

Special Report Entrepreneurship – A growth tonic



Highlights

- Entrepreneurship can prove a tonic for stagnating economies by boosting employment, driving innovation and raising productivity levels. It can also provide a shot in the arm to social objectives such as income-inequality reduction and female empowerment.
- But not all entrepreneurship is beneficial. Subsistence entrepreneurship often proves a hindrance to growth. Opportunity entrepreneurship is what really counts and governments need to take targeted measures to encourage opportunity entrepreneurs.
- Our survey of opportunity entrepreneurs challenges conventional wisdom, suggesting that such entrepreneurs are typically more established than start-ups and are associated with multiple sectors, not just IT and other service industries. They are also highly educated and are strongly optimistic on growth prospects.
- Countries like India and Kenya are playing catch-up with more developed countries like Singapore in creating supportive entrepreneurial environments. Government focus now has to be on holistic, 'ecosystem' support rather than piecemeal support initiatives.

Madhur Jha +44 20 7885 6530 Madhur.Jha@sc.com Senior Economist, Thematic Research Standard Chartered Bank





Contents

Executive summary	3
Infographic	5
What makes a successful entrepreneur?	5
Entrepreneurship	7
Grappling with 'definitions' of entrepreneurship	7
Is Nigeria more entrepreneurial than the US?	7
Not all entrepreneurs are created equal	9
Encouraging opportunity entrepreneurs is crucial	10
Our entrepreneurship survey	11
Key takeaways	12
Personal characteristics	12
Enterprise characteristics	14
Focusing on upgrading the 'entrepreneurial ecosystem'	19
Female entrepreneurs face additional constraints	26
Government measures needed to support entrepreneurial ecosystems	27
Conclusion	29
Appendices	30
Country code	30
References	31
Global Research Team	32



Executive summary

Entrepreneurship: Why it matters

Entrepreneurship has taken on great significance for governments looking to boost growth and employment since the global financial crisis. It is also increasingly seen as a remedy for socio-economic challenges, such as income inequality and the lack of female participation in the labour force. It is particularly relevant in emerging markets that can be more dynamic and innovative in pursuing growth, leapfrogging stages of development seen in the more developed countries.

But not all entrepreneurship is useful for growth. While some countries, such as Nigeria and Ghana, show high levels of entrepreneurship, a lot of these firms are started for subsistence or necessity purposes or are based in the informal sector. In some emerging markets, these subsistence firms can make up as much as 30% of all entrepreneurial firms. Such enterprises have little impact on economic growth, being low-productivity, low-innovation and low-employment firms.

It is increasingly accepted that only opportunity entrepreneurs – those who start businesses to exploit an opportunity or fill important gaps in the market – are relevant for growth. According to one study, these entrepreneurs formed only 6% of total entrepreneurs but accounted for over 50% of net jobs created in the UK in 2002-08. These opportunity entrepreneurs tend to usher in productivity improvements and innovative products or processes that support high growth, making operations more sustainable and allowing for easier transition to larger firms.

Our entrepreneurship survey - Challenging conventional wisdom

Countries that have a higher number of subsistence entrepreneurs relative to opportunity entrepreneurs find it harder to escape the poverty trap, with recent research suggesting that subsistence entrepreneurship could even impede growth. Governments therefore need to focus on promoting measures that boost opportunity entrepreneurship.

A common assumption is that opportunity entrepreneurs will largely be relatively new firms that are primarily related to the information technology (IT) sector. As a result there has been a focus on supporting start-ups and encouraging industrial clusters, as well as other entrepreneurial ventures in the high-tech sectors. It is also assumed that these firms are usually supported by venture capitalists or 'angel' investors rather than more traditional sources of finance.

Data on the characteristics of opportunity entrepreneurs and the constraints and challenges they face is very limited. To gain a better understanding of opportunity entrepreneurs, we conducted our own survey for this report. We surveyed 62 clients, primarily from India, Kenya and Singapore, with a few responses from countries such as Malaysia as well.

The survey challenges assumptions about opportunity entrepreneurs. Our survey shows that these firms are usually well-established (not necessarily start-ups) and are engaged in a wide range of sectors, including traditional sectors such as manufacturing and wholesale & retail trade. The proportion of opportunity entrepreneurs involved in the IT sector is still small in these economies.

Our survey also suggests that opportunity entrepreneurs share certain characteristics, irrespective of whether they are located in a developed country like Singapore or developing countries like India or Kenya. These entrepreneurs are



confident and optimistic about their own growth prospects; they also firmly believe that entrepreneurs are held in high esteem in their countries. They tend to be very well-educated and in the 30-50 age group, rather than younger as anecdotal evidence would appear to suggest. These entrepreneurs play a major role in creating employment and are also engaged in charity work, though more progress can be made to encourage other community work, such as education.

Government regulations and lack of finance are major constraints

Our survey shows that the main constraints that opportunity entrepreneurs face in growing their businesses come from: (1) government regulations; (2) access to finance; and (3) lack of a skilled workforce, irrespective of the country of residence. Some respondents also indicated that weak global growth and lack of demand is a concern. While most respondents agreed that policy action was being taken to help entrepreneurs, they did not feel that this was effective or relevant. There were mixed views about the use of industrial clusters for fostering entrepreneurship.

The lack of finance options was reflected in the predominant use of own funds or those from family and friends to fund the business. This is also evident in the high rate of re-investment of profits into the business. Venture capital or angel investments are still a very small part of the finance mix, with bank finance being the other major source of finance for opportunity entrepreneurs.

Developing 'entrepreneurial ecosystems' is the key

Our survey results, as well as the respondents' answers to qualitative questions of what makes them successful, support the growing literature that calls for a more holistic approach to boosting entrepreneurship. Increasingly the focus is on developing a supportive entrepreneurial ecosystem based on several different pillars, including financial, cultural, educational and regulatory. The GEI index (a comparison of countries in terms of entrepreneurial ecosystems) shows that developed countries like the US and Singapore have better entrepreneurial ecosystems than developing countries like India and Kenya.

Female entrepreneurship needs more support

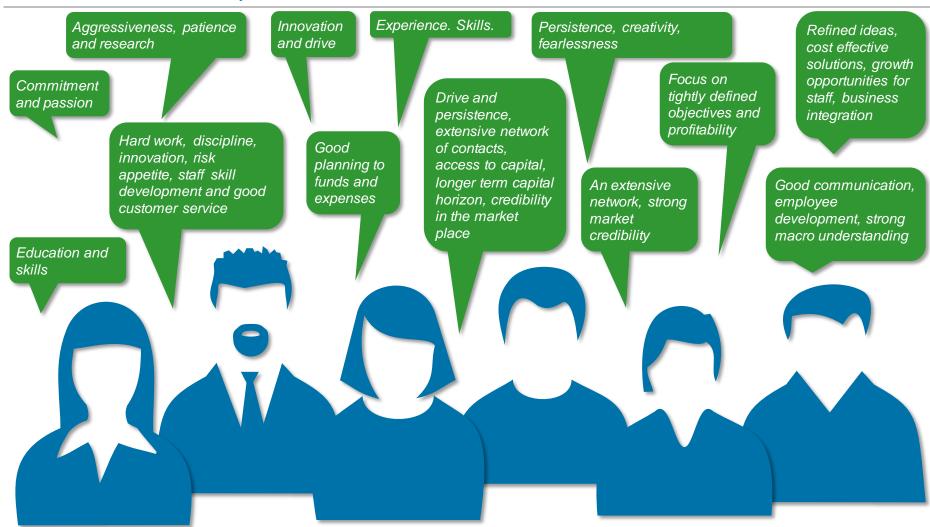
Female entrepreneurship, both according to our survey and academic research, remains quite weak, especially when focus is put only on opportunity entrepreneurs. This could reflect the additional social, religious and legal constraints that women face. We were surprised that most respondents felt that it was not more difficult for women than men to become entrepreneurs. One possible explanation for this optimism could be that countries like Kenya and China have entrepreneurial ecosystems that are more supportive of female entrepreneurship than their levels of economic development would suggest and are pursuing more dynamic ways of promoting female entrepreneurship compared to Western countries.

Conclusion

Not all entrepreneurs are equal – opportunity entrepreneurs matter more for growth. Our survey supports recent literature which indicates that governments need to develop the entrepreneurial ecosystem if they want to encourage opportunity entrepreneurs. This would imply a shift away from focusing on piecemeal, finance-based support for start-ups or the high-tech sector. Instead, the focus has to be on developing an ecosystem that suits the unique socio-economic conditions of the country, providing 'relational' support, such as building networks through more local and regional government engagement rather than top-down national policies.

Infographic

What makes a successful entrepreneur?



Source: Standard Chartered Research



How best would you describe the sector your business falls into?

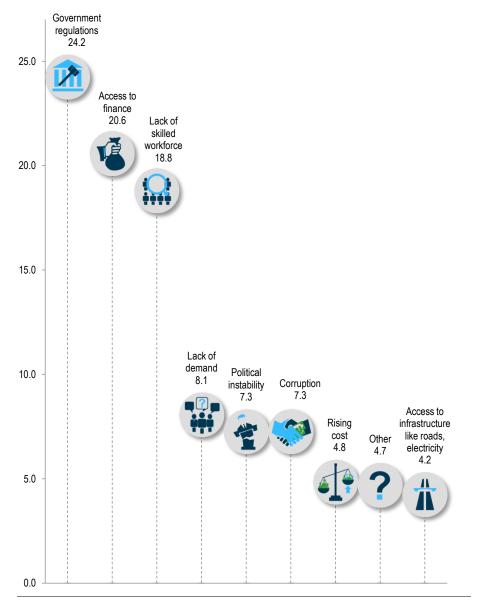
% of respondents

Wholesale or retail trade: 27.3 Manufacturing: 25.5 Professional services: 14.5 Construction and real estate: 9.1 Agriculture, fishing, forestry or mining: 7.3 Media and entertainment: 3.6 Utilities, energy, clean energy: 3.6 Other : 3.6 Hospitality: 1.8 Health and Education: 1.8 Information Technology: 1.8 Transport: 0.0 20% 30% 0% 5% 10% 15% 25%

Source: Standard Chartered Research

What are the top 3 constraints to growing your business?

% of respondents, average for top 3



Source: Standard Chartered Research





Entrepreneurship

The global financial crisis has seen the world become more dependent upon emerging markets to drive global growth. Following a boost from fiscal spending immediately after the crisis, emerging market authorities are increasingly looking to raise private-sector participation for sustained economic growth. Developing entrepreneurial capabilities domestically is a significant aspect of reform plans across major emerging markets.

But the focus on entrepreneurship is not limited to emerging markets. Sluggish growth in developed markets is also spurring greater interest in boosting entrepreneurial capabilities, with the European Commission adopting the Entrepreneurship 2020 Action Plan in 2012, aimed at reviving growth and job creation.

Grappling with 'definitions' of entrepreneurship

It is surprising then that questions are still raised about the usefulness of entrepreneurship in boosting economic growth (Vivarelli 2013, Shane 2008). This uncertainty can be attributed to two main factors. First, there is no consensus on how best to define entrepreneurship (UNCTAD Note, 2015). Second, there seems to be a paucity of data to really determine the impact of entrepreneurship on growth, even if a definition is chosen.

Entrepreneurship is the capacity to create and develop new business ventures

Entrepreneurship, in its broadest sense, is the capacity to create and develop new business ventures. But definitions used can be hard to follow and quantify. The OECD defines entrepreneurship as 'the phenomenon associated with entrepreneurial activity as the enterprising human action in pursuit of the generation of value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets (UNCTAD 2015). This definition is ambiguous, as the word 'new' can be interpreted in several ways.

Pioneers of economic thinking on entrepreneurship argued that it is synonymous with innovation – the introduction of new products or processes or the opening up of new markets that replace the old in a process of 'creative destruction' (Schumpeter 1911).

This suggests that existing firms that launch new product lines or expand businesses in new markets or adopt new technological processes could also be called entrepreneurs. And it is not enough to set up a new business; the business needs to be innovative for it to be counted as an entrepreneurial venture.

Using different definitions of entrepreneurship can have different growth implications

Clearly the definition that is ultimately used has a bearing on any estimation of the success of entrepreneurship in a country, including its socio-economic impact. The definition used can also produce some confusing results, as we note in the section below.

Is Nigeria more entrepreneurial than the US?

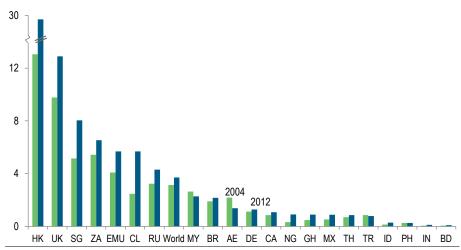
World Bank data shows weak entrepreneurship in emerging markets

The World Bank entrepreneurship database defines entrepreneurship in terms of new business density or the number of newly registered corporations per 1,000 working-age people (aged 15-64). According to this data, entrepreneurial activity is high and rising in the more developed markets, while it has been weak in emerging countries, with little sign of improvement over the last decade (Figure 1). This suggests that the level of economic development is highly correlated with entrepreneurial activity in an economy.



Figure 1: New business densities are still low in emerging markets

New business registrations per 1,000 people aged 15-64



Source: World Bank, Standard Chartered Research

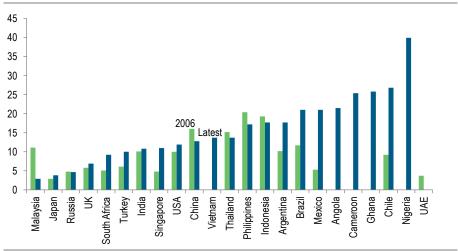
The World Bank definition of entrepreneurship, however, has some limitations. It covers only newly registered enterprises and conveys little information about how these enterprises fare over time, i.e., the success rate of such enterprises. Also, it only includes enterprises that are registered, which might not be the norm for smaller enterprises, especially in developing markets.

GEM data shows high activity in emerging markets

TEA is a more comprehensive definition of an entrepreneur

A comprehensive survey of entrepreneurship at a global level is available in the Global Entrepreneurship Monitor (GEM). The GEM employs a broader definition of entrepreneurship than the World Bank. An entrepreneur is defined as someone who is either starting a business or has been running a business (paying wages and salaries) for less than 42 months. Activity related to such entrepreneurs in a country is referred to as total early stage entrepreneurial activity (TEA).

Figure 2: Entrepreneurship levels show a very mixed performance across countries (% of population aged 18-64)



Source: GEM, Standard Chartered Research ;Note: No data available for Vietnam, Angola, Cameron, Ghana for 2006



9

Surprisingly, TEA data suggests no link between entrepreneurship and growth TEA data produces some very surprising results globally. Countries such as Nigeria, Ghana, Chile, Cameroon and Thailand show the highest levels of entrepreneurial activity, ahead of more developed countries like the US, UK and Singapore by a wide margin (Figure 2). At the same time, other emerging markets like India, Malaysia and Russia show very weak entrepreneurial activity. Comparison of activity over time also shows no sustained improvement in TEA rates across countries.

Not all entrepreneurs are created equal

Existing evidence suggests that entrepreneurial opportunities increase with a country's level of development (Naude 2013). At the same time, there are good reasons to believe that entrepreneurs usher in productivity growth and economic progress through the introduction of new products, processes or the tapping of new markets. Entrepreneurs can also play a key role in generating employment.

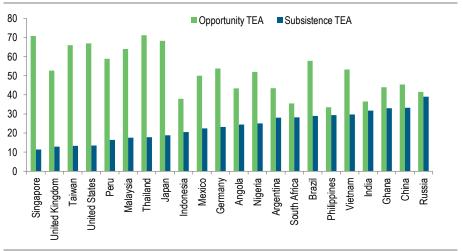
Entrepreneurship can have wide social and economic benefits

There are additional benefits. The United Nations in 2012 adopted a resolution on entrepreneurship for development. The resolution highlighted the importance of entrepreneurship, not only for job creation and growth but also as a means to achieve wider social objectives. Entrepreneurship is increasingly being viewed as a means of reducing poverty and income inequality and promoting female empowerment globally.

The GEM TEA data shows no clear relationship between a country's development level and entrepreneurial activity. So how does one square this circle?

The answer lies in different types of entrepreneurship, based on the motivation driving entrepreneurial activity. Some entrepreneurial activity in almost all countries is driven by necessity and the lack of viable alternatives, in particular, other gainful employment. These 'subsistence' entrepreneurs are only able to support themselves or their immediate families. This type of necessity or subsistence entrepreneurship has little impact on economic growth as these entrepreneurs are unlikely to innovate or employ people outside their immediate family. These firms are likely to stay small.

Figure 3: Developed countries have more opportunity entrepreneurs % of total entrepreneurial activity; latest data



Source: GEM, Standard Chartered Research

11 April 2016



Opportunity entrepreneurs start businesses to pursue an opportunity

On the other hand, 'opportunity' entrepreneurs start businesses because they identify new opportunities. Such businesses are more likely to expand into larger entities as these entrepreneurs are willing to continuously innovate and also are more likely to generate higher growth and greater employment opportunities.

At least 10% of all entrepreneurs are subsistence entrepreneurs

Subsistence entrepreneurs are present in all countries – both emerging and developed. GEM data shows that at least 10% of all early entrepreneurs across markets are subsistence entrepreneurs (Figure 3). But the proportion of subsistence entrepreneurs is particularly high in emerging markets as these usually have a very large informal sector, both as a proportion of output as well as employment (Figures 4 and 5). Around 30% of all entrepreneurs in countries such as India, China, Brazil, Russia and Ghana are really subsistence entrepreneurs.

Countries such as Singapore, the UK, the US and Taiwan, on the other hand, have a much higher share of opportunity entrepreneurs than countries such as India, China, Russia or Ghana (Figure 3).

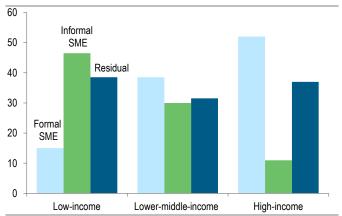
Encouraging opportunity entrepreneurs is crucial

The distinction between these two categories of entrepreneurs is critical. Recent academic work (Coad 2014) shows that not all entrepreneurial activity is growth enhancing. It is only a higher ratio of opportunity entrepreneurs to subsistence entrepreneurs that is positively correlated with economic development (Figure 6). In addition, it is very hard for subsistence entrepreneurs to become opportunity entrepreneurs (Schoar 2010). As a result, a developing country that has a preponderance of subsistence entrepreneurs will find it harder to escape the subsistence trap.

Governments looking at entrepreneurship to boost economic growth need to focus on promoting opportunity entrepreneurship in particular, even though these entrepreneurs might form only a very small part of the total entrepreneurship pool. Recent research has shown that these enterprises can be a major source of job creation. According to one study, during 2002-08, high-growth enterprises accounted for only 6% of the total number of businesses in the UK but accounted for 54% of all net new employment in the country (Anyadike-Danes 2009).

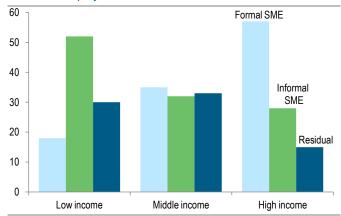
A higher proportion of opportunity entrepreneurs is positively correlated with GDP

Figure 4: Emerging markets have large informal sectors... % of total GDP



Source: Ayyagari et. al, Standard Chartered Research

Figure 5: ...both in terms of output and employment % of total employment



Source: Ayyagari et. al, Standard Chartered Research



Opportunity entrepreneurs create jobs, raise productivity and fill important gaps in incomplete markets In addition, opportunity entrepreneurs are resilient and continue to grow during economic downturns (Brown 2014). Other research shows that these entrepreneurs, through the exploitation of existing opportunities, fill important gaps left by markets that are incomplete or underdeveloped (Leff 1979).

Data on the characteristics of such entrepreneurs and the challenges they face, however, is very limited. As a result it is hard to know what distinctive needs and constraints these entrepreneurs face and whether they differ across regions.

Our entrepreneurship survey

Targeting only opportunity entrepreneurs

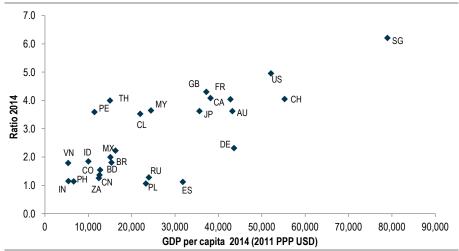
To better understand 'opportunity entrepreneurs', we have conducted our own survey of such entrepreneurs in this report. Several definitions of opportunity entrepreneurs exist, mostly related to how fast a firm's turnover or number of employees has grown (e.g., 'gazelle' firms are those that have seen growth of at least 20% p.a. over the last three years). There are some concerns about using these definitions as they are usually backward looking and past performance is not always a good predictor of future growth.

Our survey focuses only on opportunity entrepreneurs

In this report, we choose the broadest definition of an opportunity entrepreneur by considering what motivated them to become an entrepreneur (same as the GEM definition). We have only chosen those survey respondents who picked 'spotting an opportunity' or 'being independent' as the main motivations for starting their own business. In addition, as we chose the survey respondents predominantly from our client base; this naturally eliminates the inclusion of informal-sector or subsistence entrepreneurs.

Our survey targets entrepreneurs who have been running a business for less than 10 years and who have no more than 250 employees on their payroll. The constraint on employment and years of operation are applied to exclude well-established businesses and conglomerates that have moved beyond the stage of what is commonly understood as entrepreneurship. Our 62 survey respondents are primarily based in Singapore, India and Kenya, with responses also from Malaysia.

Figure 6: Higher growth entrepreneurship is positively correlated with GDP per capita; ratio of improvement to necessity entrepreneurship



Source: World Bank, Standard Chartered Research



Conventional wisdom says that opportunity entrepreneurs are young and largely run high-tech start-ups Conventional wisdom is that opportunity entrepreneurs are expected to have certain defining characteristics. They are expected to enjoy high growth, are likely to be start-ups or relatively new firms and are most likely predominantly linked to the technology-related sectors (Birch 1979). The entrepreneurs themselves are expected to be quite young in age. In this report we seek to establish if these expectations are valid and hold across countries. We also try to gauge the main strengths and key constraints these entrepreneurs face.

Key takeaways

Our survey produces some immediately interesting results. Certain characteristics seem to define opportunity entrepreneurs across regions regardless of the socio-economic background of the country. However, expectations that entrepreneurial enterprises are primarily start-ups or technology related and that entrepreneurs are typically younger, early-career business builders are not borne out by the data.

Personal characteristics

Opportunity entrepreneurs are upbeat about growth prospects

Our survey shows that most opportunity entrepreneurs have high levels of confidence. Most respondents have also seen strong turnover growth in the last three years (Figure 7), highlighting that these are indeed high-growth opportunity firms. In addition, these entrepreneurs expect this trend to continue over the next two years (Figure 8).

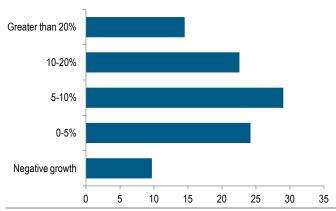
Men dominate entrepreneurial activity

Our survey results show that opportunity entrepreneurs are more likely to be male (Figure 9) and in the 30-50 age bracket (Figure 10). These results are slightly different to the GEM survey data that shows the highest participation in entrepreneurial activity by people in a slightly younger demographic, in both developed and emerging markets.

Women tend to start enterprises more out of necessity than for the opportunity motive Only c.25% of the survey respondents are women (Figure 9). Women on average are less likely than men to start an enterprise. In addition, women are less likely to cite opportunity as the main motivation for starting a business. The latest GEM survey suggests that women are twice as likely as men to be subsistence entrepreneurs. So, while the proportion of women starting enterprises is higher in emerging markets than the developed world, this is reflective of their being subsistence entrepreneurs, usually in the informal sector.

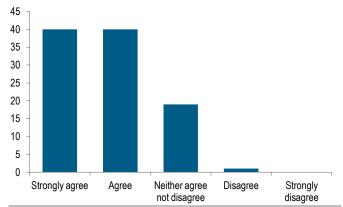
Figure 7: What has been the average turnover growth of your business over the last three years?

% of respondents



Source: Standard Chartered Research

Figure 8: Your business will expand by more than 10% p.a. on average (revenue and/or employees) over the next two years; % of respondents



Source: Standard Chartered Research



Figure 9: Gender of respondent

% of respondents

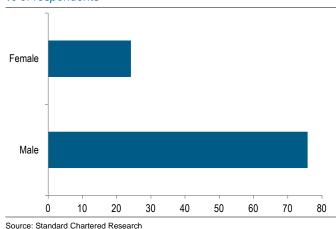
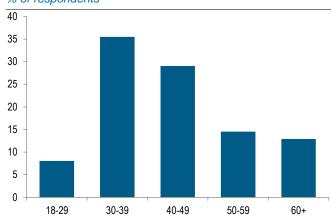


Figure 10: Age bracket of respondent (in years)

% of respondents



Source: Standard Chartered Research

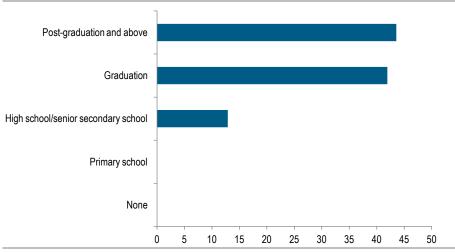
Opportunity entrepreneurs are

highly educated across countries

Opportunity entrepreneurs are highly educated

There is not much information available in the GEM data on the levels of education of entrepreneurs; but one possible reason for high levels of subsistence entrepreneurship is likely to be low education levels in emerging markets. Our survey, however, finds high education levels among opportunity entrepreneurs: over 85% of respondents have completed a graduate or post-graduate degree (c.45% had also completed a post-graduate degree) (Figure 11). This was true not only of the more developed markets but also of emerging markets like India, Kenya and Malaysia.

Figure 11: What is the highest level of education you have completed? % of respondents



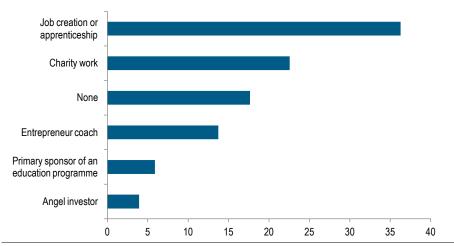
Source: Standard Chartered Research

Opportunity entrepreneurs are engaged in charity work

Opportunity entrepreneurs support their communities through job creation and charity work Job creation is a key benefit of supporting opportunity entrepreneurs. Around 37% of respondents in our survey picked job creation as one of the top two ways in which they support their wider community/region. Our survey also supports the view that opportunity entrepreneurship has wider socio-economic benefits beyond growth, with more than one-fifth of the respondents indicating that they also undertake charity work as a major way of supporting their communities (Figure 12). However, more can be done to encourage these entrepreneurs to provide angel investments or support education in their communities.



Figure 12: Top two ways in which you support your wider community/region/country?; % of respondents, average of top 2 responses



Source: Standard Chartered Research

Enterprise characteristics

Size of businesses places them firmly on the SME spectrum

Opportunity entrepreneurs fall into the smaller section of the SME market Most opportunity entrepreneurs are positioned at the smaller end of the SME segment, with the median number of employees for our respondent firms being 25 (Figure 13). More than 60% of these firms have also predominantly seen an average turnover over the last three years of c.USD 3.25mn, placing them once again at the lower-end of the SME spectrum (Figure 14).

Figure 13: How many employees do you have in your business currently?

% of total responses

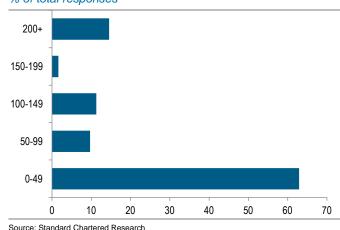
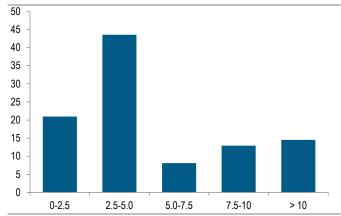


Figure 14: What has been the average turnover growth in your business over the last three years in USD mn?

% of total responses



Source: Standard Chartered Research

Technology is good and innovation is a top priority

GEM data indicates that innovation differs widely depending on the level of economic development. It is highest in North America and lowest in Africa. This in part reflects the inclusion of subsistence entrepreneurs in emerging markets.

Innovation is a key priority for most opportunity entrepreneurs

Our survey shows that these distinctions largely disappear when only opportunity entrepreneurs are surveyed. Innovation has high importance for opportunity entrepreneurs across regions. Not a single respondent believed that technology would affect their business negatively, with an overwhelming majority (80%) expecting the



impact to be positive (Figure 15). All respondents also confirmed that innovation is a priority for them, with around 50% deeming it their top priority (Figure 16).

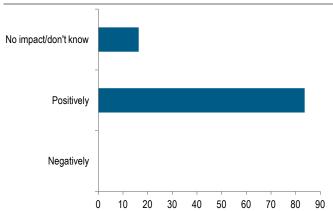
The focus on innovation was also apparent, with most respondents signalling that they would invest more in innovation this year than last (Figure 17). A majority of respondents plan to spend more on improving systems and processes in 2016, though a sizeable number also seem to be looking to spend more on innovation in terms of the product offering of their enterprises (Figure 18).

Opportunity entrepreneurs have wide business interests

Traditionally it has been believed that given high levels of education and the emphasis on innovation, most opportunity entrepreneurs would be involved in technology-related or service sectors, prompting many countries to encourage high-tech industrial clusters.

Figure 15: How do you see digital technology affecting your business over the next five years?

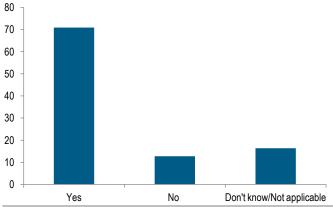
% of respondents



Source: Standard Chartered Research

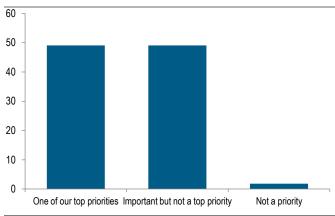
Figure 17: Do you plan to spend more on innovation in 2016 than in 2015?

% of respondents



Source: Standard Chartered Research

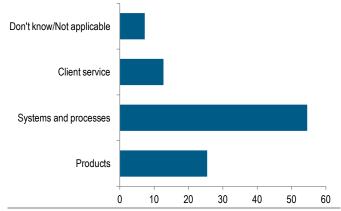
Figure 16: Is innovation a priority for your business? % of respondents



Source: Standard Chartered Research

Figure 18: In which part of your business do you plan to spend more on innovation in 2016?

% of respondents



Source: Standard Chartered Research

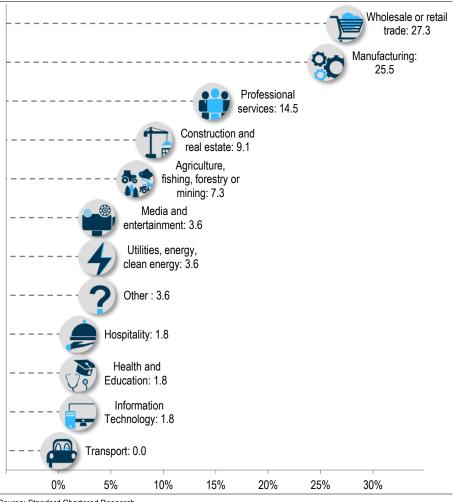


The latest GEM survey, which looks at both necessity and opportunity entrepreneurs, supports this view. It shows that a majority of developed-world entrepreneurs are concentrated in the IT and services (finance, health, education) sectors. But entrepreneurs in less developed economies are predominantly positioned in wholesale and retail trade. Data on the sectoral distribution of opportunity entrepreneurs is very limited.

Traditional sectors such as manufacturing are important for opportunity entrepreneurs

Our survey, however, shows that opportunity entrepreneurs are engaged in a wide range of sectors (Figure 19). Traditional sectors such as manufacturing (c.25%), wholesale and retail trade (c.27%) and professional services dominate. Some entrepreneurs are also engaged in real estate and construction, as well as agriculture or petroleum-related sectors, while their presence in the IT sector is still quite limited. These results support recent academic work showing that high-growth firms tend to be quite heterogeneous in terms of sectoral presence (Brown 2014). This suggests that government policies aimed at only bolstering entrepreneurship in technologyrelated sectors would be too restrictive.

Figure 19: How best would you describe the sector your business falls into? % of respondents



Source: Standard Chartered Research

11 April 2016 16



Only 2% of respondents showed venture capital or angel funds are sources of finance

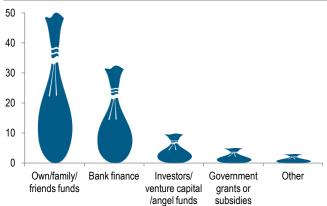
Self-funding is the main source of finance

It is commonly believed that opportunity firms or high-growth enterprises are usually funded by venture capital (OECD 2011). However, our survey shows that capital from investors, angel funds or venture capital sources is relatively unimportant as a source of finance for opportunity entrepreneurs in our markets. Only around 2% of respondents in our survey benefited from such sources of finance. Bank finance is a significant source of capital for opportunity entrepreneurs but a large majority rely on their own or family funds to start up and maintain businesses (Figure 20).

This is also reflected in the way in which profits from the enterprise are distributed among competing claims. According to our survey, over 70% of all profits are reinvested into the business, with the remaining pot largely being divided between paying down existing debt and remunerating employees in the form of bonuses (Figure 21). Opportunity entrepreneurs' commitment to growing their business is evident from the low levels of withdrawals as dividends (c.10% of total profits).

Figure 20: What are the two main sources of finance for your business?

% of respondents, average for top 2



de cubeidios ac bonus

Source: Standard Chartered Research

Government regulation is a top constraint for expansion

Source: Standard Chartered Research

Weak demand and slow global growth are additional constraints

In our survey, we asked respondents to pick the top three constraints to business expansion. Government regulations, access to finance and the lack of a skilled workforce were the most frequently cited reasons (Figure 22). Poor access to finance ties in with the reliance on own funds for starting a business and suggests that there is still scope for improving not only bank finance availability but also encouraging newer sources of funding, such as angel investors or crowd sourcing. A few respondents also cited weak demand and a tough global macroeconomic environment as limiting factors to growth.

Government measures have proved ineffective so far

Besides citing bureaucracy and complex government regulations as the main constraint to growth, our respondents indicated that they did not find government measures supportive enough of their enterprises. The survey shows that government subsidies are an insignificant source of finance for entrepreneurs (Figure 20). 60% of respondents also suggested that while the government has taken action in their country to encourage entrepreneurship, by and large this has been ineffective. 30% of respondents agreed that the government response had been beneficial in promoting entrepreneurial activity (Figure 23).

Figure 21: In 2015, please specify the percentage of your business profits that has been:
% of profits for all respondents

80 70 60 50 40 30 20 10 0 Distributed Withdrawn Used to pay Given as Other Reinvested into the as dividends down debt charity among business employees as bonus

11 April 2016



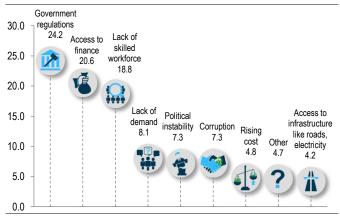
A sizeable proportion of respondents would be willing to move to an industrial cluster

Industrial or technology clusters have, for many decades, been seen by governments as the way to develop not just enterprises but also create sizeable employment. However, there is increasing debate on whether governments should and can encourage enterprise development through the formation of clusters or whether this should be a more market-driven and natural process (Chatterji 2013).

Our survey also shows a mixed picture of the usefulness of industrial clusters. A small majority of respondents (45%) indicated that they had not benefited from being part of an industrial cluster (Figure 24) and would not be willing to move to one either. However, a sizeable proportion of respondents (c.20%) said they would consider moving to an industrial cluster depending upon the benefits and advantages that it would provide (Figure 25). In addition, most of our Singapore respondents indicated that they were either benefiting from being part of an industrial cluster or would be willing to move to one.

Figure 22: What are the top three constraints to growing your business?

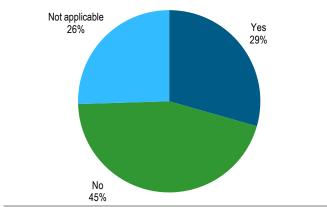
% of respondents, average for top 3



Source: Standard Chartered Research

Figure 24: Have you benefited from being part of an industrial cluster?

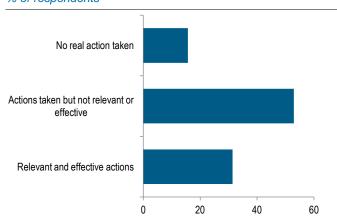
% of respondents



Source: Standard Chartered Research

Figure 23: What do you think of the actions taken by the government in your country to support entrepreneurial activity?

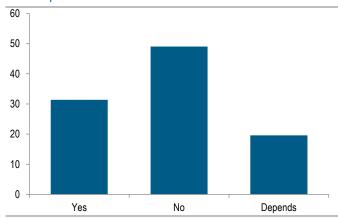
% of respondents



Source: Standard Chartered Research

Figure 25: Would you be willing to move location to be part of an industrial cluster?

% of respondents



Source: Standard Chartered Research



Focusing on upgrading the 'entrepreneurial ecosystem'

Our survey throws some interesting light on the characteristics of opportunity entrepreneurs. Contrary to expectations of new and tech-related firms dominating opportunity entrepreneurship, these firms tend to be slightly more established (at least three years in operation) and dominant in a range of sectors, including the more traditional sectors of the economy. This would suggest that attempts to boost entrepreneurship by encouraging more start-ups – especially in the tech sector – might be misplaced (Mason 2013).

Various factors play a role in the success of an entrepreneur

In addition to the questions above, we asked our respondents to give us a more qualitative response in terms of what factors make them successful entrepreneurs. The answers (Figure 26) suggest that several components need to come together for an enterprise to be successful. This echoes the growing focus in entrepreneurship literature on the need to foster a supportive 'entrepreneurial ecosystem'.

Passion, Innovation perseverance and love for Persistence, creativity, fearlessness Commitment Ability to adapt and Hard work. focus on the future innovation, risk appetite: staff skill development and good customer service Fearlessness and creativity Initiative, responsibility, drive and orientation Refined ideas, cost effective solutions, growth opportunities for Good Experience. communication. staff, business employee development, strong integration . macro understanding

Figure 26: What are the distinguishing factors that make you a successful entrepreneur?

Source: Standard Chartered Research



The entrepreneurship ecosystem is best described as a set of individual elements – such as leadership, culture, capital markets and open-minded customers – that in isolation are conducive to entrepreneurship but insufficient to sustain it (Isenberg 2013). However, when these elements combine they provide ideal conditions to support entrepreneurship. Isenberg highlights nine elements as constituting the entrepreneurial ecosystem, built on diverse pillars such as culture and government policy (Figure 27).

Opportunity entrepreneurs have a high opinion of their social status in their country It is increasingly accepted that culture and social acceptance can be a strong determinant of where entrepreneurship flourishes. We asked our entrepreneurs whether they felt that entrepreneurship was seen to be crucial for development in their country. Most participants responded in the affirmative and quite a few agreed strongly (Figure 28). 90% of the respondents also felt that in their country, entrepreneurs were admired for their initiative, risk appetite and innovation (Figure 29). A strong belief in the usefulness of entrepreneurship makes it more acceptable as a career choice among family and peer groups.

Local & global markets

Human capital & workforce

Entrepreneurial ecosystem

Education & training

Universities as catalysts

Mentors, advisors & support systems

Culture

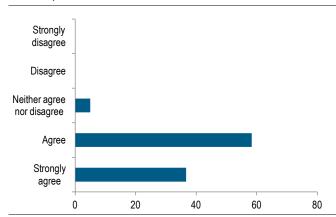
Figure 27: An entrepreneurial ecosystem consists of several elements

Source: Isenberg 2013, Standard Chartered Research



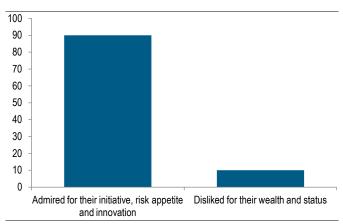
Figure 28: Most people see entrepreneurs as crucial for your country's development

% of respondents



Source: Standard Chartered Research

Figure 29: In your country, entrepreneurs are: % of respondents



Source: Standard Chartered Research

Differences in entrepreneurial ecosystems are increasingly seen as the primary reason for differences in levels of entrepreneurial activity, not only between developed and emerging markets but also between countries at similar stages of development. Inherent disparities in areas such as education levels, access to funding, infrastructure, government support and cultural constraints can discourage individuals from entrepreneurial pursuits.

An entrepreneurial ecosystem is made up of several pillars covering attitudes, abilities and aspirations

The Global Entrepreneurship Development Institute (GEDI), a US-based policy development organisation, provides one the most comprehensive indices of entrepreneurial ecosystems for 132 countries. Its definition of an ecosystem is wider than the Isenberg definition, incorporating both institutional and individual variables.

GEDI's Global Entrepreneurship Index (GEI) is a super-index comprising three sub-indices measuring entrepreneurial attitudes, abilities and aspirations. Each of these sub-indices in turn is made up of several pillars. There are 14 pillars in total and each pillar consists of an individual variable and an institutional variable (Figure 30):

- Entrepreneurial attitudes includes variables that measure the opportunity perception of a population, start-up skills of potential entrepreneurs, fear of failure, networking ability, as well as cultural support for entrepreneurship as a career choice in each country.
- 2. Entrepreneurial abilities includes measures of opportunity enterprises as a proportion of all enterprises; the ability of firms to absorb new technologies and those firms that are involved in technology sectors; the education levels of entrepreneurs as well as the degree of employee training. It also includes measures of the competition and market dominance that could affect the success of start-ups.
- 3. Entrepreneurial aspirations includes measures of the potential of a country to generate new products as well as new processes; the extent of research and development in a country; the percentage of high-growth businesses that have strong expansion plans; measures of internationalisation and the availability of finance.

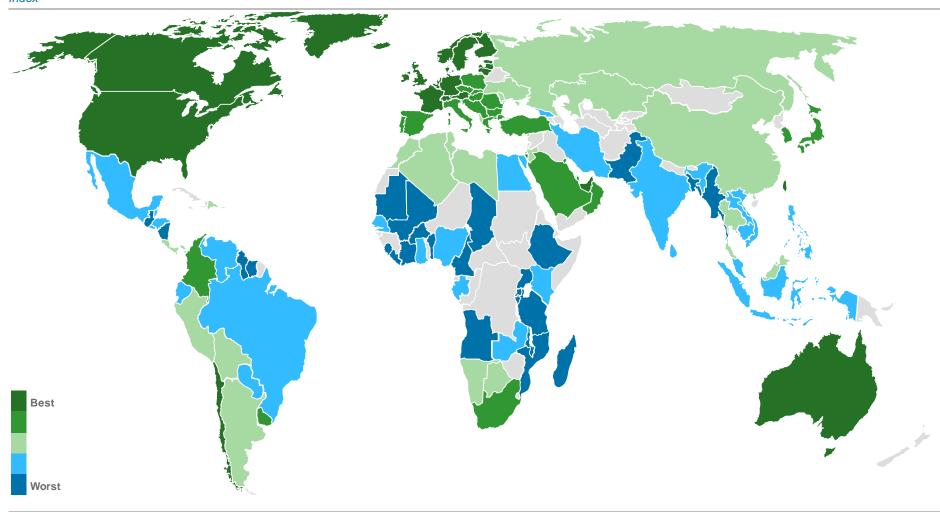


Figure 30: The GEI is a comprehensive measure of a country's entrepreneurial ecosystem Details

Sub-index	Pillar	Individual variable	Institutional variable
Attitudes sub-index			
	Opportunity perception	Opportunity	Market agglomeration
	Start-up skills	Skill recognition	Post-secondary education
	Risk acceptance	Risk perception	Business risk
	Networking	Know entrepreneur	Internet usage
	Cultural support	Career status	Corruption
Abilities sub-index			
	Opportunity start-up	TEA opportunity	Freedom
	Technology absorption	Tech sector	Tech absorption
	Human capital	High education	Staff training
	Competition	Competition	Market dominance
Aspirations sub-index			
	Product innovation	New product	Tech transfer
	Process innovation	New technology	GERD
	High growth	Gazelle	Business strategy
	Internationalisation	Export	Globalisation
	Risk capital	Informal investment	Depth of capital market

Source: GEDI, Standard Chartered Research

Figure 31: Entrepreneurial ecosystems vary sharply across and within regions Index



Source: GEDI, Standard Chartered Research





64.4 67.8 62.3 63.3 50.4 48.5 51 51.9 60 60 40 20 20 Europe North America 60 40 20 MENA 39.2 38.3 80 60 60 40 40 19.8 19.8 21.3 18.1 20 20 South and central America Sub-Saharan Africa ■GEI ■Attitudes ■Aspirations ■Abilities

Figure 32: The developed world leads in fostering ecosystems conducive for entrepreneurial activity (Index)

Source: GEDI, Standard Chartered Research

Developed countries lead the way in terms of ecosystems that encourage greater entrepreneurial activity, with high scores in North America and Europe on the three sub-indices of the GEI (Figure 32). Sub-Saharan Africa has the least supportive entrepreneurial ecosystem, scoring particularly poorly on entrepreneurial abilities, though scores on other measures are also low. These regional indices mask widely differing performances on a country basis, however.

On an individual country basis, the US is ranked number 1 and has the most supportive ecosystem for entrepreneurs (Figure 30). Its large, almost complete circle on the spider chart of 14 pillars shows that the US is best in class on almost all of the 14 pillars (Figure 33).

Risk acceptance Opportunity Startup Internationalisation Opportunity Perception **Product Innovation** 0.6 USA India Competition Startup skills 0.0 **Cultural Support** Networking World Process Innovation **Human Capital**

Risk Capital

High Growth

Figure 33: India scores well on innovation but has to do more on other pillars *Index*

Source: GEDI, Standard Chartered Research

11 April 2016 24

Technology Absorption



India is ranked low in terms of its entrepreneurial ecosystem but does well on innovation

In comparison, India is ranked 98 out of 132 countries analysed in the GEI, indicating that its ecosystem is still relatively underdeveloped. This is also obvious from the considerable unevenness in terms of the 14 pillars of the ecosystem compared with the US.

India's strength lies in innovation, both in terms of processes and products. High levels of innovation are also reflected in a strong competitiveness pillar, indicating the uniqueness of products on offer. However, India does particularly poorly in technology absorption, networking and internationalisation, with a low number of respondents citing opportunity as the main motivation for starting an enterprise.

Figure 34 compares the ecosystems of Singapore (ranked 11) and Kenya (ranked 104). Singapore gets maximum points on pillars such as process innovation, internationalisation, start-up of opportunity enterprises and also high-growth enterprises. It also does particularly well in terms of developing human capital.

Kenya does better than Singapore on the networking pillar but lags behind on other pillars Kenya, on the other hand, needs to improve on most of these indicators but it scores much higher than Singapore on networking, with Kenya leading emerging markets in the use of mobile technology. Kenya also suffers from relatively low cultural support for entrepreneurship. These constraints seem to apply to a wide range of emerging markets across regions, whether in Africa, Asia or the Middle East.

Risk acceptance Opportunity Startup, Internationalisation Opportunity Perception **Product Innovation** 0.6 0.4 Competition Singapore Startup skills 0.0 Cultural Support Networking Kenya Process Innovation Human Capital Hiah Growth Technology Absorption Risk Capital

Figure 34: Kenya has a weaker ecosystem than Singapore except in networking *Index*

Source: GEDI, Standard Chartered Research



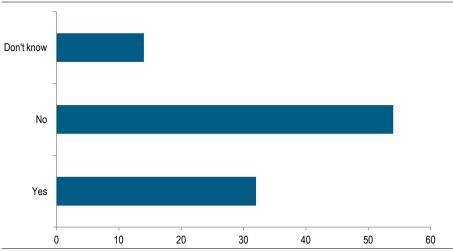
Female entrepreneurs face additional constraints

A key aspect many countries are grappling with is the participation of women in entrepreneurship. Our survey underlines these concerns, with only c.25% of respondents being women. Female entrepreneurs, like their male counterparts, face constraints in infrastructure, availability of finance and skilled workforce. Women tend to face additional constraints, such as the absence of legal rights in some countries and social restrictions on travel and certain types of work. The GEM data shows that women tend to perform particularly poorly on measures of opportunity entrepreneurship.

Surprisingly, most respondents felt that women do not find it more difficult than men to start a business It was surprising then that the majority response to our question of whether women find it harder to start an enterprise was in the negative (Figure 35). While this result could be partly because of the low representation (only c.25%) of women in the survey, most of the women respondents also replied in the negative. A closer look at the country distribution is warranted. Not a single respondent from Singapore (male or female) felt that women found it more difficult than men to be entrepreneurs. On the other hand, the response from survey participants in India and Kenya was more mixed.

Figure 35: In your country, it is more difficult to be an entrepreneur if you are a woman?





Source: Standard Chartered Research

This country differentiation can once again be attributed to the difference in the conditions that could support high potential numbers of female entrepreneurs. GEDI produces a Female Entrepreneurship Index (FEI) for 77 countries (excluding Kenya) that shows Singapore ranked a high 16 compared with 70 for India.

Many emerging markets have more supportive ecosystems for women than their level of development would suggest

For emerging markets, however, there are reasons to be upbeat and to expect faster progress in female entrepreneurship over the coming years. It is encouraging to see that many emerging market countries – including China, Nigeria, Ghana and Mexico – punch above their weight in terms of female entrepreneurship, given their level of development (as measured by GDP per-capita levels). Singapore, on the other hand, has some more work to do given its high level of development (Figure 36).



80 70 60 GDP per capita Rank 50 AR 40 ◆RU 30 20 10 SA 50 60 70 20 40 80 FEI Rank

Figure 36: Some emerging markets have better female entrepreneurship conditions than their per-capita GDP levels suggest; rank

Source: World Bank, GEDI, Standard Chartered Research

Government measures needed to support entrepreneurial ecosystems

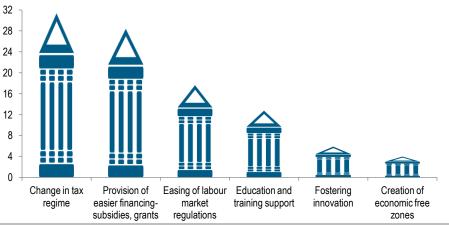
The GEDI data suggests that countries differ markedly on various pillars of the entrepreneurial ecosystem. This matters a lot as, increasingly, a supportive entrepreneurial ecosystem is seen to be the best way to promote opportunity entrepreneurs (Mason 2014).

This is evident also from our own survey results. Our survey highlights a wide range of constraints for entrepreneurs, including lack of finance, burdensome government regulations and a lack of available skilled workers.

Easier tax rules is the number one measure respondents would like to see from government

We asked respondents to pick the top two government measures they felt would be beneficial for them. Over 30% of respondents on average picked a change in the tax regime (easing tax rules) as the top measure to support entrepreneurship; while over 25% of respondents cited easier financing as one of their top two most desirable government measures (Figure 37). These two measures would help alleviate the top two constraints faced by our respondents, namely burdensome government regulations and access to finance. Easing of labour-market rules and education and skills development measures would also help address the lack of a skilled workforce that many respondents indicated was a top constraint as well.

Figure 37: What government policies would benefit you the most? (pick top 2) % of respondents, average of top 2 responses



Source: Standard Chartered Research



Piecemeal government efforts to kick-start opportunity entrepreneurship, such as research and development grants, venture capital financing or business incubators, have in the past failed to improve entrepreneurial activity within a country. These 'traditional policy' approaches tend to be transactional in nature and often focus on growing the number of firms without much focus on the quality of these firms.

'Growth-oriented policy'
approaches are more relational in
nature and focus on expanding the
networks at local, national and
international levels

Promotion of opportunity entrepreneurs, however, requires more focus on the development of an entrepreneurial ecosystem that has certain distinctive characteristics. The 'growth-oriented policy' approaches are more relational in nature and focus on expanding the networks at local, national and international levels in order to support opportunity enterprises beyond the start-up stage. Opportunity entrepreneurs require strategic guidance, leadership development and business mentoring rather than just money-based forms of support. Figure 38 details the main differences between growth-oriented and traditional entrepreneurship policies.

Figure 38: The focus is increasingly on growth-oriented policies to boost opportunity entrepreneurship

	Traditional enterprise policies	Growth-oriented enterprise policies
Actors	Focus on individual entrepreneurs or geographical clusters	Focus on networks of entrepreneurs or temporary clusters
Objective	Focus on quantity – more entrepreneurs and new ventures	Focus on quality – 'blockbuster' entrepreneurs with the largest economic potential
Policy targets	Policy actors are targeted by specific focused interventions aimed at parts of entrepreneurial systems, i.e., non-systemic	Policy is targeted at connecting components within ecosystems to enable the system to function better, i.e., systemic
Forms of support	'Transactional' forms of support – grants, tax incentives, subsidies	'Relational' forms of support – network building, institutional alignments of priorities, fostering peer-based interactions
Funding	Policy push to generate and promote entrepreneurial sources of finance aimed at start-ups, particularly in the form of venture capital and business angel funding	Recognition that different businesses have different funding needs, such as debt finance, peer to peer, crowdfunding, etc. As businesses develop, they need different funding sources
Innovation	Focus on R&D and protection of intellectual property rights. Strong encouragement of technology and innovation within high-tech sectors	Increasing recognition of unprotected and 'open' sources of innovation.
Policy framework	Top-down policy making. Implementation of policy is undertaken at national level primarily	Multi-scalar policy frameworks emerging. Bulk of systemic policies is enacted at the regional or local level

Source: Mason 2014, Standard Chartered Research

What should government policy look like?

Our survey results challenge conventional wisdom about opportunity entrepreneurs and the government policies being used to encourage such entrepreneurship. A few key steps governments can take to focus on growth-oriented rather than traditional policies include:

- Greater focus on existing entrepreneurs and SMEs, rather than the current focus on start-ups, as opportunity entrepreneurs are more likely to be firms that have been in existence for some years already.
- 2. Identifying opportunity entrepreneurs from within an existing set of entrepreneurs can be a challenge but focus could be placed on firms that have grown by over 10% p.a. on average over three to five years.
- 3. Looking beyond the high-tech sector and focusing on industries/sectors that have already established a presence within the country. The setting up of clusters around existing large firms can be beneficial as smaller firms can benefit from the knowledge and experience of managers who leave larger firms and join smaller ones.



- 4. Involving local and regional governments in formulating policies. As entrepreneurs face unique local and regional ecosystems, a blanket national policy is unlikely to be as effective as allowing regional and local governments to develop policies that best suit local conditions.
- 5. Focusing on relational and peer-based support. To transition from being small to medium-sized firms, opportunity enterprises need more relational support, not just funding. This can be in the form of peer-to-peer mentoring programmes, networking activities and management advice from successful entrepreneurs or senior managers of large companies.
- Encouraging multiple sources of finance such as peer-to-peer lending and crowdsourcing, as well as ensuring that traditional sources of finance through bank lending targeted at SMEs, is also a key policy area for governments looking to encourage entrepreneurship.

Conclusion

Entrepreneurship can have several positive effects on growth, namely boosting employment, raising productivity and speeding up innovation. It is little wonder then that governments are focusing on entrepreneurship as a way to lift economies out of growth stagnation. Not all entrepreneurs are equally important for growth, however. Opportunity entrepreneurs matter more but we know little about their characteristics, challenges and strengths.

The findings of our survey of 62 opportunity entrepreneurs – primarily covering India, Kenya and Singapore – challenge the conventional wisdom about opportunity entrepreneurs; in particular, we find that these entrepreneurs are not necessarily young, nor do they run business start-ups. Most opportunity enterprises are well-established and cover a wide range of sectors, belying expectations that the IT sector dominates the sectoral make-up of this group.

Our survey also supports recent literature which indicates that governments need to develop an entrepreneurial ecosystem if they want to encourage opportunity entrepreneurs. This would imply a shift away from focusing on piecemeal, finance-based support for start-ups in the high-tech sector. Instead the focus has to be on developing an ecosystem that suits the unique socio-economic conditions of the country, providing 'relational' support, such as building networks through more local and regional government engagement rather than top-down national policies.



Appendices

Country code

Country	Country code
Angola	AO
Argentina	AR
Australia	AU
	BD
Bangladesh Brazil	BR
Canada	CA
Chile	CL
China	CN
Colombia	CO
Czech Republic	CZ
Denmark	DK
Egypt	EG
Finland	FN
France	FR
Germany	DE
Ghana	GH
Greece	GR
Hong Kong	HK
India	IN
Indonesia	ID
Italy	IT
Japan	JP
Kenya	KE
Korea, Republic of (South Korea)	KR
Malaysia	MY
Mexico	MX
Netherlands	NL
New Zealand	NZ
Nigeria	NG
Norway	NO
Pakistan	PK
Peru	PE
Philippines	PH
Poland	PL
Portugal	PT
Russian Federation	RU
Saudi Arabia	SA
Singapore	SG
Slovakia	SK
South Africa	ZA
Spain	ES
Sri Lanka	LK
Sweden	SE
Switzerland	СН
Taiwan	TW
Thailand	TH
Turkey	TR
Uganda	UG
United Arab Emirates	AE
United Kingdom	GB
United States of America	US
Venezuela	VE
Vietnam	VN
violidiil	V 1 4



References

Abdesselam R. and Jean Bonnet et al., 'What happened to entrepreneurial economies after the financial crisis? An empirical study of OECD countries', November 2014

Acs Z. and Nicola Virgill, 'Entrepreneurship in Developing Countries' The Jena Economic Research papers 2009- 023, March 2009

Birch D. 'The Job Generation Process', Cambridge, MA: M.I.T. Program on Neighbourhood and Regional Change 1979

Brown R. and Colin Mason et al, 'Increasing 'The Vital 6 Percent': Designing Effective Public Policy to support High Growth Firms', Nesta working paper No. 14/10, January 2014

Brown R. and Suzanne Mawson 'Trigger points and high-growth firms: A conceptualisation and review of public policy implications', *Journal of Small Business and Enterprise Development*, 20(2), pp. 279-295, May 2013

Coad, A. Daunfeldt, S-O. Hozl, et al., 'High-growth firms: introduction to the special issue', *Industrial and Corporate Change*, 23, 91-112., 2014

Delgado M. and Michael E. Porter et al., 'Clusters and Entrepreneurship' MIT and the NBER, September 2010

'Entrepreneurial Ecosystems around the globe and early-stage company growth dynamics', World Economic Forum, January 2014

Global Entrepreneurship Index 2016, The Global Entrepreneurship and Development Institute, Washington, D.C., USA

Global Entrepreneurship Monitor 2015/16 Global Report

Isenberg D. 'Worthless, Impossible, and Stupid: How Contrarian Entrepreneurs Create and Capture Extraordinary Value', July 2013

Leff, N., 'Entrepreneurship and Economic Development: The Problem Revisited', Journal of Economic Literature, 17: 46-64, 1979

Lingelback D. and Lynda de la Viña et al, 'What's distinctive about growth-oriented entrepreneurship in developing countries?' UTSA College of Business Center for Global Entrepreneurship Working Paper No. 1, March 2005

Mason C. and Ross Brown, 'Entrepreneurial ecosystems and growth oriented entrepreneurship', OECD, January 2014

Naudé W., 'Entrepreneurship and Economic Development: Theory, Evidence and Policy', IZA DP No. 7507, July 2013

Shane S., 'Why encouraging more people to become entrepreneurs is bad public policy' World Entrepreneurship Forum 2008 edition

Schoar A., "The Divide between Subsistence and Transformational Entrepreneurship", *NBER Innovation Policy and the Economy, Volume 10,* February 2010

Vivarelli M., 'Is entrepreneurship necessarily good? Microeconomic evidence from developed and developing countries', Industrial and Corporate Change, Volume 22, Number 6, February 2013



Global Research Team

Management Team

Dave Murray, CFA +65 6645 6358

Head, Global Research Dave.Murray@sc.com

Standard Chartered Bank, Singapore Branch

Marios Maratheftis +971 4508 3311

Chief Economist Marios.Maratheftis@sc.com Standard Chartered Bank

Thematic Research

Madhur Jha +44 20 7885 6530

Senior Economist, Thematic Research Madhur.Jha@sc.com

Standard Chartered Bank

Senior Economist, Thematic Research Enam.Ahmed@sc.com Standard Chartered Bank

Mayank Mishra +65 6596 7466

Macro Strategist Mayank.Mishra@sc.com

Enam Ahmed +44 0207 885 7735

Samantha Amerasinghe +44 20 7885 6625

Economist, Thematic Research Samantha.Amerasinghe@sc.com Standard Chartered Bank

Global Macro Strategy

Eric Robertsen +65 6596 8950

Head, Global Macro Strategy and FX Research Eric.Robertsen@sc.com

Standard Chartered Bank, Singapore Branch

Economic Research

Africa

Razia Khan +44 20 7885 6914

Chief Economist, Africa Razia.Khan@sc.com

Standard Chartered Bank

Victor Lopes +44 20 7885 2110

Senior Economist, Africa Victor.Lopes@sc.com Standard Chartered Bank

Sarah Baynton-Glen +44 20 7885 2330

Sarah.Baynton-Glen@sc.com Standard Chartered Bank

Edward Cheng +44 20 7885 5284

Economist, Africa

Edward.Cheng3@sc.com Standard Chartered Bank

Emmanuel Kwapong +44 20 7885 5840

Economist, Africa

Emmanuel.Kwapong@sc.com Standard Chartered Bank

The Americas

Mike Moran +1 212 667 0294

Head, Economic Research, The Americas

Mike.Moran@sc.com

Standard Chartered Bank NY Branch

Thomas Costerg +1 212 667 0468

Senior Economist, US Thomas.Costerg@sc.com

Standard Chartered Bank NY Branch

Italo Lombardi +1 212 667 0564

Senior Economist, Latam

Italo.Lombardi@sc.com

Europe

Standard Chartered Bank NY Branch

Sarah Hewin +44 20 7885 6251

Achilleas.Chrysostomou@sc.com

Achilleas Chrysostomou +44 20 7885 6437

Chief Economist, Europe Sarah.Hewin@sc.com

Standard Chartered Bank

Standard Chartered Bank

Economist, Europe

Asia

David Mann +65 6596 8649

David.Mann@sc.com

Standard Chartered Bank, Singapore Branch

Standard Chartered Bank, Singapore Branch

Southeast Asia

Edward Lee Wee Kok +65 6596 8252

Head, ASEAN Economic Research

Lee.Wee-Kok@sc.com Standard Chartered Bank, Singapore Branch

Jeff Ng +65 6596 8075

Economist, SEA

Jeff.Ng@sc.com Standard Chartered Bank, Singapore Branch

Chidu Narayanan +65 6596 7004

Economist, Asia

Chidambarathanu.Narayanan@sc.com Standard Chartered Bank, Singapore Branch

Usara Wilaipich +662 724 8878

Senior Economist, Thailand

Usara.Wilaipich@sc.com

Standard Chartered Bank (Thai) Public Company Limited

Aldian Taloputra +62 21 2555 0596

Senior Economist, Indonesia

Aldian.Taloputra@sc.com

Standard Chartered Bank, Indonesia Branch

South Asia

Anubhuti Sahay +91 22 6115 8840

Head, South Asia Economic Research Anubhuti.Sahay@sc.com

Standard Chartered Bank, India

Sauray Anand +91 22 6115 8845

Economist, South Asia Saurav.Anand@sc.com

Standard Chartered Bank, India

Kanika Pasricha +91 22 6115 8820

Economist, India

Standard Chartered Bank, India

Kanika.Pasricha@sc.com

Middle East and North Africa

Dima Jardaneh +971 4 508 3591

Head of Economic Research, MENA

Standard Chartered Bank

Carla Slim +971 4 508 3738

Economist, MENA Carla.Slim@sc.com Standard Chartered Bank **Greater China**

Shuang Ding +852 3983 8549 Head, Greater China Economic Research

Shuang.Ding@sc.com

Standard Chartered Bank (HK) Limited

Kelvin Lau +852 3983 8565

Senior Economist, HK

Kelvin.KH.Lau@sc.com Standard Chartered Bank (HK) Limited

Betty Rui Wang +852 3983 8564

Economist, NEA

Betty-Rui.Wang@sc.com

Standard Chartered Bank (HK) Limited

Se Yan +86 10 5918 8302

Senior Economist, China

Se Yan@sc.com

Standard Chartered Bank (China) Limited

Lan Shen +86 10 5918 8261

Economist, China

Lan.Shen@sc.com

Standard Chartered Bank (China) Limited

Tony Phoo +886 2 6603 2640

Senior Economist, NEA

Tony.Phoo@sc.com

Standard Chartered Bank (Taiwan) Limited

Chong Hoon Park +82 2 3702 5011

Head. Korea Economic Research ChongHoon.Park@sc.com

Standard Chartered Bank Korea Limited

Kathleen B. Oh +82 2 3702 5072

Bilal Khan +92 21 3245 7839

Standard Chartered Bank (Pakistan) Limited

Philippe Dauba-Pantanacce +44 20 7885 7277

Senior Economist, MENAP

Bilal.Khan2@sc.com

Economist, Korea Kathleen.BN.Oh@sc.com

Standard Chartered Bank Korea Limited

Dima.Jardaneh@sc.com

Senior Economist, Global Political Analyst Philippe.Dauba-Pantanacce@sc.com Standard Chartered Bank

11 April 2016 32



FICC Research

Rates Research

Kaushik Rudra +65 6596 8260 Head, Rates & Credit Research Kaushik.Rudra@sc.com Standard Chartered Bank, Singapore Branch

Nagaraj Kulkarni +65 6596 6738 Senior Asia Rates Strategist Nagaraj.Kulkarni@sc.com Standard Chartered Bank, Singapore Branch

Arup Ghosh +65 6596 4620 Senior Rates Strategist Arup.Ghosh@sc.com Standard Chartered Bank, Singapore Branch

Lawrence Lai +65 6596 8261 Asia Rates Strategist Lawrence.Lai@sc.com Standard Chartered Bank, Singapore Branch

Hee Eun Lee +65 6596 8690
Asia Rates Strategist
Hee-Eun.Lee@sc.com
Standard Chartered Bank. Singapore Branch

Becky Liu +852 3983 8563 Senior Asia Rates Strategist Becky.Liu@sc.com Standard Chartered Bank (HK) Limited

John Davies +44 20 7885 7640 US Rates Strategist John.Davies@sc.com Standard Chartered Bank

Samir Gadio +44 20 7885 8618 Head, Africa Strategy Samir.Gadio@sc.com Standard Chartered Bank

Eva Murigu +25 42 0329 4004 Africa Strategist EvaWanjiku.Murigu@sc.com Standard Chartered Investment Services Kenya Limited

Flows Research

Michael Trounce +44 20 7885 2058 Senior Strategist, Flows Research Michael.Trounce@sc.com Standard Chartered Bank

Credit Research

Kaushik Rudra +65 6596 8260 Head, Rates & Credit Research Kaushik.Rudra@sc.com Standard Chartered Bank, Singapore Branch

Shankar Narayanaswamy +65 6596 8249 Head, Credit Strategy & Financials Shankar.Narayanaswamy@sc.com Standard Chartered Bank, Singapore Branch

Bharat Shettigar +65 6596 8251 Head, IG/Sovereign Credit Research Bharat.Shettigar@sc.com Standard Chartered Bank, Singapore Branch

Jaiparan Khurana +65 6596 7251 Credit Analyst, IG/Sovereign Jaiparan.Khurana@sc.com Standard Chartered Bank, Singapore Branch

Simrin Sandhu +65 6596 6281 Senior Credit Analyst, Financials & ME Corporates Simrin.Sandhu@sc.com Standard Chartered Bank, Singapore Branch

Nikolai Jenkins, CFA +65 6596 8259 Credit Analyst, Financials Nikolai.Jenkins@sc.com Standard Chartered Bank, Singapore Branch

Zhi Wei Feng +65 6596 8248 Head, HY Credit Research Zhi-Wei.Feng@sc.com Standard Chartered Bank, Singapore Branch

Chun Keong Tan, CFA +65 6596 8257 Credit Analyst, HY Tan.Chun-Keong@sc.com Standard Chartered Bank, Singapore Branch

Jiacheng Chen +65 6596 8710 Credit Analyst, HY Jiacheng Chen @ sc.com Standard Chartered Bank, Singapore Branch

Melinda Kohar +65 6596 9543 Credit Strategist Melinda.Kohar@sc.com Standard Chartered Bank, Singapore Branch

FX Research

Eric Robertsen +65 6596 8950 Head, Global Macro Strategy and FX Research Eric.Robertsen@sc.com Standard Chartered Bank, Singapore Branch

Robert Minikin +44 20 7885 8674 Head, Asian FX Strategy Robert.Minikin@sc.com Standard Chartered Bank

Eimear Daly +44 20 7885 6162 G10 FX Strategist Eimear.Daly@sc.com Standard Chartered Bank

Nick Verdi +1 646 845 1279 Senior FX Strategist Nick.Verdi@sc.com Standard Chartered Bank NY Branch

Devesh Divya +65 6596 8608 Asia FX Strategist Divya.Devesh@sc.com Standard Chartered Bank, Singapore Branch

Eddie Cheung +852 3983 8566 Asia FX Strategist Eddie.Cheung@sc.com Standard Chartered Bank (HK) Limited

Lemon Zhang +65 659 69498 Lemon.Zhang@sc.com Analyst, FX Research / Global Macro Strategy Standard Chartered Bank, Singapore Branch

Commodities Research

Paul Horsnell +44 20 7885 6913 Head, Commodities Research Paul.Horsnell@sc.com Standard Chartered Bank

Nicholas Snowdon +44 20 7885 2276 Metals Analyst Nicholas.Snowdon@sc.com Standard Chartered Bank

Suki Cooper +1 212 667 0319 Suki.Cooper@sc.com Precious Metals Analyst Standard Chartered Bank NY Branch

Priya Balchandani +65 6596 8254 Energy Analyst Priya.Balchandani@sc.com Standard Chartered Bank, Singapore Branch

Serene Shang Yi Lim +65 6596 6064 Energy Analyst Serene-SY.Lim@sc.com Standard Chartered Bank, Singapore Branch

Judy Zhu +86 21 6168 5016 Metals Analyst Judy-Hui.Zhu@sc.com Standard Chartered Bank, Singapore Branch



This page is intentionally blank.



Disclosures appendix

Analyst Certification Disclosure: The research analyst or analysts responsible for the content of this research report certify that: (1) the views expressed and attributed to the research analyst or analysts in the research report accurately reflect their personal opinion(s) about the subject securities and issuers and/or other subject matter as appropriate; and, (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views contained in this research report. On a general basis, the efficacy of recommendations is a factor in the performance appraisals of analysts.

analysis in the Bearean report accutrately effect unter personal opinion(s) about me subject secumes and issues a motor or mer subject matter as appropriate; and, (2) no part or his or ner compensation was, is or will be directly or indirectly related to the specific recommendations or views contained in this research report. On a general basis, the efficacy of recommendations is a factor in the performance appraisals of analysts.

Global Discatamer: Standard Charteers (indirectly related to the third contained or returned to the term of the contained or the co

and interpretations commissions. The distallations and full research discourse with responsible to this communication and you are adviced to read such terms and continues, additional communication and full research discourse with responsible on systems and continues. As a communication of the communication and full research discourse with responsible on systems and continues. As a communication of the communication is not discussed in the communication of the communi

Document approved by Sarah Hewin Chief Economist, Europe Document is released at 15:15 GMT 11 April 2016



