

SUMMARY

Overview	<ul style="list-style-type: none"> ➤ Narrow definition: the capacity to identify opportunities in the market and create new business ➤ Broad definition: the attitudes and behaviours associated with creativity, innovation and risk-taking in general applicable within all aspects of personal and working life. ➤ Vital to enable innovation, competitiveness and successful economic growth ➤ Few statistics as yet capture the broader definition of entrepreneurship skills
Demand	<ul style="list-style-type: none"> ➤ In 2009, some 2.5 million new enterprises were established across 25 Member States employing 1.8 million people ➤ New businesses accounted for one in ten of the active enterprises in the EU in 2009 (10.7%) although the birth rate across Member States varied significantly as did the growth in the net business population ➤ New firms are responsible for the majority of new jobs created
Supply	<ul style="list-style-type: none"> ➤ In 2011, 30.7 million people were self-employed among the EU-27 working age population (15-64), an increase of 6% since 2002 ➤ A typical entrepreneur in Europe is male and educated to upper secondary level ➤ In global comparisons, Europeans are below the global average in terms of seeing good opportunities to start a business and possessing the skills to do so ➤ Europeans are above global average for 'fear of failure' as a disincentive for self-employment, suggesting a lower propensity to take risks
Mismatches	<ul style="list-style-type: none"> ➤ The key entrepreneurship skills gaps include: <ul style="list-style-type: none"> ~ The specific skills needed to run a business - developing and implementing a business plan or accounting ~ Transversal or strategic skills associated with entrepreneurship - the ability to take decisions based on a balanced assessment of risk and information analysis; the ability to recognise and implement opportunities for business growth, follow market developments and manage their products and service offer ➤ The creation of the broader set of entrepreneurship skills starts in the initial education system and teachers are important catalysts in the development of entrepreneurship attitudes and behaviours ➤ The concept of entrepreneurship education is relatively new and an uncommon topic in teachers' education in many Member States. The European Commission is facilitating the identification and dissemination of innovative methods and good practice in entrepreneurship education in teachers' initial and in-service training

This report does not necessarily reflect the position or opinion of the European Commission. The Analytical Highlight has been developed from a combination of European, international and national sources and provides illustrative examples of available skills information. Visit the EU Skills Panorama at: <http://euskillspace.ec.europa.eu>

1. Defining and recognising the importance of entrepreneurship skills

The contribution of entrepreneurship to the EU economy has been acknowledged at EU level in the Lisbon Strategy (2000-2010) as well as in the recent Europe 2020 Strategy.¹

1.1. Entrepreneurship: vital to promoting innovation, competitiveness and economic growth

Entrepreneurship is seen as a vital element in societies for promoting innovation, competitiveness and economic growth.² However, while the need to foster an entrepreneurial spirit more effectively has been acknowledged across Europe – in order to create new firms and to promote business growth – entrepreneurship skills have been identified also as providing benefits to society beyond their direct application to business activity. Entrepreneurship skills are deemed as vital regardless of whether a person envisions their future as being an employee or being self-employed³ as they can be used in all aspects of personal and working life.⁴

A sense of initiative and entrepreneurship is defined by the European Parliament and the Council (2006) as ‘an individual’s ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports individuals, not only in their everyday lives at home and in society, but also in the workplace in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance’.⁵

Entrepreneurship is also described as an attribute that goes further than required for business activity, to include an ‘active and reactive spirit’⁶ and a ‘mind-set that supports everyone in day-to-day life at home and in society, and provides a foundation for entrepreneurs establishing a social or commercial activity’.⁷ These broad based definitions of entrepreneurship are further emphasised by its inclusion as one of the eight core competences that are deemed vital for individuals to succeed in the knowledge based economy. It is the ‘the ability to turn ideas into action... (involving) creativity, innovation and risk-taking... the individual is aware of

¹ European Commission (2010).

² European Commission (2012).

³ Gävleborg (2003).

⁴ European Charter for Small Enterprises (2001).

⁵ Ibid.

⁶ Council of the European Union (2001)

⁷ Eurydice (2012).

the context of his/her work and is able to seize opportunities that arise'⁸, with other definitions also including 'a spirit of initiative'.⁹

Key entrepreneurship competences include:

- Economic, legal and managerial knowledge of running a business, including knowledge of the working of the economy
- Skills: planning, organisation, analysis, communication, negotiation, working individually and in teams, risk assessment, capacity to identify opportunities for personal and professional/business activities
- Attitudes: pro-activeness, independence and motivation and determination to meet objectives.¹⁰

1.2. Proxy indicators in the absence of measures to assess 'intra-preneurship'

Direct measures or indicators of the more broadly defined entrepreneurship skills in the population and workforce are limited. There are no European measures of employed individuals' 'intra-preneurship', the application of entrepreneurial skills in the workplace, or measures of how entrepreneurship skills are manifest in citizenship or in personal fulfilment. Consequently, this paper is unable to set out data on the current state of play of skills supply and demand for '*entrepreneurship skills*'. Necessity has required the use of 'proxy' indicators, mostly associated with a narrower traditional definition of entrepreneurship, whilst recognising that they do not consider the totality of the broad definition of entrepreneurship, they do provide some pointers towards creativity, innovation and propensity to take risks amongst the general populace.

Entrepreneurship is strategically important in order to promote new enterprise start-ups, develop existing enterprises and to provide a sense of initiative amongst society. In 2009, 2.5 million new enterprises were established across 25 Member States¹¹ employing 1.8 million people. New businesses accounted for one in ten of the active enterprises in the EU in this period (10.7%) although the birth rate¹² across Member States varied significantly from 3% in Cyprus to 17.6% in Bulgaria (see Figure 1). New firms (i.e. those under five years old) are responsible for the majority of new jobs created,¹³ even though 15% of new jobs created no longer exist after five years.

⁸ European Commission (2006).

⁹ European Commission (2004).

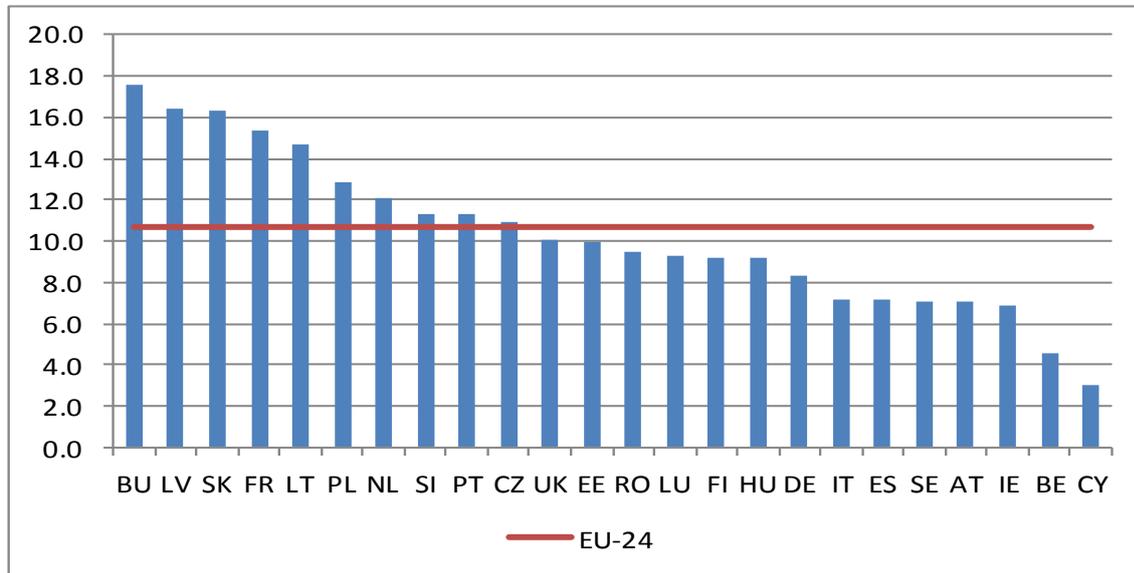
¹⁰ GHK (2011b).

¹¹ Data was unavailable for Ireland and Poland.

¹² The birth rate considers the number of enterprise births in the reference period divided by the number of enterprises active in the reference period.

¹³ EIM (2011).

Figure 1 - Enterprise birth rate, EU and Member States, 2009



Source: Eurostat, table (*bd_9a_1_form_r2*). EU average equates to average of enterprise birth rates included in data (therefore excluding DK, EL and MT).

Such statistics reflect the importance of enterprise creation as a driver of economic growth. However, entrepreneurship can be understood by more than just a country's enterprise birth rate. Entrepreneurship is a '*social phenomenon which has a social and cultural dimension*'.¹⁴ The increasing importance and recognition of entrepreneurship at the societal level is visible through the existence of entrepreneurship strategies that integrate entrepreneurship into the school system in countries such as Belgium, Finland and Sweden. Similarly, the Danish government is currently developing its first innovation strategy within which innovation and entrepreneurial skills are being recognised as crucial for economic growth and competitive capacity.¹⁵

Measuring creativity at the individual level is difficult. Creativity can be considered as the ability of an individual to 'adapt to the constantly changing environment, reformulate problems, and take risks to try new approaches to problems'.¹⁶ Villalba suggests that it can be defined by traits which include 'autonomy, flexibility, preference for complexity, openness to experience, sensitivity, playfulness, tolerance of ambiguity, risk-taking and risk tolerance, intrinsic motivation, self-efficacy and wide

¹⁴ Buligescu, B., Hollanders, H. and Saebi, T. (2012).

¹⁵ For more information see <http://fivu.dk/nyheder/temaer/2012/innovationsstrategies>

¹⁶ Villalba (2009).

interest and curiosity'.¹⁷ Furthermore, creativity assumes that something has been produced and that it is something original – with different levels of 'originality', varying from originality to a person, the peer group, geographical locality, firm or market etc. This is reiterated by the National Endowment's for Science, Technology and the Arts (NESTA) definition of innovation as 'change associated with the creation and adoption of ideas that are new-to-world, new-to-nation/region, new-to-industry or new-to-firm'.¹⁸

The following presents information on entrepreneurship across Europe and the Member States. It provides the available data which, while it may not consider the full dimensions of entrepreneurship and is reliant on proxy measures, it is an indication of the current state of play.

2. Current and future supply of entrepreneurship skills

2.1. The characteristics of Europe's entrepreneurs

In 2011, 30.7 million of the EU-27 working age population (15-64) were self employed - an increase of 6% since 2002.¹⁹ However, self employment varied by Member State; with a decrease in self-employment of 49% in Lithuania compared to an increase of 112% in Slovakia.²⁰ Some 9 million self employed people in the working age population were employing others (EU-27, 2011).²¹

Entrepreneurs in Europe are a diverse group of people from various backgrounds.²² However, statistical analysis shows that a 'typical' entrepreneur in Europe is male and educated to upper secondary level.²³ The gender gap is very clear. Eurostat data for 2009 indicates that 70% of EU entrepreneurs were male. However, country level trends differ significantly. In Portugal, 40% of entrepreneurs are female, the highest proportion across Europe. There are also high levels of female entrepreneurs in Lithuania (38%) and Latvia (37%). Conversely, in Ireland and Malta female entrepreneurs accounted for 19% and 17% respectively of all entrepreneurs. Interestingly, the proportion of female entrepreneurs has remained relatively constant since 1999 in the EU-27.

A growing share of European entrepreneurs is highly educated; just over one quarter (28%) of European entrepreneurs are educated at tertiary level - an increase of 32%

¹⁷ Villalba (2009).

¹⁸ Clayton et al (2009).

¹⁹ Eurostat, table (*lfsa_esgaed*). see also OECD (2009).

²⁰ Eurostat, table (*lfsa_esgaed*).

²¹ Ibid.

²² Volkmann et al. (2009).

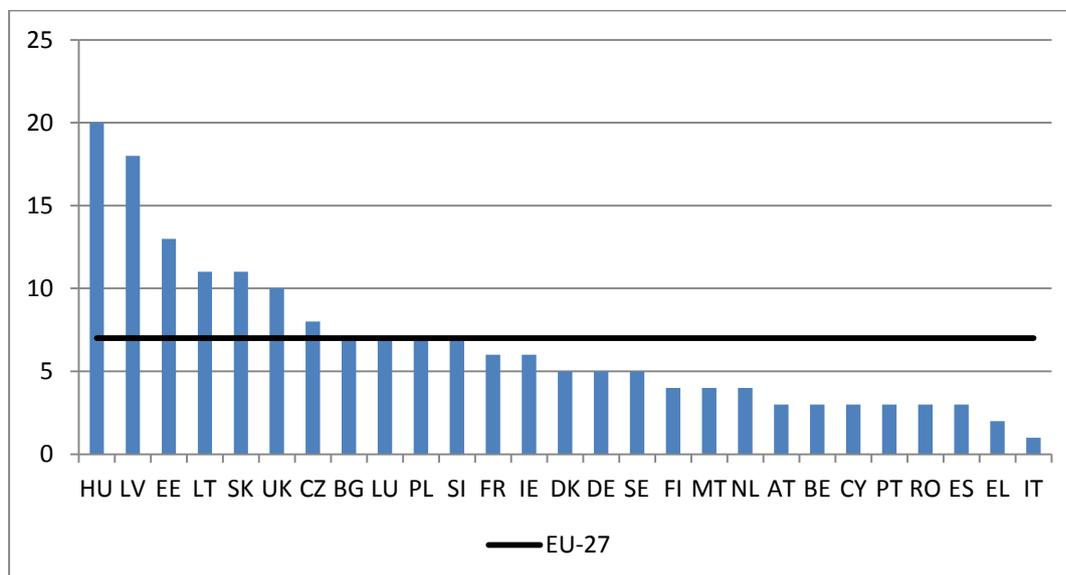
²³ Cedefop (2011).

since 2000. Entrepreneurship is also common among many migrant communities. In certain EU countries, migrants demonstrate notably higher rates of self-employment than the native population.²⁴

2.2 Perceptions and attitudes to self-employment

Perceptions and attitudes to self-employment vary across the Member States. Two-thirds of EU citizens who were not currently self-employed at the time of the survey felt that becoming self-employed in the next five years was unrealistic (see Figure 2).²⁵ Further analysis found that this was also due to their lack of finance (24% in EU-27) or the economic climate (12%). However there was also a perception among a minority of respondents that they did not have the necessary skills (7%); they did not have a business idea (8%) or the risk of failure was too great (6%). The share of respondents stating they did not have the necessary skills for self-employment however varied from 20% in Hungary and 18% in Latvia to just 1% and 2% respectively in Italy and Greece.

Figure 2 - Share of respondents preferring employment over self-employment because they felt they lacked the skills for self-employment, 2009



Source: Eurobarometer No. 283.

National level evidence highlights the following positive incidences amongst young people:

²⁴ Cedefop (2011).

²⁵ European Commission (2009).

- In **Denmark**, a survey of young people engaged in enterprise education in 2011 found that 9% of them had received education related to starting their own business with an additional 26% receiving training in entrepreneurial methods.²⁶ Furthermore, almost all respondents (95%) were in favour of entrepreneurship, and 2.4% were already in the process of starting their own company/business, with a further 53% expressing a desire to do so.
- In **Sweden**, the Entrepreneurship Barometer 2008 shows that the Swedish education system has a significant role in informing and encouraging children and young adults to become entrepreneurs. In particular, upper secondary schools are viewed as providing young adults with information on entrepreneurship and self-employment. Results in 2008 illustrate that 75% of young adults have a positive attitude towards entrepreneurship and self-employment.²⁷ Four out of ten would rather be self-employed and run an enterprise than be employed.
- In the **UK**, the Department for Business, Innovation and Skills (BIS) regularly monitors a set of key indicators related to entrepreneurship. The skills strategy in England includes an ambition to encourage more widespread teaching of entrepreneurial skills.²⁸ This includes providing a framework for the further education sector to do more to support enterprise among learners (building on the previous development of a National Enterprise Academy).

2.3. Global entrepreneurship trends: Europeans perceive opportunities though a fear of failure holds back business start-ups

The ability to take risks is a key component of entrepreneurial spirit. The fear of a perceived failing and therefore an individual being put-off from starting a business, could be considered as a proxy for a lack of willingness to take risks. On average in the 20 EU Member States²⁹, 37.1% of the sample of working age population surveyed who had perceived opportunities to start a business felt fear of failure would prevent them from doing so. Country level trends vary, with fear of failure more prominent among individuals in Poland (43%), Germany (42%) and Latvia (41%) – while it was much lower in Slovenia (31%), Finland (32%) and Slovakia (32%). When compared to other parts of the world, individuals in Europe are considered to be more fearful of failure – particularly compared with respondents from the US, Japan and China.

²⁶ The Foundation for Entrepreneurship - Young Enterprise Denmark (2011).

²⁷ The Swedish Agency for Economic and Regional Growth (Nutek) (2008).

²⁸ BIS (2010).

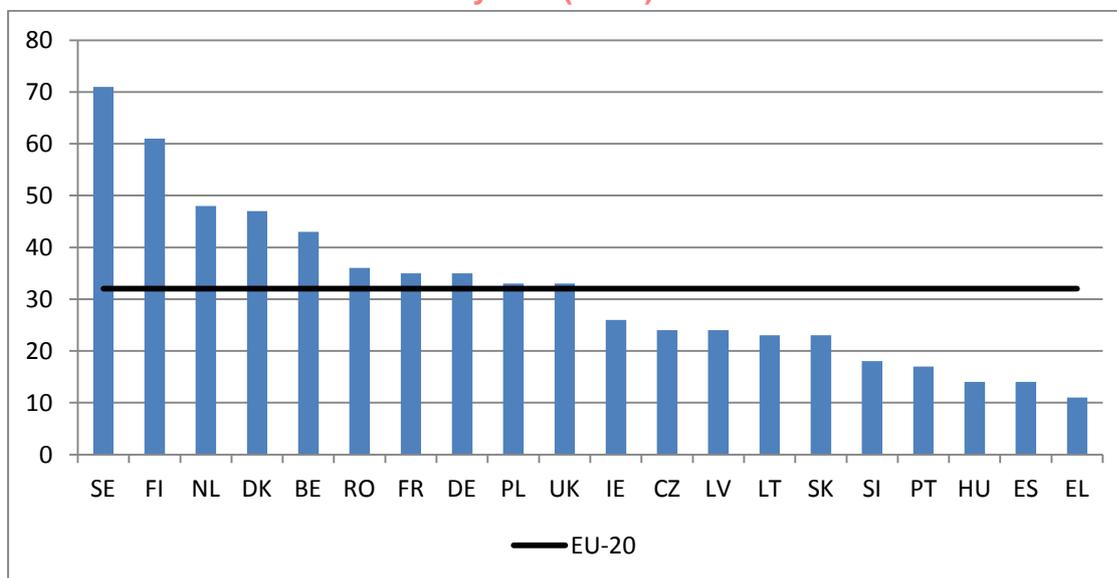
²⁹ In the Global Entrepreneurship Monitor, participating Member States include: CZ, DE, DK, ES, FI, FR, EL, HU, IE, LV, LT, NL, NO, PL, PT, RO, SK, SI, SE and the UK as well as CH, HR.

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On average 32% of Europe respondents saw good opportunities to start a firm – which is below the global average of 39%. The country level trends vary significantly. In 2011, in Sweden 71% of the 18-64 population felt there were opportunities for starting up a business, 40% felt they had the capabilities to start up a business, while 9% had intentions to start up a business in the next 3 years.³⁰ In Greece however, just 11% felt there were perceived opportunities to do business in their area, 50% felt they had capabilities to establish a business with 11% having entrepreneurial intentions.

Figure 3 - Share of respondents (18 -64) that see good opportunities to start a business in the area where they live (2011)

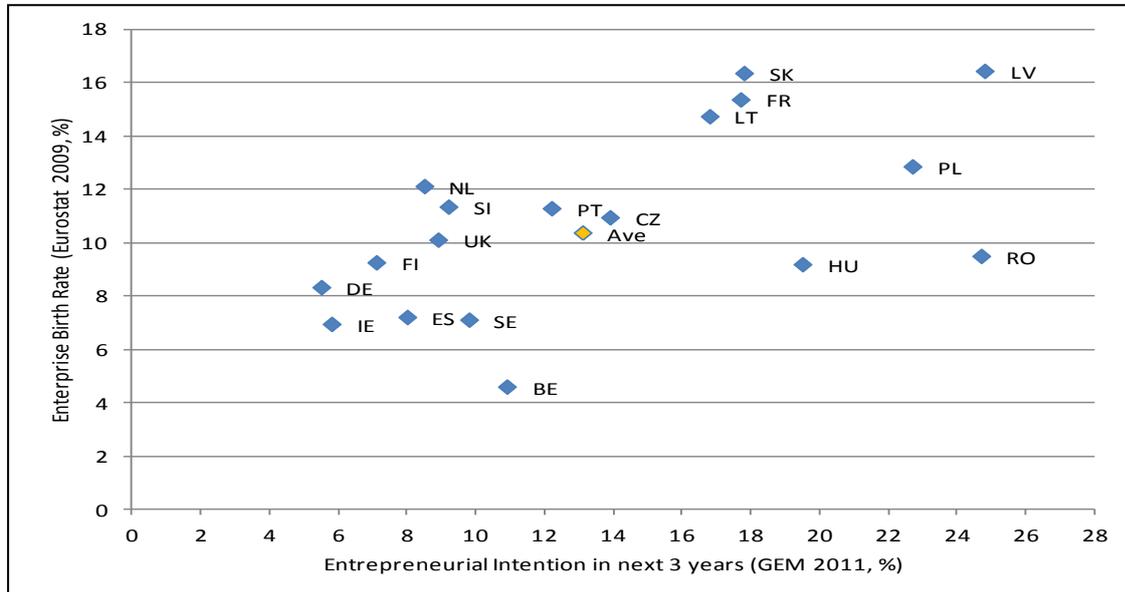


Source: GEM (2011).

When the rate of entrepreneurial intention is considered alongside the enterprise birth rate in certain Member States (see Figure 4), a positive relationship is evident. For instance, the Latvian enterprise birth rate is one of the highest while entrepreneurial intention is also considerably above average. In contrast, in Ireland both the enterprise birth rate and rate of entrepreneurial intention over the next 3 years are below average.

³⁰ GEM (2011).

Figure 4 - Relationship between entrepreneurial intentions and enterprise birth rate



Source: GEM (2011) and Eurostat, table (*bd_9a_l_form_r2*); Member States included where data was available for both variables.

In the absence of an indicator for innovativeness at the individual level, consideration of innovation at the level of the enterprise provides a rough proxy. On average, across the EU, 47% of enterprises have introduced new products in 2010.³¹ However, the extent of innovation varies by Member State from 30% in Estonia to 65% in Cyprus. When examining products new to the market, more than one third of firms (37%) have done so. This again varies significantly by Member State from 21% in Spain to over 50% in Slovenia and Sweden.

3. Skill mismatches

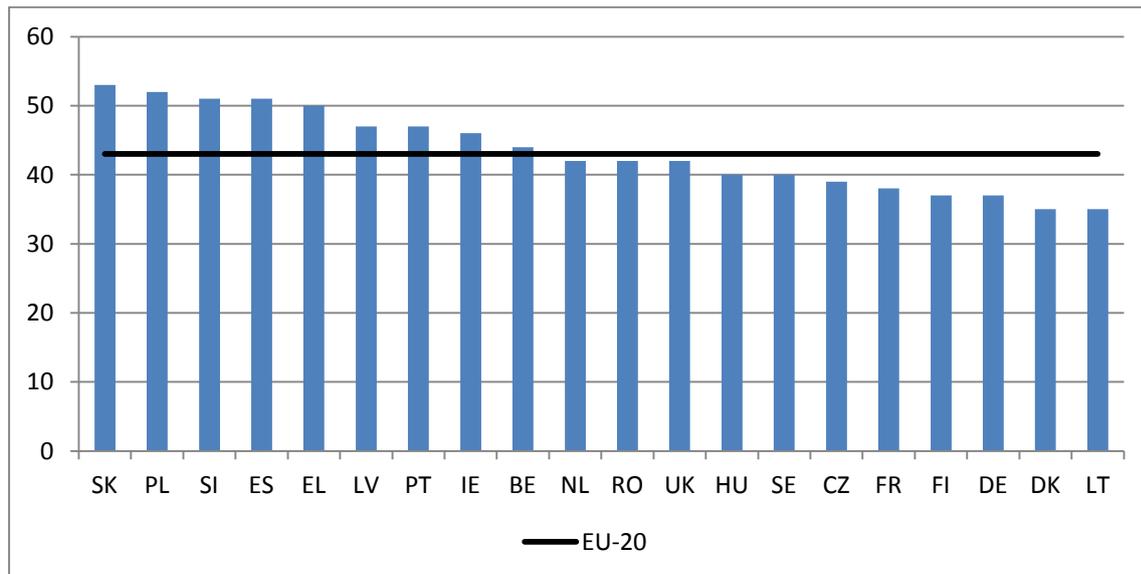
Entrepreneurship is viewed as a means to drive economic growth as individuals possessing entrepreneurial spirit are more likely to be innovative and creative thinkers, have a propensity to take risks and act on their own initiative (amongst others). The following explores skills mismatches (as far as possible) and how they might be addressed.

One manifestation of entrepreneurial skills is that individuals can establish new businesses which can provide new employment opportunities. Other manifestations include the application of such skills to grow existing businesses. Across the 20 EU Member States participating in the GEM survey, 43% of the working age population feel they have the required capabilities to start a business, including skills, knowledge and experience, slightly below the global average of 48% (see Figure 5). The

³¹ Data is available for 23 Member States.

perceived capability to start a business varies by Member State from 35% in Denmark and Lithuania to 53% in Slovakia. As stated earlier in this paper, fewer respondents saw good opportunities to start a firm (32% GEM EU 20 average).

Figure 5 - Share of respondents (18-64) that believe they have the required skills and knowledge to start a business (2011)



Source: GEM (2011).

While on average 7% of the Member State working age population did not seek self-employment due to a lack of skills – other issues were also identified as barriers to self employment: a lack of finance, the economic climate and a lack of a business idea.

Gaps in entrepreneurship skills appear to be multifaceted:

- Specific, technical business-running skills e.g. developing and implementing a business plan, accounting, budgeting;
- Transversal or strategic skills associated with entrepreneurship: an ability to take decisions based on balanced risk assessment and information analysis; recognising and implementing opportunities for business growth; following market developments and managing the products and services offer.³²

These skills gaps have been identified on a narrow basis – the most easily identifiable skills associated with new firm formation or self-employment. The more abstract but equally fundamental traits of entrepreneurship linked to innovation, creativity and initiative are more difficult to capture but which in many ways may be

³² OECD WPSMEE (2010).

just as, if not more, significant. Understanding the incidence of entrepreneurship skills, attitudes and behaviours and the extent to which there is a skills gap is severely hampered by a lack of comprehensive and consistent information that gets to the heart of measuring 'entrepreneurship' in the round. However, this need not hold back progress.

The acquisition of the knowledge, skills and attitudes of entrepreneurship can be encouraged in many ways (through leisure activities, participation in sport, family environment, etc.) but most particularly though through the context of education and training. Education and educators are fundamental catalysts for the development of entrepreneurship and its adoption across European society. Research has identified scope for further development in the education sector – in relation to understanding entrepreneurship, pedagogy and working methods and the assessment of outcomes³³ and so, the European Commission is currently working with experts, teachers and the educators of teachers to identify good practice and enable its wider dissemination.

A number of countries have developed entrepreneurship education strategies and there is an emerging body of knowledge about good and effective practice in learning and teaching. Ministries, institutions and inspirational teachers are working to integrate learning and the acquisition of transversal entrepreneurship skills, knowledge and behaviours not just into 'entrepreneurship' courses but across the curriculum, into the classroom and across the schools and colleges; achieving in many cases what was argued by Gibb,³⁴ that education institutions should be considered as entrepreneurial organisations, classrooms as entrepreneurial places and teachers as enterprising people.

Useful resources

European level sources

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³³ GHK (2011b).

³⁴ Gibb, A. (2005).

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