

# Future Potential

A GEM perspective on  
youth entrepreneurship **2015**

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# EXECUTIVE SUMMARY

The long-term effects of the U.S financial crisis and ensuing global downturn continue to be felt worldwide. In particular, it is the new entrants into the labour market – the youth – who are bearing the brunt of the sluggish global economy. Young people are three times more likely than adults to be unemployed, while even amongst the employed youth, many young people have only informal, temporary, or unpaid family jobs. Fostering effective entrepreneurial activity among the youth is regarded as a critical development strategy in order to integrate them into the labour market as well as harness their potential to contribute in a meaningful way to sustainable economic development in their regions. This report analyses data collected over the period 2012 – 2014 by GEM National Teams through the standard annual surveys in order to contribute to a deeper understanding of the nature, characteristics and dynamics of youth entrepreneurs and enterprise formation, from a global perspective. The areas focused on are a comparison between youth and adults, gender differences in youth entrepreneurial behaviour, and a regional comparison of youth entrepreneurship. To enable the use of GEM data, the youth is defined as people between the ages of 18 – 34 years. Where appropriate, the report distinguishes between the ‘young youth’ (18 – 24 years) and the ‘older youth’ (25 – 34 years).

**Overall the older youth display the highest level of entrepreneurial propensity. It is encouraging that almost 40% of the young youth have personal contact with a start-up entrepreneur.**

## INTER-GENERATIONAL DIFFERENCES

The data confirm the historical shift towards more extensive education of the younger generation. The youth as a group have more education than the adults – three quarters have completed at least secondary education, compared to two-thirds of the adult group. The findings with regard to exposure to business training are encouraging. The young youth are more likely to have received training during schooling than the older youth and significantly more likely than the adults. Training during schooling has, in fact, doubled from one generation to the next. A positive link between training in starting a business and entrepreneurial behavior was shown – in all three age categories, entrepreneurs were 1.5 times more likely to have received some form of business training compared to the non-entrepreneurs. The finding, therefore, that more than two-thirds of the youth have received no training raises concerns, given the imperative to stimulate successful entrepreneurial activity in this group.

Overall, the older youth display the highest level of entrepreneurial propensity. It is encouraging that almost 40% of the young youth have personal contact with a start-up entrepreneur; however, the young youth have the lowest confidence in their ability to run a business. In the light of the significantly higher levels of business training that this age group has received within the formal school system, their

low self-efficacy does raise concerns about the quality of the business and entrepreneurship training offered. The youth, as a group, show significantly higher levels of entrepreneurial intention than the adults (1.6 times higher). In the older youth category, this intention translates into a relatively high level of actual entrepreneurial activity, while the young youth show a significant decline between entrepreneurial intention and entrepreneurial activity. On the other hand, the established business rate among the adults is substantially higher than for the two youth age categories. The discrepancy between the older youth and adult rates deserves attention. Although the older youth have the highest TEA rate, the adult established business rate is 1.7 times the rate for the older youth. Policies aimed at supporting promising early-stage entrepreneurs among the older youth are needed to improve the sustainability of their businesses so that they can contribute more effectively to the economy. Fairly high levels of opportunity-motivated entrepreneurship were noted across all the age categories, with no significant differences between the youth and adults.

The majority of early-stage enterprises (over 90%) across the age categories provide employment for fewer than five people. The young youth have the smallest businesses with almost three quarters (73%) running one-person businesses (i.e. providing employment for no one other than the owner). Growth expectations are also fairly similar across

the age categories, particularly in terms of medium and high growth expectations. Nine percent of early-stage entrepreneurs in all three age categories anticipate employing more than 20 people within the next five years. It is important to identify young entrepreneurs with realistic high-growth aspirations and institute policies aimed specifically at supporting them in order to optimise their impact on economic growth and job creation.

## GENDER DIFFERENCES

Young women are often doubly disadvantaged in their attempts to integrate into the work force – by their gender as well as by their age. An encouraging finding in this report is that there is no difference in the educational levels of young women and men from a global perspective. The gender parity in terms of post-secondary and graduate level education is particularly positive. Although there is also no significant difference in the exposure to business training at school, young men are 1.2 times more likely to pursue business training after school. Although, for both genders, training after school is more strongly linked to entrepreneurial behaviour, this is particularly the case for young women. For youth who pursued post-school business training, males are 1.5 times and females 1.8 times more likely to be entrepreneurs.

Compared to young women, young men have more favourable perceptions with regards to entrepreneurial competencies. The discrepancies are most significant in terms of self-efficacy and access to entrepreneurial role models. Males are 1.2 times more likely to have confidence in their own ability to run a business – perhaps linked to their higher exposure to business training, particularly after school. They are 1.3 times more likely than their female counterparts to personally know a start-up entrepreneur. In line with these findings, the rates for young women in all stages of entrepreneurial activity are lower than the male rates. Young men are 1.3 times more likely to be engaged in early stage entrepreneurial activity and 1.6 times more likely to be established entrepreneurs.

Young women are more likely to be pushed into entrepreneurship out of necessity than are young men.

Young men are 1.8 times more likely to be motivated by opportunity than by necessity, while young women are only 1.4 times more likely to be opportunity- rather than necessity-driven. Young women more often resort to obtaining loans through personal and family connections, while young men are more likely to obtain funds from financial institutions. Young women may be disinclined to attempt an approach to a commercial bank because of a lack of confidence in their knowledge of how to develop and present a robust business plan.

A significant majority (73%) of early-stage entrepreneurial activity by young women is in the consumer services sector. Young men demonstrate a more balanced profile: half of their early-stage business activity is in the consumer services sector, with both the transformative and business services sectors showing significant activity. Young men are twice as likely to be involved in the transformative sector and 1.6 times more likely to be in the business services sector, compared to young women. Young women are more likely to use their home as a business location (57% compared to 45% of young men). Only 35% of young women used the internet to sell products and services, compared to 48% of young men. These two factors are likely to have an effect on business sustainability by limiting the markets that young women are able to access. Although the majority of youth businesses across the genders provide employment only for the owner, young female entrepreneurs tend to have smaller businesses than their male counterparts (73% are one-woman businesses, compared to 66% one-man businesses). Businesses run

by young males are twice as likely to provide jobs for more than five people, compared to those run by young females. Young men have significantly higher growth aspirations than young women do. Three-quarters of young male entrepreneurs expect to generate jobs within the next three years – 27% have medium growth expectations while an encouraging 11% have high growth expectations (i.e. their business will provide more than 20 jobs).

## REGIONAL DIFFERENCES

The education levels attained by young people differ significantly across the regions. Sub-Saharan Africa reports significantly lower levels of education than the other four regions. Despite the global shift towards higher levels of education for the young, almost a quarter of the youth in sub-Saharan Africa (SSA) have less than a primary school education while 55% have not completed their secondary education. Almost half of the youth in Asia and the MENA region, by contrast, have some form of post-secondary education, closely followed by the European Culture Countries (40%).

In terms of business training, the situation is less pessimistic. Youth in the SSA region are the most likely to have received some form of business training at school. This is encouraging; however, the quality of this training is likely to be inconsistent given the lack of teacher training and resources in most of the region. Youth in the Latin American and Caribbean (LAC) and ECC regions are most likely to pursue business training after school, while youth in Asia and the MENA region are least likely to receive any form of business training.

Youth in sub-Saharan Africa have the highest levels of perceived entrepreneurial competence, while the youth in the ECC region display the lowest level of entrepreneurial propensity. The low self-efficacy of the ECC youth is a concern, given their high level of general education and relatively high levels of business-related training. A particularly noticeable discrepancy is in the youth being acquainted with a start-up entrepreneur. The rate for this indicator is similar across the regions with the exception of SSA. Youth in the SSA region are significantly more

**Although there is also no significant difference in the exposure to business training at school, young men are 1.2 times more likely to pursue business training after school.**



## **South and East Asia have the highest percentage of youth business offering one to four jobs. The MENA region has the largest youth businesses – a fifth of businesses offer employment for at least five people.**

likely (1.5 times) to know a start-up entrepreneur personally than are youth in the other four regions.

The SSA and LAC regions top the rankings in terms of entrepreneurial intention. In the SSA region, entrepreneurial intention is particularly high – half of the youth surveyed expressed the intention to start a business. The ECC region has the lowest entrepreneurial intentions (less than a fifth of the youth). Early-stage and established business activity are highest in the SSA region, followed by the LAC region. An equal proportion of young entrepreneurs in the SSA region are in nascent and new businesses, and the established business rate is robust. The ECC is the worst-performing region in terms of both early-stage and established entrepreneurial activity. However, they report the highest rate of intrapreneurial behaviour by a significant margin. The LAC region has the highest prevalence of opportunity motivation. In this region, young entrepreneurs are more than twice as likely to be motivated by opportunity as opposed to necessity. Sub-Saharan Africa and the MENA region report the highest prevalence of necessity-motivated enterprises.

The regions differ significantly in terms of the source of financing for young nascent entrepreneurs. In the SSA, LAC and ECC regions personal savings are the primary source of financing by a fairly substantial margin. Young nascent entrepreneurs in South and East Asia (S&EA) are equally likely to use personal or family savings as a primary source of financing. Although personal savings are an important source of finance in the MENA region, banks and financial institutions are also significant in this respect, providing financing for a third of young entrepreneurs in the region.

The distribution of youth early-stage entrepreneurial activity according to industry sector varies considerably across the regions. In SSA and S&EA, a significant majority of youth entrepreneurs are in the consumer-oriented services sector. The SSA region's youth are the group most likely to report involvement in the extractive sector (more than double that of youth in the other regions). The MENA and ECC regions show

the most balanced profiles, with good diversity in terms of youth involvement in the different industry sectors. The MENA region has the highest prevalence of youth enterprises in the transformative sector, as well as good representation in the business services sector. In line with its higher educational levels and access to more sophisticated markets, the ECC region has the highest rate of youth involvement in the business services sector by a significant margin. Youth in the ECC region are significantly more likely to use the internet than youth in the other regions – almost three-quarters of youth in the ECC report using the internet as a marketing tool. At the other end of the scale, only a third of youth in Asia use the internet to sell products, while the SSA reports disturbingly low levels of internet use at a mere 16%. Young entrepreneurs in the region are therefore unable to mitigate the negative impact of small and over-traded local markets, which is likely to reduce their business sustainability and growth prospects.

The majority of youth entrepreneurs in the LAC, ECC and SSA regions only create employment for the business owner. While the SSA and LAC regions have the highest rates of early-stage entrepreneurial activity, the majority of these businesses make no contribution to job creation. Although the MENA and S&EA regions report lower youth entrepreneurial rates, only half of these businesses provide no additional jobs. South and East Asia have the highest percentage of youth businesses offering one to four jobs. The MENA region has the largest youth businesses – a fifth of the businesses offer employment for at least five people. Particularly encouraging is the number of businesses offering more than 20 jobs (6%).

Young entrepreneurs in the S&EA region have the lowest growth aspirations, with only 62% expecting to create any new jobs over the next five years, compared to over 70% for the other regions. The MENA and ECC regions report the highest medium-growth expectations, while the MENA region has the highest high-growth expectations by a considerable margin. It is encouraging that a fifth of young entrepreneurs in this region expect to create more than 20 new jobs in the next five years.

# CHAPTER 1 INTRODUCTION

## 1.1 THE YOUTH EMPLOYMENT CHALLENGE

The US financial crisis of 2007/2008 was followed by a significant global downturn (2008 – 2012). The Global Competitiveness Report 2014 – 2015 notes that although the global economy seems to be finally leaving behind the worst and longest-lasting financial and economic crisis of the last 80 years, this resurgence is moving at a less decisive pace than it has after previous downturns. Global growth has risen slowly for the last two years, from 2.2% in 2012 to 2.3% in 2013 and 2.5% in 2014, but is still significantly below the pre-crisis levels of around 4%. This growth is too slow to make a difference in job creation, and to close output and employment gaps that opened due to the crisis.

**A shortage of employment opportunities in their countries is seen as a very big problem by more than two-thirds of the world's population (Asia 62%, North America 64%, Europe 71%, the MENA countries 70%, Latin America 79% and sub-Saharan Africa 88%).**

WEF Outlook on the Global Agenda 2015

In its *Outlook on the Global Agenda 2015*, the World Economic Forum identifies deepening income inequality and persistent jobless growth as the two most important challenges that the world will need to address in the coming twelve to eighteen months. Inequality is one of the key challenges of our time. Income inequality specifically is one of the most visible aspects of a broader and more complex issue, one that entails inequality of opportunity and extends to age, gender, ethnicity and disability, among others. A lack of inclusive growth, capable of providing decent jobs and livelihoods for all people within society, is seen as the second most critical issue. The inherent dangers of neglecting inequality are obvious. People, especially the youth, who are excluded from the mainstream end up feeling disenfranchised and become easy fodder for conflict. This, in turn, reduces the sustainability of economic growth and weakens social cohesion.

The International Labour Organisation's *World Employment and Social Outlook (WESO) Report 2015* re-enforces this pessimistic view. It warns that sluggish economic growth has complicated the task of bringing unemployment and underemployment even back to pre-crisis levels in most countries. Unemployment rates for youth are invariably higher than those for adults. This reflects several factors, including the lack of experience of young people entering the labour market for the first time, and the lack of strong work-related networks that are often important for finding a job. However, the persistent impact of the global economic crisis has exacerbated

the difficulty that new entrants into the labour market have in finding a job, and youth unemployment has become a significant concern worldwide.

Youth, especially young women, continue to be disproportionately affected by unemployment. Almost 74 million young people (aged 15–24) were looking for work in 2014. The youth unemployment rate reached 13%, which is almost three times higher than the unemployment rate for adults. To make matters worse, many countries are projected to see a substantial increase in youth unemployment – the ILO predicts that between 2014 and 2019, youth unemployment will rise by up to 8% in parts of Europe, South America and Africa. In contrast, older persons have fared relatively well during the crisis and their employment rates have remained stable, even in those countries that have been hit hard. Unlike previous downturns, when older workers often were pushed into early retirement, this time enterprises have tended to retain their most experienced workers.

The spike in youth unemployment is common to all regions and is occurring despite improvements in the average educational attainments of the youth. More young people are gaining tertiary qualifications than ever before – the ILO report notes that the share of youth in the labour force with tertiary education has increased since 2007 in 26 out of 30 countries for which data are available. Nonetheless, unemployment rates among young workers with tertiary education have also risen in 16 out of 18 countries since the onset of the crisis.

**Looking ahead, it's estimated that almost 50% of the current jobs in existence will become automated, even in the 'white-collar' occupations, which have traditionally been resistant to automation. Over the coming 10 years, we will face huge, tectonic forces of globalisation and astonishing technological progress – forces that must be confronted and embraced if we are to ensure economic opportunity and inclusiveness for all.**

Andrew McAfee, Co-Director of the Initiative on the Digital Economy at the MIT Sloan School of Management (quoted in WEF Outlook on the Global Agenda 2015)

It is important to recognise that official unemployment rates, particularly in less developed regions, often disguise the full extent of the employment challenge. As is the case for most formal assessments of unemployment, the ILO unemployment rate has active job seeking as a criterion for inclusion in the unemployment rate. Discouraged work seekers are therefore not taken into account. The persistence of the current weak economic and labour market conditions in many countries has caused an unprecedented increase in the duration of unemployment, and therefore in the number of discouraged work seekers. When the active job search criterion is excluded, the unemployment rate doubles in many low-income economies.

In addition, official unemployment figures often fail to take into account employment quality. A significant proportion of the population may be underemployed, (i.e. earning very low wages), stuck in vulnerable employment (for example, a low-productivity job without any employment benefits or social protection) or classified as the working poor. These individuals are forced to take whatever work opportunities present themselves, most of which are not sustainable nor are they viable routes out of poverty. Therefore, it would be short-sighted to consider youth employment issues exclusively through the lens of unemployment. Youth unemployment rates are typically highest in the Middle East and North Africa, but in other developing regions (including sub-Saharan Africa and South Asia) low-quality jobs for youth as well as adults are widespread. To put this into context, the

ILO's *Global Employment Trends for Youth 2013* estimated that up to 60% of young people in developing regions were either without work, not studying, or engaged in irregular employment.

The economic and social costs of unemployment and widespread low-quality jobs for young people are considerable. A high level of unemployed or underutilised young people represents a waste of potential human resources and talent, and will have a negative impact on the future growth prospects of a country or region. High levels of long-term unemployment among the youth are of particular concern. Young people who are unable to gain a foothold in the world of work are prevented from accessing and developing transferable skills. Those skills and competencies they do possess are rapidly eroded, which further reduces the likelihood of them entering the labour market.

The social costs of high youth unemployment are also significant. Young people that cannot find a way to improve their livelihood are at particular risk of high welfare dependence or becoming involved in crime and other anti-social behaviours. It is therefore imperative to find avenues for them to participate in the economy in a meaningful way. High un- and underemployment rates also make societies more vulnerable to civil disorder and political upheaval. The ILO's *World Economic and Social Outlook Report 2015* estimates that social unrest has increased as joblessness persists and, worldwide, currently sits at 10% higher than before the financial crisis.

Countries facing high or rapidly rising youth unemployment (particularly among the male youth) are especially vulnerable to social unrest. This is compounded in countries where educated young people cannot find satisfactory employment opportunities – as is the case in many Middle Eastern and North African countries. Similar developments have been observed recently in European countries where youth unemployment has increased substantially since the onset of the crisis. Youth unemployment rates of up to 52%, for example, are currently being experienced in Greece and Spain.

It is clear that the formal and public sectors are unlikely to be able to offer work opportunities to the increasing number of young people looking for employment.

The ILO's *World Economic and Social Outlook Report 2015* notes that if new labour market entrants over the next five years are taken into account, an additional 280 million jobs need to be created by 2019 to close the global employment gap caused by the financial crisis. The situation is further complicated by the fact that globalisation, technological advances and the digital economy have had a radical effect on the world of work. The traditional career path of a stable job with steady hours, a regular pay cheque and solid pension – a job for life – is no longer an option for many young people. Already, the number of career transitions experienced by individuals is on the increase and technology is disrupting the traditional patterns in many industries.

The mismatch between the supply and demand for skills is also recognised as a key reason driving the high youth unemployment rates. Although more young people are gaining tertiary qualifications, they are not providing themselves with skills and qualifications that are relevant to a changing labour market. Advances in technology act as a facilitator for new ideas and employment options, as do the burgeoning service industries in many emerging economies. However, educational institutions are not providing young people with the skill set required to take advantage of these opportunities. There is no simple solution to the youth unemployment and underemployment challenge, and it is critical to identify

and explore factors which contribute to strategies that enable economies to benefit from the talents, energy and ideas that young people bring to the labour market. Important elements of such strategies include education and skills development, entrepreneurship development, as well as better labour market information, statistics and analysis.

## 1.2 THE YOUNG ENTREPRENEUR

**In earlier times, young people were not actively encouraged to participate in entrepreneurial endeavours.** Work experience (perhaps even more than innate ability) was considered an essential prerequisite for succeeding in an entrepreneurial endeavour. It was generally believed that through work experience, people could acquire entrepreneurial competencies and might eventually become entrepreneurs. Neither education nor socialisation of young people aimed to stimulate an interest in becoming an entrepreneur. Young people studied academic subjects in schools, and underwent anticipatory socialisation to become employees or, occasionally, to succeed parents who ran a business. When young people did express an intention to become entrepreneurs, as happened occasionally, they were likely to be discouraged by family as well as by lenders and investors, who were reluctant to support people who lacked experience.

In recent years, however, there has been a global shift in social values, norms and institutions for entrepreneurship, specifically young people's involvement in entrepreneurship. Entrepreneurial interest is now regarded as a mindset that can be instilled and nurtured through socialisation and education, and entrepreneurial competencies are considered learnable through instruction and training. Young people are channelled into entrepreneurship, budding young entrepreneurs are supported – emotionally and financially – in their entrepreneurial endeavours, and the successful ones are celebrated as heroes.

The movement toward young people's involvement in entrepreneurship is part of the globalised faith in entrepreneurship, a belief that



**Young people, in general, have not acquired competencies such as self-efficacy, opportunity-alertness and risk-willingness through experience working in an enterprise. Instead they have acquired competencies through socialisation if parents are entrepreneurs, and through education.**

(Hoffman et al. 2005)

people's pursuit of entrepreneurial endeavours will benefit themselves and society. Young people's engagement in entrepreneurship is also believed to enhance their life chances and livelihood and to increase youth employment, security and stability in society (Kvedaraite 2014).

### 1.2.1 Previous studies of young people's involvement in entrepreneurship

Despite the fact that entrepreneurship is regarded as a potential solution for one of the world's most important current problems, namely the youth unemployment challenge, there are a limited number of studies that investigate young entrepreneurs as a distinct group or in comparison to the older age cohorts (Geldhof et al. 2014). Young people differ from adults in a number of areas including access to capital and resources, psychology, influence from society and environmental conditions, and social attitudes. These differences need to be acknowledged and addressed in research aimed at facilitating youth entrepreneurship.

Previous studies of youth involvement in entrepreneurship have investigated young people:

- in themselves, addressing questions like, how are young people acquiring entrepreneurial competencies, resources, vocational intentions, and becoming entrepreneurs?
- in contrast to older people, addressing questions like, how are young people and older people using their competencies and resources for entrepreneurial careers and work?
- in the context of society, addressing questions like, how are societies providing cultural, institutional and economic support for youth to become entrepreneurs?

Most of the intra-group studies about youth entrepreneurship contain a population of students in the formal educational system or students who follow entrepreneurial programmes offered by non-governmental organisations or other organisations (Kvedaraite 2014; Geldhof et al. 2014). The studies tend

to focus on how young people acquire entrepreneurial competencies, resources, and vocational intentions. Young people, in general, have not acquired competencies such as self-efficacy, opportunity-alertness and risk-willingness through experience working in an enterprise. Rather, youth have acquired competencies through socialisation if parents are entrepreneurs, and through education (Hoffmann et al., 2005). Much research focuses on young people's acquisition of entrepreneurial interests, intention and competencies through their education and training (Levie et al. 2013). A shortcoming of most of such research is its focus on students, and lack of focus on other kinds of young people, e.g. the unemployed youth. Many young individuals that have the intention to start their own business are not students or graduates. Another shortcoming is the typical focus on intention to become an entrepreneur, and a lack of focus on young individuals' transition from intention to starting an entrepreneurial venture. By limiting their focus to entrepreneurial potential, these types of studies do not test the effect of education on real entrepreneurial activities of young individuals (Hamilton & Hamilton 2012).

An important trend in inter-group studies is generation theory, which considers historical shifts in generations of young and how today's young differ from those who grew up in earlier times (Pilcher 1994). Today's young people tend to have more education than those in earlier times, so today's start-ups are more knowledge-based than they were previously. The present generation of young people grew up in an era of globalisation, whereas the older generation grew up in an era when the local and national context was more salient (Woodman & Wyn 2012). Accordingly, generation theory may help understand why young entrepreneurs are networking more internationally and are oriented more toward exports than older entrepreneurs. Furthermore, the older generation grew up in an era when experience, especially experience in working in an enterprise, was considered the way to acquire entrepreneurial competencies for entering entrepreneurship, while today's young generation is growing up in an

## A justification for investing in education and training is that many young people intend to become entrepreneurs, but few of them go on to start an enterprise, presumably because of insufficient training.

(Geldhof et al. 2014)

era with an educational philosophy that entrepreneurial competencies are presumed learnable, i.e. education and training are considered ways to acquire competencies for pursuing an entrepreneurial career. Starting entrepreneurs are, therefore, often younger today than those in the previous generations (Schøtt & Cheraghi, 2015).

Studies of youth in the context of society are important for policy frameworks as they address the question of how different societies provide cultural, institutional and economic support for youth to become entrepreneurs. Young people's involvement in entrepreneurship is influenced by their individual attributes and by their environmental conditions. Studies of entrepreneurship have distinguished between negative factors pushing people toward entrepreneurship and positive factors pulling people to become entrepreneurs (Verheul et al. 2010). A society may pull youth towards entrepreneurship by creating incentives and support for entry into entrepreneurship. Social value placed on achievement, social development, independence, entrepreneurship and innovation are examples of positive factors that may pull people toward discovering and exploiting opportunities and further toward self-employment. Social conditions such as poverty, high unemployment, and widespread dissatisfaction are examples of negative factors that amplify the distance between people's current and desired states, which may push people into starting an enterprise to make a living.

Cultural traditions in society sustain values and norms for appropriate behaviours of youth and appropriate behaviours toward youth. Some societies value independence in young people, whereas other societies grant authority to older people and thus devalue independence in young people. Such cultural traditions may influence young people's desire to pursue entrepreneurship. Institutions in society also enable or constrain youth. In Africa, lack of easy access to education is an obstacle, exacerbated by crises in the economy and health services (Chigunta et al. 2005; Garcia & Fares, 2008), pushing very young people to enter the work force and also to start a business without much education, experience and resources. Conversely, education and training in entrepreneurship, public and private support, and institutional arrangements such as incubators may pull young people into entrepreneurship and nurture their self-efficacy, opportunity-alertness, risk-willingness, and interaction with entrepreneurs as potential role-models. The economic institutions in society also affect youth, e.g. financial institutions that are reluctant to lend money to young entrepreneurs.

### 1.2.2 Resources of youth

A number of studies have addressed the question of how people employ their available resources to pursue entrepreneurial ventures. Resources comprise the human capital that people have in their heads, the social capital that people have in their valuable relations with others, and the financial capital that people may have in their pockets (Bourdieu 1986).

**Human capital of youth:** Human capital refers to people's knowledge, skills and experience, and thus comprises both codified knowledge acquired through education and tacit knowledge acquired through apprenticeship, for example. A justification for investing in education and training is that many young people intend to become entrepreneurs, but few of them go on to start an enterprise, presumably because of insufficient training (Geldhof et al. 2014). Education and entrepreneurial training has been shown to nurture students' entrepreneurial skills – a 2012 OECD report notes the positive effect of

education on enhancing entrepreneurial intention in youth between the age of 18 to 30 in 27 countries in Europe (OECD 2012) – while entrepreneurial courses at tertiary level have been shown to enhance innovative intention (Mayhew et al. 2012). Some countries have focused on policies designed to increase the number of young people going into vocational and technical training institutions, with the intention that more of these students would enter into self-employment. Societies, however, differ considerably in the education and training of their youth. Generally, entrepreneurial training appears most functional in developed countries with low rates in the population of entrepreneurial activity and of training. In parts of the developing world, such as sub-Saharan Africa, basic education is problematic, with poor quality of basic education and low throughput rates reducing the number of students who progress to secondary, let alone tertiary education.

**Social capital of youth:** People's social capital in the form of relationships with entrepreneurs, who may serve as role-models and provide tacit knowledge on entrepreneurial pursuits, promotes their intentions to become entrepreneurs. Specifically, young people's social capital in the form of having self-employed parents who serve as role-models and provide tacit knowledge, promotes their pursuit of self-employment (Geldhof et al. 2014). Their entrepreneurial propensity is particularly enhanced when the parents are successful entrepreneurs (Reynolds et al, 2004). Entrepreneurs' networks include the private sphere of family and friends, who provide emotional support, and the public sphere of the work place, the professions, the market and the international environment. Networks in the public sphere are built up gradually, and older entrepreneurs often have the advantage of networks that are larger and more diverse (Xheneti & Bartlett 2012).

**Financial capital of youth:** Financial capital refers to the funds that a person can access to invest in starting, running and expanding a business. Access to finance has been well-documented, both as a general business concern and more specifically as a youth-specific obstacle. Raising bank or investor finance is more problematic for young people as they are unlikely to have developed a credit



history, which will limit their ability to raise bank finance through traditional routes. In Lithuania, for example, students consider the difficulty of obtaining loans from banks as a major obstacle to turning intentions into startups (Kvedaraite 2014) while in Ghana young people's difficulty in obtaining funds from financial institutions is exacerbated by corruption and nepotism (Boateng et al. 2014).

In European countries, lack of financial support from the private sector has been found to be a significant obstacle for young entrepreneurial individuals (OECD 2012). Young entrepreneurs often adopt strategies to cope with their difficulties in obtaining financial support. One strategy is bricolage, entrepreneurially and innovatively using the limited resources that are at hand and that others consider useless, rather than drawing up a business plan that is overly ambitious and unlikely to lead to a loan (Baker & Nelson 2005). Another strategy is bootstrapping which entails using the limited resources in ways that reduce costs (Bhide 1992).

While acknowledging the difficulties youth face, the literature cautions that access to finance is often over-reported as the key inhibitor of youth entrepreneurial development. While access to finance is often the most visible constraint, it is not necessarily the primary inhibitor of youth entrepreneurial development. Increasing the amount of funding available to youth-based businesses without the concomitant mentoring, skills development or market access being available is unlikely to result in a significant increase in youth entrepreneurial activity.

**In European countries, lack of financial support from the private sector has been found to be a significant obstacle for young entrepreneurial individuals.**

(OECD 2012)



### 1.3 OBJECTIVES AND METHODOLOGY OF THIS REPORT

**Since its inception in 1997 by scholars at Babson College and London Business School, the Global Entrepreneurship Monitor (GEM) has developed into one of the world's leading research consortia concerned with improving our understanding of the relationships between entrepreneurship and national development.** In the sixteen years since its inception GEM has measured entrepreneurship in over 100 countries, covering all geographic regions and economic levels and comprising an estimated 74% of the world's population and 90% of the world's GDP, and has gained widespread recognition as the most informative and authoritative longitudinal study of entrepreneurship in the world.

GEM provides a comprehensive view of entrepreneurship across the globe by measuring the attitudes of a population, and the activities and characteristics of individuals involved in various phases and types of entrepreneurial activity. It allows for comparisons with regard to the level and characteristics of entrepreneurial activity among different economies and helps to guide the formulation of effective and targeted policies aimed at stimulating entrepreneurship.

In order to assist policy makers to make more informed decisions about how to increase entrepreneurship and enhance SMME development among the youth, it is important that the current youth entrepreneurial landscape be defined and understood. This report analyses data collected over the period 2012 – 2014 by

GEM National Teams through the standard annual surveys, specifically disaggregated by age, in order to contribute to a deeper understanding of the nature, characteristics and dynamics of youth entrepreneurs and enterprise formation, from a global perspective.

The youth is a category of people that needs to be defined, in contrast to older people, to make analysis possible. The literature has no agreement on an age-bracket – typically, in studies of youth, the young denotes people from the teens up to somewhere around thirty years old. For the purpose of this report, and to enable the use of GEM data, the term 'youth' is defined as people between the ages of 18 – 34 years while the term 'adults' is used to refer to those aged 35 – 64 years. In addition, in the youth category this report distinguishes between the 'young youth' and the 'older youth', where the 'young youth' are those aged 18 to 24 years, and the 'older youth' are those aged 25 to 34 years.

The GEM Adult Population Survey in 2012 to 2014 measured people's involvement in 89 countries (listed in the Appendix). The sample of adults between the ages of 18 and 64 years is 616 099 adults. The survey reported the adults' background details such as gender, age and education; their entrepreneurial competencies such as self-efficacy, opportunity-perception, risk-propensity, and role-modelling by knowing a start-up entrepreneur; and their occupation, and whether they intend to start a business, are trying to start one, or already own/manage a business. Those identified as owning and managing a start-up or operating business were asked additional business-related

questions such as motives for being in the business, business age and size, and expectations for growth of the business. The data from the Adult Population Survey have been analysed with a focus on the youth's involvement in entrepreneurship.

The GEM National Expert Survey measured framework conditions for youth involvement in entrepreneurship in 2012 in 46 countries (listed in the Appendix). In each participating country, institutional framework conditions for entrepreneurship were assessed by a panel of experts, enabling comparison across countries of the conditions for involving youth in entrepreneurship. The data from the National Expert Survey have been analysed to ascertain how societies variously push and pull young people toward entrepreneurial endeavours.

#### The report addresses the following areas:

- How do entrepreneurial attitudes, competencies and activity among young people compare with those among the older population?
- Do the characteristics of youth enterprises, as well as their economic impact, differ from the enterprises of older entrepreneurs?
- How do the genders differ with respect to young people's entrepreneurial aspirations, and young entrepreneurs' developing businesses?
- How do the regions of the world differ with respect to youth entrepreneurship, and how do countries differ in their framework conditions for including the young in entrepreneurship?

# YOUNG ENTREPRENEURS' STORIES





## CRAIG TAYLOR (SCOTLAND): COJENGO

**Craig Taylor graduated in 2008 with a degree in Computer Science from the University of Strathclyde in Glasgow.** He is now the managing director of a new Scottish high-tech company, Cojengo, which is helping tens of millions of farmers in Africa with its VetAfrica app. The app allows vets, animal health workers and rural farmers to diagnose diseases in livestock quickly and accurately, and find the right drugs to treat them.

Craig explains that it all started with a student project in his final year. The project was to design apps that they then tested in Ethiopia. That trip gave him exposure to the problems faced by people at a time when mobile technology was really starting to kick in. After graduating, he worked for a large company in the technology industry for five years. “Working for large companies has its benefits, but at a younger age or graduate intake level, sometimes the impact you have is minimal,” he says. “That student project experience stayed with me and I felt I had unfinished business. I felt I had no choice but to go for it or I would look back and regret it. For me it was about learning more and having control over major decisions, shaping a company and a culture I could influence.”

Craig acknowledges that being a young entrepreneur throws up lots of obstacles. “For me, it was getting my head around the complexities of setting up a company, investment deals and the day-to-day running of a business that you just don’t see if you work for someone else,” he says. “But in Scotland, young entrepreneurs are very fortunate. For a relatively small country, Scotland has numerous organisations and supporting policies to encourage innovation and entrepreneurship.” The University of Strathclyde, Craig’s *alma mater*, had been named Entrepreneurial University of the Year in 2013, and so it seemed like a natural place to seek support for the new Cojengo venture. He also received support from the Strathclyde Entrepreneurial Network, Scottish Enterprise, Business Gateway, Scottish Development International and private sector investors Gabriel Investments. “These were all in close proximity so we could focus on growing the business with a great local support network behind us,” he notes.

Craig’s advice to would-be entrepreneurs: “Embrace the entrepreneurial path. You won’t be alone – there are so many individuals and organisations designed to help you succeed. So just be brave, evaluate the risks involved and if you believe in your idea, go for it.”

**For me, it was getting my head around the complexities of setting up a company, investment deals and the day-to-day running of a business that you just don’t see if you work for someone else.**

*Craig Taylor*

# ALLEN NABUKENYA

## (UGANDA):

### ARTIST AND SOCIAL ENTREPRENEUR

**Allen is a young social entrepreneur using her artistic talent to rid Kampala city of its perennial garbage problem.** She makes artwork, shoes, bags and jewellery out of used polythene bags, broken glass and old tyres. Her motivation to be an entrepreneur is multifaceted. Growing up with an entrepreneurial mother, she was exposed to entrepreneurship early in life. This was stirred further at university where, as a Bachelor of Art and Industrial Design student, she studied an entrepreneurship course unit that focused on community-based needs.

This course inspired to use her entrepreneurial gene to change her society for the better, and she decided to focus on the poor waste management that was destroying Kampala. She befriended the street children that scavenged the city for food, and convinced them to join her to pick up garbage every evening. She paid them a small remuneration for their efforts and has since gone on to hire some of them permanently.

With her limited financial resources, Allen considered waste as a potential source of affordable and readily available raw material. Today her work is sold in art galleries and has been displayed at various art exhibitions. She uses some of these proceeds to support the street children and works closely with other social entrepreneurs. Every evening, when she meets the street children, they chat about lots of things as they collect garbage. "I see it as my duty to encourage and motivate them to aspire to a better future," she says.

As a young entrepreneur working in rather unusual sector, she is often thought of as being mad, but this does not derail her efforts in any way. She still lacks modern equipment that could increase her production but is hopeful that she will soon get this sorted out. She adds, "Many people don't respect me because I'm small-bodied and young. My appearance tends to prejudice people against me." However, she believes that she has come this far because of her determination and her belief in herself. She has never considered getting a formal job, because formal employment limits creativity. Others have recognised the value of her efforts - she has won a number of accolades and has been trained by the British Council and United States Aid (USAID).

Her advice to young people with entrepreneurial dreams: "Hold on to your dream, be patient when things are not going your way and be determined."



**Hold onto your dream,  
be patient when things  
are not going your way  
and be determined.**

*(Allen Nabukenya, artist and social entrepreneur)*



**Entrepreneurs are the ones who create new businesses, drive and shape innovation, speed up structural changes, introduce new competition and contribute to an economy's fiscal health.**

## DAMJAN MATIČIČ (SLOVENIA): KOOFR ([www.koofr.eu](http://www.koofr.eu))

**Damjan Matičič established the software company Koofr together with his friends in February 2013.** Koofr is a hybrid cloud storage interface, built to address and effectively solve the problems of public and private cloud storage, enabling users to access and share files via web and mobile interface. The company received the Slovenian Start-up of the Year 2013 Award. Currently they employ six people and are operating primarily in Eastern Europe. They plan to double their production this year and penetrate other markets in Europe, Asia and both Americas.

Damjan's father is a small business owner and while growing up, Damjan spent many hours in his father's offices, helping with minor tasks. Given his engineering degree and additional knowledge acquired in the field of management, he was working towards a well-paid steady job. But his inner drive was telling him that he needed to do more, and when the opportunity arose he took it and co-founded the business which he is now running. It helped to be one of four co-founders, as they were able to give one another a great deal of mutual encouragement and reassurance.

He thinks that young entrepreneurs mostly face the same challenges as any other entrepreneur. "One obstacle that worries many young people in particular, though, is how they will be able to negotiate with much more senior management of large companies," he says. "Young entrepreneurs are sometimes afraid that they won't be taken seriously in meetings. I don't believe this will be the case if you have a strong product, good pitch and confidence."

In his opinion, in Slovenia there are many organisations which are specifically trying to help young entrepreneurs. Among these are business schools (one of which Damjan attended) which provide targeted programmes for young people. In recent years a vibrant and diverse start-up community has developed in Slovenia as well, which is now probably the most important pillar for young people starting their companies. This community consists of successful young entrepreneurs, supporting organisations, investors as well as university professors, which means there is a wide range of knowledge and support that can be gained by collaborating.

"This is the best time in history to start a business," adds Damjan. "There is a lot of positive energy and a helping community available, which means many obstacles can be avoided by listening to advice." His advice to potential young entrepreneurs: "Surround yourself with successful entrepreneurs, who are always willing to give advice. Believe in your idea and in yourself and don't quit after a failure, because with failures we grow."

# CHAPTER 2 A GLOBAL PERSPECTIVE ON YOUTH ENTREPRENEURSHIP

In recent years, and particularly in the wake of the global financial crisis, it has become increasingly important for policy makers, business and civil society leaders to work together in order to identify and strengthen the forces that drive future economic growth. In particular, governments need to focus on inclusive and sustainable growth – the creation of enabling environments that foster innovation, facilitate more productive economies and, critically, open up new and better job opportunities for all segments of the population.

Entrepreneurship is widely considered to be an important mechanism for economic development through job creation, innovation and its welfare effect, and over the past three decades has become a key focus of academic research. Entrepreneurs are the ones who create new businesses, drive and shape innovation, speed up structural changes, introduce new competition and contribute to an economy's fiscal health. Given the global youth employment challenge, it is imperative to find ways of enabling young people to participate constructively in the economic activities of their countries or regions. Entrepreneurship development is regarded as a key element in strategies that will enable economies to benefit from the talents, energy and ideas – the future potential – that young people bring to the labour market. However, a major obstacle for organisations involved in the development of youth entrepreneurship is the lack of reliable and up-to-date

data and related analysis. This chapter analyses three years of GEM data (2012 - 2014) in order to provide an overview of the current youth entrepreneurial landscape. A key focus is to develop an understanding of how the youth, as a segment of the population, differs from the adult section of the population, as well as to explore gender and regional differences in entrepreneurial propensity, aspirations and activity within the youth cohort.

## 2.1 THE ENTREPRENEURIAL PIPELINE

The GEM model recognises entrepreneurial attitudes, activity and aspiration as dynamic interactive components of national entrepreneurial environments. Entrepreneurial activity does not take place in a vacuum, and entrepreneurial attitudes and perceptions (both societal and individual) play an important part in creating an entrepreneurial culture.

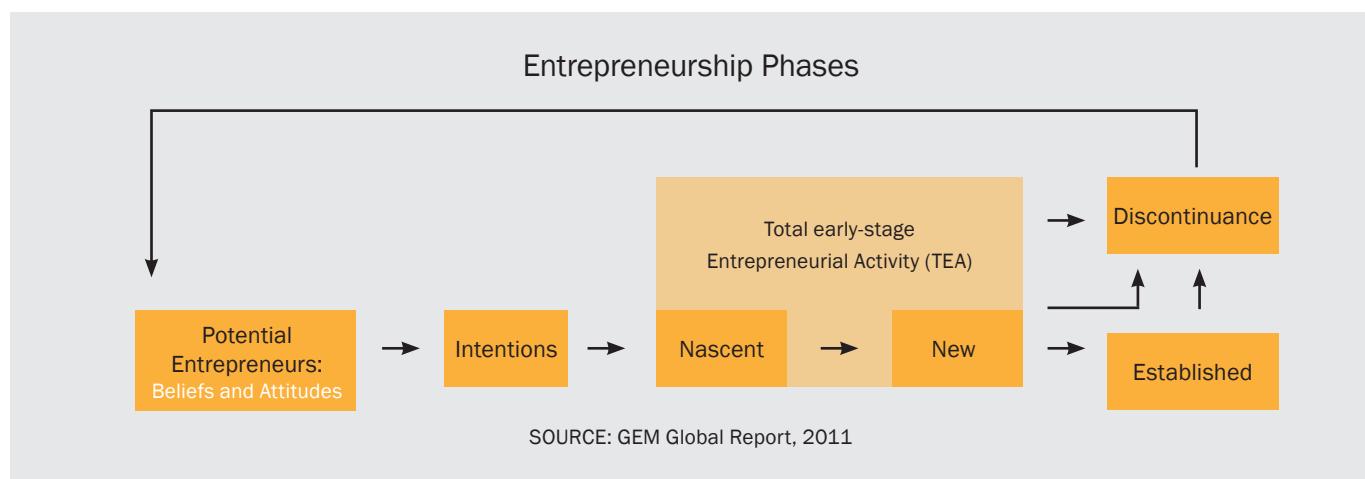


Figure 2.1: The entrepreneurial pipeline, 2012 – 2014

**Table 2.1:** Highest level of education completed, by age category, 2012-2014

Education level completed (%)	18-24 years	25-34 years	35-64 years
No education or pre-primary education	7%	9%	14%
Primary or some secondary education	19%	16%	18%
Secondary education degree	48%	35%	33%
Post-secondary education	24%	34%	28%
Graduate education experience	2%	7%	6%

**Entrepreneurial experience and/or education help youth develop new skills that can be applied to other challenges in life. Non-cognitive skills, such as opportunity recognition, innovation, critical thinking, resilience, decision making, teamwork, and leadership benefit all youth, whether or not they intend to become or continue as entrepreneurs.**

World Bank (2008)

GEM sees entrepreneurial activity as a continuous process rather than as individual events. As such, the Adult Population Survey (APS) is designed to allow for the measurement and assessment of individual participation across the range of phases comprising entrepreneurial activity: potential entrepreneurship, entrepreneurial intentions, nascent and new business activity, progression into established business ownership, and the reasons for business discontinuance. This process can be viewed as a pipeline, where people participating in each phase are the source of those potentially advancing to the next phase (Figure 2.1). GEM's multi-phase measures of entrepreneurship are defined below:

**Potential entrepreneurs** – those who see opportunities in their environments, have the capabilities to start businesses and are undeterred by fear of failure.

**Intentional entrepreneurs** – those who intend to start a business in the future (in the next three years).

**Nascent entrepreneurs** – those who have taken steps to start a new business, but have not yet paid salaries or wages for more than three months.

**New entrepreneurs** – those who are running new businesses that have been in operation for between three months and 42 months.

**Established business owners** – those who are running a mature business, in operation for more than 42 months.

**Discontinued entrepreneurs** – those who, for whatever reason, have exited from running a business in the past year.

## 2.2 AGE AS AN ENTREPRENEURIAL FACTOR: A COMPARISON BETWEEN YOUTH AND ADULTS

### 2.2.1 Education and training

Education and training are essential for young people to enter the labour market successfully as this increases their potential productivity and employability. Table 2.1 indicates the highest level of education completed for each of the age categories: the young youth (18-24 years), the older youth (25-34 years) and adults (35-64 years).

Table 2.1 shows the historical shift towards more extensive education of the younger generation.

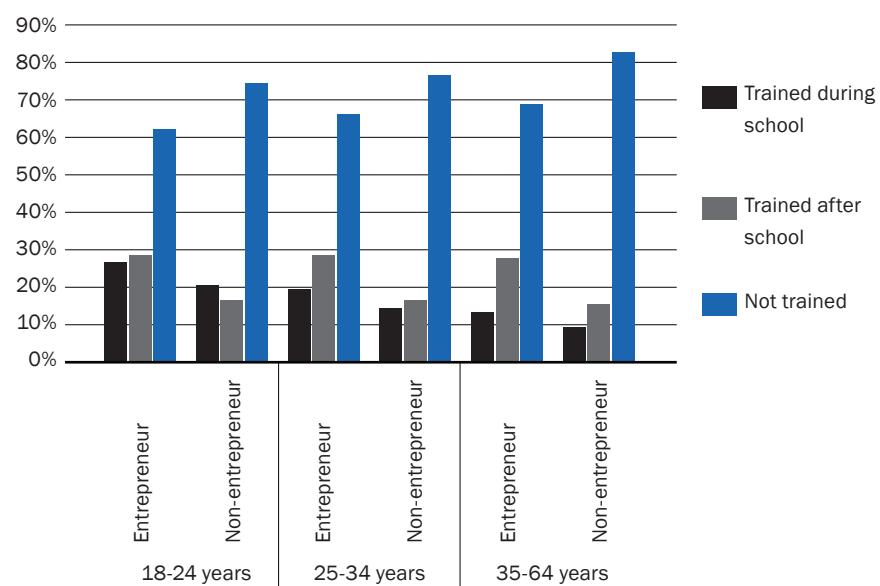
The youth as a group have more education than the adults – three-quarters have completed at least secondary education, compared to two-thirds of the adult group. Many of the young youth would still have been pursuing higher education, so their 2% completion of higher education is likely to increase considerably as they grow older. This finding is encouraging – according to the *2010/11 Global Competitiveness Report*, basic education increases the efficiency of each individual worker. Moreover, workers who have received little formal education can carry out only simple manual work and find it much more difficult to adapt to more advanced production processes and techniques. Lack of basic education can therefore become a constraint on business development. However, level of education achieved is not the only important factor. Quality of education offered varies considerably – many countries, for example still have unacceptably high pupil-teacher ratios, poorly trained teachers, insufficient textbooks and inadequate educational infrastructure. The International Labour Organisation's *World Employment*

and Social Outlook (WESO) Report 2015 notes that the spike in youth unemployment is occurring despite the fact that more young people are gaining tertiary qualifications than ever before. The relevance of education to the demands of the market is therefore a crucial aspect of an effective education and skills development programme.

Figure 2.2 indicates whether individuals have received any training in starting a business, either at primary or secondary school, or later in life. There is evidence that practical entrepreneurship training may better prepare school leavers for the transition from school to the labour market, enable them to identify business opportunities and improve their chances of success in business and self-employment ventures. Entrepreneurship education can enhance an individual's level of self-efficacy as well as increase students' interest in entrepreneurship as a viable career choice.

The findings with regard to exposure to business training are encouraging. The percentage of individuals who have received no training has decreased from 79% in the 35-64 year age group to 71% among 18-24 year olds. This is primarily as a result of an increased focus on business and entrepreneurial training in the school curriculum. The young youth are more likely to have received training during schooling than the older youth, and significantly more likely than the adults. Training during schooling has, in fact, doubled from one generation to the next. Training after schooling has also increased slightly from the older generation to the younger generation (bearing in mind that the young youth could still choose to engage in more post-school training). However, the finding that more than two-thirds of the youth have received no training does raise concerns, given the imperative to stimulate successful entrepreneurial activity in this group.

Figure 2.2 also shows a positive link between training in starting a business and entrepreneurial behaviour. In all three age categories, entrepreneurs were 1.5 times more likely to have received some form of business training, compared to the non-entrepreneurs.



**Figure 2.2:** Training in starting a business, by age category and entrepreneurial involvement, 2012-2014

## 2.2.2 Entrepreneurial propensity

GEM research has confirmed the importance of individuals' perceptions of their entrepreneurial ability, their recognition of start-up opportunities, how risk-averse they are, and the extent to which their social networks include entrepreneurs as being instrumental in whether or not they become involved in starting new businesses. To get an estimate of the size of the pool of potential entrepreneurs, the APS asks two questions:

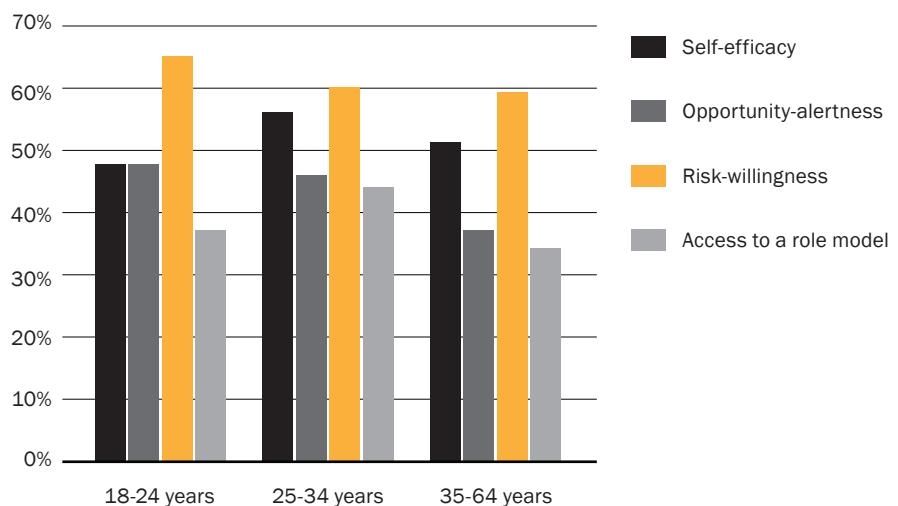
- In the next six months, will there be good opportunities for starting a business in the area where you live?
- Do you have the knowledge, skills and experience required to start a new venture?

Risk-averseness is assessed by measuring the percentage of those perceiving entrepreneurial opportunities who indicate that fear of failure would prevent them from setting up a business. If fear of failure is low, it is expected that individuals will be less inhibited by the risks inherent in doing business. Fear of failure can be influenced by intrinsic personality traits, as well as by societal norms and regulations. The extent to which individuals' social networks include entrepreneurial role models is assessed through the question: Do you know someone personally who started a business in the past two years?

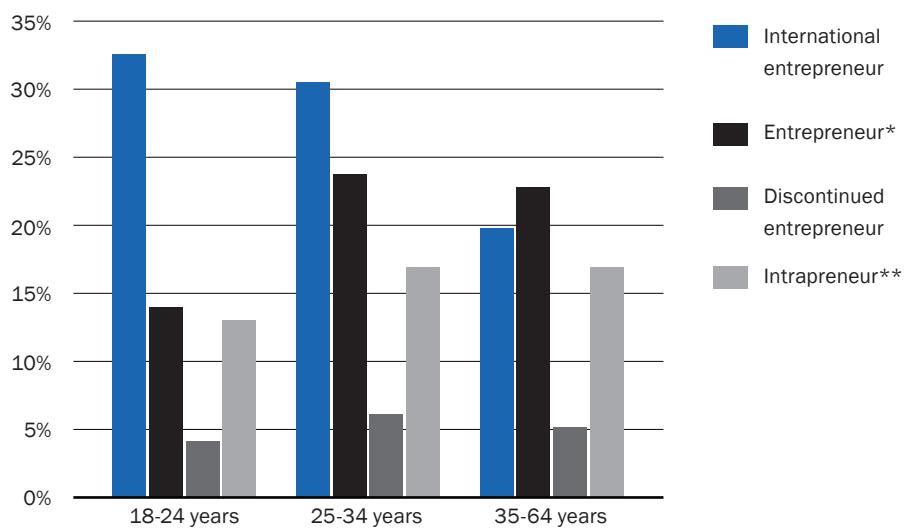
Figure 2.3 indicates that overall, the older youth display the highest level of entrepreneurial propensity. They have the highest level of confidence in their own ability to run a business, are most likely to know a start-up entrepreneur, and perceive good opportunities in the area in which they live. This could be linked to the fact that individuals in this age group have had the time as well as the opportunity to develop their skills and knowledge through education as well as through work experience. Experience in the work place will also bring them into contact with entrepreneurs outside their immediate personal circle – the young youth are more likely to be limited to role models among their family and close friends. It is encouraging that almost 40% of the young youth have personal contact with a start-up entrepreneur. Although this age group tends to lack work experience, which may limit their entrepreneurial endeavours, they can compensate for lack of experience by drawing on their social networks for support and advice. The young youth have the lowest confidence in their abilities. Given their relative lack of work experience, this is understandable. However, in the light of the significantly higher levels of business training that this age group has received within the formal school system (Figure 2.2), their low self-efficacy does raise concerns about the quality of the business and entrepreneurship training offered.

### 2.2.3 Entrepreneurial behaviour

Potential entrepreneurs see good opportunities for starting a business and believe that they have the necessary skills, knowledge and experience to start a business. However, even when individuals have favourable perceptions of entrepreneurship and exhibit entrepreneurial intentions, it is by no means certain that this will be translated into actually starting businesses. Individuals will assess the opportunity costs, and the risks and rewards of starting a business versus other employment preferences and options, if these are available. In addition, the environment in which potential, intentional and active entrepreneurs exist needs to be sufficiently enabling and supportive. A variety of national characteristics could act as deterrents for potential entrepreneurs, for example: 'red tape', which could present



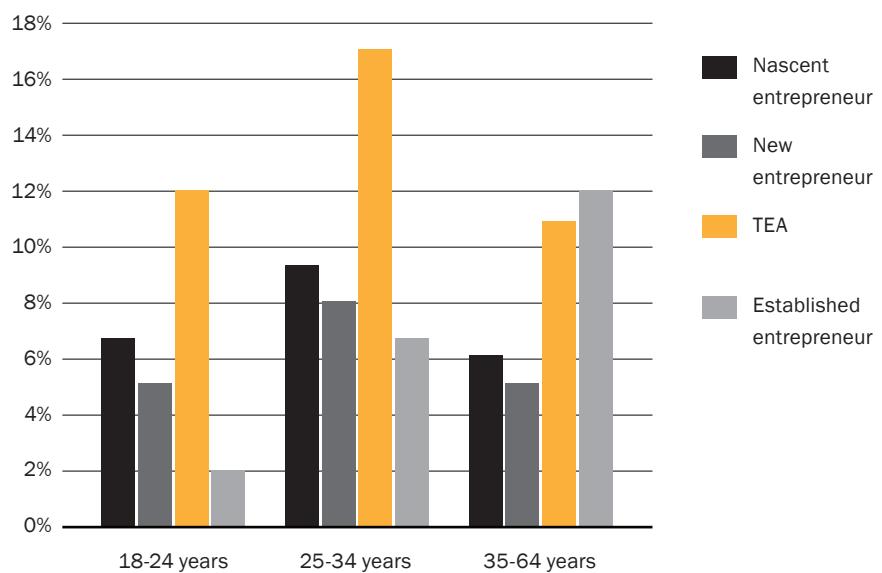
**Figure 2.3:** Entrepreneurial competencies, by age category, 2012-2014



**Figure 2.4:** The entrepreneurial pipeline, by age, 2012-2014

\*The category 'entrepreneur' includes nascent, new and established entrepreneurs

\*\*The category 'intrapreneur' denotes entrepreneurial work by employees



**Figure 2.5:** Early-stage and established entrepreneurial activity (%), by age, 2012-2014



unfavourable administrative burdens or high costs to those thinking about starting a business; access to resources and technical assistance; levels of corruption and crime; the attractiveness of the market; and the competitive environment.

Figures 2.4 and 2.5 capture entrepreneurial activity throughout the business cycle for the three age categories. Figure 2.4 indicates that the youth, as a group, show significantly higher levels of entrepreneurial intention than the adults (1.6 times higher). It is encouraging that approximately a third of all youth respondents expressed entrepreneurial intentions. This may reflect a growing global entrepreneurial culture, where entrepreneurship is increasingly regarded as a positive and viable career choice. In the older youth category, this intention translates into a relatively high level of actual entrepreneurial activity (the highest overall) while the young youth show a significant decline between entrepreneurial intention and entrepreneurial activity. Entrepreneurial activity among the older youth and adults is 1.7 times higher than that in the young youth category.

Of particular interest is the relationship between entrepreneurial intention and early-stage entrepreneurial activity (TEA). This indicator measures individuals who are participating in either of the two initial phases of the entrepreneurial process: nascent entrepreneurs and new business owners. Measuring these two types of entrepreneurs is important as it provides the level of early-stage activity that will hopefully be transformed into established businesses. Although the young youth have the highest level of entrepreneurial intention, their TEA rate shows the sharpest fall off between intention and actual entrepreneurial behaviour. The



level of entrepreneurial intention in this group is 2.75 times the TEA rate, compared to the older youth and adults where the entrepreneurial intention rate is 1.8 times the TEA rate for both age categories (Figure 2.5). It is important for policy makers to address the factors that contribute to the fall off between intentional and active entrepreneurs. Providing an enabling environment and appropriate entrepreneurship support policies and programmes would help actualise the intentions of these youths. Support policies to encourage the prospective youth entrepreneurs should include access to entrepreneurial finance (including grants and subsidies) and lower cost of access to physical infrastructure - communication, utilities, transportation, land or space.

Figure 2.5 indicates that the established business rate among the adults is substantially higher than for the two youth age categories. The low established business rate among the young youth is less of a concern, as it is likely that individuals in this group may have engaged in post-school training and that they may be recent entrants into the labour force. However, the discrepancy between the older youth and adult rates deserves attention. The adult established business rate is 1.7 times the rate for the older youth. Policies aimed at supporting promising early-stage entrepreneurs among the older youth are needed to improve the sustainability of their businesses, so that they can contribute more effectively to the economy through the on-going introduction of new products and processes and a more stable base of employment.

Intrapreneurship (i.e. entrepreneurial work by employees) is highest among the older youth and adults (Figure 2.4). The intrapreneurship rate among the young youth, although lower, is encouraging – particularly if their relatively shorter

time in the labour force is taken into account. Intrapreneurship includes the development of new activities for an individual's main employer, such as developing or launching new goods or services, or setting up a new business unit, a new establishment or subsidiary. GEM research has shown that entrepreneurs often work in the same industry prior to starting their own businesses. On-the-job experience is invaluable in instilling both an understanding of how business operates and, even more importantly, allowing entrepreneurially-minded people to develop the experience and confidence to start off-shoot businesses within industries in which they have knowledge and experience. Given the high global youth unemployment rates, policy makers need to seriously consider ways of increasing youth access to employment possibilities, such as differentiated wages for the youth, in light of the potential long-term positive benefits on entrepreneurial development.

The relative prevalence of opportunity-motivated versus necessity-motivated entrepreneurial activity provides useful insights into the quality of early-stage entrepreneurial activity. Necessity based early-stage entrepreneurial activity is defined as the percentage of those involved in early-stage entrepreneurial activity that claim to be driven by necessity (having no better choice for work) as opposed to opportunity. Opportunity based early-stage entrepreneurial activity is the percentage of those involved in early-stage entrepreneurial activity driven purely or partly by opportunity, as opposed to finding no other option for work. This includes taking advantage of a business opportunity or having a job but seeking a better opportunity. GEM has shown that businesses started by opportunity-driven entrepreneurs are much more likely to

survive and employ people than those started by necessity-driven entrepreneurs. Table 2.2 shows relatively high levels of opportunity-motivated entrepreneurship across all the age categories, with no significant differences between the youth and adults.

Securing sufficient funding is an important resource for every business, especially for start-ups and for growing firms. The finding that access to finance is a key problem is a common feature of research on challenges facing all entrepreneurs and is confirmed by Table 2.3 which indicates that half of the respondents, regardless of age category, relied on personal savings to fund their entrepreneurial ventures. The young youth often have no credit history or assets to serve as collateral for loans – Table 2.3 shows that these individuals are most reliant on family savings, and least likely to obtain finance from financial institutions.

#### 2.2.4 Entrepreneurship impact

A key focus for most countries, particularly in the light of persistent youth unemployment, is to facilitate growth that is sustainable and inclusive in order to generate widespread employment and to reduce poverty. The potential of the SME sector to create job opportunities is thus a crucial factor. The performance of the enterprises in terms of actual job creation was measured by asking the early-stage entrepreneurs how many people (excluding the owner/s) were currently working for the business (Figure 2.6).

The majority of early-stage enterprises (over 90%) across the age categories provide employment for fewer than five people. The young youth have the smallest businesses, with almost three-quarters (73%) running one-person businesses (i.e. providing employment for no people other than the owner).

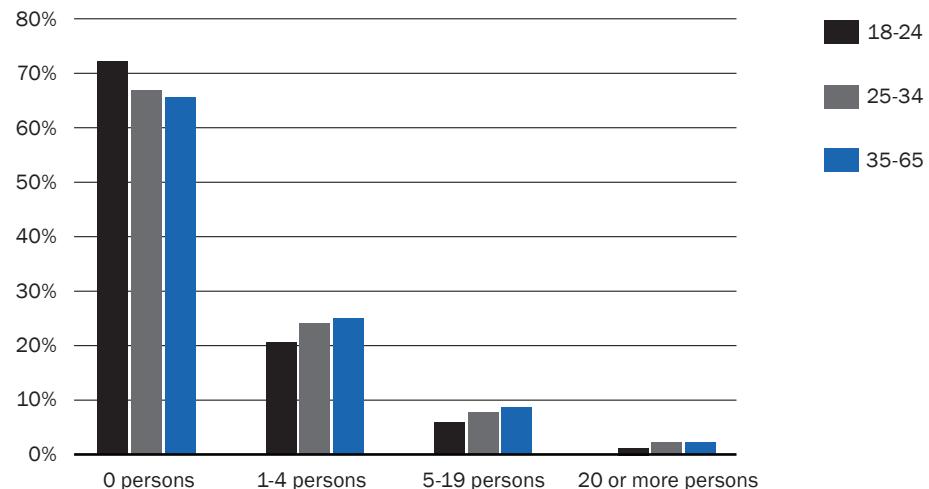
The early-stage entrepreneurs were also asked how many employees they expect to have in the next five years. The difference between current and expected employees indicates growth expectations (Figure 2.7). GEM refers to low growth businesses (projecting 0 – 5 new employees in five years), medium growth businesses (projecting 6–19 new employees), or high growth businesses (projecting 20+ new employees).

**Table 2.2:** Reason for starting a business (as % of TEA), by age, 2012-2014

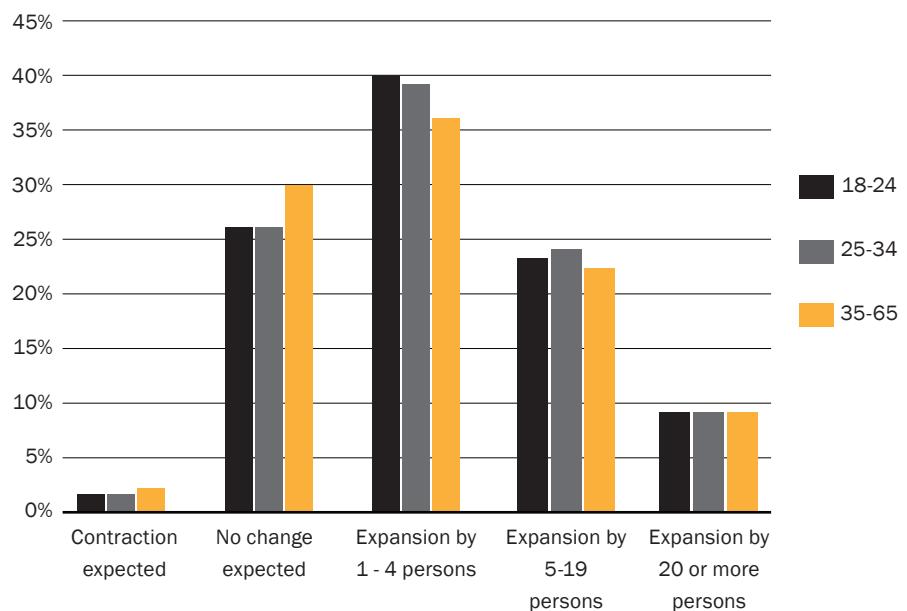
	18-24 years	25-34 years	35-64 years
<b>Opportunity-motivated</b>	62%	62%	60%
<b>Necessity-motivated</b>	38%	38%	40%

**Table 2.3:** Source of financing for start-ups, by age, 2012-2014

	18-24 years	25-34 years	35-64 years
<b>Personal savings</b>	51%	52%	52%
<b>Family savings</b>	22%	18%	15%
<b>Bank or other financial institution</b>	19%	23%	25%
<b>Friends</b>	3%	3%	3%
<b>Other source of financing</b>	5%	5%	5%



**Figure 2.6:** Size of business (not counting owner) for early-stage entrepreneurs, by age, 2012-2014



**Figure 2.7:** Growth expectations for early-stage entrepreneurs, by age, 2012-2014

Growth expectations are fairly similar across the age categories, particularly in terms of medium and high growth expectations. Nine percent of early-stage entrepreneurs in all three age categories anticipate employing more than twenty people within the next five years. It is important to identify young entrepreneurs with realistic high-growth aspirations, and institute policies aimed specifically at supporting them in order to optimise their impact on economic growth and job creation.

Research has shown that high-growth enterprises are extremely mobile and will move from areas in which they feel their growth potential is being constrained. The youth as a group are already more mobile, having fewer obligations such as dependents or properties to maintain. Alleviating regulatory burdens as well as offering targeted financial support is important in developing an environment that allows promising youth businesses to flourish.

### **2.3 THE INFLUENCE OF GENDER ON YOUTH ENTREPRENEURSHIP**

**The International Labour Organisation's *World Employment and Social Outlook (WESO) Report 2015* notes the persistence of gender gaps in the labour market.** Overall, women continue to suffer from higher rates of unemployment, are less likely to participate in the labour force and face higher risks of vulnerable employment. Although a rise in female labour force participation rates has been observed in some regions, female labour force participation at the global level has been on a decline, standing at 50.3 per cent in 2014 compared with 51.9 per cent in 2000. Most South Asian countries face a challenge of low labour force participation for women – men in this region are 2.5 times more likely to be employed than are women. In the MENA region, female participation in the labour force remains particularly low. The labour force participation rate for women in the MENA region was 21.7% in 2014, which is 53.5 percentage points lower than the rate for men (75.2%). Moreover, 27% of employed women in this region are classified as ‘unpaid family workers’ (compared with 18% globally). In sub-Saharan Africa the unemployment rate is comparable across genders. However,



vulnerable female employment (typically unpaid family work) is considerably higher than the rate for males, at 84% compared with 70% for males in 2014. Young women are thus doubly disadvantaged in their attempts to integrate into the work force – by their age as well as their gender.

Although interest in female entrepreneurship is an increasing trend around the world, the rate of participation in entrepreneurship still varies considerably between countries and geographical regions. According to the OECD (2004), women tend to have lower participation rates in entrepreneurship as they face more social and cultural constraints than men. Many studies maintain that women face greater difficulties in becoming entrepreneurial. These obstacles include: higher levels of domestic responsibility; lower levels of education (particularly in developing countries); lack of female role models in the business sector; fewer business-orientated networks in their communities; lack of capital and assets; lower status in society and a culturally-induced lack of assertiveness and confidence in their ability to succeed in business. These factors may prevent women from perceiving as well as acting on entrepreneurial opportunities.

#### **2.3.1 Education and training**

Table 2.4 reports on the levels of education attained by the youth, disaggregated according to gender. The category ‘youth’ refers to individuals aged 18-34 years. The findings are encouraging – there is no difference in the educational levels of young women and men, from a global perspective.

**Economies with high female labour force participation rates experience economic growth slowdowns less often, indicating a higher resilience to adverse economic shocks. With more women in the labour market, an economy makes greater use of its productive potential. Moreover, female labour force participation also presents a powerful anti-poverty device.**

*World Bank (2015)*

The gender parity in terms of post-secondary and graduate level education is particularly positive. Figure 2.8 summarises the business training received by young women and men. There is no significant difference in the exposure to business training at school. However, young men are 1.2 times more likely to pursue business training after school. Figure 2.8 reinforces the positive link between business training and entrepreneurial behaviour. Young people who received business training at school are 1.2 times more likely to be entrepreneurs. For both genders, training after school is more strongly linked to entrepreneurial behaviour, but this is particularly the case for young women. For youth who pursued post-school business training, males are 1.5 times and females 1.8 times more likely to be entrepreneurs.

### 2.3.2 Entrepreneurial propensity

Figure 2.9 shows that young men have more favourable perceptions with regard to all four entrepreneurial competencies, compared to young women. The discrepancies are most significant in terms of self-efficacy and access to entrepreneurial role models. Males are 1.2 times more likely to have confidence in their own ability to run a business – perhaps linked to their higher exposure to business training, particularly after school. They are 1.3 times more likely than their female counterparts to personally know a start-up entrepreneur. In this way, young women are disadvantaged from the start, having fewer role models (which could affect their willingness to engage in entrepreneurial activity) as well as limited access to mentorship opportunities.

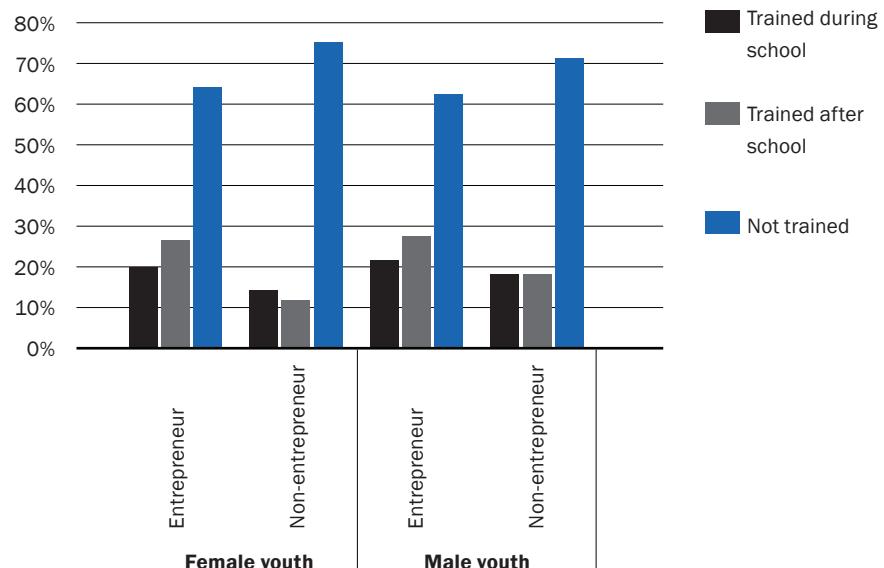
### 2.3.3 Entrepreneurial behaviour

Figure 2.10 summarises the youth's involvement in entrepreneurial activity, by gender, over several phases of the entrepreneurial process. In line with the findings in section 2.3.2, the rates for young women in all stages of entrepreneurship are lower than the male rates.

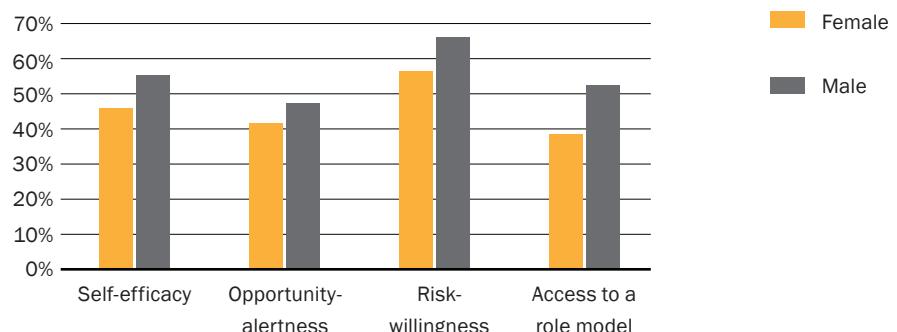
Young people of both genders show fairly positive rates for intention to start up a

**Table 2.4:** Highest level of education completed for youth, by gender, 2012-2014

Education level completed (%)	Female	Male
No education or pre-primary education	9%	8%
Primary or some secondary education	17%	18%
Secondary education degree	39%	41%
Post-secondary education	30%	29%
Graduate education experience	5%	4%



**Figure 2.8:** Youth training in starting a business, by gender and entrepreneurial involvement, 2012-2014



**Figure 2.9:** Entrepreneurial competencies among the youth, by gender, 2012-2014

business in the next three years (29% for young women and 35% for young men). However, there is a sharp fall off between intentional and nascent entrepreneurs, which is more marked for young women. Young women are more than four times more likely to express entrepreneurial intentions than to be nascent entrepreneurs. Given that the latter is the first stage of actual entrepreneurial activity, this is cause for concern. Young men are 1.3 times more likely to be

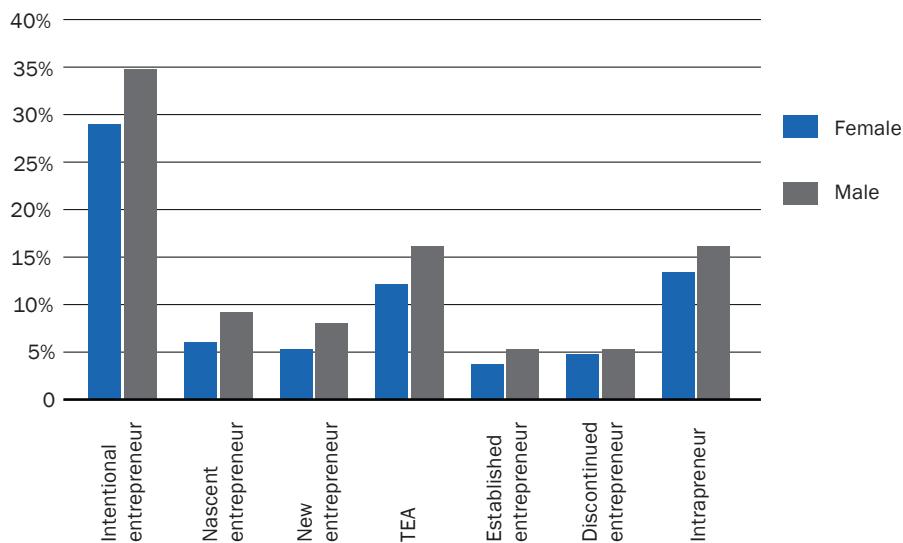
engaged in early stage entrepreneurial activity and 1.6 times more likely to be established entrepreneurs, compared to young women. Young women's lower confidence in their business-related skills and knowledge, and their lack of access to appropriate role models (Figure 2.9) is likely to be a factor in their relative lack of willingness to start entrepreneurial ventures, as well as affect the sustainability of their businesses in the long run.

**Table 2.5:** Reason for youth starting a business (as % of TEA), by gender, 2012-2014

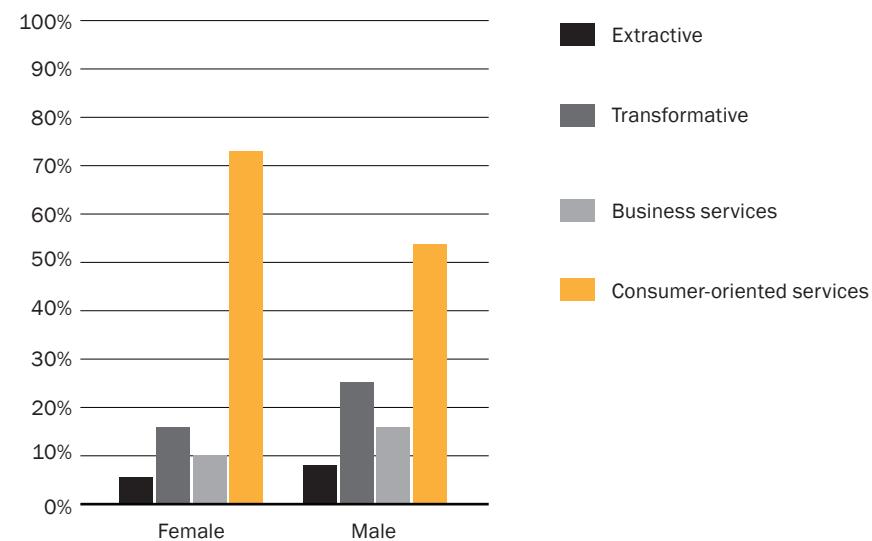
	Female	Male
<b>Opportunity motivated</b>	59%	65%
<b>Necessity motivated</b>	41%	35%

**Table 2.6:** Source of financing for youth start-ups, by gender, 2012-2014

	Female	Male
<b>Personal savings</b>	52%	52%
<b>Family savings</b>	23%	17%
<b>Bank or other financial institution</b>	18%	23%
<b>Friends</b>	3%	3%
<b>Other source of financing</b>	4%	5%



**Figure 2.10:** The youth entrepreneurial pipeline, by gender, 2012-2014



**Figure 2.11:** Youth early-stage entrepreneurial activity, by sector and gender, 2012-2014

Table 2.5 shows that young women are more likely to be pushed into entrepreneurship out of necessity than are young men. Young men are 1.8 times more likely to be motivated by opportunity than by necessity, while young women are 1.4 times more likely to be opportunity rather than necessity-driven. High levels of youth unemployment in many regions translate into high competition for low levels of job opportunities in the formal sector. This means that young women, especially in poorer communities, will be forced into necessity-entrepreneurship because of lack of other options for sustainable livelihoods.

Table 2.6 highlights another factor which may contribute to the sharp fall off between entrepreneurial intention and early-stage entrepreneurial activity by young women. Young women more often resort to obtaining loans through personal and family connections, while young men are more likely to obtain funds from financial institutions. Young women may be disinclined to attempt an approach to a commercial bank because of a lack of confidence in their knowledge of how to develop and present a robust business plan. Social and cultural bias against women's participation in the business sector may also play a role.

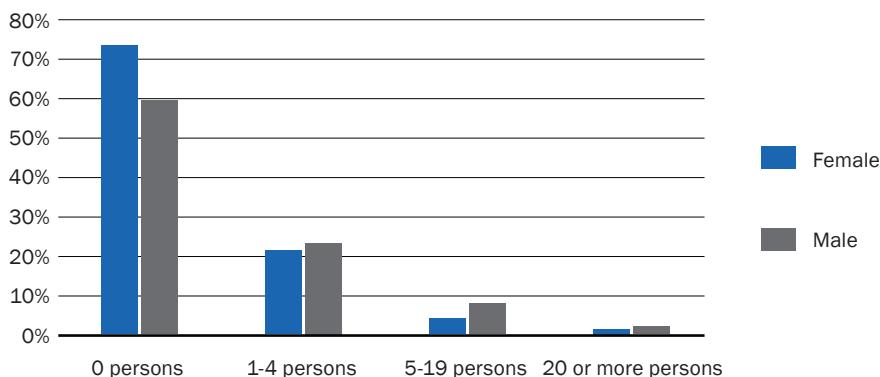
### 2.3.4 Entrepreneurship impact

Figure 2.11 shows the distribution of youth early-stage entrepreneurial activity according to industry sector. The extractive sector includes agriculture, forestry, fishing and mining; the transformative sector includes construction, manufacturing, transportation, communication, utilities and wholesale distribution; business services include finance, insurance and real estate; and consumer services include retail, motor vehicles, lodging and restaurants, personal services, education and recreational services. A significant majority (73%) of early-stage entrepreneurial activity by young women is in the consumer services sector. Young men demonstrate a more balanced profile: half of their early-stage business activity is in the consumer services sector, with both the transformative (25%) and business services (16%) sectors showing significant activity. Young men are twice as likely to be involved in the transformative sector and 1.6 times more likely to be in the business services sector, compared to young women.

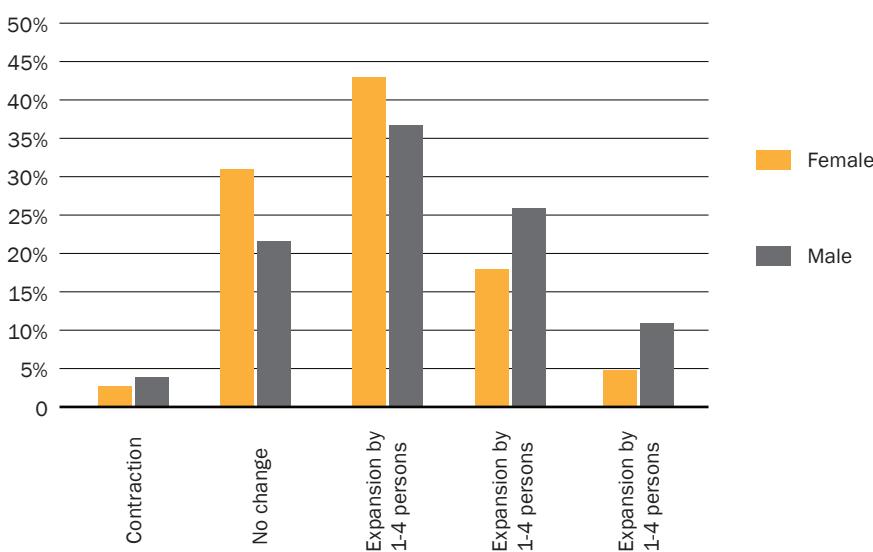
The services sector is currently one of the fastest growing sectors worldwide (ILO, 2015) and therefore has an important role to play as an employment creator. The consumer services industry is relatively easy to access as there are limited barriers to entry, and businesses can be started with limited financial resources and with relatively lower skills. However, the competition in this industry is therefore often higher, with a large number of “me-too” businesses operating in the same market and diluting the sustainability of the market. The low rate of established businesses for young female entrepreneurs (Figure 2.10) may well be as a result of their choice of sector.

Youth respondents were asked whether their business would operate primarily from their home, and whether they would

use the internet to sell their products/services. Young women were more likely to use their home as a business location (57% compared to 45% of young men). This is understandable as in many cultures young women are often primary care-givers within family structures and would need to combine both home and work responsibilities. A key disadvantage of trading from home is the small market-reach offered due to the business position and a greater reliance on family, friends and neighbours as customers. A possible option, to mitigate the limited reach of home-based businesses, is to trade online. However, only 35% of young women used the internet to sell products and services, compared to 48% of young men. These two factors are therefore likely to have an effect on business sustainability by limiting the markets that young women are able to access.



**Figure 2.12:** Size of youth business (not counting owner) for early-stage entrepreneurs, by gender, 2012-2014



**Figure 2.13:** Growth expectations for youth early-stage entrepreneurs, by gender, 2012-2014

**Education and skills development is the biggest challenge facing sub-Saharan Africa. UNESCO predicts that the region will soon be home to 50% of the world's illiterate population.**

*WEF Outlook on the Global Agenda 2015*

Figure 2.12 shows that although the majority of youth businesses across the genders provide employment only for the owner, young female entrepreneurs tend to have smaller businesses than their male counterparts (73% are one-woman businesses, compared to 66% one-man businesses). Businesses run by young males are twice as likely to provide jobs for more than five people, compared to those run by young females.

Young men have significantly higher growth aspirations than young women do (Figure 2.13). Approximately a third of young women expect no change in their business size in the next three years which, given that the majority of these are one-person businesses, is not encouraging. A more positive finding is that a quarter of young women have medium to high growth expectations. Three-quarters of young male entrepreneurs expect to generate jobs within the next three years – 27% have medium growth expectations while an encouraging 11% have high growth expectations (i.e. more than 20 jobs). While this expressed growth potential has, as yet, not been tested and may not have such a significant effect on the actual employment rate, businesses that do not aspire to grow are significantly less likely to do so successfully. Given that the majority of the youth businesses are nascent and new businesses (Figure 2.10), interventions aimed at providing the correct market dynamics and regulatory framework for these high-impact businesses could enable these businesses to contribute meaningfully to socio-economic development.

**Table 2.7:** Highest level of education completed for youth, by region, 2012-2014

Education level completed (%)	SSA	MENA	S&EA	LAC	ECC
No education or pre-primary education	23%	9%	4%	11%	2%
Primary or some secondary education	32%	13%	12%	18%	14%
Secondary education degree	30%	31%	36%	47%	44%
Post-secondary education	14%	42%	45%	22%	32%
Graduate education experience	1%	5%	3%	2%	8%

**Table 2.8:** Youth training in starting a business, by region, 2012-2014

Business training received (%)	SSA	MENA	S&EA	LAC	ECC
Trained during school	21%	15%	10%	20%	18%
Trained after school	16%	15%	11%	21%	21%
No training	71%?	76%	84%	70%	68%

Note: The totals do no add up to 100% because some individuals pursued training during as well as after school.

## 2.4 A REGIONAL PERSPECTIVE ON YOUTH ENTREPRENEURSHIP

One of GEM's key objectives is to allow for comparison of levels of entrepreneurial attitudes, activity and aspiration among different countries, geographic regions and economic development levels.

This section will explore the extent to which youth are participating in entrepreneurial activity, as well as the nature and impact of this activity, for the following regions: sub-Saharan Africa (SSA), Middle East and North Africa (MENA), South and East Asia (S&EA), Latin America and the Caribbean (LAC) and the European culture countries (ECC). This latter category includes the United States and Canada.

### 2.4.1 Education and training

The education levels attained by young people differ significantly across the regions. Sub-Saharan Africa reports significantly lower levels of education than the other four regions (Table 2.7). Despite the global shift towards higher levels of education for the young, almost a quarter of the youth in sub-Saharan Africa have less than a primary school education while 55% have not completed their secondary education. The situation is exacerbated by

**Skills mismatch is a key structural challenge for the MENA region. Improved education for youth, coupled with more effective linkages between the government, educational institutes and the marketplace, is needed to resolve the incidence of skills mismatch and to facilitate school-to-work transitions.**

ILO WESO Report 2015

the mediocre quality of education offered in most sub-Saharan African countries. By contrast, only 29% of youth in the LAC and 22% in the MENA region have not completed secondary education, while in Asia and the ECC this number sits at a mere 16%. Almost half of the youth in Asia and the MENA region have some form of post-secondary education, closely followed by the ECC (40%). Once again, sub-Saharan Africa lags significantly in this respect, reporting only 15% of youth with post-secondary qualifications.

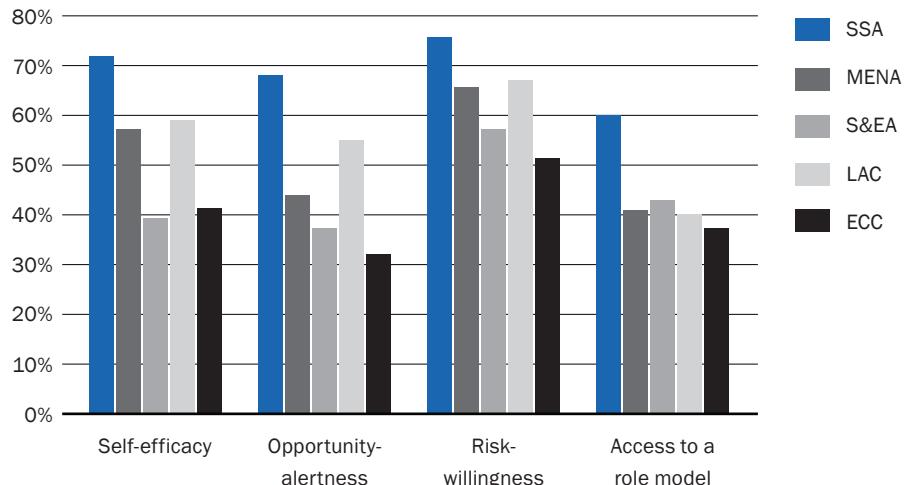
In terms of business training received, the situation is less pessimistic (Table 2.8). Governmental efforts to address the issues of effective education, job creation and entrepreneurship development within the sub-Saharan African region have included reforms of the education and training systems as well as of the school curricula. Some countries have focused on policies designed to increase the number of young people going into vocational and technical training institutions, while entrepreneurial education has also been introduced into a number of curricula. These appear to be bearing fruit, as youth in the SSA region are the most likely to have received some form of business training at school (21%). This is encouraging – however, the quality of this training is likely to be inconsistent, given the lack of teacher training and resources in most of the region.

Youth in the LAC and ECC regions are most likely to pursue business training after school, while youth in Asia and the MENA region are least likely to receive any form of business training. This lack of training is a more significant concern in the MENA region. The ILO WESO Report 2015 notes that at 30%, the youth unemployment rate in the MENA region is one of the highest in the world. Youth unemployment in this region is 3.7 times higher than the adult rate. Reducing youth unemployment is hampered by the size of the growing and comparatively young population - in 2014, 26.2% of the working-age population was aged 15–24 years, compared with 22.4% globally.

#### 2.4.2 Entrepreneurial propensity

Figure 2.14 shows that youth in sub-Saharan Africa have the highest levels of perceived entrepreneurial competence, across all four indicators, while the youth in the ECC region display the lowest level of entrepreneurial propensity. This is in line with GEM research, which has shown that individuals in factor-driven economies (which predominate in the SSA region) tend to have higher perceptions that there are good opportunities for entrepreneurship, and that they have the capabilities to start businesses. These attitude measures tend to decline with greater economic development levels. GEM argues that while this seems counter-intuitive, individuals in economies at different stages of economic development are likely to have different kinds of businesses in mind. This would suggest that the perception of what is considered an opportunity and the capabilities required to create and manage this entrepreneurial opportunity in factor-driven economies, could differ significantly from the perceptions in efficiency- or innovation-driven economies (such as in the ECC region) (Kelley et al, 2010).

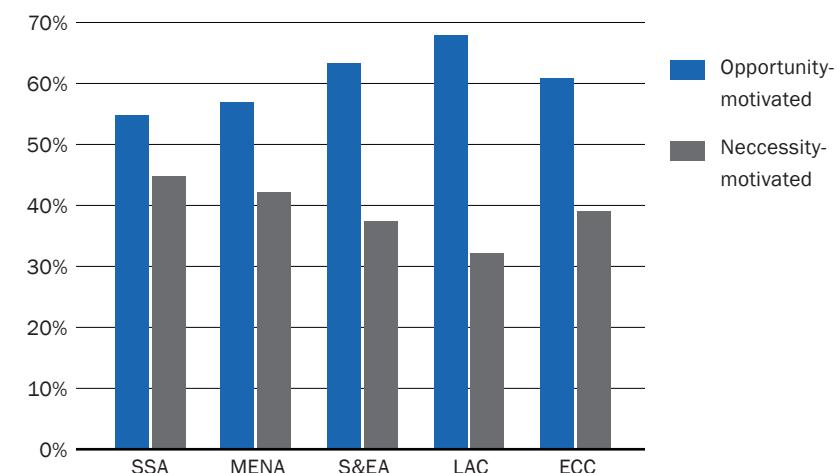
The low entrepreneurial propensity among youth in the ECC region is of concern, given the persistently high youth unemployment rates in the region. In the EU-28, adults faced an unemployment rate of 9 per cent in the second quarter of 2014, whereas young people faced a jobless rate of 22 per cent. This translates into a ratio of youth-to-adult unemployment rates close to 2.5 for EU-28 (ILO WESO Report 2015). The low self-efficacy of the ECC youth (41%) is a concern, given their high level of general education and relatively high levels of business-related training. Their opportunity perception is also very low (less than half that of youth in the SSA region). A particularly noticeable discrepancy is in terms of knowing a start-up entrepreneur. The rate for this indicator is similar across the regions with the exception of sub-Saharan Africa. Youth in the SSA region are significantly more likely (1.5 times) to know a start-up entrepreneur personally than youth in the other four regions.



**Figure 2.14:** Entrepreneurial competencies among the youth, by region, 2012-2014

**Table 2.9:** The youth entrepreneurial pipeline, by region, 2012-2014

	SSA	MENA	S&EA	LAC	ECC
<b>Intentional entrepreneur</b>	52%	39%	26%	41%	19%
<b>Nascent entrepreneur</b>	14%	7%	5%	11%	5%
<b>New entrepreneur</b>	14%	7%	8%	8%	3%
<b>TEA</b>	28%	14%	13%	19%	8%
<b>Established entrepreneur</b>	9%	5%	6%	5%	3%
<b>Discontinued entrepreneur</b>	15%	6%	3%	5%	2%
<b>Intrapreneur</b>	11%	13%	8%	11%	23%



**Figure 2.15:** Reason for youth starting a business (as % of TEA), by region, 2012-2014

#### 2.4.3 Entrepreneurial behaviour

In line with their positive scores in Figure 2.14, the SSA and LAC regions top the rankings in terms of entrepreneurial intention. In the SSA region entrepreneurial intention is particularly high – half of the youth

surveyed expressed the intention to start a business (Table 2.9). The ECC region has the lowest entrepreneurial intentions – less than a fifth of the youth. Although the MENA region shows a high rate of entrepreneurial intention (marginally less than the second ranked LAC region), its youth show the sharpest

fall off between entrepreneurial intention and actual entrepreneurial activity. Youth in the MENA region are 2.8 times more likely to express intention than to be engaged in early-stage entrepreneurial activity. Given the disturbingly high youth unemployment figures for the region, it is important for policy makers to address this disconnect between intention and activity as a matter of urgency.

Early-stage and established business activity are highest in the SSA region, followed by the LAC region. An equal proportion of young entrepreneurs in the SSA region are in nascent and new businesses, and the established business rate is robust. While established businesses are important for preserving stability, early-stage entrepreneurship is important for creating dynamism in economic activity, and the youth businesses in the SSA region display a balanced profile in this respect. The ECC is the worst-performing region in terms of both early-stage and established entrepreneurial activity; however, they report the highest rate of intrapreneurial behaviour by a significant margin. This suggests that the youth in the region do have entrepreneurial potential, but need encouragement to become employment creators rather than creative employees.

Figure 2.15 summarises the motive for starting a business for the early-stage youth entrepreneurs. The opportunity motive prevails over the necessity motive in every region, but to a different extent. The LAC region has the highest prevalence of opportunity motivation (68%) – in this region, young entrepreneurs are more than twice as likely to be motivated by opportunity, compared to necessity. Sub-Saharan Africa and the MENA region report the highest prevalence of necessity-motivated enterprises. It has been argued that entrepreneurial activity on the continent is often motivated by the need for survival, given that many African governments do not have supportive welfare structures. Under these conditions, it is likely that people will start up businesses to create some form of employment for themselves or to increase their income since wage employment is often not enough to support their families. The ILO WESO

**Table 2.10:** Source of financing for youth start-ups, by region, 2012-2014

	SSA	MENA	S&EA	LAC	ECC
<b>Personal savings</b>	58%	40%	39%	52%	52%
<b>Family savings</b>	19%	17%	37%	16%	14%
<b>Bank or other financial institution</b>	16%	33%	16%	26%	23%
<b>Friends</b>	3%	4%	4%	2%	1%
<b>Other source of financing</b>	4%	6%	3%	4%	10%



## In 2014, nearly eight out of ten employed persons in sub-Saharan Africa were in vulnerable forms of employment - significantly higher than the global average of 45%.

ILO WESO Report 2015

Report 2015 notes that although sub-Saharan Africa has the highest labour force participation rate of all regions (estimated at 70.9% compared with a global average of 63.5% in 2014) the quality of jobs is of considerable concern, with working poverty and vulnerable employment the highest across all regions.

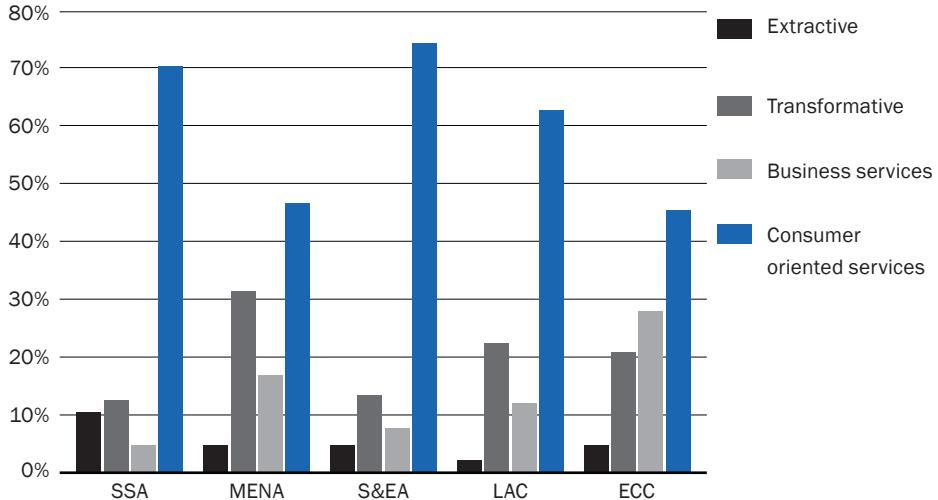
Table 2.10 shows that the regions differ significantly in terms of the source of financing for young nascent entrepreneurs. In the SSA, LAC and ECC regions personal savings are the primary source of financing by a fairly substantial margin. In the LAC and ECC regions, banks provide financial resources to about a quarter of young start-up entrepreneurs, while family savings is the second option for SSA youth. Young nascent entrepreneurs in South and East Asia are equally likely to use personal or family savings as a primary source of financing – this region reports by far the highest level of family support, from a financial perspective, for young entrepreneurs. Although personal savings are an important source of finance in the MENA region, banks and financial institutions are also significant in this respect, providing financing for a third of young entrepreneurs in the region.

#### 2.4.4 Entrepreneurship impact

The distribution of youth early-stage entrepreneurial activity according to industry sector varies considerably across the regions (Figure 2.16). Sub-Saharan Africa and South and East Asia show a similar pattern – in both regions, a significant majority of youth entrepreneurs are in the consumer-oriented services sector (70% and 74% respectively), with about 15% of early-stage activity in the transformative sector. The SSA region's youth are the group most likely to report involvement in the extractive sector (at 11%, more than double that of youth in the other regions).

The MENA and ECC regions show the most balanced profiles, with good diversity in terms of youth involvement in industry sector. The MENA region has the highest prevalence of youth enterprises in the transformative sector, as well as good representation in the business services sector. In line with its higher educational levels (Table 2.7) and access to more sophisticated markets, the ECC region has the highest rate of youth involvement in the business services sector by a significant margin (28%). The SSA region, by contrast, shows extremely low involvement in this sector (5%). The poor quality of schooling offered in many African countries clearly disadvantages the youth in terms of their access to more sophisticated industry sectors.

In order to assess their market reach and competitiveness within their industry sectors, the youth were asked whether they used the internet to sell their products and services. Table 2.11 indicates that youth in the ECC region are significantly more likely to use the internet than youth in the other regions – almost three-quarters of youth in the ECC report using the internet as a marketing tool. At the other end of the scale, only a third of youth in Asia use the internet to sell products, while the SSA region reports disturbingly low levels of internet use at a mere 16%. This is likely due to a combination of a lack of appropriate skills, inadequate access to the relevant physical infrastructure (especially in the rural areas) and cost factors. Young entrepreneurs in the region are therefore unable to mitigate the negative impact of small and over-traded local markets,



**Figure 2.16:** Youth early-stage entrepreneurial activity, by sector and region, 2012-2014

**Table 2.11:** Internet use to sell products/ services by youth, by region, 2012-2014

	SSA	MENA	S&EA	LAC	ECC
Internet use	16 %	61%	33%	47%	74%

**Young entrepreneurs in the S&EA region have the lowest growth aspiration, with only 62% expecting to create any new jobs over the next five years, compared to over 70% for the other regions.**

which is likely to reduce their business sustainability and growth prospects.

GEM recognises that not all entrepreneurs have an equal impact on job creation. Table 2.12 shows that the majority of youth entrepreneurs in the LAC (78%), ECC (71%) and SSA (70%) regions only create employment for the business owner. While the SSA and LAC regions have the highest rates of early-stage entrepreneurial activity (Table 2.9), the majority of these businesses make no contribution to job creation. However, while self-employment has a minimal effect on job creation, its impact cannot be disregarded in regions characterised by high levels of poverty and chronic underemployment. In many parts of sub-Saharan Africa, for example, every job counts, and it is not unusual to find a self-employed person supporting a large family and enabling those around him/ her to have a better life.

Although the MENA and S&EA regions report lower youth entrepreneurial rates (14%, compared to the 28% of the SSA and 19% of the LAC regions), only half of these businesses provide no additional jobs. South and East Asia have the highest percentage of youth businesses offering 1 to 4 jobs. The MENA region has the largest youth businesses – a fifth of the businesses offer employment for at least five people. Particularly

**Table 2.12:** Size of youth business (not counting owner) for early-stage entrepreneurs, by region, 2012-2014

	SSA	MENA	S&EA	LAC	ECC
<b>0 persons</b>	70%	53%	55%	78%	71%
<b>1-4 persons</b>	25%	29%	35%	18%	20%
<b>5-19 persons</b>	4%	12%	7%	4%	7%
<b>20 or more persons</b>	1%	6%	2%	1%	2%

**Table 2.13:** Growth expectations for youth early-stage entrepreneurs, by region, 2012-2014

	SSA	MENA	S&EA	LAC	ECC
<b>Contraction</b>	2%	5%	2%	2%	3%
<b>No change</b>	25%	19%	36%	26%	25%
<b>Expansion by 1-4 persons</b>	49%	29%	35%	39%	34%
<b>Expansion by 5-19 persons</b>	19%	28%	20%	25%	28%
<b>Expansion by 20 or more</b>	5%	19%	7%	8%	10%

**Providing an enabling environment and appropriate entrepreneurship support policies and programmes would help actualise the intentions of the youth.**

encouraging is the number of businesses offering more than 20 jobs (6%). While the percentage of young people engaged in entrepreneurial activity is lower, the impact that these youth businesses would have on employment is considerably larger than for most of the regions surveyed.

Young entrepreneurs in the S&EA region have the lowest growth aspirations, with only 62% expecting to create any new jobs over the next five years, compared to over 70% for the other regions (Table 2.13). Youth in the SSA region also tend to have low-growth aspirations, with half of the entrepreneurs projecting expansion by 1-4 jobs. The MENA and ECC regions report the highest medium-growth expectations, while the MENA region has the highest high-growth expectations by a considerable margin. It is encouraging that a fifth of young entrepreneurs in this region expect to create more than twenty new jobs in the next five years. Their robust current job creation rates (Table 2.12) suggest that these growth projections are realistic, and the significant percentage of youth in the region who obtain finance from banks (33%) rather than personal sources (Table 2.10) suggests that they will be able to access the financial support needed for business growth and expansion.

## 2.5 NATIONAL FRAMEWORK CONDITIONS FOR YOUTH INVOLVEMENT IN ENTREPRENEURSHIP

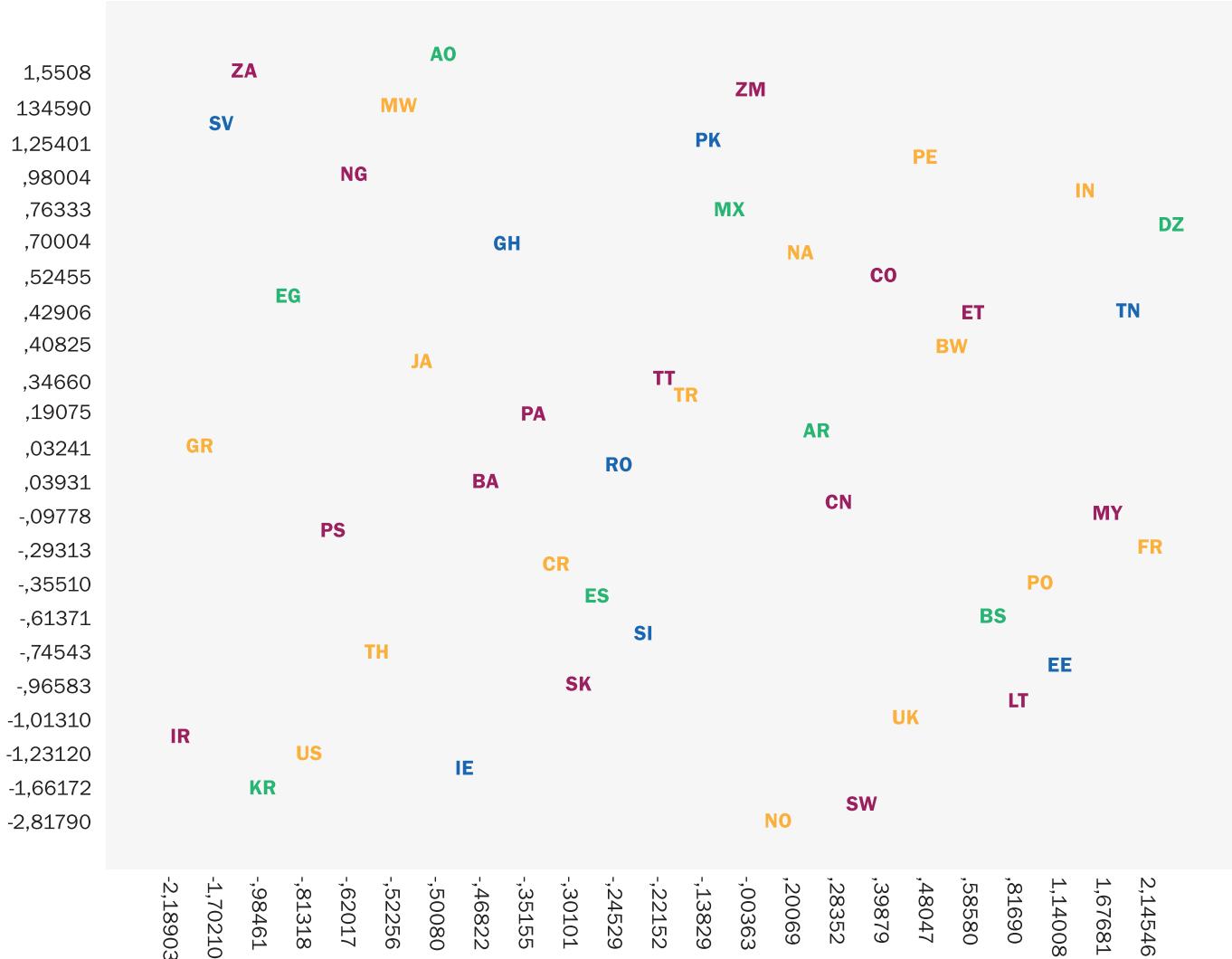
The GEM model acknowledges that particular environmental factors (social, political and economic) are influential in creating unique business and entrepreneurial contexts. The national framework of institutions and culture influencing entrepreneurial activity is assessed by means of the National Expert Survey (NES). In 2012, the NES questionnaire contained several statements concerning youth involvement in entrepreneurship. The national experts indicate to what extent these statements are valid in the context of their country/ region.

Conditions that may push youth toward entrepreneurship are indicated by the following six statements:

- In my country, youth do not have easy access to primary and secondary education.
- In my country, most of the youth have no option other than to find work.
- In my country, youth are pushed into business activity out of necessity.
- In my country, families expect youth to contribute to the family's finance.
- In my country, the youth involved in business activity are more likely to be self-employed than an employee (work for someone else).
- In my country, self-employed youth learn to develop their business activities largely through their own experience and relationships.

Conditions that may pull youth toward entrepreneurship are indicated by the following five statements:

- In my country, there are many opportunities to develop "micro-business" for youth.
- In my country, governmental programs effectively train and support youth entrepreneurs.
- In my country, there is an adequate system of business incubators that can be accessed by young adults.
- In my country, financers fund young adults' business initiatives.
- In my country, micro-credit facilities for young adults to start a business are efficient.



**Figure 2.17:** NES perceptions of factors pushing or pulling youth towards entrepreneurship, GEM, 2012

Each statement was assessed on a scale from 1 for completely false through to 5 for completely true, and averaged for each country as a measure of the quality of that specific condition (the statement 'youth have easy access to primary and secondary education' was reversed in direction of measure). These measurements were made in 46 countries (each shown by its acronym in Figure 2.17). The six conditions that may push youth and the five conditions that may pull youth were identified as the two major factors in an exploratory factor analysis of the measured conditions of youth in entrepreneurship, which also yielded factor scores. Each country has a score on the push factor, indicating how much the country pushes youth toward entrepreneurship. Each country also has a score on the pull factor, representing the extent to which youth in the country is pulled toward entrepreneurship.

Figure 2.17 reveals how countries differ in their institutional framework conditions for youth involvement in entrepreneurship. The countries are plotted according to their push factor (vertical axis) and pull factor (horizontal axis). Algeria (DZ in the upper right corner), for example, strongly pushes and strongly pulls its youth toward entrepreneurship. Iran (IR in the lower left corner) neither pushes nor pulls its youth. South Africa and El Salvador (ZA and SV in the upper left corner) strongly push but weakly pull their youth. Lithuania, Estonia, France and Switzerland (LT, EE, FR and SW in the lower right corner) strongly pull but weakly push their youth toward entrepreneurship. Research is needed to further clarify the effects of these institutional conditions upon the entrepreneurial behaviour of youth around the world.

**The GEM model acknowledges that particular environmental factors (social, political and economic) are influential in creating unique business and entrepreneurial contexts.**

# YOUNG ENTREPRENEURS' STORIES



# **II RATNA YANTI KOSASIH (INDONESIA):**

## **PT BUMIBRAJA NUSANTARA**

**Ii Ratna Yanti Kosasih (Ratna) is a 32-year-old Indonesian technopreneur who decided to leave her career at an international oil service company to follow her heart to be an entrepreneur.** Together with her husband and his college friend, she founded a company named PT Bumibraja Nusantara. Based in Bandung, the company provides mini boilers for small and medium businesses. She believes that everyone can be an entrepreneur, as long as they are focused and ready for challenges, because there are so many business opportunities in Indonesia.

Ratna initially acted as an angel investor for her husband, supporting him in the research and development phase of creating a mini reverse-combustion boiler. In 2013 Ratna and her husband, Nafi, founded a company to sell custom-made mini boilers. The boiler's low price and its efficiency (saving customers almost 80% of their fuel costs) make it more affordable for small businesses. Currently, the company has sold more than 60 high quality yet low cost boilers to small business in tofu, chips and even small garment industries.

Growing up in a non-entrepreneur family, Ratna was inspired to be an entrepreneur by her husband who has an entrepreneur father. As the business direction they have chosen helps to improve the efficiency and productivity of small businesses, Ratna gains great life satisfaction from her work. "Small business owners have such limited knowledge about technology," she says. "It feels good knowing that our customers could get their payback within three months and start saving even more money through using our product." Ratna adds, "As Indonesia has so many SMEs [more than 50 million] which contribute significantly to employment, the market for our boiler is huge."

In 2014, PT Bumibraja Nusantara received a grant from Yayasan INOTEK to scale-up their business. In 2015, Ratna and Nafi were the winners of the Mandiri Young Technopreneur trophy and also received an award from the President as innovative technopreneurs. Ratna says that their journey has been full of challenges as they need investment to produce the boiler. "SMEs have limited money and cannot pay upfront so we need to raise money for production and only receive payment from the buyer on delivery." Her first attempt to raise money was through crowdfunding from college friends and ex-colleagues to produce ten boilers. Another challenge is that it is not easy to convince customers about the benefit of the boiler, as some of them do not understand the function of the boiler. Ratna is grateful for the support she received from various organisations. When she submitted a funding proposal to Yayasan INOTEK, she was not sure that she would get the capital. "I just tried, and I did not realise that the benefits would be more than I expected. I did not only receive funding but, which is more precious, the network," she says.

Being a young, new technopreneur, Ratna says that focus is the key to success. "Once I decided to resign from my prestigious employment, I knew there was no way back. My husband said: 'Now, we do not have any backup parachute. We need to jump and rely on our only parachute to survive'. I accepted that which means I used all my creativity, abilities and previous professional experience to make our business grow."

Ratna's final words of advice: "Don't be afraid to start a business. Being innovative is not difficult. It is not about something complex, it should be simple and it should be effective and useful for society. Hence, we need to know what they need. We need to explore and observe what is lacking in our customers' expectations."



**Don't be afraid to start a business. Being innovative is not difficult. It is not about something complex, it should be simple and it should be effective and useful for society. Hence, we need to know what they need. We need to explore and observe what is lacking in our customers' expectations.**

*Ratna and Nafi*



## DAVID LLOYD (CANADA): FREDSENSE TECHNOLOGIES

David Lloyd is co-CEO and a founder of FREDsense Technologies. He has a Master's degree in Biochemistry (2012) from the University of Calgary, with a focus on cancer biology, as well as informal training in Synthetic Biology. He was nominated as one of the 'Top 40 Under 40' by Avenue Magazine. FREDsense Technologies is a technology start-up based in Calgary, Alberta, which develops biosensors to detect toxins in water. The uniqueness of their technology is that it is fast, portable, simple to use and detects multiple toxins simultaneously. Compared with traditional testing that requires skilled operators and expensive equipment, it is much cheaper and quicker.

David initially had no real plan to follow an entrepreneurial career path. "I just fell into it by accident," he says. "The University of Calgary has a very interdisciplinary approach and I had the opportunity to be involved with many team projects. I formed a team with six like-minded people and we competed in the iGEM (International Genetically Engineered Machines) competition in Massachusetts, where we were fortunate to win over ten awards, more than any other team had since the competition started in 2003. After iGEM most of the projects die, but we decided to keep ours going." David was encouraged by the open innovation environment at his university. "Being part of iGEM I was surrounded by people willing to take crazy risks, so it was a no-brainer. We had already been doing it," he adds.

David acknowledges that they faced many challenges as young entrepreneurs. "We had no idea what to do first," he says. "We had taken no business courses, and we just dived in head first." Their two main challenges were their knowledge base about how to start a company, and raising funds. Doing Biotechnology research is very expensive and they had to learn how to scrounge equipment and get equipment at government auctions. The largest obstacle was negotiating with the University for use of the IP. They were fortunate in that they were able to get support from a number of organisations in Alberta. "We got a lot of help from the AITF Geekstarter programme – our start-up would not have been possible without that," he adds. "We also got a lot of help from NSERC, IRAP, the AITF Bootstrap program and ACAMP. The Canadian Mining Innovation Council is a critical part of the ecosystem and very helpful. We also got help from the Genomics Entrepreneurship Centre at UBC."

David's advice to young people who would like to follow an entrepreneurial path: "Jump in head first. Surround yourself with people who have done it before. Soak up as much information as you can. Get mentors. Expose yourself to the community."

**Jump in head first.  
Surround yourself with  
people who have done  
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much information as  
you can. Get mentors.  
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community.**

# LAURA FABIOLA SUAREZ HERNANDEZ (MEXICO):

ENAAY TECNOLOGIAS SA DE CV; SUNU INC.

Fabiola has a degree in creation and enterprise development from ITESM, and is co-founder of Enaay Tecnologías SA de CV (a Mexican enterprise offering R&D services) as well as of Sunu Inc. which is a start-up focused on creating wearable solutions in the mobility area. Entrepreneurship was not a career path she originally considered, but when she realised that she wanted a career that allowed her to learn and do a variety of different things, entrepreneurship fitted the bill. “The idea of freedom of action was one of the things I loved most about it, because I did not have to follow a written path or work for someone,” she says. “I just had to learn, put into action and follow my passion.” She was fortunate in that her parents were highly supportive of her decision. “In spite of criticism from some of my relatives, they let me grow in this area and follow my intuition.”

The biggest obstacle she faced as a young entrepreneur was inexperience. “No matter what they taught you in school it actually is very different out there,” she says. She dealt with this challenge by surrounding herself with people with expertise, who mentored her. The second obstacle, but no less important, was credibility. “People think that just because you are young you do not know what you are doing, that you are lacking in skills.”

Mexico has a number of different organisations that support young entrepreneurs by granting funds for different purposes such as IP, mentoring, raw material or machinery. She received funds for IP from Coecytjal, for licences from INADEM, while Reto Zapopan provided her with loans for licences, raw material, prototyping and marketing, as well as mentoring support.

Her advice to potential young entrepreneurs: “Follow your passion and turn it into your start-up because it is a long path and you will need perseverance and will. If your idea is not strong enough to keep you going forward, then look for something else.”



**Follow your passion and turn it into your start-up because it is a long path and you will need perseverance and will. If your idea is not strong enough to keep you going forward, then look for something else.**

# CHAPTER 3 RECOMMENDATIONS FOR POLICY AND PRACTICE

The long-term effects of the U.S financial crisis and ensuing global downturn continue to be felt worldwide. The World Economic Forum, in its *Outlook on the Global Agenda 2015*, identifies persistent jobless growth as the second biggest challenge that will have to be addressed in the near future. In particular it is the new entrants into the labour market – the youth – who are bearing the brunt of the sluggish global economy. Youth unemployment and under-employment have become key concerns for both the developed and developing world. The scale of youth unemployment is staggering, with young people three times more likely than adults to be unemployed, while even amongst the employed youth, many have only informal, temporary, or unpaid family jobs. It is clear, then, that the challenge facing policy makers, business and civil society leaders is to find ways of fostering innovative and effective entrepreneurial activity among the youth in order integrate them into the labour market, as well as harness their potential to contribute in a meaningful way to sustainable economic development in their regions. This report has highlighted a number of key areas that have the potential to stimulate and support entrepreneurial activity among the youth.

**Practical and interactive business and entrepreneurship training programmes at secondary school are an important factor in encouraging youth entrepreneurship.**

## EDUCATION AND TRAINING

Creating a critical mass of young entrepreneurs requires a long-term investment in human capital development. In general, there has been a shift towards higher levels of education among the youth – however, there are still wide regional disparities in access to basic education. It is imperative that governments in these regions address the structural problems that continue to deprive young people of a good educational foundation. In addition, it is critical to address the quality and relevance of curricula. Mismatches between the skills required by industry/ the economy and those provided by schools and universities are prevalent. Educational facilities need to improve their capacity to provide the education and job skills that will be needed to develop greater productivity and technology-intensive industries. Improving the quality of skills pertinent to modern economies – such as maths, science and IT education - is non-negotiable to allow young people to exploit opportunities generated by technological advances and the digital economy, as well as to participate in sophisticated business sectors such as business services. It is also important to expand interventions that deal with key skills gaps e.g. apprenticeships, technical and vocational education facilities. Vocational training schemes tied to enterprise, for example, have helped Germany to lower its youth unemployment figures.

This report has confirmed a positive link between training in starting a business and entrepreneurial behaviour. Practical and interactive business and entrepreneurship training programmes at secondary school are an important factor in encouraging effective youth entrepreneurship. It is imperative however, that teachers in these courses are well-trained. Formal education systems often have the tendency to foster the belief that higher education is the sole pathway to professional advancement and success, creating the implication that vocational expertise is distinctly inferior to academic knowledge. In the current job climate, this is a short-sighted approach. Schools need to actively promote entrepreneurship as a career path – inviting successful young entrepreneurs to participate in the educational programme is a way to introduce young people to positive entrepreneurial role models.

Many young people choose an entrepreneurial direction after school, it is thus important to increase investment in training programmes in entrepreneurship outside of the traditional higher education institutions. Governments should identify and replicate privately-sponsored models in their regions that are working. Programmes must be regularly evaluated and continually improved to take into account changes in the national conditions as well as research in entrepreneurial development.

## MENTORSHIP AND BUSINESS SUPPORT

Many young people, especially young women, lack contact with successful entrepreneurial role models whom they can turn to for support and business advice. The youth often do not have work-place experience of their own to draw on, and young entrepreneurs in particular often struggle to build up appropriate professional networks. It is important to provide mentorship programmes for young entrepreneurs where the mentors have practical personal experience of running a business. Schemes such as in-service education and the linking of entrepreneurial training to enterprise development could equip young people with the skills and experience to operate their own businesses successfully. This could have positive effects in terms of profitability, survival of enterprises and long-term employment creation.

Experiential incubators that are easily accessible to young potential entrepreneurs, where they can develop new business opportunities as well as reinforce skills already obtained, provide youth with a supportive space in which to nurture their entrepreneurial skills. Such

incubators have been shown to foster innovation and encourage movement into sectors with higher profit potential. Clusters/ business hubs should be created, including entrepreneurs as well as commercial and professional support structures, so that start-ups can be assisted in a more protected and supportive environment. This is particularly important in rural and semi-rural areas where poor infrastructure (physical and commercial) is a major barrier to youth businesses.

## FINANCE

Entrepreneurs at all stages of the entrepreneurial pipeline find it problematic to obtain funding, especially those intending to start a business and those in the early stages (nascent and new firms). Particularly in the case of youth, the entrepreneurs in question do not have the required track record nor have they been able to acquire the required collateral demanded by the financial institutions. This report shows that close to three-quarters of the financing for youth businesses comes from personal sources (own savings, family and friends). Therefore, there is a need for policies that allow access to a greater diversity of funding options for youth businesses. New funding models need to be introduced,

possibly backed by government, which enable young entrepreneurs to obtain seed capital without the stringent requirements required by commercial banks with respect to collateral. Commercial banks are often not best placed to assess the risks associated with youth enterprises. A different approach to the management of funding should be encouraged, with attention given to micro-funding models, coupled with training/mentoring through the first year of operation.

This could also be used to improve access to funding for youth businesses, where small loans coupled with technical support are often needed. Incentives should be introduced for financial institutions to increase their lending to small, youth-owned enterprises as part of their corporate social responsibility policies. The cost of running and growing a business is often difficult for under-resourced youth entrepreneurs, which has a negative impact on the sustainability of their enterprises. Reducing or eliminating, for a given period, the tax burden on young entrepreneurs is a potential solution. A significant contribution to formalising small enterprises would be to provide them with affordable space in which to carry on their activities, for example by reimbursing stall-rental fees.



## IT INFRASTRUCTURE

An efficient IT infrastructure reduces cost of business, increases market reach, improves access to information and allows for innovation. Many youth businesses are inhibited by high costs, forcing them to trade from home and rely on family and friends as customers. Improving IT infrastructure would allow for a reduction in the cost of technology – this, as well as the potential to reach new markets, could have a significant impact on the sustainability of youth businesses. This report showed that with the exception of the ECC region and, to some extent, the MENA region, the internet as a trading space is underutilised by the youth. Internet capacity within many of the regions needs to be enhanced to afford the youth the opportunity to develop and expand their businesses beyond localised markets. Apart from encouraging and supporting the extension of ICT infrastructures throughout the country, policy makers could promote training in the business use of ICT generally as a medium for sales, market and product research, innovation and seeking sources of finance. Regulations covering the provision of internet and ICT services could also be streamlined for young business customers. Access to new

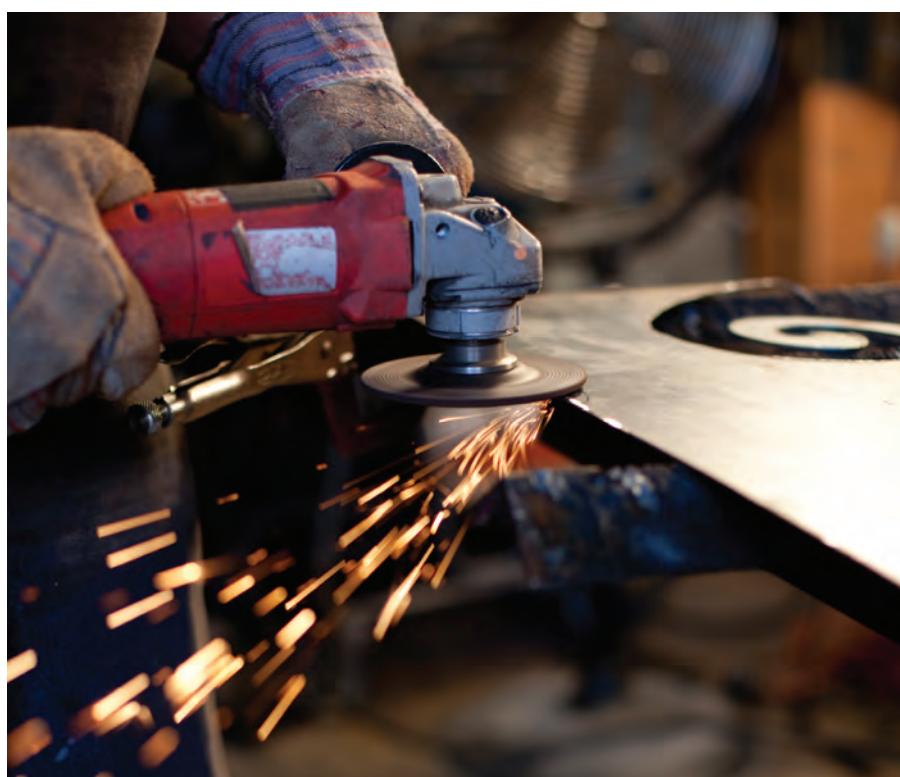
**It is clear, then, that the challenge facing policy makers, business and civil society leaders is to find ways of fostering innovative and effective entrepreneurial activity among the youth in order integrate them into the labour market, as well as harness their potential to contribute in a meaningful way to sustainable economic development in their regions.**

information technologies needs to be brought within reach of younger people. This implies the introduction of pricing mechanisms adapted to young people's means. IT infrastructure also has a part to play in terms of education. MOOCs (Massive Open Online Courses) and their technology could be used to deliver low-cost learning opportunities to developing countries such as India and Kazakhstan, and Africa's emerging economies where mobile phones are the primary form of communication (showing a 40-fold increase since 2000). Mobile technology makes education accessible to young learners in remote parts of the country as well as addresses concerns about the quality of educators, who can be provided with ongoing support through a range of online platforms. However in emerging economies, where many of these challenges play out, a data-driven approach may have to overcome numerous barriers, such as availability of broadband access, and even whether there is an affordable and consistent supply of electricity.

## HIGH-GROWTH ENTREPRENEURS

Job creation is an important developmental focus and policy makers recognise the contribution of the SME sector in this respect. Many of the youth businesses surveyed in this report show moderate to high growth expectations. Given that young entrepreneurs are more likely to employ other young individuals, it is important that these expectations are supported through appropriate policy interventions. These interventions may well be more resource intensive, and may demand a shift in support from generic support for all small businesses to focused support for high growth businesses.

The 2007 GEM Global Report on High-Growth Entrepreneurship emphasises that small businesses and high-growth businesses have different finance requirements, with small businesses needing better access to grants, subsidies and soft loans, while policies that promote R&D loans and innovation grants, business angel finance and venture finance would be more beneficial in promoting high-growth entrepreneurs. Governments could, for example, provide tax breaks for investors to fund young entrepreneurs who have the potential to develop high-growth businesses.



# APPENDIX

Countries surveyed in National Expert Survey 2012 (including Youth Framework Conditions), or Adult Population Survey 2012-14.

Acronym	Countries, in alphabetic order	NES 2012	APS 2012	APS 2013	APS 2014
<b>Middle East and North Africa</b>					
DZ	Algeria	X	X	X	
EG	Egypt	X	X		
IR	Iran	X	X	X	X
KW	Kuwait				X
LY	Libya			X	
PK	Pakistan	X	X		
PS	Palestine	X	X		
QA	Qatar				X
TN	Tunisia	X	X		
TR	Turkey	X	X	X	X
<b>Sub-Saharan Africa</b>					
AO	Angola	X	X	X	X
BW	Botswana	X	X	X	X
BF	Burkina Faso				X
CM	Cameroon				X
ET	Ethiopia	X	X		
GH	Ghana	X	X	X	
MW	Malawi	X	X	X	
NA	Namibia	X	X	X	
NG	Nigeria	X	X	X	
ZA	South Africa	X	X	X	X
UG	Uganda		X	X	X
ZM	Zambia	X	X	X	
<b>South and East Asia</b>					
CN	China	X	X	X	X
IN	India	X	X	X	X
ID	Indonesia			X	X
JP	Japan		X	X	X
KZ	Kazakhstan				X
KR	Korea	X	X	X	
MY	Malaysia		X	X	X
PH	Philippines			X	X
SG	Singapore		X	X	X
TW	Taiwan		X	X	X
TH	Thailand	X	X	X	X
VN	Vietnam			X	X
<b>Latin American and Caribbean</b>					
AR	Argentina	X	X	X	X
BB	Barbados	X	X	X	X
BZ	Belize				X
BO	Bolivia				X
BR	Brazil		X	X	X
CL	Chile		X	X	X
CO	Colombia	X	X	X	X
CR	Costa Rica	X	X		X
EC	Ecuador		X	X	X

Acronym	Countries, in alphabetic order	NES 2012	APS 2012	APS 2013	APS 2014
GT	Guatemala			X	X
JM	Jamaica	X	X	X	X
MX	Mexico	X	X	X	X
PA	Panama	X	X	X	X
PE	Peru	X	X	X	X
PR	Puerto Rico			X	X
SV	El Salvador	X	X		X
SR	Suriname			X	X
TT	Trinidad and Tobago	X	X	X	X
UY	Uruguay		X	X	X
<b>European culture countries</b>					
AU	Australia				X
AT	Austria		X		X
BA	Bosnia and Herzegovina	X	X	X	X
BE	Belgium		X	X	X
CA	Canada			X	X
HR	Croatia	X	X	X	X
CZ	Czech Republic			X	
DK	Denmark		X		X
EE	Estonia	X	X	X	X
FI	Finland		X	X	X
FR	France	X	X	X	X
GE	Georgia				X
DE	Germany		X	X	X
GR	Greece	X	X	X	X
HU	Hungary		X	X	X
IE	Ireland	X	X	X	X
IL	Israel		X	X	
IT	Italy		X	X	X
XK	Kosovo				X
LV	Latvia		X	X	
LT	Lithuania	X	X	X	X
LU	Luxemburg			X	X
MK	Macedonia		X	X	
NL	Netherlands		X	X	X
NO	Norway	X	X	X	X
PL	Poland	X	X	X	X
PT	Portugal		X	X	X
RO	Romania	X	X	X	X
RU	Russia		X	X	X
SK	Slovakia	X	X	X	X
SI	Slovenia	X	X	X	X
ES	Spain	X	X	X	X
SE	Sweden		X	X	X
SW	Switzerland	X	X	X	X
UK	United Kingdom	X	X	X	X
US	United States	X	X	X	X
<b>Number of countries surveyed</b>		46	89		

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