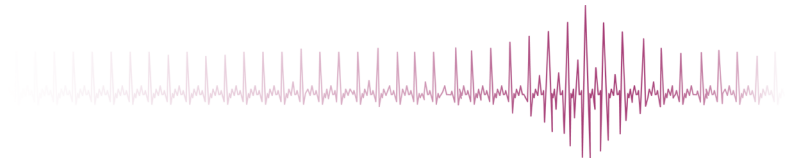


Global Entrepreneurship Monitor

Scotland **2010**





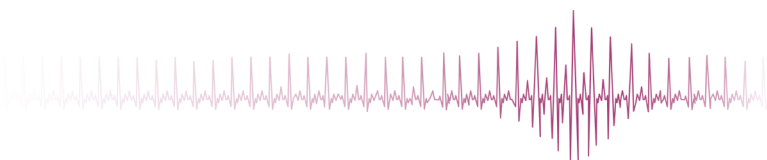
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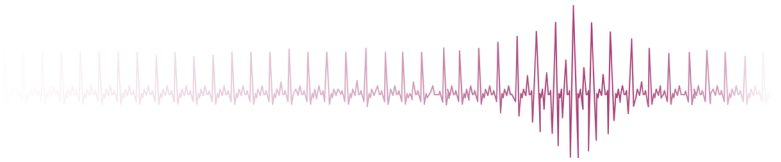
Whilst this work is based on data collected by the GEM consortium, responsibility for analysis and interpretation of those data is the sole responsibility of the author.





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Foreword

This year's GEM Scotland Report makes for disappointing reading, compounding last year's. There is no great change in new business activity levels; the funding landscape remains extremely challenging; and there is evidence that for Scots, lack of interest is a more significant barrier to starting a business than elsewhere.

If you take our low TEA rate and relate that to the impact of serial entrepreneurs (we have fewer of them too) we are in the vice-like grip of a funnel that creates fewer new entrepreneurs and therefore fewer serial entrepreneurs.

This wouldn't be so bad were we to see proverbial 'green shoots' but there appear to be few, if any. Fundamentally, Scotland needs to drive more economic development, both corporately and entrepreneurially, and if we do not drive a definitive strategy to do so - that includes a supportive tax regime, fiscal policies that drive growth and ground level support for start-ups - we will be an economy destined for reverse gear.

Last year in these pages, I underlined the need for Scotland to take a radical look at itself and

change markedly. A few days ago Swansea City celebrated promotion to the English Premier League – ten years after they were rescued from the brink of collapse. It's an analogy for entrepreneurship - the ten year the Welsh Entrepreneurship Action Plan has helped transform entrepreneurial activity there.

A key element of that plan was to embed a culture of entrepreneurship across post-16 education and training. Backed by investment, the result has seen a remarkable increase in entrepreneurial activity - in marked contrast to the same group in Scotland. To get to the entrepreneurial premier league Scotland needs a plan!

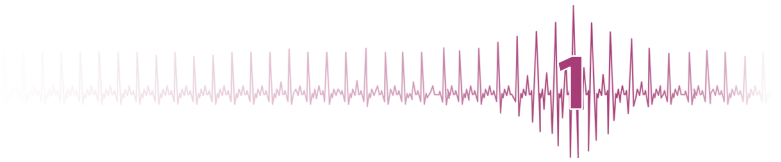
Our new government should take a fresh look at enterprise policy across all the environments through which our young people travel – including further, as well as higher, education.

Scotland has led the world in the past; it's time for it to lead again for our national future.

Yours aye

Tom

Sir Tom Hunter



Introduction

GEM is a major research project aimed at describing and analysing entrepreneurial processes within a wide range of countries.

GEM has three main objectives:

- To measure differences in entrepreneurial attitudes, activity and aspirations among economies.
- To uncover factors determining the nature and level of national entrepreneurial activity.
- To identify policy implications for enhancing entrepreneurship in an economy.

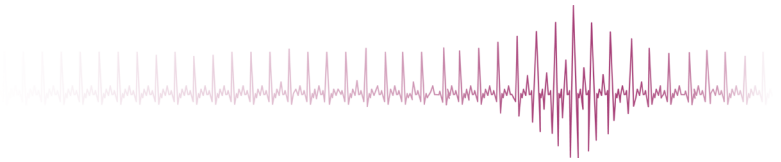
As the 2010 GEM report¹ explained, GEM is based on the following premises. First, an economy's prosperity is highly dependent on a dynamic entrepreneurship sector. Second, an economy's entrepreneurial capacity is

composed of individuals from all groups in society with the ability and motivation to start businesses, and requires positive societal perceptions about entrepreneurship. Third, high-growth entrepreneurship is a key contributor to new employment in an economy, and national competitiveness depends on innovative and cross-border entrepreneurial ventures.

In 2010, GEM surveyed 59 economies, with over 180,000 individual interviews and over 2000 expert interviews. As shown in Table 1.1, these economies represent the largest most geographically and economically diverse group surveyed to date. Together, they comprise over 52% of the world's population and 84% of the world's GDP².

| | Factor-Driven ³ | Efficiency-Driven | Innovation-Driven |
|--|--|---|---|
| Sub-Saharan Africa | Angola*, Ghana, Uganda, Zambia | South Africa | |
| Middle East/North Africa (MENA) – South Asia | Egypt*, Iran*, Pakistan, Saudi Arabia*, West Bank and Gaza | Tunisia | Israel |
| Latin America and Caribbean | Jamaica*, Guatemala*, Bolivia | Argentina, Brazil, Chile*, Colombia, Costa Rica, Ecuador, Mexico, Peru, Trinidad and Tobago, Uruguay* | |
| Eastern Europe | | Bosnia and Herzegovina, Croatia*, Hungary*, Latvia*, Macedonia, Montenegro, Romania, Russia, Turkey | Slovenia |
| Asia Pacific | Vanuatu | Malaysia, China, Taiwan* | Australia, Japan, Republic of Korea |
| United States and Western Europe | | | Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States |

Table 1.1:
GEM countries classified by economy and geography
*in transition to next stage



The Entrepreneurial Process

GEM views entrepreneurship as a process rather than as an event. An important manifestation of entrepreneurship (though not the only one) is new business activity. GEM collects data on the proportion of individuals in an economy who are expecting to start a business, are actively trying to start a business, are running their own young business, are running their own established business, and who have recently closed a business.

Nascent entrepreneurs are those individuals, between the ages of 18 and 64 years, who have taken some action towards creating a new business in the past year. In order to qualify in this category, these individuals must also expect to own a share of the business they are starting and the business must not have paid any wages or salaries for more than three months.

New business owners are individuals who are active as owner-managers of a new business that has paid wages or salaries for more than three months, but less than 42 months.

One of the principal measures in GEM is 'total early-stage entrepreneurial activity' (TEA), the proportion of people who are involved in setting up a business or owners-managers of new businesses. In addition to those individuals who are currently involved in the early stages of a business, there are also many individuals who have owned and managed a business for a longer time. These individuals are included in GEM's estimates of the number of established business owners (EBO).

These two measures convey different information about the entrepreneurial landscape of a country. Early-stage entrepreneurship indicates the dynamic entrepreneurial propensity of a country. In other words, it shows the percentage of the population willing and able to undertake an entrepreneurial venture. Established business ownership, instead, indicates the percentage of the population actively involved in running businesses that proved to be sustainable.

Key Findings of GEM2010 Global report

Entrepreneurial Attitudes

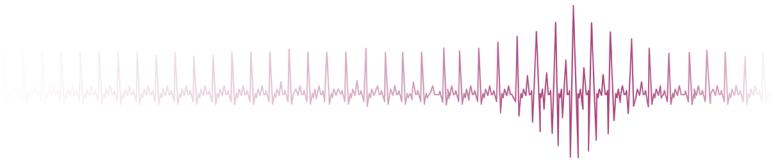
Many individuals in the Sub-Saharan African factor-driven economies saw opportunities for starting a business in their local area, felt they had the knowledge, skills and experience to start a business, and intended to start a business. In contrast, fewer people in MENA/South Asian countries had positive entrepreneurial perceptions and intents. Among efficiency-driven countries, many people in Latin America reported positive perceptions about opportunities and capabilities, while few in Eastern Europe were positive on these measures. Among innovation-driven countries, there was a distinction between relatively high opportunity and capability perception in the Nordic countries and relatively low perceptions in southern Europe.

Entrepreneurial Activity

Early-stage Entrepreneurial Activity (TEA) rates reflected the prevalence of entrepreneurial

What's new in GEM Scotland 2010?

- GEM Scotland 2010 has eleven years of data to draw on, with around 2000 individuals aged between 16 and 80 interviewed each year. In the UK in 2010, 10,403 individuals aged between 16 and 80 were interviewed, one third the 2009 sample size. The reduced size was due to the abolition of Regional Development Agencies in England.
- In 2010, 10% of the sample in each UK region was drawn from mobile-only households, to better reflect the national population. While attitudes appear to be similar in landline households and mobile-only households, activity rates are significantly higher in mobile-only households. Thus previous estimates of TEA in the UK in the past few years, as the prevalence of mobile-only households has grown, may be understated, possibly by as much as one tenth.
- New questions in the 2010 survey enabled identification of "intrapreneurs" in existing organisations, the nature of entrepreneurs' prior employers and further information on individuals who had discontinued businesses, serial entrepreneurs and repeat entrepreneurs.



attitudes and the state of economic development of a country, with highest proportions of opportunity-motivated (versus necessity-motivated) nascent and new entrepreneurs in innovation-driven countries with more higher rates of positive entrepreneurial attitudes. “Churn”, or turnover of owner-managed business stock, declines with increasing levels of economic development.

Entrepreneurial Aspirations

The efficiency-driven and innovation-driven economies have similar proportions of entrepreneurs with high-growth aspirations. These levels are higher than in the factor-driven economies. Notably, the MENA and Eastern

European economies, although exhibiting low TEA rates, show relatively high levels of high-growth expectations among TEA entrepreneurs.

Impact of the recent economic downturn

Perceptions improved in more developed economies in 2010, where the recession took root starting around 2008. Fewer entrepreneurs in many of the innovation-driven economies thought it was more difficult to start a business compared to a year ago, although there were still some pessimists in the mix. In addition, fewer of these entrepreneurs felt negative effects from the global slowdown in 2010, and one quarter saw more opportunities compared to a year earlier.

1 Most of the information in this chapter is taken from the 2010 GEM Executive Report (Kelley, Bosma and Amorós, 2011) available from www.gemconsortium.org.

2 These percentages are based on IMF’s World Economic Outlook Database, October 2010 and USA Bureau of Census.

3 Phases of economic development are decided on the level of GDP per capita and the extent to which countries are factor-driven in terms of the shares of exports of primary goods in total exports. See Porter, M.E. and Schwab, K. (2008), *The Global Competitiveness Report 2008-2009*, Geneva, Switzerland: World Economic Forum.



Summary Highlights for GEM Scotland 2010

2

- In 2010, 43% of working age adults in Scotland who thought there were good opportunities for starting a business agreed that fear of failure would prevent them from starting a business, up from a low of 31% in 2007. This compares with 36% in the UK and 35% across all Arc of Prosperity countries.
- Scotland's Total Early-Stage Entrepreneurial Activity (TEA) rate in 2010 was unchanged at 3.7% on a like-for like basis with 2009 (3.6%). This is significantly lower than the UK rate of 5.6%. However, in 2010, there was no significant difference in the proportion of individuals who expected to start a business or of established business owner managers between Scotland and the UK.
- The distribution of TEA by age in Scotland is unusually flat, with TEA rates of both males and females in their thirties being slightly lower than that of people in their forties. In all other home nations of the UK, TEA rates peak strongly in the mid-thirties for both males and females. This represents a lost generation of entrepreneurs for Scotland.
- There is no evidence from GEM surveys that Scotland's entrepreneurs are any less (or more) ambitious, innovative or technology-focused than those in benchmark countries.
- Entrepreneurial activity among young adults in Scotland appears to have recovered from a negative reaction to the recession in 2009. However, young adults in Scotland are more likely to report lack of interest as a major barrier to starting a business or becoming self-employed than in other UK home nations.
- Fifty-six percent of young (aged 18 to 29 years) early-stage entrepreneurs surveyed in Scotland between 2003 and 2010 thought that there are adequate sources of start-up finance in their region, compared to 46% in England, 30% in Wales, and 35% in Northern Ireland.
- Young nascent entrepreneurs, particularly in Scotland, rely more on family than other individuals as sources of external funding. But a third of young Scottish nascent entrepreneurs also expect funding from banks and government agencies.
- Young entrepreneurs in Scotland value close family and social ties as sources of advice more than their peers in other home nations.
- Entrepreneurs who have started more than one business have higher entrepreneurial capability and commitment than first time entrepreneurs, and they tend to create more jobs than a first time entrepreneur. Unfortunately Scotland has fewer of them both absolutely and relatively than most of its benchmark nations.
- From 2006 to 2010, 55% of Scottish nascent entrepreneurs (49% across the UK) expected to fund all the start-up costs themselves. Expectations of external funding appear to have peaked in 2008, with greater expectations in Scotland than in the UK as a whole, but since then there has been less expectation, especially in Scotland, of external sources of funding. The median expected start-up cost in Scotland and the UK was £10,000.
- Informal investment rates were stable in Scotland at around one quarter of the average AOP rate from 2002 until 2009, when they dropped significantly, then rose significantly in 2010 to twice their long run average. A similar pattern of decline followed by an increase is evident in the UK, but not in other AOP countries. The unusual pattern fits a change in funding strategy by nascent entrepreneurs as bank finance has been harder to obtain.
- The contrast between the trend in TEA rates for young adults in Scotland and Wales from 2002 to 2010 is striking. Scotland may have much to learn from the experience of the Welsh Entrepreneurship Action Plan, launched in 2000, and subsequent policy measures, which may have positively influenced the attitudes, activity and aspiration of young Welsh adults.

Entrepreneurial Business Attitudes, Activity and Aspirations in Scotland: 2010 Update

This chapter reports measures of entrepreneurial attitudes, activity and aspirations in Scotland in 2010. Where relevant, comparisons are made with the UK and UK home nations, Arc of Prosperity countries, and other innovation-driven, high income nations, and with measures in previous years¹. Because 10% of the sample in each UK region consisted of mobile-only households, separate measures for the full sample and only for households with landlines are shown. The former may be more comparable internationally, while the latter may be more comparable with previous years.

Entrepreneurial Attitudes among the non entrepreneurially-active population

Table 3.1 displays historical trends of

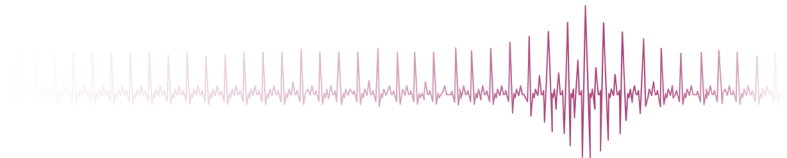
entrepreneurial attitudes among the non-entrepreneurially-active population – those who were not nascent, new or established business owner-managers. The picture for Scotland is mixed, with the main changes being an increase in the proportion of Scots who know someone who started a business in the past 2 years (from 22% in 2009 to 27% in 2010 when we compare like-for-like households with landlines) and an increase in fear of failure among those who perceive opportunities. The recent year-on-year rise in fear of failure is not statistically significant, but fear of failure in Scotland has risen significantly since its lowest point in 2007, unlike in the UK and AOP nations. Figure 3.1 shows a common trend of rising fear of failure in the past few years in the peripheral home nations but not in England.

Table 3.1:

Entrepreneurial attitudes among non-entrepreneurial individuals in the Scottish, UK and Arc of Prosperity adult population samples, 2002 to 2010 (% agree with statement)

Source: GEM Scotland and UK Surveys Note: 2009 AOP estimates exclude Ireland

| Item | Know someone who started a business in past 2 years | | | Good opportunities for starting a business in the next 6 months | | | Have knowledge, skills to start a business | | | Fear of failure would prevent me starting a business (among those who see opportunities) | | |
|--------------------|---|----|-----|---|----|-----|--|----|-----|--|----|-----|
| | Scot | UK | AOP | Scot | UK | AOP | Scot | UK | AOP | Scot | UK | AOP |
| Sample | | | | | | | | | | | | |
| 2002 | 19 | 21 | 46 | 23 | 26 | 44 | 37 | 41 | 36 | 40 | 37 | 33 |
| 2003 | 23 | 22 | 50 | 34 | 32 | 41 | 41 | 43 | 34 | 37 | 35 | 36 |
| 2004 | 26 | 24 | 43 | 33 | 33 | 43 | 47 | 46 | 36 | 36 | 36 | 36 |
| 2005 | 25 | 25 | 44 | 29 | 35 | 52 | 42 | 46 | 36 | 33 | 36 | 36 |
| 2006 | 25 | 25 | 43 | 34 | 34 | 52 | 45 | 45 | 36 | 33 | 37 | 39 |
| 2007 | 23 | 24 | 44 | 36 | 36 | 55 | 39 | 44 | 35 | 31 | 38 | 34 |
| 2008 | 20 | 24 | 43 | 33 | 27 | 41 | 41 | 44 | 36 | 34 | 38 | 35 |
| 2009 | 22 | 23 | 45 | 21 | 23 | 40 | 40 | 44 | 34 | 34 | 35 | 34 |
| 2010 | 27 | 31 | 38 | 25 | 27 | 42 | 44 | 47 | 37 | 43 | 36 | 35 |
| 2010 landline only | 28 | 31 | | 25 | 26 | | 44 | 46 | | 43 | 38 | |



Entrepreneurial Activity

In 2010, representative samples of the working age population (aged 18-64) were surveyed in 59 countries. Figure 3.2 shows the estimates of Total early-stage Entrepreneurial Activity (TEA) in each of the 22 innovation-driven (high income) sovereign nations participating in GEM2010, plus Scotland, ordered by TEA rate². TEA measures the proportion of nascent and new business owner/managers in the population of working age adults. In "innovation-driven" nations such as Scotland, stimulating innovation and entrepreneurship should be a focus of government attention, according to the World Economic Forum³.

If the vertical bars on either side of the point estimates for TEA for any two countries do not overlap, they have statistically different TEA rates⁴. Figure 3.2 shows that Scotland ranked in the fourth quartile of innovation-driven countries in 2010, as it did in 2009. Only Italy had a significantly lower TEA rate than Scotland in 2010, while 8 countries had TEA rates statistically higher than those of Scotland.

Figure 3.2:
National 2010 TEA rates for 22 sovereign innovation-driven nations and Scotland, ordered by TEA rate

Source: 2010 GEM Scotland and Global Survey

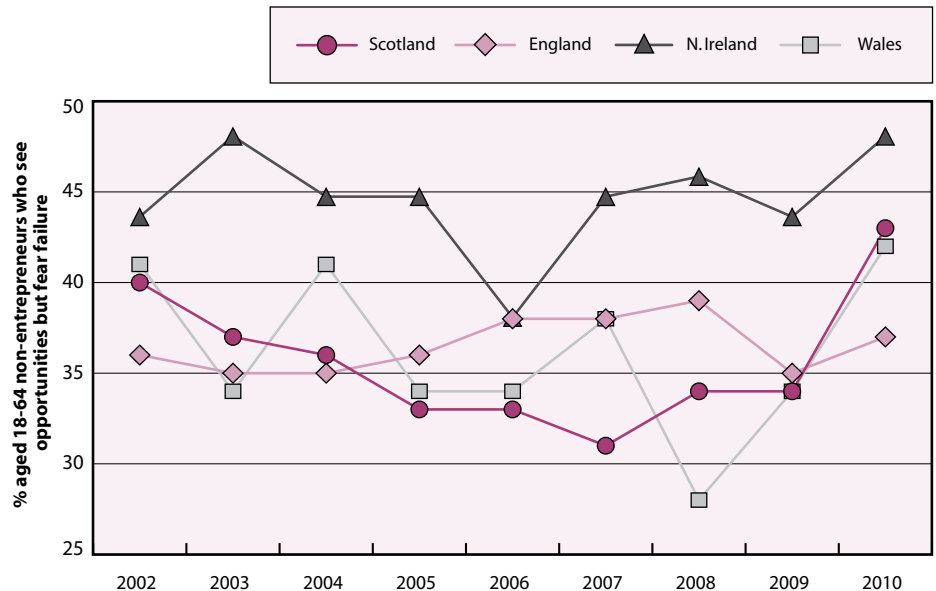
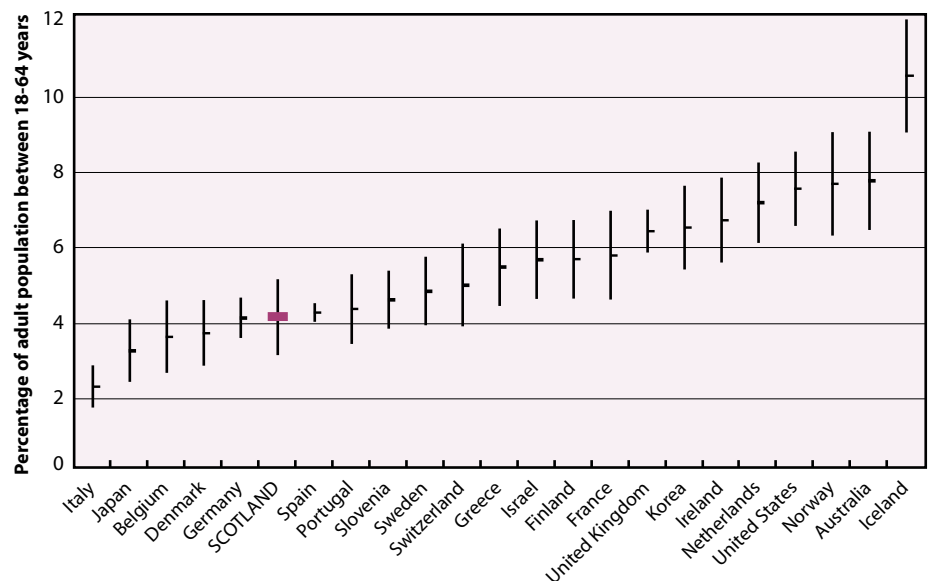


Figure 3.1:
Trend in fear of failure among non-entrepreneurial individuals who see opportunities in the four home nations of the UK (in households with landlines)

Source: GEM UK Surveys 2002 to 2010



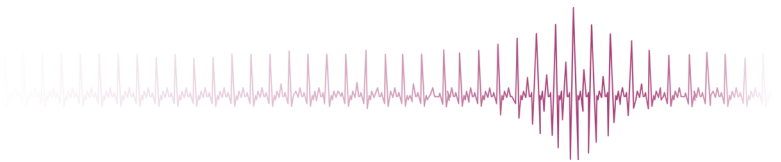


Table 3.2 benchmarks the TEA rate for Scotland for 2010 against the UK, "Arc of Prosperity" nations that participated in 2009 and 2010 (Denmark, Finland, Iceland, and Norway) and 17 high income/innovation-driven sovereign nations that participated in GEM in 2009 and 2010. Rates in Scotland, the UK and the benchmark country groups were relatively unchanged in 2010. This contrasts with a 20% decline in TEA in Scotland in 2009. The Scottish TEA rate remained significantly below that of the UK in 2010.

Following press reports quoting a Business Gateway contractor that the "picture painted about the decline of Scottish start-ups [by the 2009 GEM Scotland report] could not be further from the truth"⁵, it is instructive to compare the official business birth statistics for 2009 against both the TEA rate and the start-up statistics issued by the Committee of Scottish Clearing Bankers, and the extent to which annual

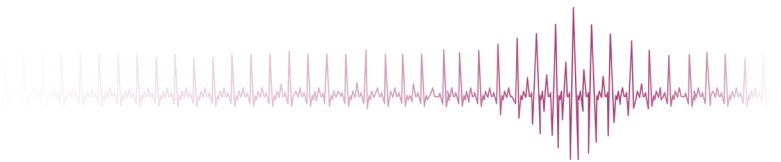
changes in the official statistics are reflected in changes in the TEA and bank account opening data. On 1 December 2010, business birth and death statistics for the United Kingdom in 2009 were released. This data combines VAT and PAYE statistics on new business registrations in the 12 months to November.

Table 3.3 shows that the rate of decline in recorded new business births in Scotland in 2009 was 9%, following a similar decline in 2008 of 11%. In 2009 business deaths exceeded business births, in the case of the UK for the first time since the series began in 2001, and in the case of Scotland for the first time since 2004. The rate of decline in births and rate of increase in deaths in Scotland was lower than in the UK as a whole (9% versus 12% and 19% versus 26%). This reflects a less dynamic entrepreneurial economy in Scotland than in the UK. Comparing with five years earlier, the number of births in Scotland in 2009 was 2.4%

Table 3.2:
Scottish and benchmark TEA rates,
2009 and 2010

Source: 2009 and 2010 GEM Scotland and
Global Surveys

| | TEA | | % change | Scottish TEA as a % of other TEA rates | | |
|--|------|------|----------|--|-----------------|--------------------------|
| | 2009 | 2010 | | 2009 | 2010 (landline) | 2010 (landline & mobile) |
| Scotland (landlines) | 3.6 | 3.7 | 3% | | | |
| Scotland (landlines and mobiles) | n.a. | 4.2 | | | | |
| UK (landlines) | 5.8 | 5.6 | -4% | 62% | 67% | |
| UK (landlines and mobiles) | n.a. | 6.5 | | | | 65% |
| 17 High income/innovation-driven nations (like-for-like) | 5.9 | 5.6 | -5% | 61% | 66% | 75% |
| 4 Arc of Prosperity nations (like-for-like) | 7.2 | 7.0 | -3% | 50% | 53% | 60% |



higher than in 2004, while the number of deaths was 4.9% higher.

Table 3.4 shows estimates by the Committee of Scottish Clearing Bankers of new business start-ups based on business bank accounts being opened by members of the Committee (Bank of Scotland, Clydesdale Bank, Lloyds TSB Scotland and The Royal Bank of Scotland). Historically the number of business bank account openings has been around one third higher than the official recorded statistics. This could be because of multiple bank account openings and the under-recording of smaller business births that do not register for VAT or PAYE.

The rate of decline in this bank-based measure in 2008 and 2009 was double the official rate, and the absolute number of business bank account openings recorded by members of the Committee approached the official business

births measure in 2009. This is probably due to a loss of market share by these banks to other financial services providers in Scotland. There was little change in this measure in 2010 on 2009.

The correlation between the annual change in business bank account openings and official business births from 2004 to 2009 is 0.54. Thus only 29% of the variability in change in actual annual business births is mirrored in changes in business bank account openings⁶. This suggests that changes in business bank account openings did not reflect changes in annual new registered businesses during this period very accurately.

Unlike the previous two measures, the GEM TEA rate does not measure new businesses but rather engagement by individuals in new business activity. It is a combined estimate, based on a representative sample, of the proportion of

| SCOTLAND | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| BUSINESS BIRTHS | 14,375 | 16,935 | 15,070 | 18,165 | 16,225 | 14,725 |
| BUSINESS DEATHS | 14,720 | 13,660 | 12,595 | 12,020 | 13,025 | 15,440 |
| Births minus deaths | -345 | 3,275 | 2,475 | 6,145 | 3,200 | -715 |
| Annual % change in births | | 17.8% | -11.0% | 20.5% | -10.7% | -9.2% |
| Annual % change in deaths | | -7.2% | -7.8% | -4.6% | 8.4% | 18.5% |

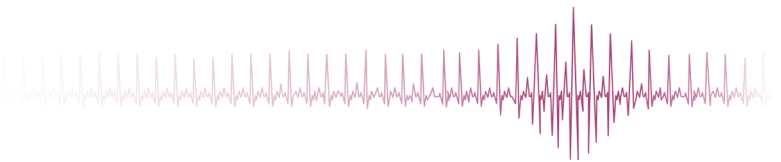
Table 3.3:
Number of Business Births and Deaths in Scotland, 2004 to 2009

Source: Office of National Statistics

| SCOTLAND | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| NEW BUSINESS BANK ACCOUNTS | 20,808 | 21,383 | 23,468 | 25,041 | 20,028 | 15,726 | 15,439 |
| Annual % change | -7% | 3% | 10% | 7% | -20% | -21% | -2% |

Table 3.4:
New Business Bank Account Openings in Scotland, 2004 to 2010

Source: Committee of Scottish Clearing Bankers



working age individuals who are actively trying to start a new business and the proportion of working age individuals who manage and own (at least in part) a business that has been paying wages for up to three and a half years. Table 3.5 shows the annual changes in the TEA rate in Scotland between 2004 and 2010.

The TEA rate is a "smoothed measure" of new business activity by individuals before, during and after the year of start-up. Thus, sharp changes from year to year in actual business births may not show up immediately in the GEM data. It is also an estimate of the true rate, which

may lie plus or minus around 1 percentage point on either side of the estimate. Nevertheless, the correlation of annual changes in the TEA rate with changes in official business births for 2005 to 2009 is 0.86. In other words, 74% or three quarters of the variability in changes in annual official business births over this period is mirrored by changes in the annual TEA rate. As a proxy measure of change in annual official business births, the Scottish TEA rate performs relatively well. By comparison, the correlation of changes in the annual TEA rate with annual changes in business bank account openings for this period is only 0.18.

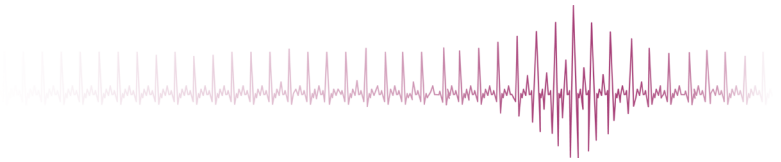
Table 3.5:
Scottish TEA rate (households with landlines only), 2004 to 2010
Source: GEM Scotland surveys

| SCOTLAND | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---------------------|------|------|------|------|------|------|------|
| TEA rate (landline) | 5 | 5.7 | 4.1 | 4.6 | 4.5 | 3.6 | 3.7 |
| Annual % change | -8% | 14% | -28% | 12% | -2% | -20% | 3% |

Table 3.6:
Entrepreneurial activity in the Scottish and UK adult population samples, 2002 to 2010 (% agree with statement)
Source: GEM Surveys

| Item | I expect to start a business in the next 3 years (%) | | | Total early-stage Entrepreneurial Activity (TEA) rate (%) | | | Established Business Owner-manager (EBO) rate (%) | | | I have shut down a business in the last 12 months (%) | | |
|---------------|--|------------|------|---|------------|-----|---|------------|-----|---|------------|-----|
| | Scot | UK | AOP | Scot | UK | AOP | Scot | UK | AOP | Scot | UK | AOP |
| 2002 | 5.9 | 6.7 | 11.9 | 5.0 | 5.4 | 8.0 | 4.4 | 5.6 | 7.7 | 1.3 | 1.7 | 2.2 |
| 2003 | 6.8 | 8.0 | 10.9 | 5.6 | 6.4 | 7.9 | 5.3 | 5.7 | 7.4 | 1.4 | 2.0 | 2.3 |
| 2004 | 6.5 | 8.6 | 11.4 | 5.0 | 5.8 | 7.6 | 4.8 | 4.7 | 6.5 | 1.6 | 1.8 | 2.1 |
| 2005 | 6.2 | 8.7 | 11.7 | 5.7 | 6.0 | 7.9 | 4.1 | 5.1 | 7.1 | 1.6 | 1.9 | 2.3 |
| 2006 | 5.8 | 7.9 | 11.1 | 4.1 | 5.8 | 7.6 | 4.2 | 5.3 | 6.9 | 1.6 | 2.0 | 2.2 |
| 2007 | 5.6 | 6.8 | 11.5 | 4.6 | 5.5 | 7.9 | 3.9 | 5.8 | 7.5 | 1.3 | 2.0 | 2.4 |
| 2008 | 5.1 | 6.8 | 10.6 | 4.5 | 5.5 | 7.6 | 5.5 | 6.0 | 7.2 | 1.2 | 2.1 | 2.9 |
| 2009 | 4.3 | 6.2 | 10.5 | 3.6 | 5.8 | 7.2 | 4.8 | 5.8 | 7.6 | 1.2 | 2.2 | 1.7 |
| 2010 landline | 5.0 | 6.8 | 10.6 | 3.7 | 5.6 | 6.9 | 6.2 | 6.2 | 7.5 | 0.8 | 1.1 | 2.4 |
| 2010 all | 6.0 | 7.3 | | 4.2 | 6.5 | | 6.5 | 6.2 | | 1.0 | 1.2 | |

Note: Numbers in bold denote significant differences between Scottish and UK samples in the same year. Ireland did not participate in GEM in 2009, but is included in all other years.



Several Scottish enterprise support organisations reported increases in enquiries for their services during 2009 and early 2010. As shown above, this was not reflected in new business statistics, probably because of shifts in the funding landscape since 2008; as funding from banks declined, nascent entrepreneurs turned to other possible sources, including government funding, causing an increase in enquiries. Funding of entrepreneurs is covered in Chapter 6.

Table 3.6 shows trends in four different entrepreneurial activity rates in Scotland, the UK and Arc of Prosperity countries. In all four measures, Scotland has lower rates of activity than AOP countries. However, in 2010, there was no significant difference in the proportion of individuals who expected to start a business

or of established business owner managers between Scotland and the UK.

Distribution of entrepreneurial activity by gender and age in the UK home nations

Figure 3.3 shows the trend in TEA rates by gender and age for the home nations of the UK, using the combined 2002 to 2010 database of over 188,000 cases. The trend suggests, but the statistical evidence is weak, that Scottish males aged 18 to 23 have lower TEA rates (2.8%) than their peers in other nations (3.9% in all three)⁷. Men in Scotland from around 24 to 40 years of age have lower TEA rates than their peers in other home nations, and older men in Scotland have lower TEA rates than older men in England. While younger and older Scottish women of working age have similar rates to their

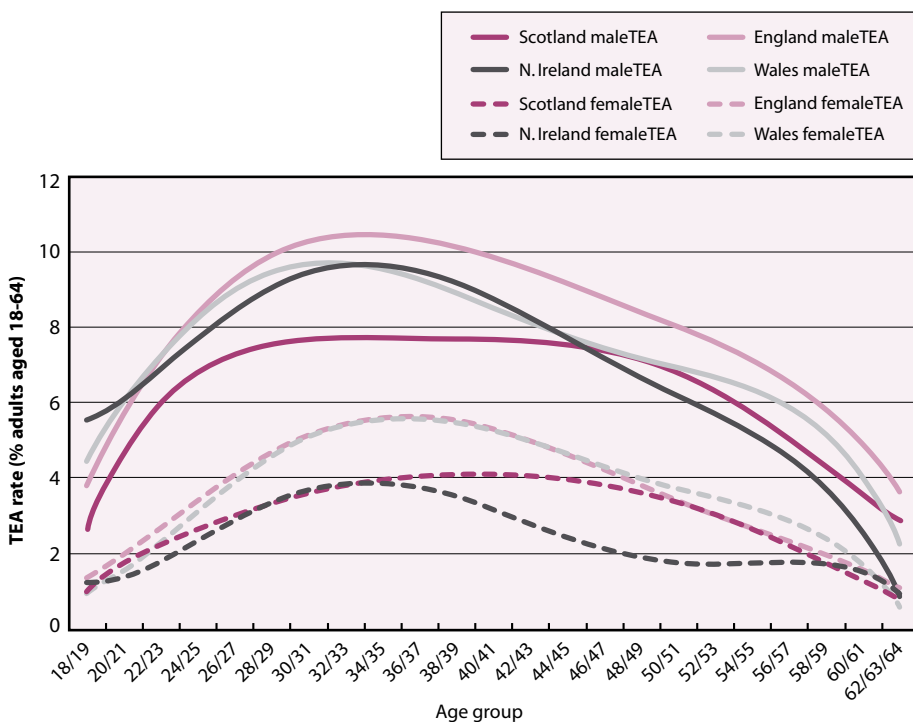
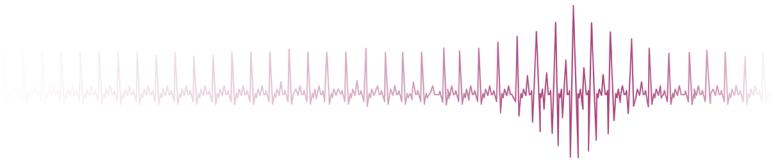


Figure 3.3: Distribution of TEA rates by gender and age for the UK home nations, combined 2002 to 2010 data⁸

Source: GEM UK Surveys 2002 to 2010



peers in other home nations, they have lower rates than their peers in England and Wales from around 24 to 40 years of age.

The distribution of TEA by age in Scotland is unusually flat, with TEA rates of both males and females in their thirties being slightly lower than that of people in their forties. In all other home nations, TEA rates peak strongly in the mid-thirties for both males and females.

Distribution of TEA by nation of origin and nation of residence

Table 3.7 shows the distribution of TEA rates in the UK population by nation of origin and nation of current residence⁹. A similar pattern holds in every nation: those born and resident in the same nation (the shaded cells in Table 3.7)

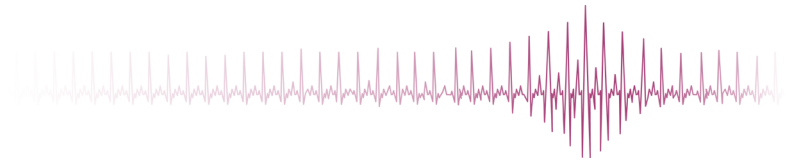
have the lowest TEA rates in their row (nation of residence) or column (nation of origin). Scots who migrate to other home nations of the UK have higher TEA rates (6.3% on average) than Scots who live in Scotland (3.9%). The same pattern holds for the English, Welsh and Northern Irish, although it is notable that Scots born and resident in Scotland appear to have the lowest TEA rate of any group in the table.

Entrepreneurial Aspirations

Table 3.8 shows estimates of how aspirational Scots early-stage entrepreneurs are compared with their peers in the UK and Arc of Prosperity countries. Equivalent data for three measures of entrepreneurial aspiration are available for five years. On each of these, the measures for Scotland do not appear very different from those of the UK or AOP countries.

| Born in | England | Wales | Scotland | Northern Ireland | Outside UK |
|------------------|---------|-------|----------|------------------|------------|
| Resident in | | | | | |
| England | 5.6 | 7.6 | 5.8 | 7.2 | 7.8 |
| Wales | 7.6 | 4.3 | 9.2 | 12.4 | 7.4 |
| Scotland | 8.0 | 11.5 | 3.9 | 6.1 | 8.9 |
| Northern Ireland | 5.9 | n.a. | 6.2 | 4.7 | 5.0 |

Table 3.7:
TEA rates by nation of origin and nation of residence, 2002 to 2010 combined data
Source: GEM UK surveys 2002 to 2010



Conclusion

Entrepreneurial attitudes and activity remained muted in Scotland in 2010 following a drop in 2009, and this was particularly noticeable among males. Fear of failure rose from 31% in 2007 to 43% in 2010. Scotland's relatively low rate of early-stage entrepreneurial activity can be traced to an unusually flat distribution of activity by age. One might say that most of Scotland's "missing" entrepreneurs are in their thirties. There is no evidence, however, that Scotland's entrepreneurs are any less (or more) ambitious, innovative or technology-focused than those in benchmark countries.

- 1 "Arc of Prosperity" is a term used by the Scottish Government to describe five small, high income, independent nations that surround Scotland in an arc from Ireland to the west, Iceland to the North, and Norway, Finland and Denmark to the east.
- 2 Comparison of Scotland with factor-driven or efficiency-driven countries is less useful because their environments are so different.
- 3 Porter, M.E. and Schwab, K. (2008), *The Global Competitiveness Report 2008-2009*, Geneva, Switzerland: World Economic Forum.
- 4 "Statistical significance" refers to a calculation of where the range within which the average value of 95 out of 100 replications of the survey would be expected to lie. This range is shown in Figure 3.2 by vertical bars on either side of each data point. If the 'confidence intervals' (denoted by the vertical bars) of two national TEA rates do not overlap, the difference between the TEA rates is not statistically significant at the 0.05 level. Reference in this report to significant differences implies statistically significant difference at the 0.05 level.
- 5 www.bbc.co/news/10434180. In fact, official IDBR-based business births in Glasgow, and South, East and North Ayrshire, areas for which the contractor had Business Gateway contracts, declined by 6%, 3%, 11% and 22% respectively in 2009.
- 6 The square of the correlation coefficient 0.54 is .29. This figure, the coefficient of determination, is a measure of the extent to which two variables mirror each other in variability. A perfect fit would produce a coefficient of determination of 1.0.
- 7 Chi-square (continuity corrected)=3.241, p=.072.
- 8 Trend lines are fitted fourth order polynomials.
- 9 I'm grateful to Carol Craig for suggesting this analysis.

| Item | High Job Expectation (% of TEA entrepreneurs expect greater than ten jobs and growth >50% in five years) | | | New Product Market (% of all TEA entrepreneurs) | | | High or Medium technology sectors (% of all TEA entrepreneurs) | | |
|---------------------------|--|------|----------------|---|------|----------------|---|------|----------------|
| | Scot | UK | AOP nations | Scot | UK | AOP nations | Scot | UK | AOP nations |
| 2006 | 9.1 | 19.8 | 16.2 | 18.0 | 22.0 | 23.8 | 7.4 | 9.3 | 9.5 |
| 2007 | 18.0 | 16.5 | 16.2 | 22.9 | 19.7 | 24.2 | 5.3 | 9.4 | 9.3 |
| 2008 | 11.2 | 15.2 | 19.8 | 20.0 | 22.0 | 25.0 | 13.7 | 12.0 | 10.1 |
| 2009 | 14.4 | 17.6 | 18.1 | 18.9 | 25.8 | 35.8 | 15.0 | 8.3 | 3.5 |
| 2010 landline & mobile | 21.2 | 14.4 | 17.4 | 36.1 | 25.0 | 33.6 | 9.1 | 13.5 | 7.5 |
| 2010 landline | 16.2 | 11.2 | | 35.7 | 27.5 | | 12.5 | 13.2 | |
| Average 2006 to 2010 | 14.8 | 16.7 | 17.6 | 23.2 | 22.9 | 28.5 | 10.1 | 10.5 | 8.0 |

Table 3.8:
Entrepreneurial aspirations in the Scottish, UK and Arc of Prosperity nations adult population samples, 2002 to 2010 (% agree with statement)

Source: GEM Scotland and UK Surveys

Note: Numbers in bold denote significant differences between Scottish and UK samples in the same year

Young Entrepreneurs

This chapter considers the entrepreneurial activity of adults under the age of 30¹. The probability that young people in Scotland will engage in early stage entrepreneurial activity triples as they age: from around 2% for 18 to 19 year olds to around 6% for those aged from 27 to 29². The equivalent rates in England are 3% and 7%.

Figure 4.1 shows the proportion of early-stage entrepreneurs in the population of young adults by home nation annually from 2002 to 2010. From 2002 to 2009, only households with landlines were surveyed. In 2010, 10% of the sample consisted of mobile-only households. This made a significant difference to the TEA rate for young people in Scotland. In Figure 4.1, TEA rates for the full sample are shown on the right; rates for the landline only household sample are more comparable with earlier years.

Two notable features of Figure 4.1 are a dip in the Scottish TEA rate in 2009 and a doubling of the Welsh rate from 2002 to 2010. During this time, the Welsh Assembly Government implemented an Entrepreneurship Action Plan for Wales, covering all levels of the education system. In the 2008 GEM survey, 58% of 18 to 29 year olds in Wales agreed they had received training in starting a business provided by a college or university that was not part of their formal education, compared with only 35% in Scotland, 39% in England and 29% in Northern Ireland. There was no significant difference in the proportion who had received training in starting a business as part of formal post-school education across the home nations. Almost half (48%) of adults aged 18 to 29 surveyed in Wales in 2010 agreed that they had taken part in any activities at school, college or university that made them think about starting a business or

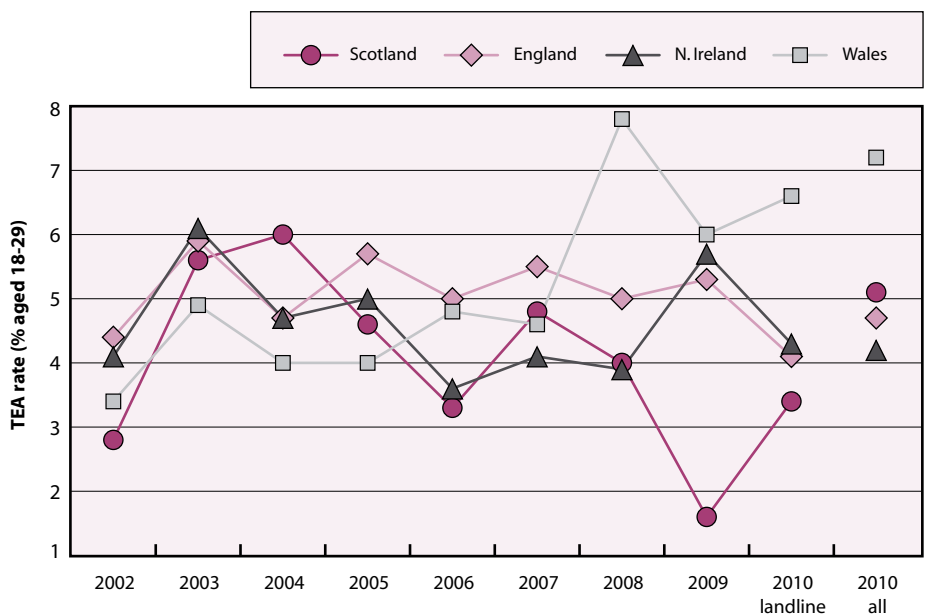
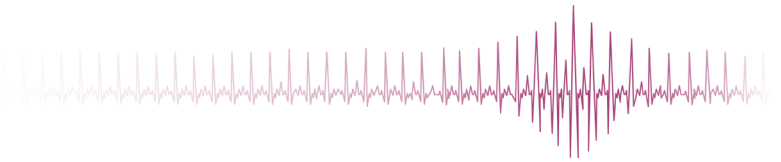


Figure 4.1:
TEA rates among adults aged 18 to 29
from 2002 to 2010

Source: GEM UK Surveys 2002 to 2010



being their own boss. Equivalent statistics are not available for other home nations.

In Scotland, efforts were focused on more general enterprise education in schools during this period. The fruits of this work will appear in the next ten years as this generation enters the world of work.

Barriers

Young adults lack "entrepreneurial capital", which includes relevant skills, social networks, financial capital and credibility – and the commitment needed to make a new business work³. Table 4.1 shows that younger non-

entrepreneurial adults in all home nations are more likely than older adults to cite 'getting finance for the business' and 'lack of skills' as the biggest barriers they face to starting a business.

Young adults are less likely than older adults to mention lack of security or loss of income as barriers. Lack of advice or the complexity of regulations are rarely mentioned by young or old adults.

Significantly more non-entrepreneurial adults in Scotland than in other home nations cite lack of interest as one of the biggest barriers to them starting a business or becoming self-employed.

| Barrier to starting a business or becoming self-employed: | England | | Wales | | Scotland | | N. Ireland | |
|---|---------|-------|-------|-------|----------|-------|------------|-------|
| | 18-29 | 30-64 | 18-29 | 30-64 | 18-29 | 30-64 | 18-29 | 30-64 |
| Getting finance for the business (2005 to 2010) | 63 | 47 | 62 | 44 | 62 | 46 | 66 | 48 |
| Lack of skills/knowledge (2004 to 2010) | 19 | 11 | 17 | 10 | 18 | 11 | 17 | 12 |
| Lack of interest in starting a business (2004 to 2010) | 12 | 18 | 12 | 18 | 15 | 20 | 12 | 16 |
| The time commitment it would require (2004 to 2010) | 11 | 11 | 9 | 8 | 12 | 9 | 11 | 11 |
| Fear of debt/loss of security/income (2005 to 2007) | 14 | 17 | 12 | 14 | 12 | 14 | 14 | 18 |
| Not having an idea for a business (2004 to 2010) | 11 | 10 | 10 | 8 | 11 | 9 | 10 | 10 |
| Loss of security/income from current job (2008 to 2010) | 10 | 15 | 10 | 16 | 10 | 16 | 7 | 15 |
| The chance that the business might fail (2004 to 2010) | 8 | 8 | 7 | 7 | 7 | 8 | 7 | 9 |
| Fear of debt (2008 to 2010) | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 3 |
| Age (2004 to 2010) | 4 | 11 | 4 | 13 | 3 | 12 | 3 | 11 |
| The complexity of regulations (2004 to 2010) | 2 | 3 | 1 | 3 | 1 | 3 | 1 | 2 |
| The economic climate at the moment (2005 to 2010) | 1 | 2 | 1 | 2 | 1 | 3 | 1 | 2 |
| The economic climate at the moment (2010 only) | 4 | 7 | 8 | 10 | 6 | 9 | 10 | 12 |

Table 4.1: The biggest barriers cited by non-entrepreneurial adults to them starting a business or becoming self-employed, in order of frequency of mention by young adults in Scotland, by age group and home nation, 2004 to 2010

Source: GEM UK APS survey, 2004 to 2010

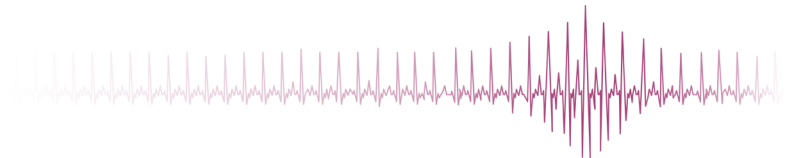


Figure 4.2 shows the trend from 2003/04 to 2009/10 for younger and older adults. The proportion of non entrepreneurial adults who mention disinterest has increased. Young adults typically have lower rates of disinterest than older adults, but in Scotland they started and finished the decade with disinterest as high as older adults.

This strong increase in disinterest among young adults in Scotland fits with the apparent dip in entrepreneurial activity among young adults in Scotland in 2009. It may also be related to the importance of family advice to young Scottish entrepreneurs, a subject we return to below.

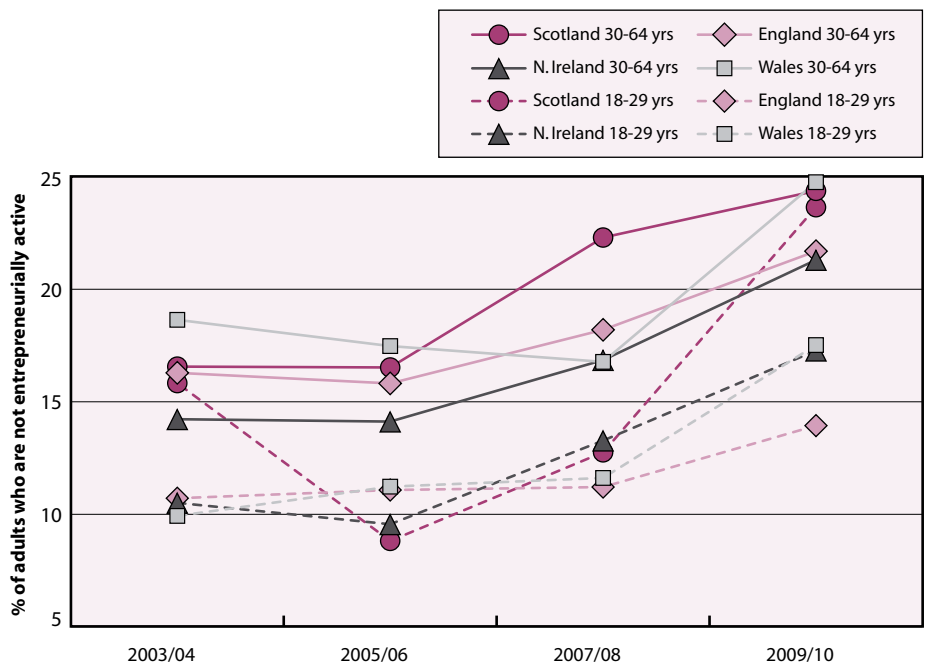
Funding

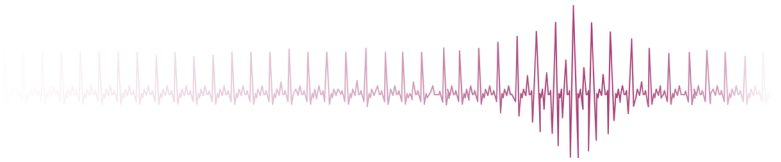
Fifty-six percent of young early-stage entrepreneurs surveyed in Scotland between

2003 and 2010 thought that there are adequate sources of start-up finance in their region, compared to 46% in England, 30% in Wales, and 35% in Northern Ireland. This difference holds across the entire period. The views of older early-stage entrepreneurs were very similar across the home nations, varying from 29% to 33%. There may be a mismatch between the belief of young non-entrepreneurs in Scotland that funding is hard to find, and the actual experience of young entrepreneurs.

Young nascent entrepreneurs, particularly in Scotland, rely more on family than other individuals as source of funding, as table 4.2 shows. But a third of young Scottish entrepreneurs also expect funding from banks and government agencies.

Figure 4.2: Proportion of younger and older non-entrepreneurial adults in the UK home nations citing lack of interest as one of the biggest barriers preventing them from starting a business or becoming self-employed, 2003/04 to 2009/10
Source: GEM UK APS surveys 2003 to 2010





Advice

In Scotland, the most popular sources of advice for young adults thinking of starting a business or actively trying to start a business are parents and relatives, followed by friends and colleagues. In 2010, 25% of young "thinkers" and 33% of young nascent entrepreneurs in Scotland said they had asked parents or relatives for advice, compared with only 8% and 7% of older thinkers and nascents. Friends were mentioned by 11% of younger thinkers and 15% of younger nascents, versus 16% of older thinkers and nascents. Colleagues were mentioned by 6% of younger thinkers and 8% of younger nascents, versus 14% of older thinkers and 11% of older nascents. All other categories, including banks and enterprise organisations, were mentioned less frequently by young thinkers and nascents.

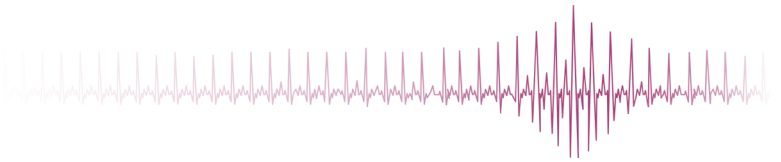
In the 2005 and 2006 GEM surveys, owner managers were asked what sources of advice they valued when starting their business. Young Scottish owner managers more frequently valued the advice of their parents and relatives (59%), friends (61%) and colleagues (51%) than professional advisors in government agencies (26%) or other service providers such as banks (28%). As in other home nations, they were significantly more likely than older owner managers to acknowledge valued advice from social networks, but no more likely to acknowledge valued advice from professionals (see Table 4.3 on next page).

Young entrepreneurs in Scotland value close social ties as sources of advice more than their peers in other home nations. But as 75% of respondents in Scotland from 2008 to 2010 had no parent who had run a business (compared

| Type of funding expected: | England | | Wales | | Scotland | | N. Ireland | |
|---|---------|-------|-------|-------|----------|-------|------------|-------|
| | 18-29 | 30-64 | 18-29 | 30-64 | 18-29 | 30-64 | 18-29 | 30-64 |
| No funding needed | 5 | 5 | 5 | 6 | 2 | 3 | 8 | 3 |
| All funded by entrepreneur | 42 | 52 | 42 | 53 | 53 | 56 | 50 | 58 |
| None funded by entrepreneur | 3 | 3 | 1 | 3 | 0 | 1 | 2 | 1 |
| Close family member (spouse, parent, sibling) | 18 | 8 | 14 | 7 | 25 | 10 | 14 | 6 |
| Other relatives, kin or blood relations | 14 | 4 | 3 | 4 | 14 | 5 | 3 | 2 |
| Work colleagues | 8 | 7 | 10 | 5 | 9 | 13 | 17 | 4 |
| A stranger | 4 | 4 | 2 | 3 | 0 | 3 | 3 | 4 |
| Friends or neighbours | 10 | 4 | 1 | 1 | 2 | 3 | 0 | 1 |
| Banks or other financial institutions | 19 | 21 | 28 | 16 | 34 | 28 | 11 | 23 |
| Government programmes | 21 | 12 | 21 | 15 | 32 | 14 | 13 | 16 |
| Any other source | 8 | 7 | 5 | 7 | 14 | 5 | 8 | 9 |

Table 4.2: Percentage of younger and older nascent entrepreneurs expecting to secure different sources of external funding, by home nation, 2006 to 2010

Source: GEM UK APS Surveys 2006 to 2010



- 1 The Prince's Scottish Youth Business Trust focuses on entrepreneurs between the ages of 18 and 25, while Shell Livewire focuses on entrepreneurs between the ages of 16 and 30.
- 2 This is based on a combined 2002 to 2010 database of 2196 individuals in Scotland and 17139 individuals in England between the ages of 18 and 29. The estimates are weighted for age, gender, ethnicity and (in England) region.
- 3 The relatively high churn rate of young entrepreneurs aged 18 to 24 both before and after start-up was discussed in the GEM Scotland 2009 report.

with 72% in England, Wales and Northern Ireland), much of this advice may not be particularly well informed. Even if it is, relevant work experience may be more valuable. As Table 4.4 shows, experience of working in one's parent's business goes a long way to reducing fear of failure among young adults in Scotland. It also tends to increase start-up skills and opportunity perception and the likelihood that an individual will know someone who has started a business in the last two years: a proxy measure of relevant social networks.

In conclusion, entrepreneurial activity among young adults in Scotland appears to have recovered from a negative reaction to the recession. TEA rates for young adults in

Scotland in 2010 were similar to those in England and Northern Ireland, but lower than those in Wales. As a new generation of students who have received enterprise education in Scottish schools enter further and higher education in the new decade, it remains to be seen if they will have the same opportunity to experience more context-specific training in starting a business as the previous generation did in Wales. Young potential entrepreneurs in Scotland are more likely to seek and value advice from their social networks than their peers in other home nations. The sentiment of the wider population towards entrepreneurship may, therefore, affect potential young entrepreneurs in Scotland more than elsewhere in the UK.

Table 4.3:
Percentage of younger and older owner-managers who valued advice from social networks versus professional business advisors in starting their business, 2005 and 2006

Source: GEM UK APS survey, 2005 and 2006

| | England | | Wales | | Scotland | | N. Ireland | |
|---|---------|-------|-------|-------|----------|-------|------------|-------|
| % of owner managers who valued advice from: | 18-29 | 30-64 | 18-29 | 30-64 | 18-29 | 30-64 | 18-29 | 30-64 |
| Parents, relatives, friends, or colleagues | 74 | 54 | 65 | 53 | 85 | 52 | 76 | 53 |
| Advisors in Government agencies or service providers e.g. Banks | 25 | 29 | 30 | 36 | 37 | 37 | 37 | 29 |

Table 4.4:
Percentage of younger and older adults who agree they would not start a business in case it might fail by family business background and home nation, 2008 to 2010

Source: GEM UK APS Surveys 2008 to 2010. Significantly different percentages by columns are shown in bold

| | England | | Wales | | Scotland | | N. Ireland | |
|---|---------|-----------|-------|-------|-----------|-------|------------|-------|
| % who would not start a business in case it might fail: | 18-29 | 30-64 | 18-29 | 30-64 | 18-29 | 30-64 | 18-29 | 30-64 |
| No family business background | 37 | 37 | 36 | 39 | 36 | 40 | 46 | 46 |
| Did not work in family business | 40 | 36 | 35 | 39 | 37 | 38 | 39 | 45 |
| Worked in family business | 40 | 33 | 36 | 37 | 22 | 37 | 54 | 41 |

Repeat Entrepreneurs

Repeat entrepreneurs are individuals starting or running a business they founded and who started a different business before their current one. Experience of starting and running a business increases the entrepreneurial capital of an entrepreneur, assuming lessons have been learned from the first experience. In this chapter, we focus on the prevalence, nature and importance of repeat entrepreneurs in the population of Scotland and benchmark countries, and compare them with first time founders.

The 2008 and 2010 GEM UK surveys asked existing business owner-managers if they were founders and if they had ever run a business before their current business. Combining both years, 18% of founding business owner managers in Scotland were repeat entrepreneurs, compared with 22% in England, 26% in Wales, and 15% in Northern Ireland.

Figure 5.1 shows the prevalence of repeat entrepreneurs in the population in home nations and Arc of Prosperity countries for 2008. Northern Ireland, Denmark and Scotland appear to have lower rates than other nations. However, Denmark has a higher relative prevalence of repeat entrepreneurs, i.e. the proportion of founding owner managers who have started a business before this one, than Northern Ireland or Scotland (see Figure 5.2).

Data was collected in 2007, 2008 and 2010 on the prevalence of repeat nascent entrepreneurs in the working age population. The combined

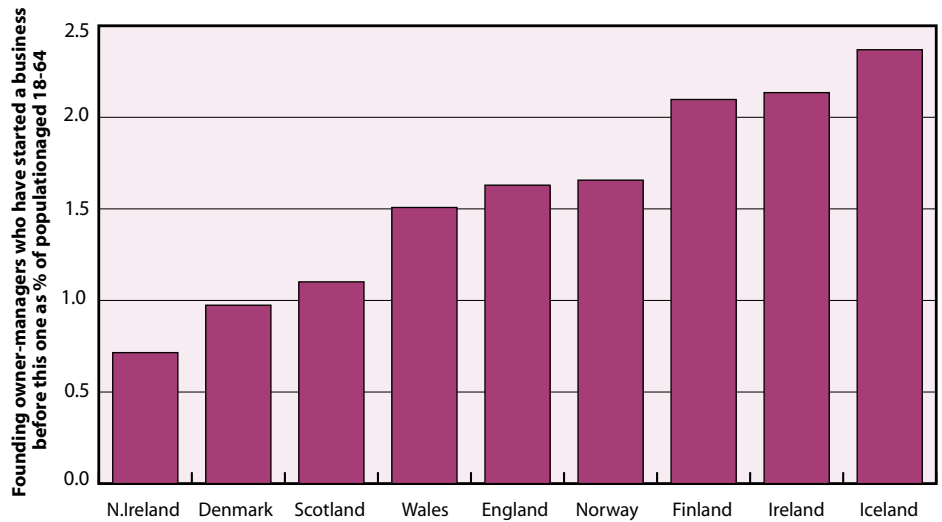


Figure 5.1:
Prevalence of repeat entrepreneurs in the working age population in home nations and Arc of Prosperity countries, 2008
Source: GEM Global APS, 2008

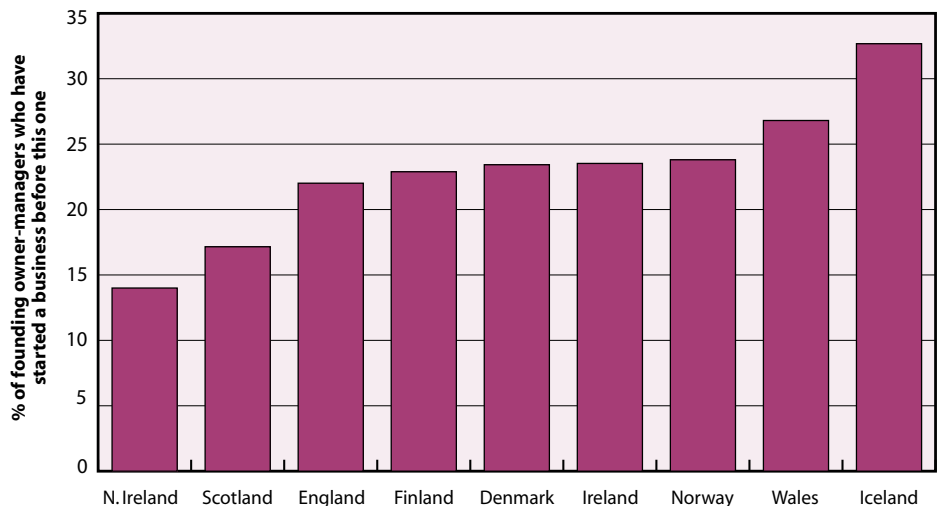


Figure 5.2:
Relative prevalence of repeat entrepreneurs in home and Arc of Prosperity nations, 2008
Source: GEM Global APS, 2008

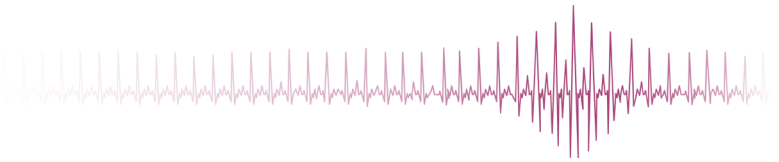
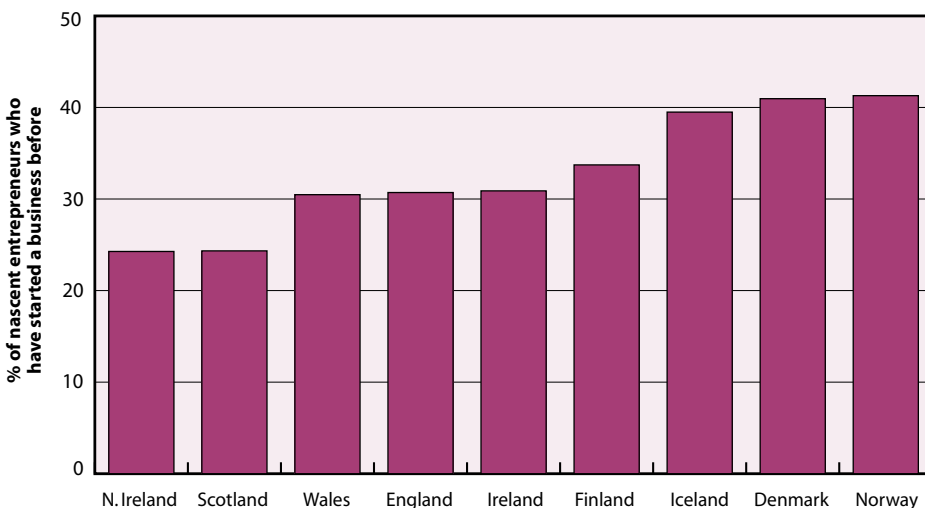


Figure 5.3:
Prevalence of nascent entrepreneurs who have founded a business before in the working age population in home nations and Arc of Prosperity countries, 2007/2008
Source: GEM Global APS 2007 and 2008

estimate for Scotland is significantly lower (0.59%) than for England (0.94%). The estimates for Wales and Northern Ireland are 0.88% and 0.67%.

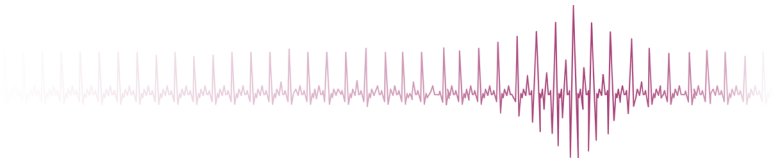
Figures 5.3 and 5.4 show the prevalence and relative prevalence of nascent entrepreneurs who have started and managed a business before for home and AOP nations for the combined 2007 and 2008 surveys. Once again, Scotland and Northern Ireland are at the bottom of the league table, but this time the nations of the British Isles appear to have a lower relative prevalence of repeat nascent entrepreneurs than Nordic nations.

Figure 5.4:
Relative prevalence of repeat nascent entrepreneurs home and Arc of Prosperity nations, 2007/2008
Source: GEM Global APS 2007 and 2008



Repeat entrepreneurs tend to be older, male and running larger businesses. Only 4% of repeat entrepreneurs in the UK in 2008 and 2010 (the two years for which this data is available) were under 30, compared with 8% of first time founders. Only 20% of repeat entrepreneurs in the combined 2008/2010 UK GEM sample were women, compared with 31% of first time founders. Only 19% of repeat entrepreneurs had at most GCSE or equivalent educational qualifications, compared with 28% of first time founders. This difference persists when we exclude young adults who might still be studying. Nineteen percent of repeat entrepreneurs are immigrants, compared with only 9% of first time founders (and 12% of the working age population in general).

Repeat entrepreneurs tend to work longer hours than first time entrepreneurs. Twenty-nine percent of repeat entrepreneurs worked



less than 40 hours on the business on average in 2008, while 12% worked more than 60 hours a week. This compares with 38% and 8% of first time entrepreneurs.

The combined 2008 and 2010 surveys suggest that repeat entrepreneurs tend to be less likely to be self-employed with no employees (48% versus 53%), and more likely to have more than 5 employees in addition to the owners (16% versus 11%). This difference persists into expectations about the future size of their business; 21% of repeat entrepreneurs expected their business would provide more than 5 jobs (excluding the owners) in five years time, compared with 16% of first time founders¹.

Repeat nascent entrepreneurs also differ from first-time nascent entrepreneurs, and along the same lines: they are more likely to be male,

older, and better educated. As Figure 5.5 shows, the dominance of males among repeat nascent entrepreneurs grows with age. Over half of male nascent entrepreneurs and one third of female nascent entrepreneurs around the age of 45 are likely to be repeat entrepreneurs. The prevalence and relative prevalence of repeat nascent entrepreneurs drops after the age of 60.

In conclusion, repeat entrepreneurs are a significant group: they have higher entrepreneurial capital – both in terms of capability and commitment - and they tend to create more jobs than a first time entrepreneur. Unfortunately Scotland has fewer of them both absolutely and relatively than most of its benchmark nations. In contrast, Wales has a relatively high proportion of these repeat entrepreneurs.

¹ These differences are all statistically significant at the 5% level, from a sample of around 3,500 founding owner-managers running existing businesses, and tend to be consistent across the home nations, but because of small numbers the proportions for individual home nations are not shown here.

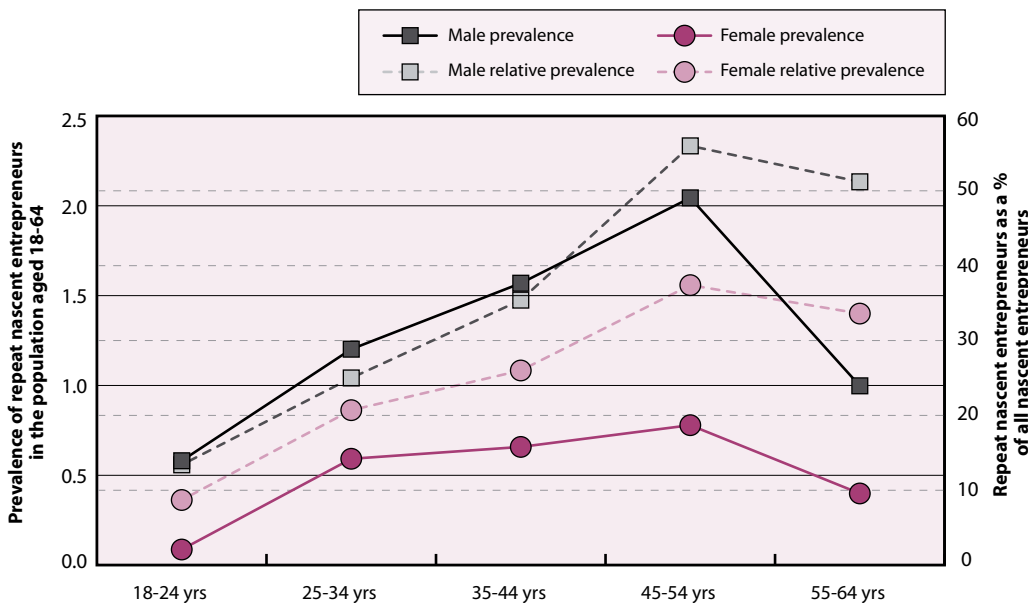


Figure 5.5: Prevalence and relative prevalence of repeat nascent entrepreneurs in the UK by age group and gender, combined 2007, 2008 and 2010 data
Source: GEM UK APS 2007, 2008, 2010

Funding Entrepreneurs

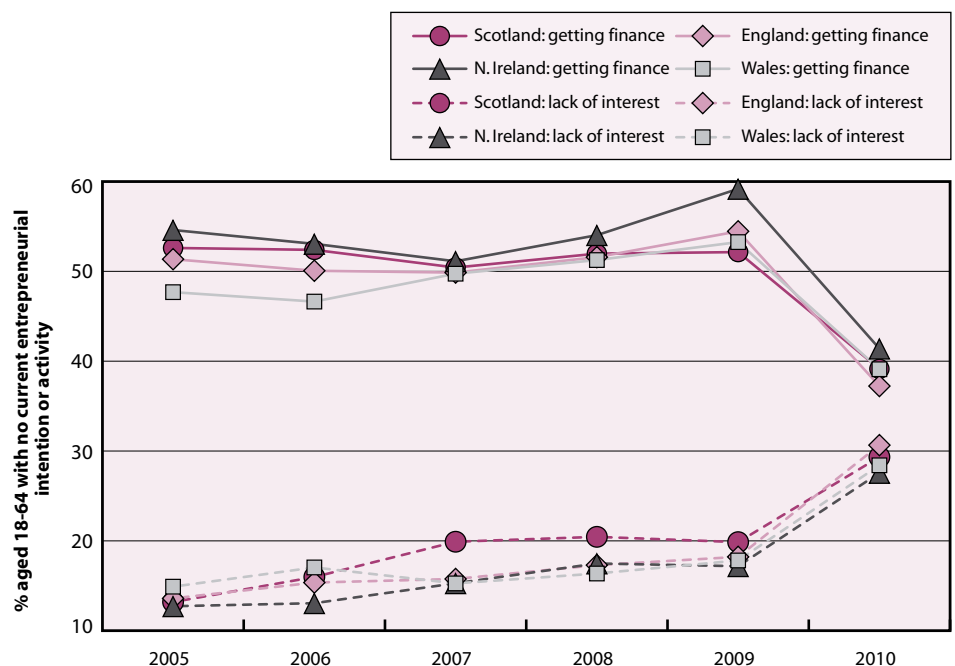
This chapter considers how start-up entrepreneurs in Scotland fund their new businesses, comparing with the experience in benchmark nations where data permits.

In Scotland, 60% of those interviewed in 2009 to 2010 who had tried to start a business in the past 12 months but gave up and had now no involvement in trying to start or running a business cited "getting finance" as one of the biggest barriers preventing them from starting a business. However, there are very few of these individuals: around 0.4% of the Scottish and 0.6% of the UK working age population. Across the UK, two thirds (67%) of all people surveyed who tried but gave up in the previous 12 months were either nascent entrepreneurs

again at the time of the survey or running a different business.

Across the 2005 to 2010 period, half (50%) of people in Scotland - and across the UK - who had no current or intended engagement in starting or running a business cited getting finance as one of the biggest barriers to them starting a business. This proportion remained stable until 2009 and then declined to around 40% in 2010. At the same time, the proportion who said that lack of interest was one of the biggest barriers increased to 30%, as Figure 6.1 shows. Less than 20% of those who cited financial barriers in 2010 also mentioned lack of interest. But clearly there was an improvement in sentiment of non-entrepreneurs on funding availability in 2010.

Figure 6.1: Percentage of those with no current entrepreneurial intention or activity who cited "getting finance" and "lack of interest" as barriers to them starting a business or becoming self-employed, by home nation, 2005 to 2010
Source: GEM UK APS, 2005 to 2010



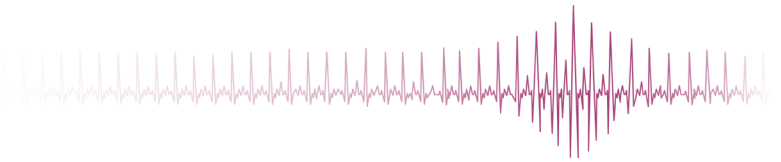


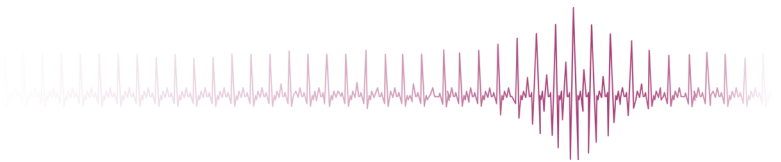
Table 6.1 shows the proportion of nascent, new and established entrepreneurs who thought that there were adequate sources of external start-up funding in their region, by home nation from 2003/04 to 2009/10. The long term pattern is of a decline in perception of external funding availability in England, Wales and Northern Ireland on the part of nascent and established entrepreneurs, but not on the part of new entrepreneurs, i.e. those who have started in the last 3½ years.

No long term decline is evident in Scotland, but there appears to have been a major dip in 2009, followed by a bounce-back. Only 22% of nascent and new entrepreneurs in Scotland in 2009 thought there were adequate sources of external start-up funding, compared with 52% in 2010. These changes are not statistically significant because of small numbers, but the recovery across the UK from 31% to 44% is statistically significant.

| | | 2003/04 | 2005/06 | 2007/08 | 2009/10 |
|------------|-------------|---------|---------|---------|---------|
| England | nascent | 41 | 38 | 33 | 33 |
| | new | 41 | 43 | 40 | 39 |
| | established | 53 | 39 | 42 | 34 |
| Wales | nascent | 33 | 30 | 31 | 29 |
| | new | 45 | 40 | 36 | 42 |
| | established | 31 | 42 | 38 | 30 |
| Scotland | nascent | 38 | 43 | 56 | 46 |
| | new | 40 | 23 | 61 | 49 |
| | established | 26 | 38 | 42 | 40 |
| N. Ireland | nascent | 65 | 11 | 20 | 16 |
| | new | 53 | 43 | 41 | 39 |
| | established | 40 | 35 | 58 | 24 |

Table 6.1:
Percentage of nascent, new and established entrepreneurs who agreed that there are adequate sources of external start-up funding in their region, by home nation, 2003/04 to 2009/10

Source: GEM UK APS, 2006 to 2010



Tables 6.2 and 6.3 show the percentage of nascent entrepreneurs in Scotland and the UK each year from 2006 to 2010 who expected to get funding from different sources. Expectations of external funding appear to have peaked in 2008, with greater expectations in Scotland than in the UK as a whole, but since then there has been less expectation, especially in Scotland, of external sources of funding. On average over this period, 55% of Scottish entrepreneurs (49% across the UK) expected to fund all the start-up costs themselves. Seventy-three percent (61% in the UK) expected to fund at least half the costs. The median expected start-up cost in

Scotland and the UK was £10,000, with the median cost for those businesses fully funded by the entrepreneur being £8,000.

Turning from the demand side to the supply side, Figure 6.2 shows the percentage of 18-64 year olds who have invested in at least one new business in the last three years in Scotland, the UK, and Arc of Prosperity countries 2002 to 2010. Rates were stable in Scotland at around one quarter of the average AOP rate until 2009, when they dropped significantly, then rose significantly in 2010 to twice their long run average. A similar pattern

Table 6.2:
Percentage of nascent entrepreneurs mentioning different expected sources of funding for their new business in Scotland, 2006 to 2010

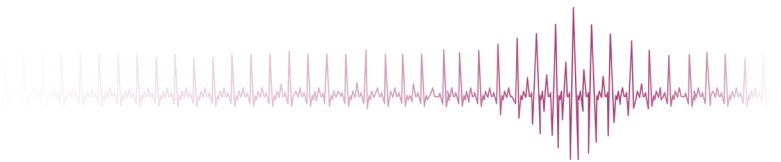
Source: GEM Scotland APS, 2006 to 2010

| SCOTLAND | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|------|------|------|------|------|
| No funding needed | 10 | 0 | 0 | 0 | 4 |
| All funded by entrepreneur | 66 | 52 | 45 | 62 | 50 |
| None funded by entrepreneur | 0 | 0 | 0 | 6 | 0 |
| Family member | 9 | 4 | 39 | 5 | 20 |
| Friends, neighbours or work colleagues | 5 | 14 | 32 | 6 | 8 |
| A stranger | 2 | 2 | 8 | 0 | 0 |
| Banks or other financial institutions | 20 | 40 | 35 | 23 | 29 |
| Government programmes | 11 | 23 | 29 | 16 | 19 |
| Any other source | 5 | 10 | 0 | 6 | 14 |

Table 6.3:
Percentage of nascent entrepreneurs mentioning different expected sources of funding for their new business in the UK, 2006 to 2010

Source: GEM UK APS, 2006 to 2010

| UK | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|------|------|------|------|------|
| No funding needed | 5 | 4 | 5 | 5 | 10 |
| All funded by entrepreneur | 46 | 53 | 51 | 51 | 44 |
| None funded by entrepreneur | 3 | 2 | 2 | 4 | 9 |
| Family member | 10 | 15 | 16 | 11 | 9 |
| Friends, neighbours or work colleagues | 12 | 12 | 15 | 11 | 13 |
| A stranger | 5 | 4 | 4 | 4 | 1 |
| Banks or other financial institutions | 26 | 23 | 21 | 22 | 19 |
| Government programmes | 16 | 14 | 19 | 16 | 19 |
| Any other source | 8 | 8 | 6 | 10 | 5 |



of decline followed by an increase is evident in the UK, but not in other AOP countries (with the exception of Ireland).

This unusual pattern is probably connected with the banking crises and consequent increasingly difficult credit market for start-up businesses in the British Isles in 2009. Consistent with this pattern, the proportion of nascent and new entrepreneurs reporting failed attempts at raising funds from friends and family and other investors across the UK declined from 7% in 2009 to 3% and 2% respectively in 2010, with similar declines in refusal rates in Scotland.

Table 6.4 shows the nature of the relationship between individual investors and their start-up entrepreneur investees in Scotland and the UK from 2002-2004 to 2008-2010. These break down into three main types: individuals who are socially connected by family, or by social ties, and strangers. The table shows there has been a shift over this period, particularly in Scotland, from mainly funding start-up entrepreneurs in the family to a mix of family and non-family but socially tied investees. Funding of strangers remains rare. In 2010, however, the proportion of family investments reported by informal investors in the Scottish

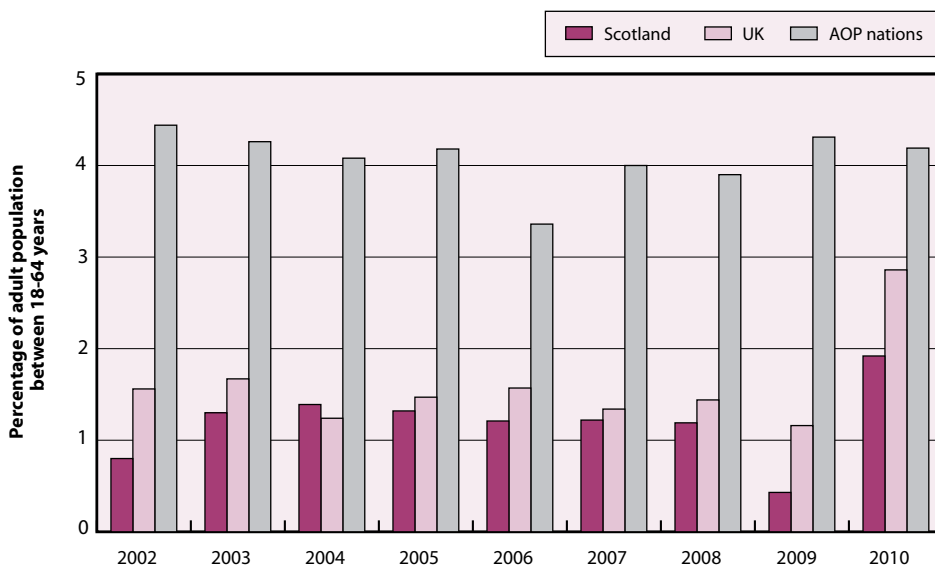


Figure 6.2: Informal Investment rate in Scotland, UK and Arc of Prosperity nations, 2002-2010 (% of respondents aged 18-64 who invested in someone else's new business in the last three years)

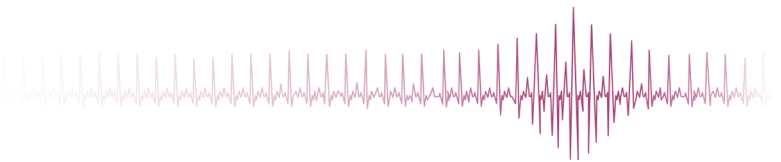
Source: GEM Global APS, 2002 to 2010

Note: Ireland did not participate in GEM in 2009.

| | | 2002-2004 | 2005-2007 | 2008-2010 |
|----------|--------------------------------------|-----------|-----------|-----------|
| Scotland | Blood relatives | 67 | 56 | 47 |
| | Friends, neighbours, work colleagues | 27 | 42 | 47 |
| | Stranger/other | 6 | 2 | 6 |
| UK | Blood relatives | 52 | 52 | 45 |
| | Friends, neighbours, work colleagues | 39 | 42 | 47 |
| | Stranger/other | 8 | 6 | 7 |

Table 6.4: Relationship of informal investor with entrepreneur in their most recent start-up business investment, Scotland and UK, 2002-04 to 2008-10

Source: GEM UK APS, 2002 to 2010



GEM survey increased from 47% to 59%. In the other home nations, the proportion of funding from non-family individuals increased in line with the long term trend.

The overall median informal investment in a new business from 2002 to 2010 was £7,000 in both Scotland and the UK. The median amount invested in family members was £8,000, compared with £5000 in friends, neighbours and work colleagues and £40,000 in strangers. The latter suggest a more professional "business angel" type of investment relationship. The other two investment categories are more of the "love money" type.

Table 6.5 shows the relative frequency of the most important reason why individuals shut down, quit or sold a business in the past year, for the combined 2007 to 2010 database, for home and AOP nations. It is ordered in frequency of mention in Scotland on the vertical dimension,

and frequency of mention of problems getting finance on the horizontal dimension. It can be seen that "problems getting finance" is a relatively minor reason, but that it is more frequently mentioned in Scotland than in most benchmark nations. While problems getting finance have increasingly been reported as a main reason for quitting a business, less than 10% of those who quit a business in 2010 in Scotland (and across the UK) mentioned it.

In conclusion, start-up entrepreneurs in Scotland appear to have been particularly affected by an external funding drought in 2009, but they seem to have shifted funding strategies by appealing to individual investors for "love money", and in particular to family members, more than in the past. However, informal investment rates in Scotland remain at only half of average rates across all AOP nations. Perceptions of availability of external start-up funding seem to have improved in Scotland in 2010 on the steep but temporary decline in perceptions in 2009.

Table 6.5:
Frequency of mention of principal reasons for shutting down, quitting or selling a business in the past 12 months, home and AOP nations, 2007 to 2010 combined

Source: GEM Global APS, 2007 to 2010

| | Finland | Ireland | Denmark | N.Ireland | England | Wales | Norway | Scotland | Iceland |
|-------------------------------------|---------|---------|---------|-----------|---------|-------|--------|----------|---------|
| Another job or business opportunity | 14 | 15 | 19 | 14 | 16 | 14 | 11 | 31 | 15 |
| The business was not profitable | 14 | 20 | 12 | 28 | 30 | 23 | 19 | 18 | 17 |
| Personal reasons | 25 | 18 | 22 | 24 | 18 | 22 | 11 | 12 | 21 |
| Retirement | 23 | 10 | 2 | 7 | 8 | 9 | 2 | 9 | 0 |
| The exit was planned in advance | 6 | 8 | 3 | 2 | 6 | 6 | 9 | 7 | 4 |
| Problems getting finance | 2 | 3 | 4 | 4 | 4 | 4 | 6 | 6 | 10 |
| Other | 6 | 17 | 29 | 12 | 8 | 14 | 29 | 6 | 18 |
| An opportunity to sell the business | 9 | 9 | 8 | 6 | 5 | 3 | 13 | 5 | 9 |
| An incident | 2 | 0 | 1 | 2 | 3 | 4 | 1 | 5 | 6 |



Scottish Entrepreneurship Policy and Programmes Review 2010

7

There were no major initiatives in entrepreneurship policy or programmes in 2010. The Scottish Investment Bank, announced in April 2009, did not commence operations in 2010.

A "fundamental review of the purpose of an enterprise agency and the success of the recent reforms" was instituted by the Scottish Parliament committee on Economy, Energy and Tourism in 2010. Most witnesses argued that, while the transfer of responsibility for local economic development, including new and small business enterprise support programmes, to local authorities from Scottish Enterprise in 2008 and from Highlands and Islands Enterprise in 2009 was not flawless, no-one wanted another restructuring any time soon¹.

One issue raised in the enquiry was that there had been an overall reduction in the expenditure on local economic development following the transfer of Business Gateway to local authorities. Another was that there might be a gap in services between the new and small businesses handled by Business Gateway and the faster growth businesses that were account-managed centrally by Scottish Enterprise. A third issue was the perception among business support organisations at the "sharp end" of delivery that following the demise of the Local Enterprise Companies there was a disconnect between them and national policy-making, despite the new Regional Advisory Boards.

Despite these issues, local authority representatives were positive about the

move, while SE and HIE were more firmly focused on helping ambitious firms in key sectors to grow and export, although Scottish Enterprise still managed the central phone enquiry fulfilment and resource service (EFRS) of Business Gateway. Several local authorities had generated new forms of enterprise support for businesses which fell between the standard Business Gateway provision and Scottish Enterprise account management.

In September, the local authorities reported progress against targets under the Single Outcome Agreements with the Scottish Government for the year 2009/10². Almost all of these SOAs specified targets for new business creation. However, the indicator measures used differed from local authority to local authority, and the presentation of indicators and accompanying text varied greatly in detail and style. Some used Business Gateway support output measures; others used the Committee of Scottish Clearing Banks business bank account openings, others used the latest available VAT registration data (for 2008). Most left these outcome measures blank as the data was not available for 2009/10 from the Office for National Statistics (ONS) until December 2010. Local authorities recognised that this lack of timely data was a real issue.

In November, a review of social enterprise success factors and how social enterprise can be encouraged in Scotland, commissioned by the Scottish Government, was released³. It emphasised the importance of the people who drive social enterprises and "revealed

the critical influence of the public sector itself (both positive and negative) in shaping the market prospects for social enterprises"⁴. It noted a "growing vulnerability and concern among social enterprises when it comes to the resulting public spending cuts that are likely to accelerate, deepen, and affect all of the public sector over the coming years".

Official new business registrations (for VAT or PAYE) in 2009 at local authority level for the 12 months to November 2009 were released by ONS in December. New business registrations fell by more than 20% in 5 Scottish local authorities, by 10% to 19% in 12, by less than 10% in 11, was unchanged in one, and grew in 3 local authorities. Overall, the drop in official Scottish new business starts in 2009 was 9%, compared with a drop of 12% across the UK.

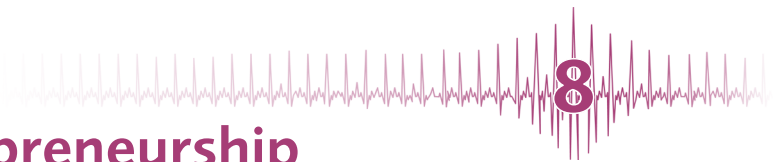
In December, Enterprise Minister Jim Mather announced a series of grants worth over £6.6 million from the European Regional Development Fund (ERDF) to provide advice and support to small businesses and entrepreneurs in three local authority areas and for Scottish Chambers of Commerce and PSYBT.

1 www.scottish.parliament.uk/s3/committees/eet/documents/EnterprisereportPDF.pdf

2 www.improvementservice.org.uk/library/577-single-outcome-agreements/681-phase-2-single-outcome-agreements-2009-onwards/752-soa-annual-reports-2009-2010/view-category/

3 www.scotland.gov.uk/Publications/2010/11/23094200/0

4 www.scotland.gov.uk/Publications/2010/11/23094200/12



GEM and Entrepreneurship Policy in Scotland

In 2010, entrepreneurial activity in Scotland remained subdued after a historic low in 2009. Nascent entrepreneurs reacted to a decline in availability of bank finance by turning to family and friends for funding.

Throughout this report, Wales has contrasted strongly against Scotland. Since, 2002, entrepreneurial activity among young adults in Wales has increased steadily from 3.4% to 6.6% on a like-for-like basis. In contrast, the increase in Scotland was from 2.8% to 3.1%. Furthermore, GEM 2008 and 2010 data suggest that 26% of founding business owner-managers in Wales are repeat entrepreneurs, compared with only 18% in Scotland.

Unlike Scotland, Wales launched a comprehensive, integrated Entrepreneurship Action Plan in 2000, with the aim of increasing business registrations by 50% between 2000 and 2006. While VAT registrations only grew by 7% during this time, activities initiated in the education system may have had positive effects in the longer term. The Welsh Knowledge Exploitation Fund, which drew on EU Objective 1 funds, was deployed "to embed a culture of entrepreneurship across post-16 education and training."¹ Every college and university in Wales was provided with funding for entrepreneurship champions who received state of the art training, and entrepreneurship scholarships were provided to students or recent graduates who wished to start their own business. By 2003/04, every further and higher education institution in Wales offered entrepreneurship education. As shown in Figure 4.1 in Chapter

4, the increase in entrepreneurial activity among young people in Wales over the last few years is remarkable, particularly when set against a backdrop of declining entrepreneurial activity among older adults during the same period.

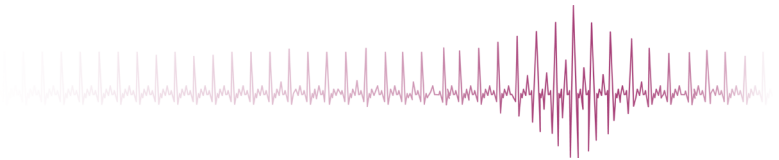
Scotland now has a generation of people in their forties who, were they in England or Wales, (or in Northern Ireland if they were male) might well have been entrepreneurs in their thirties – and had a good chance of becoming repeat entrepreneurs in their forties. This lost generation can be seen in the gap between Scotland and other home nations in the entrepreneurial activity of people in their thirties in Figure 3.3 of Chapter 3.

Further evidence of the fragility of entrepreneurship in Scotland can be seen in Table 6.5 in Chapter 6. In Scotland, 31% of entrepreneurs quit a business to take up paid employment or pursue another opportunity: more than in any other home or AOP nation. Only 37% of these were actively trying to start a business or running a new business; the rest were in paid employment or studying. These were not business failures, but more a case of the entrepreneur giving up on the venture. Indeed, they were twice as likely to give "lack of interest" as a major barrier to starting again than entrepreneurs who gave other reasons for quitting - and Scots quitters were twice as likely to cite lack of interest than quitters from elsewhere in the UK. Together with the rise in disinterest in entrepreneurship shown in Figure 6.1 in Chapter 6, they should give cause for concern.

While Scotland cannot recover this lost generation, it can prevent another generation – those who have benefited from the investment in enterprise education in Scottish schools since 2003 – from missing out on their entrepreneurial potential. As this generation enters third level education, in colleges and universities, it will find a sector ill-prepared to receive enterprising individuals who wish to develop entrepreneurial as well as technical skills, or indeed to connect students with their entrepreneurial potential. As an example, the Scottish Institute for Enterprise, which suffered repeated funding crises in the latter half of the decade, has only three regional business advisors to cover all Scottish universities, and does not cover the further education sector.

There is an opportunity for the new Scottish government to look afresh at enterprise policy in an integrated way. It has invested in parts of the environment for entrepreneurship: in schools, for example, and decentralised new business support. But there is a gap in third level education: a formative time when students can experiment in entrepreneurship in a more concrete way than at school but still at low risk. A comprehensive action plan, along the Welsh lines, may be needed now to address the rising level of disinterest in entrepreneurship in Scotland on the one hand and the expectations of those students who have been switched on to entrepreneurship by *Determined to Succeed* on the other.

¹ Higher Education Funding Council for Wales (2000). HEFCW Circular Number W00/80HE, 7 August



Appendix 1

In the GEM 2008 Executive Report¹, the tenth in the series, a revised GEM model was presented. This model incorporated what has been learnt about entrepreneurial activity in the past ten years, and also what has been learnt about the economics of development and where entrepreneurship and innovation contribute to economic development. In particular, GEM adopted the World Economic Forum typology of "factor-driven economies", "efficiency-driven economies", and "innovation-driven economies"².

The revised model recognises that the nature and contribution of entrepreneurship may vary across countries with different levels of economic development. The model suggests

a comparative study of entrepreneurship of an economy such as Scotland should focus on other innovation-driven economies rather than factor - or efficiency-driven economies.

The second major adjustment to the GEM model is the recognition that entrepreneurship is multi-faceted, and is not captured by one measure but by many. This is represented in the diagram by the Entrepreneurship box which has three main components: attitudes, activity and aspirations. Given the right institutional context (as represented by the left hand side of the diagram), entrepreneurial attitudes, activity and aspiration interact to contribute to national economic growth through the provision of new economic activity. This is important because it

suggests that a narrow focus on measuring the number of business start-ups alone may miss the important impact that attitudes and aspirations, as well as institutions, may have on the effect of entrepreneurship in a nation on national economic growth.

1 Bosma, N., Acs, Z.J., Autio, E., Coduras, A., and Levie, J. (2009). *Global Entrepreneurship Monitor 2008 Executive Report*. London: GERA. Available at www.gemconsortium.org

2 Phases of economic development are decided on the level of GDP per capita and the extent to which countries are factor-driven in terms of the shares of exports of primary goods in total exports. See Porter, M.E. and Schwab, K. (2008), *The Global Competitiveness Report 2008-2009*, Geneva, Switzerland: World Economic Forum.

