the clusters. There have been 5,700 collaborative R&D projects since 2005; €2.7bn awarded from government since 2008; €3bn from project partners on R&D.
Germany	The Research and Education Ministry (BMBF) provides regional focus through regional innovation forums and programmes (formerly Bioregio and Innoregio, which were government-supported regional competitions for clusters in IT or biotech). Localisation of specialisms is also prominent in Germany as a result of a collective understanding that innovation leads to economic development. Example: The Innovation Alliance on Lithium-Ion Battery LIB 2015 consists of some 60 project partners from politics, industry, science and research and is supported by the federal government; 15% of the research project is financed by the federal government (€60m) and 85% by the consortium of BASF, BOSCH, EVONIK, LiTec and Volkswagen (€360m).
India	The Ministry of Micro, Small and Medium Enterprises (MSME) aims to promote the formation of clusters, most importantly in the development of modern technology. Around 55% of SMEs are located in urban areas, with the other 45% in the rural regions.
Nigeria	Through public and private sector partnership, SMEDAN, as an agency of government, facilitates the establishment of industrial parks and regional SME development centres. It has adopted clustering as one of its strategies for quickly developing SMEs. It has also collaborated with the United Nations Industrial Development Organisation (UNIDO) to adopt the Sub-Contracting and Partnership Exchange (SPX). SMEDAN also helps to provide workspace, through its Industrial Development Centres.
Singapore	The Economic Development Board has hailed the number of leading firms in its biomedical cluster, which it hopes one day will be the 'Biopolis of Asia'. Pharmaceutical giants Bayer Healthcare, GlaxoSmithKline and Roche all have a presence in the sector and boast a commitment of S\$16bn from the government. There are 7,000 researchers and 30 public-sector institutes.
South Africa	The Department of Trade and Industry (DTI) aims to develop intellectual property and increase access to foreign and local technology through the use of local research institutions. There are a number of science parks and incubators that are beginning to grow but results are still pending on those. The Cape IT initiative brings entrepreneurs together to develop ideas and prototypes.
UK	'Natural' clustering in places such as Cambridge or Manchester is prompted by market forces; where clusters have not developed, policymakers have worked with EU funding to stimulate networking and finance as well as mentoring support. Tech start-ups are well established in the UK and continue to intensify, especially around the Silicon Fen (Cambridge) and East London. The Silicon Roundabout (East London) is fast becoming a centre for technology, with the introduction of the 'Google Campus' in 2012.
US	Post crisis, there has been a rebound in business activity and the number of loans provided to Silicon Valley firms. There are also networks of small business development centres cropping up around several other major US cities. The SBA supports 56 federally funded cluster initiatives.

## 8. Funding provision

The financial crisis has created issues for small, growth-oriented firms seeking growth finance and this holds whether the country is developed or emerging. For emerging economies, the structures are under-developed, rely heavily on private sector microfinance (for example, the Grameen Bank and its equivalents outside India and Bangladesh) and tend not to be supported by a rigid financial institutional

framework. South Africa is the notable exception here, but even in South Africa the support to venture capital is underdeveloped and in 2011 nearly half of all the country's entrepreneurial businesses cited access to finance as a growth issue. In more established markets the financing of small businesses tends to be more developed but is no less rigid in the way it has responded to the 2008

financial crisis. The system of regional banks in Germany appears to have been particularly successful in generating secure SME funding frameworks, not least because it is heavily, and institutionally, supported by regional governments, the national government and the German Bank for Reconstruction and Development, as well as by private sector interests.

**Table 8.1: Funding provision**

Country	Policy and outcomes
China	Development of the venture capital (VC) sector is slow and interviews have suggested increased concern about the lack of exits and the commensurate issues with raising capital. SMEs account for 20–25% of bank loans; there were 89 VC deals in Q1 2013 (20% increase on Q4 2012); CVCPE has over 100 members
France	In June 2013, the European Investment Fund and the Banque Populaires-Caisses d'Épargne (BPCE) signed two guarantee agreements to support SMEs. The first brought the total finance available to innovative businesses across the EU under this initiative to above €1bn. The second will help the BPCE to generate a total portfolio of loans worth €1.8bn, to finance around 50,000 French SMEs. La Banque Publique d'Investissement (BPI), was established in July 2013 and provides assistance and financial support to French SMEs during the start-up, innovation, development, and business transfer stages. It works with banks, financial institutions and equity capital investors, research laboratories, schools, the government and chambers of commerce and industry.
Germany	KfW (German Bank for Reconstruction and Development) provides loan guarantees and co-invests alongside banks or venture capital organisations to support SME finance. The regional banking structure, including regional development banks and local savings banks, provides varying degrees of guaranteed private sector loans supported either by the KfW or the regional governments, to provide support to businesses as they grow. Since 2007, KfW's 'Small Enterprise Initiative' has improved the financing situation of small and micro enterprises. In 2009, KfW made an historic commitment of €23.8bn, under the German government's economic stimulus package.
India	SIDBI Venture Capital Fund, a subsidiary of the Small Industries Development Bank of India, has taken steps to invest in its SME Growth Fund, set up to invest in small and medium-sized industries. SIDBI has developed the India Micro Finance Platform, in conjunction with a project developed by the World Bank, to scale up sustainable and responsible microfinance for underprivileged businesses. There are also government schemes and grants available but these are often provided only to the fastest growing businesses. The Mix Market profile on India shows the following results from the SIDBI and World Bank microfinance project, currently: US\$4.6bn in loans, 31m borrowers, US\$35.5m in deposits and 450,116 depositors.
Nigeria	In August 2013, the Central Bank of Nigeria launched a NGN220bn fund to be distributed to SMEs by microfinance institutions at a 9% interest rate. SMEDAN liaises with financial institutions to attract domestic and international investment. In 2012, Nigeria had about 17.6m SMES employing around 32.4m people. A 2010 survey by the International Finance Corporation and McKinsey suggested that 80% of SMEs are excluded from financial markets.
Singapore	The SPRING Start-up Enterprise Development Scheme, the Business Angels Fund and the Early-Stage Venture Funding Scheme are the main government-aided equity financing schemes available to SMEs. SPRING offers Innovation and Capability Vouchers, the Capability Development Grant and various loans. The Innovation and Capability voucher offers S\$5,000 to SMES to pay for services, with the aim of encouraging SMEs to upgrade and enhance their capabilities. The Capability Development Grant is a financial assistance programme aimed at helping SMEs to defray up to 70% of qualifying project costs.
South Africa	The Small Enterprise Finance Agency was established in 2012 to foster the establishment and growth of SMEs. Finance is provided in the form of bridging loans, term loans and structured finance solutions. There are nine offices around the country.
UK	By international standards, there is a good level of funding from the banks in the UK and there are a number of government-backed schemes designed to help small SMEs. For example, the Enterprise Finance Guarantee (EFG) scheme and Enterprise Capital Funds (ECFs) programmes. The British Private Equity & Venture Capital Association (BVCA) is the body that advocates venture capital and private equity in the UK. More than 500 firms make up the BVCA members and the number continues to grow.
US	Some grants are available through state and local programmes and non-profit organisations. The US venture capital market raised US\$4.1bn in the first quarter of 2013, an increase from the fourth quarter of 2012. This was, however, an overall decline from the number of funds raised during the comparable period in 2012. The top five venture capital funds, three from Massachusetts, accounted for 57% of total fundraising during the first quarter of 2013.



### **CASE STUDY: FUNDING AND SUPPORT STRUCTURES NEEDS IDENTIFIED: CEO, WINERY, SOUTH AFRICA**

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The company is 100% owned and run by black women, which, given the country's past, is still unusual for the sector. Before 1994 black people did not own any land or could not be part of the wine industry as owners, only as labourers. The women started the company in 2005 and this lack of experience meant that they had to approach an established winery to help them. The women grew up in a small fishing village on the outskirts of Cape Town in South Africa and when still very young they were evicted from their home town. They decided 20 years later that they wanted to make fine wine that suits the personality and character of each of the women and so their 'Unique Selling Point' was decided. Currently they employ three people and although they started exporting only in 2007, sending a single container to the US, in 2008 the company grew by 300% and has kept growing since. Their aim is to develop the brand into a global household name and increase global market share. They currently export only minimal quantities to the UK and to Nigeria.

The CEO explained that 'for the last five years it [has been] an ongoing challenge to make inroads in the domestic market. Our chances are better in terms of surviving in export markets, where we are looking to grow our market by 80% in the next three years. We are currently seeking overseas investors in order to take our company to the next level. Opening new markets is very capital intensive.'

The core problem with expansion is the need for support structures. 'We need the right support in different countries to access these markets. People who know where to take us. We do get assistance from the Department of Trade and Industry but to make the correct connections is the difficult part. We have a relationship with a local producer who assists us in various aspects of our business model. From this location in South Africa we do our exports. We find this model to be most effective for us while we build our own independent network chain, but we do need help.'

The problem of finding the best, most accurate market information was a key issue: 'Our US market is very supportive of our wines, the brand and our story. We feel people there are more

conscious of what they buy and who they support or will benefit from their purchase. However, this is a huge market that needs to be explored more often. This market does not offer an international wine exhibition annually such as ProWein in Germany. We need platforms such as these to inform buyers and distributors and importers.'

The issue of finance loomed large: 'Finance has always been an issue for us as no local financial institutions are willing to make loans to new businesses such as us. Most of the time if we find a market or country that we want to export to we approach the DTI and see how we can benefit from their different funding programmes, which does not always work out. This is a key challenge.'

Furthermore, as an issue it seemed to be the core one: 'So, finance has been and is our biggest challenge. We identified the Asian, Africa and European countries where we would like to develop but we cannot do it on our own. We look at what generic marketing are offering and we fit in with their plans in the hope it will help building our brands. We do have the skills, the drive and ambition to build the company but we lack finance to make it happen.'

### **CASE STUDY: CMR CONTROLS LTD, CLEMENS RICHTER, FOUNDER AND MANAGING DIRECTOR, UK**

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Clemens Richter founded CMR to manufacture high-precision, low air pressure and air volume measurement transducers 35 years ago in London. The business now supplies controls for clean rooms, laboratories, industrial and commercial ventilation systems in highly sophisticated control and monitoring applications worldwide. Its products are designed to measure air volume, –,providing necessary information when designing ventilation systems in tall or complex buildings. A number of related questions are now also being addressed such as, in the case of airport terminals such as Heathrow or Hong Kong, how to prevent aircraft fumes from entering a building. Richter's idea was to measure small volumes of fresh air with electronic sensors, which, at the time when the business was established, was not being done anywhere.

CMR started its operations in Soho in 1978 but in 1990 moved to Basildon in Essex where it was cheaper to buy an industrial freehold, which therefore gave scope for expansion greater. The firm employs 20 people with a particular niche expertise in pharmaceutical clean room, hospital operating theatre and university laboratory environments. Many of the graduate engineers who

worked with Richter during the 1990s to build, develop and expand the products are still with the business and, as he says with some pride, there are fantastic people in the UK. He accepts that there will be a need to recruit more engineers in the near future and is working with the electronic engineering universities to ensure that he can recruit the right skills for the future. CMR designs the micro-processor circuits, manufactures the boards on in-house surface-mount 'pick and place' machines, writes the software and assembles and calibrates the sensors to UKAS and/or traceable standards.

He uses Mentor, a service provided through NatWest bank, to outsource compliance audits for health and safety as well as some HR and legal functions, so keeping the business costs focused on the core. And while he says he is proud to have funded his growth entirely from his balance sheet, he has used the bank for support in procuring essential but non-core acquisitions such as buildings and machinery.

Clemens Richter himself is German but the company is British. He says, as an 'inventor and an entrepreneur' he is most comfortable in the UK and points to the 'fantastic' environment for setting up a business that the UK offered back in 1978 when the company was established. His praise for the UK environment is still unstinting, even

after all this time, and he highlights the niche manufacturing and engineering capacity that smaller companies in the UK have as particular strengths in his supply chain. His argument is that because these companies are small and domestically based, they have the capacity to contribute to his supply chain in a way that larger businesses in Germany cannot.

Nonetheless, the engineering focus of the business and its emphasis on research and development are Germanic and he imports many of his large-quantity components from Germany where, he argues, the price, quality and reliability are better. He argues that Germany's manufacturing excellence means that it can scale up to meet supply-chain requirements, as his business grows, more efficiently and effectively while UK large-quantity manufacturing is higher in price and suffers from a lack of reliable delivery. This means that when he needs bulk components he goes to German suppliers – in his words, 'there are some excellent small businesses in the UK but they do not have the capability for large quantity to expand' meaning that as CMR grows, its reliance on UK suppliers may decline. Nevertheless, he is dedicated to his UK base and laughs as he says, 'British design and German manufacturing – the best of both worlds.'

## 9. Balance of public and private support

The balance of private versus public sector support depends to a large extent on two things: the sophistication of the financial and professional services sector and the degree of social versus private return from engagement in enterprise support. In developed economies, there is a greater degree of public sector and not-for-profit support for the early stages of enterprise development than for the later stages, where public return is less than private return. Public support tends to focus on building the right frameworks for enterprise growth, including enterprise education and training, innovation and research, and finance (through loans and guarantees or even the provision of seed equity). Best practice in developed economies is undoubtedly in Germany and the US, which have very similar structures for tapering support depending on where the returns from

that support are likely to accrue. Singapore, as a small economy with a strong policy focus, has clear lines of governance of public support and regulation. This allows its business birth rate strategies to be linked effectively with targeted innovation strategies, education and training and creates a strong role for the private sector in finance.

There are two key things to note about the balance between public and private provision. First, the greatest need for direct public support through finance and government mentoring, education and enterprise culture development schemes is in the first and second stages of the Virtuous Circle. Here the public gain is arguably greater than the private gain because at the earliest stages there are broader public objectives, including employment

policy and education and training. Secondly, as the gain or returns increasingly accrue to the private sector, progressively less direct financial support is needed from the government. Instead, the tax system is used to facilitate investment either in business growth itself or in new business start-ups. Table 9.1 shows the prevalence of private sector business angel, venture capital and business growth structures and looks at where governments use taxation as a complement to these, to encourage private and public returns on investment and enable real wealth creation through enterprise. Some countries, for example, the US, Singapore and Germany, have extremely effective structures. In other countries, for example, China, South Africa and Nigeria, structures are less fully integrated.

**Table 9.1: Balance of public and private provision**

Country	Policy
China	The China Venture Capital and private Equity Association was founded in 2002 to try to help support the sustainable development of venture capital and private equity in Greater China. It also promotes government policies conducive to the development of venture capital and private equity and helps facilitate networking and knowledge sharing. China Business Angel Network (CBAN) was established in 2007 by a group of angel investors in an attempt to bring an alternative source of funding, business expertise and assistance to start-ups. CBAN is also affiliated with BANSEA, Business Angel Network South-East Asia. There has been a substantial move during the past 20 years to take state-led venture capital into the private sector as the prevalence of high-growth opportunities for external investors in China has increased (Blank 2013).
France	Venture capital is healthy in France but the private equity market has slumped this year owing to poor growth and weakened companies. Besides PAI Partners, Eurazeo and AXA Private Equity, there are not-for-profit private equity firms also operating. For instance, Association Française des Investisseurs pour la Croissance (AFIC) is the only not-for-profit organisation in France that exclusively represents private equity. The government has three public bodies that offer support for and financing of competitive business clusters: the National Research Agency; the Agency for Industrial Innovation and BPI, which now incorporates OSEO, France's top business bank. In France, about two-thirds of funds comes from banks and private institutions and about one-quarter from public resources. The role of the public sector has been in facilitating a better balance between public and private institutions and the role of BPI/OSEO is similar to that of Germany's KfW in stimulating guarantees and co-investments. Policy has focused on this rather than on tax breaks.
Germany	The balance between public and private financial support is clearly dependent on the closeness to market of a given activity. Thus policy for education or science is that these are 100% publicly funded through schools and universities, but the apprenticeship scheme is a 'dual scheme' whereby the employer and the government share the costs of training. This applied similarly to entrepreneurship policy in the 1990s and 2000s but the role of public support became progressively more tapered through the 'Agenda 2010' policy for promoting competitiveness, so that it is now closely targeted.

Country	Policy
India	The public and private financial support for Indian growth businesses is blurred but there is potential for a Virtuous Circle balance to develop. Commercial banks are important channels of credit and play a pivotal role in financing the working capital requirements. The Small Industries Development Bank of India (SIDBI) plays a similar role to other development banks and has a clear remit to support SME growth. It is the principal financial institution for the promotion, financing and development of the SME sector. It also helps with refinancing, direct lending and the development of support services. State financial corporations and the state industrial development corporations are the main sources of long-term finance. Credit guarantee schemes (set up by the government) ensure better flow of credit to micro and small enterprises by minimising the risks perceived by banks/financial institutions in lending without collateral security. Mentor Partners in India helps entrepreneurs make the transition from business start-up to expansion. They help to build an ecosystem around the entrepreneurs by providing mentors, knowledge and IP education. The cooperation between public and private co-investors is embryonic but the structures do exist for this to work effectively.
Nigeria	Nigeria has the potential to develop a balance between public and private financing through the Collective Investment Schemes. These are common in Nigeria and interviews and data suggest that Stanbic IBTC Nigerian Equity Fund is the most effective in terms of volume of support. This bank is considered the 'business bank' in Nigeria. SMEDAN is the flagship support structure that promotes SME growth. It acts as a 'one-stop shop' for connecting businesses and investors, and sometimes provides small grants to support development. The FATE Foundation is a non-profit, private-sector-led organisation that aims to foster wealth creation through the promotion of business and entrepreneurial development among Nigerian youth. It aims to foster the establishment and growth of over 5,000 businesses by 2015. The Central Bank of Nigeria used to run the SME Equity Investment Scheme, whereby banks set aside 10% of their profit after tax and invested it into SMES, but this was not successful and was discontinued a few years ago. Lagos Business School and ESUT Business School are both private, prominent business institutions in Nigeria.
Singapore	The Singapore government co-invests and guarantees investments throughout the Virtuous Circle. There are also substantial tax incentives for setting up and developing a business in Singapore. For example, Expara, founded in 2003, helps develop and teach entrepreneurship and innovation through learning programmes for entrepreneurs, start-ups, companies and public institutions in Asia. Extream Ventures was established in 2009 and is a venture capital fund focusing on early-stage venture creation. It provides funding, expertise and networks to emerging technology companies in Singapore. SPRING Startup Enterprise Development Scheme (SEEDS) is an S\$80m equity finance fund for start-ups and new businesses, through which funds are matched with investments made by third-party investors. It aims to strengthen the working arrangements with co-investors. INSEAD, one of the world's leading and largest graduate business schools, has a main campus in Singapore.
South Africa	The balance between public and private sector investments and support in South Africa is tilted towards the public sector. There are fewer than 10 venture capital companies in South Africa and their focus is on high-growth rather than seed companies. Grovest Venture Capital was set up to help develop the start-up and small business sector and it offers very favourable tax reliefs and investment caps. Youth Business International is an initiative of the Prince of Wales International Business Leaders Forum. They have collaborated with Accenture, Barclays, Comic Relief, USAID and the UK government's DfID to promote support, provide business mentoring and help SMEs gain access to loans.
UK	The UK government's new business bank is designed to provide the bridge between business birth strategies and tax incentives. In the UK the well-documented 'equity gap' prevents the Virtuous Circle from working as effectively for developing businesses as it does in the US or Germany. For example, the British Private Equity and Venture Capital Association provides a platform connecting entrepreneurs and SMEs with private equity and venture capital houses and corporate advisers but has limited direct involvement with government support structures. The Federation of Small Businesses has local branches across the UK and its main aim is to protect the interests of small businesses by providing them with advice on legal protection, tax advice and business services while also promoting business growth. There is the UK Growth Accelerator (a partnership between Grant Thornton, Pera Consulting, Oxford Innovation and Winning Pitch), which is targeted at high-growth companies and aims to help with access to finance, business development, growth through innovation and leadership and management. It is relatively new and not that well known yet. UKTI aims to help businesses grow internationally by promoting innovation and increasing the attractiveness for foreign direct investment. The Department for Business Innovation and Skills (BIS) is currently in the process of creating a new institution to support finance for small and medium-sized UK businesses. The aim is to have the business bank fully operational by 2014, with the complete transfer of assets from BIS to the bank. It will bring together Capital for Enterprise Ltd and new expertise from the private sector. HMRC supports entrepreneurs through various forms of tax relief, including R&D tax relief and this provides structures at stages 3 and 4 of the Virtuous Circle but, without Stage 2, the extent to which the policy can be effective is limited.

Country	Policy
US	The balance of public and private support in the US is enabled through the Small Business Administration (SBA) which offers a number of financial assistance programs for small businesses that have been designed to meet the financing needs, such as debt financing, surety bonds and equity financing. The SBA does not make the loans directly but sets out the guidelines for loans, which are then made by its partners. The Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) encourage small businesses to engage in research that has the potential for commercialisation. They target the entrepreneurial sector because they believe that is where most innovation is and innovators thrive. There are funds set aside for these businesses so as to protect them and allow them to compete on the same level as larger businesses. The Global Entrepreneurship Programme promotes and spurs innovation by coordinating private sector and US government programmes to support entrepreneurs. Interviewees highlighted the fact that venture capital and business angel finance is huge in the US because there is so much IT and biotechnology coming out of universities and science parks supported by the government. The National Venture Capital Association is 'the voice of the US venture capital community' and is the pre-eminent trade association.

**CASE STUDY: THE ROLE OF VENTURE CAPITAL : ÉTOUCHES: ONI CHUKWU, PRESIDENT AND CEO**

Étouchés grew out of an event-management services company, Global Executive, which was founded in 1998. The company eventually transformed into a software company in 2008, having identified a lack of software solutions available within the industry, and is now one of the main providers of event management software in the world. The company is considered to have one of the most comprehensive Web-based event software management platforms available and its product line has received multiple awards from both the software and event industries. With around 700 customers stretching across the globe, the firm has offices in Connecticut, the West Coast and St Louis (USA), Reading (UK), Sweden and

Sydney, in order to provide a local service for these customers.

The tool itself manages the entire lifecycle of an event. With it, the users can plan, manage, market and measure success, provide social solutions and access data for use across their company. There are two forms of subscription: the Quad, a package providing registration, badging, hotel and travel, email and website building tools; and the Pro, offering project scheduling tools, visual displays of events in progress, revenue and expense tools and a tool to help teams to plan and share ideas. The tools can also be used as a way of measuring success, through the data gathered during an event, and can be supplied with add-on packages, which continue to improve and develop with the customer's needs.

Finance has been obtained through four main venture capital firms, from which two rounds of funding have raised US\$15 million. This financing is enough for the next stage of growth, which is estimated to reach 120% for 2013/14, following 100% growth during the periods 2011/12 and 2012/13. The industry itself is growing fast and is very underpenetrated. Currently worth US\$125m–135m, Étouchés is a fast-growing customer-centric organisation, operating in a very competitive high-tech environment. Like many of the US's fast-growing SMEs and especially because it is located so close to the 'tech-hub', New York City, the company anticipates rapid growth over the next several years of its lifecycle.

### **CASE STUDY: PRIVATE SECTOR PROVISION OF FINANCE AND SUPPORT: LARGE MINING COMPANY SOUTH AFRICA**

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This large South African mining company has a dedicated fund set up specifically to act as an enterprise development fund and as a catalyst for emerging black business in South Africa. The fund was established to empower black entrepreneurs through the creation and transformation of small and medium-sized enterprises (SMEs). Since its inception in 1989, it has invested in over 150 SMEs across various industries, and provides loan and equity finance to support start-up or expanding businesses.

It ensures the long-term economic viability of these enterprises through skills transfer and guidance, and assists its investee companies by offering strategic operational, financial and business expertise on a hands-on basis. Such support is offered in several areas, including marketing; corporate

governance; and safety, health and environment, among others. At the outset the fund's input is significant, but with time dependency is reduced, realising its philosophy of 'independence through enterprise'.

Clear exit strategies are defined in all shareholder agreements, as a key element of the fund was, and is, to ensure that those helped become sustainable as quickly and as efficiently as possible. Continued reliance on the fund is not an intention. Investment opportunities must exhibit commercial viability and growth prospects, and must actively involve a black economic empowerment (BEE) partner or entrepreneur in daily operations.

The fund therefore uses private funding to finance and support entrepreneurial businesses and develops a geographical cluster. Many of the entrepreneurs have had links with the company and although they initially rely on the company, most become independent very quickly.

## 10. Conclusions

There is no one-size-fits all policy that is appropriate for both emerging and developed economies but the structures that balance support between the public and the private sector with finance and institutional structures are remarkably similar in all the countries in the study. What is important is that policies should reflect the development needs of the country or region and that private involvement occurs where the expected private returns are greatest. Interviewees made the following generic points that relate to every country.

Key aspects of enterprise policy depend on the stage of the Virtuous Circle reached by particular businesses, and vary by country. In all cases, however, at stage 1 of the Virtuous Circle, enterprise policy has both to focus on giving start-ups incentives through small-scale loans or grants and promoting enterprise culture and enterprise skills training. This earliest support was seen by interviewees as both a labour market policy and, equally, an enterprise policy and should therefore include measures to encourage individuals out of unemployment and into business start-up.

Such a 'business-birth strategy' can be successful only if combined with other policies for promoting growth and development and as interviewees, particularly those from the US and the UK, argued, to stimulate re-investment and, hence, long-term wealth creation. Interviewees regarded enterprise policy as effective only if it combined normative (or qualitative) support with more direct finance that diminished progressively as the private sector

incentives for investment increased (that is, as private returns increased). Emerging economies, as illustrated in Table A1 (see Appendix), have less-developed policies for supporting the Virtuous Circle than those found in the developed world, according to interviewees.

Interviewees were keen to stress the importance of finance as businesses grow and highlighted the role that the recession played in reducing access to finance for growth businesses. Interviewees from the US argued that this had played into the hands of equity investors, but also stressed the need for business support to focus on investor-readiness. The structures provided through the US SBA and the German KfW were praised by interviewees for providing less-visible public support on a commercial basis to growth enterprises.

Enterprise skills were seen as critical and there is little that is surprising in that. Nonetheless, interviewees again stressed the difference between policies aimed at re-training the labour market or creating an enterprise culture through skills training in schools and colleges and those aimed at investor-readiness preparation. Regional clusters, where universities and schools were linked closely to placements, internships and exposure to business culture generally were seen a key driver in, say, Munich or Cambridge, compared, with, say, Otigba in Nigeria where the links are still developing.

Clusters are a vital aspect of enterprise growth and, in the context of the analytical framework used for this report, represent a microcosm of the

Virtuous Circle of Enterprise Growth. Interviewees pointed to different clusters – some that have evolved over time (such as Cambridge or Silicon Valley) and others, such as Munich, that have been strongly supported by enterprise policy. What was clear from interviews was that the agglomeration effects of large numbers of start-ups alongside research institutions, a ready supply of highly qualified individuals with ideas, and of private support businesses (finance, legal and administrative) provides the networks and public and private sector support critical to growth businesses.

The policy implications of the Virtuous Circle are that governments should view enterprise development as an evolutionary, iterative and non-linear process. This means direct involvement at the earliest stages to develop enterprise culture, provide skills training, innovation support and small-scale finance. The effects are positive in generating greater labour market participation through enterprise and potentially higher levels of innovation and commercialisation. As a business grows, and as the incentives for private investment grow, there is less need for direct financial involvement by the government and, in the most sophisticated Virtuous Circle structures, government support takes a facilitative role that includes tax incentives and regulatory frameworks that stimulate long-term investment. This investment is at two levels – an enterprise level through growth, innovation and employment and an individual level where the entrepreneurs are themselves encouraged to invest in early-stage ventures, whether in the social or economic space.

**Table 10.1: Interview summaries for eight participating countries**

Country	Importance of skills	Key aspects of enterprise policy	Quality of government policy	Importance of business birth rates and growth policies	Access to finance	Importance of clusters
China	The level of skills in non-high-tech sectors is increasing, especially for those students who have gone to the West for education and are beginning to return to China.	There is a programme run by the central government that encourages the banks to provide loans to SMEs, provides tax reduction schemes and relaxes industry access requirements. There is also support that can be found from professional services, financial advisers and non-profit organisations.	The government has made moves to spur innovation and more recently The People's Bank of China has introduced preferential tax treatment for high-tech enterprises. This reduces the Corporate income tax (CIT) rate to 15%, from 25%, with two years' exemption from CIT and three years' 50% relief. There is also a 50% tax relief for qualifying R&D expenditure and geographically based incentives for high-tech enterprises established during or after 2008. These incentives are central to SME growth.	Unlike the situation in some of China's competitors, China's support for SMEs generally targets the wider population in order to help develop those with high potential as well as those offering unskilled or lifestyle services.	Most private enterprises rely on family and friends when starting a business. Private equity, venture capital and business angels are still in their infancy and are subject to government policy.	Though clusters are important, they differ from the way in which the Western world understands them. More recently, they have been introduced by corporate champions and developed by a specialist division within local government.
France	France is not particularly good at providing skills training at schools. The 'Education at a glance' OECD initiative, which highlights education and its contribution to entrepreneurship, showed France to be in the bottom quarter of countries for giving students a good grounding in entrepreneurship.	La Direction Générale de la Compétitivité, de l'Industrie et des Services (DGCIS) is the part of the French government concerned with SMEs and start-ups. OSEO brings together the French innovation agency and the SME development bank and provides support for innovation and direct loans, and guarantees risk funds.	The government needs to improve labour market flexibility, reduce business taxes. Firm competitiveness must be bolstered by stimulating entrepreneurship. The economic situation of young people must also be improved through the reorganisation of the education system and making universities more autonomous.	The Ministry of Economics has offices dedicated to promoting French companies internationally, particularly with exporting, demonstrating a strong willingness to support SMEs' growth. Even with a reasonable business birth rate, entrepreneurs are still struggling to sell their businesses as an increase in capital gains tax has made it too expensive. The small and micro businesses are finding it hard to grow.	About two-thirds of funds come from banks and private institutions and about one-quarter from public resources. There is a relatively low amount of venture capital investment. The BPI (le Banque Publique d'Investissement) was established by the government and incorporates the former OSEO, CDC enterprises and the Fonds Stratégique D'Investissement (FSI), to support the development and growth of SMEs and is expected to be the main source of funding for SMEs.	Clusters resulting from local initiatives are active in most sectors. Clusters are seen as a way of boosting competitiveness in the French economy and helping to develop growth and jobs in key markets, such as IT, bio-technology and automotive. They accelerate innovation efforts and improve the attractiveness of France for business.



Country	Importance of skills	Key aspects of enterprise policy	Quality of government policy	Importance of business birth rates and growth policies	Access to finance	Importance of clusters
Germany	German apprentice training scheme is world class. Clear balance between payment for general skills by the State and specific skills by the business. Strong integration of regional dimension as well. Apprentice qualification highly regarded and key to success of business.	Bank finance was outlined as one of the stronger areas of the German Mittelstand. The KfW, often referred to as the 'Mittelstand bank' was singled out for praise owing to its societal involvement.	Some criticism about the complexity of enterprise policy but clear delineation between 'labour market' policies to increase self-employment through enterprise and policies to promote the Mittelstand. Mittelstand so embedded into German industrial structure that specific policies are hard to identify. Guarantees and subordination key to success.	A well-established system of support for SMEs will translate into a healthy business growth rate. Between 2007 and 2011 Germany's business population grew by 0.6%. This is not unhealthy when compared with many other developed nations, being similar to that of the UK (0.7%) and double that of the US (0.3%). Consistent rates of growth are brought about by the formula of regional-led support, solid bank finance and high standards of skills and innovation. Businesses are nurtured by local governments but certainly not dictated to by them.	Credit guarantees seen as far-reaching and effective, and subsidies are well balanced.	Central part of innovation policy and enterprise policy in the new German states. Innoregio and Biogregio programmes have been running for nearly 20 years and were vital as a way of creating strong clusters and attracting co-location of large firms and finance providers.
India	In 2009 the government formulated the 'National Skills Policy', which set a target of imparting skills training to 500m people, by 2022. The FICCI (Federation of India's Chamber of Commerce and Industry) recognises skills development as an imperative for achieving India's ambitious growth targets and is committed to working with industry, the government and academia to create sustainable and scalable skills propositions. This is hoped to benefit the youth from all sections of society.	There is currently no easy route.	The MSME implements schemes for the development of SMEs through credit guarantees, skills development, competitiveness programmes and infrastructure development, to name but a few. In practice these schemes are often not implemented owing to a lack of government coordination. More needs to be done to ensure that the government is involved in the management of these schemes so that finance is more accessible and SMEs can be more competitive.	SMEs are considered to be the engine for economic growth in India and play a big role in generating employment. Even so, SMEs are often placed in the same tax bracket as bigger companies and are faced with the same full array of dues. The Confederation of Indian Industry (CII) recently identified a 'delay in realisation of receivables' as the biggest challenge that SMEs face.	SIBDI is the principle financial institution for promotion, financing and development of the SME sector. Despite this institution, access to finance is minimal in India, with venture capital investments only for the lucky few and an unsuccessful private equity market in existence. It is unfortunate also that availability of adequate and timely credit is very limited, the cost of credit is high and collateral requirements are also generally quite high.	The Ministry of Micro, Small and Medium Enterprises (MSME) runs programmes to address common issues such as improvement of technology, skills, market access and access to finance and provides support by setting up facility centres and help groups and by providing access to banks and credit agencies. Clusters are important in India as they are seen as a way of developing skills collectively and demonstrating the country's competitiveness internationally. There has been increasing focus on technology development, modernisation and energy and environmental conservation, in recent years.

Country	Importance of skills	Key aspects of enterprise policy	Quality of government policy	Importance of business birth rates and growth policies	Access to finance	Importance of clusters
Nigeria	Skills are central to the development of SMEs in Nigeria. However, gaining support to get a product to market can be difficult owing to a gap in business education and weak patency and IP systems.	SMEDAN, the flagship business support structure, has achieved moderate success by making small grants to support development. External business support can be found from the 'Growing Businesses Foundation' or more recently, through the use of 'crowd funding'.	The link between industry and government is weak. The government needs to improve the patent system and make sure that copyrighting is widespread.	NGOs are starting to emerge within the early-stage growth business environment. It is a growing culture as foundations seek to bridge the gap between start-ups and a route to market.	Venture capital and business angel finance is weak. The traditional, 'family and friends' support is more prolific.	The business cluster environment is very new to Nigeria and has been driven mainly by manufacturing and trade associations, rather than government-run programmes.
South Africa	Much like Nigeria, South Africa has the problem of developing people's skills and involving them in the market. A lot of money has gone into developing skills (The National Youth Development Agency, for example) but it has been largely wasted and has produced minimal results.	The Small Enterprise Finance Agency was established in 2004 to help foster early-stage growth and job creation. Building a business in South Africa is mainly driven through one's own entrepreneurship and building of networks. Once a business has the collateral the bank will typically lend money up to a certain percentage of the collateral.	The government must focus upon eradicating corruption and improving the education and health systems, cut out the regulatory environment and the red tape, and reorganise its system for hiring and firing, enabling businesses to grow effectively.	There are large, private organisations that provide mentorship, help promote corporate social responsibility (CSR) and secure supply chains for start-ups. In practice one would have to know the right contacts in order to gain access to them. The system is working for only a minority of start-ups.	Firms largely depend on funds from family and friends. Venture capital market is not widespread and will not invest in seed companies. Angel finance is restricted to informal, word-of-mouth networks.	Clusters are a growing trend in South Africa and are seen as a way of building competitive advantage and drawing upon expertise collectively. The results are still pending.

Country	Importance of skills	Key aspects of enterprise policy	Quality of government policy	Importance of business birth rates and growth policies	Access to finance	Importance of clusters
UK	Work has to be done to integrate entrepreneurship more effectively into schools. Respondents were mixed on their thoughts of how good the skills base is in the UK but the process for accessing training is not functional. Businesses need to integrate apprenticeships and training schemes more thoroughly. Nonetheless, business courses are found within most universities and enterprise talks and events can be found throughout the UK.	Local enterprise partnerships (LEPs) and chambers of commerce are commonly used as local advisory institutions. These are not always functional. Business Links and RDAs used to be good but the support and money have gone.	Government support used to be good but it has deteriorated. Ideally, the government should act as a catalyst, facilitating the commercial links between businesses and private sources of finance.	The UK leads the EU's top economies in entrepreneurship, with a comparatively higher Transitional Employment Allowance (TEA) rate than that in its European counterparts.	There is good funding from the banks in the UK but there is difficulty in that a lot of businesses do not borrow from the banks. Grants are often niche and are relatively small amounts of money.	Clusters are well integrated but aren't region-led as they are in larger countries, owing to the geographical size of the UK. Clusters used to be more important but cuts have meant limited development in these areas.
US	There is no formal push for business mentoring schemes but there are programmes that try to link up entrepreneurs whose firms are growing. Entrepreneurship is seen as being embedded into US culture and so is accessible through business courses and university links.	Besides the Federal government programmes, start-up assistance and education can be found from local economic development centres. There is also help to be found from the Small Business Innovation Research programme and various other programmes intended to support targeted sectors.	The main government support structure is the Small Business Administration, which offers some loans and grants, networking opportunities and training centres, plus several loan guarantee funds that work with banks to make capital available. The SBA often focuses upon high-potential start-ups and more loans and grants need to be made available for the majority.	As a global innovation hub, the US lays great importance on business start-up growth. Within IT and technology, the top entrepreneurs are generally snapped up by larger corporations. Despite the large skills base in the US it can still be difficult to get a product to market.	Family and friends funds, venture capital and business angels dominate the start-up climate. There is very little external capital for launching a business. Most high-tech companies are self-funded.	Clusters can be found around large cities, with many trying to mimic the Silicon Valley model. Co-working spaces are increasing in number. They are a locally focused way to help build networks of small-business development centres.

The table shows the information derived from the interviews and demonstrates how much policy structures can vary. While in each country the principle of the policies is the same, and very much structured around the Virtuous Circle of Enterprise Growth described above, the way in which the mechanisms work to fuel business sustainability and growth differs between nations. The more developed a nation is, the more integrated the policy cycle is likely to be and equally, the less developed a country is, the more that any intervention is aimed at stage 1 of the cycle in order to ensure that own-account working can contribute to the social and economic well being of a community or region, using the existing structures rather than inventing new ones.

Interviewees saw gaps in each stage of policy in their country. Nevertheless, there are a number of policy implications that are generic.

There is a clear distinction to be made between policies that support entrepreneurship and business births, and policies that encourage unemployed people into own-account working. Even if self-employment policies improve the employment conditions of those excluded from the labour market, not all these people will want to expand their businesses and it is therefore wrong to see such policies as likely to create sustainable enterprises.

Business birth strategies are only effective if the support structures facilitating the growth of businesses use all elements of the support structure, from networking and training through seed finance to full commercial growth finance. Policies that build on local skills and expertise but that also integrate the innovation system with the skills system and finance are critical in ensuring that this growth path is obvious and accessible to businesses that have growth potential. Signalling has to be clear and having effective professional services to provide inroads into these networks is a critical success factor.

Protection of the entrepreneur's domestic finances is also important and again the role, particularly of tax advisers but also of banks in ensuring that the risks are as low as possible for entrepreneurs, is important since entrepreneurs invest so much of their own effort and resource at the outset in making their businesses grow. Interviewees stressed this but it is also clear from previous research (ACCA/ Delta Economics 2012).

Finally, the role of the fiscal system in ensuring that there is a really strong incentive to re-invest cannot be overstated. This includes incentives for R&D, but more importantly Capital Gains Tax Relief and Enterprise Investment Relief mean that, as in the US in particular, according to interviewees, there is more incentive to re-invest as business angels than there is to extract wealth for personal gain.

The balance between the public and the private sector support for enterprise growth varies across the world depending on the emphasis of policy. This means that where the gains are public (for example, in greater numbers of university spin-outs or in higher numbers of business births) the public sector takes the risk and receives the benefits in terms of higher levels of business start-ups and potentially higher employment, innovation and skills development. As businesses grow, the balance tips towards the commercial sector since the returns are private and related to investment – this applies even at the point where investment is back into start-up businesses. Government stimulates re-investment through the taxation and regulatory systems and this, in turn, ensures that linear business growth turns into a virtuous and wealth-creating circle. It is this non-linear and iterative nature of enterprise support that this research has demonstrated most clearly. There are clearly big differences between where emerging and developed nations stand within the Virtuous Circle but, in the end, the goal has to be to create the structures that encourage reinvestment in the enterprise system.

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