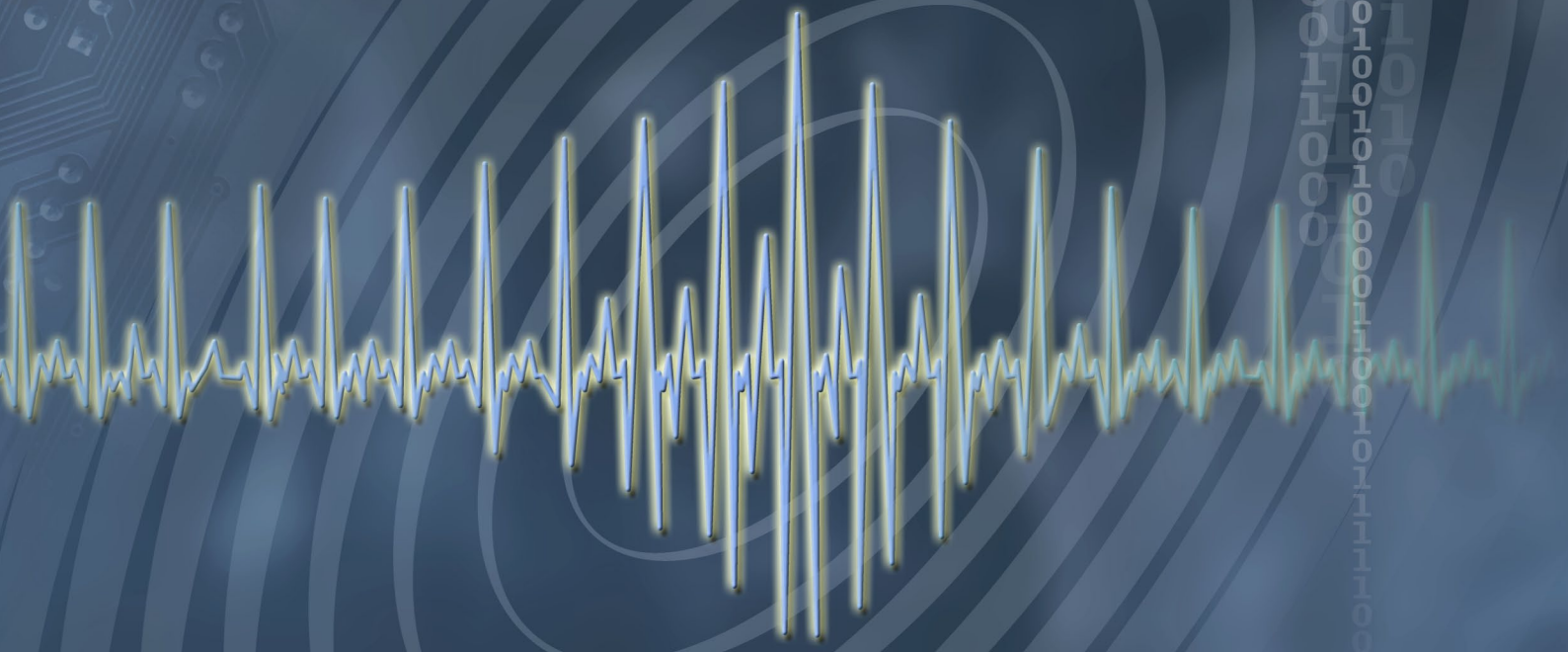
GEM

Global Entrepreneurship Monitor

Scotland **2009**



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Data for this study were provided by the Global Entrepreneurship Research Association. Names of the members of national teams, the global coordination team, and the financial sponsors are published in the Global Entrepreneurship Monitor 2009 Global Report, which can be downloaded at www.gemconsortium.org. We thank all the researchers and their financial supporters who made this research possible.

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

GEM Scotland is an important - if often worrying - analysis of Scotland's entrepreneurial position in the world. In entrepreneurial terms, we didn't make it to the World Cup...

In fact the picture is worse than that. Opportunity perception (lower), perceived lack of funding and fear of debt all played their parts in lowering our overall entrepreneurial activity rates over a long-term trend.

My fear for Scotland - unless we in the public, private and third sectors work together to grow our economy - is of a major social and economic reversal of fortune.

Scotland faces a triple economic tsunami – reduced government spending, declining entrepreneurial activity and markedly increased unemployment - particularly in the NEET category; an absolute abomination.

Layered across all three seems to be a continuing cultural undercurrent of dependency on the state. Let's be clear on one thing: we need a growing private sector to accommodate undoubted shrinkage in the public sector as government spending falls, not the reverse.

Scotland's challenges, of course, rest in part with our devolved Government; and the Coalition in Westminster will also have their part to play in finding solutions. But, equally, the responsibility of overcoming those challenges rests with me and you.

Tinkering here is not the answer; nor is doing what we have always done. Scotland as a whole needs to take a radical look at itself and change markedly.

Aggressive fiscal policies are required, as are ground level support for entrepreneurial start-ups. As I'm tired of saying, the PSYBT has those answers: fund them to deliver. Drive a tax regime that encourages growth in business at all levels of the economy.

The NEET agenda can only be tackled through an integrated approach at all levels: its prevention can save Scotland and the UK billions of pounds. Again I think we have some answers there.

Education, as ever, is a key ingredient. But as the *Determined to Succeed* funds that underpin enterprise education migrate from a ring-fenced position, one wonders whether - in a negative funding cycle - that enterprise education will continue as positively as it has to date?

I would do GEM a disservice if I ignored one good piece of news - one that echoes for me as I recall being at my father's side in the grocery business he ran. Family businesses are a key incubator for new business creation. Clearly we need to harness that knowledge and encourage greater tactical support there.

The last piece of good news is this: we are a small nation and as such we can get everyone that counts in a room to change that nation for the good of all - and we must.

JFK's words could never have been more appropriate as they are today for us in Scotland: "Ask not what your country can do for you – ask what you can do for your country". It's time for us all to answer.

Yours aye

Tom

Sir Tom Hunter

Introduction

What's new in GEM Scotland 2009?

- GEM Scotland 2009 has ten years of data to draw on, with around 2000 individuals aged between 16 and 80 interviewed each year. In the UK in 2009, 30,003 individuals aged between 16 and 80 were interviewed, close to the 2008 sample size of 32,007.

- New questions in the 2009 survey enable identification of the relative importance of economic, social and environmental goals that entrepreneurs have for their businesses, reasons for fear of failure, how long it takes people to start a business or abandon a new business attempt, how many people tried to start a business in the past year, and how entrepreneurs felt the global economic slowdown impacted on their business.

- Social entrepreneurship was a special topic for GEM this year, enabling comparison of Scottish and UK rates of social entrepreneurship with those in other countries, using a definition similar to that developed by the GEMUK team.

- The link between family business and new business is examined for the first time in the GEM Scotland report series.

GEM is a major research project aimed at describing and analysing entrepreneurial processes within a wide range of countries. In particular, GEM focuses on three main objectives:

1. To measure differences in entrepreneurial attitudes, activity and aspiration between countries
2. To uncover factors which underpin these differences
3. To identify policies that may enhance entrepreneurial activity.

GEM's contribution to the knowledge and understanding of the entrepreneurial process is unique since, to date, no other data set exists that can provide consistent cross-country information and measurements of entrepreneurial activity in a global context. Information about GEM and all GEM documents can be found at www.gemconsortium.org[1].

In the last decade, considerable attention has been paid to the changing nature of work, much of which has been driven by information technology, but some of which has been driven by changing priorities of individuals. While job and pension security will decline and working life spans will rise, individuals will lead more varied working lives, shifting from public to private to third sector throughout their working life, and working through spells of self-employment and contract employment. GEM has an important part to play in measuring these changes, and more longitudinal tracking of individuals and enterprises is likely in the future.

In 2009, the Global Entrepreneurship Monitor (GEM) cross-national assessment of entrepreneurial activity began its second decade of data collection with 180,000 individual interviews and 1600 expert interviews in 54 participating economies. The economies spanned a range of economic development phases, from factor-driven, which are primarily extractive in nature, to efficiency-driven, in which scale-intensity is a major driver of development, to innovation-driven in which the main driver of economic growth is innovation and entrepreneurship:

Factor-driven Economies[2]
Algeria, Guatemala, Jamaica, Lebanon, Morocco, Saudi Arabia, Syria, Kingdom of Tonga, Uganda, Venezuela, West Bank and Gaza Strip, Yemen.

Efficiency-driven Economies
Argentina, Bosnia and Herzegovina, Brazil, Chile, China, Colombia, Croatia, Dominican Republic, Ecuador, Hungary, Iran, Jamaica, Jordan, Latvia, Malaysia, Panama, Peru, Romania, Russia, Serbia, South Africa, Tunisia, Uruguay.

Innovation-driven Economies
Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Iceland, Israel, Italy, Japan, Republic of Korea, Netherlands, Norway, Slovenia, Spain, Switzerland, United Kingdom, United Arab Emirates, United States.

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 owner-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 GEM2009 Global report

Entrepreneurial Aspirations

A small number of new firms plan to contribute a disproportionate share of new jobs. About 70% of new start-ups over a five year period expected some job creation, but only 14% expected to create 20 or more new jobs. Countries with high levels of employment protection[3] also exhibited lower rates of business start-ups that expect to generate large numbers of new jobs. Strong employment protection may be seen by entrepreneurs as a barrier to growing their businesses, and it may make individuals with potential for high aspiration entrepreneurship view employment as a more attractive option than starting their own business.

Impact of the 2009 economic downturn

More than half of the entrepreneurs

questioned said it was more difficult to start a new business in 2009 than in 2008. A majority of entrepreneurs in factor-driven and efficiency-driven economies saw fewer opportunities for their businesses, even though these countries tended to suffer less economic decline on average than innovation-driven economies. Almost a quarter of early-stage entrepreneurs in innovation-driven countries saw more opportunities for their businesses. More established business owner/managers tended to be the most pessimistic.

Half of the innovation-driven countries show a decrease in the number of people that are trying to start new businesses. Characteristics and sentiments have also changed; in many countries the recession prompted an increase in "necessity driven" start-up entrepreneurs and a decrease in the proportion of people who saw good opportunities for new start-ups. In over one third of the countries, fear of failure associated with starting businesses increased.

Informal investment activity in 2009 decreased in most G7 countries; but among GEM countries overall, the number with decreased activity was matched by those with increased activity.

GEM Special Topic 2009: Social Enterprise

In the 2009 GEM survey, special questions were asked to identify social entrepreneurs, defined as individuals engaged in entrepreneurial activities with a social goal. Across the 49 countries that participated, on average 1.8% of the adult population was involved in early-stage entrepreneurial activity, with a range from 0.1% to 5.4%. Social entrepreneurial activity appears to rise slightly with stage of economic development. More men than women started socially oriented ventures. Social entrepreneurs also tended to be active at younger ages than business entrepreneurs. Better educated individuals were more likely to be social entrepreneurs. These kinds of ventures were started in a variety of areas, notably education, health, culture, economic development, and the environment.

1 GEM's research methodology and procedures are described in Reynolds, P.D., N. Bosma, E. Autio, S. Hunt, N. DeBono, I. Servais, P. Lopez-Garcia and N. Chin (2005), "Global Entrepreneurship Monitor: Data Collection Design and Implementation 1998–2003", Small Business Economics 24: 205–231. Most of the information in this chapter is taken from the 2009 GEM Executive Report (Bosma and Levie, 2010) available from 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.

3 The UK had the third lowest employment protection of the 19 countries studied.

Summary Highlights for GEM Scotland 2009

- The proportion of people in Scotland not engaged in entrepreneurial activity who agreed there were good opportunities to start a business in their local area fell from 33% to 20%, the same as the UK. In comparison, the average for Arc of Prosperity (AOP) countries was 40%. There was a similar gap in the proportion of people who knew someone who had started a business in the last two years. Entrepreneurial skills self-perception was, however, similar in Scotland, UK and AOP countries.

- Scotland's Total Early-Stage Entrepreneurial Activity (TEA) rate in 2009 was 3.6%, significantly below the UK rate of 5.8% and an 18% decline on the 2008 estimate. The TEA rates for both males and females, at 2.5% and 4.8%, were the lowest since recording began in 2000 and the male TEA rate for Scotland was the lowest of any region in the UK. The long term trend in TEA rates in Scotland for both males and females appears to be negative, in contrast to a static picture for the UK as a whole.

- The Scottish Social Entrepreneurial Activity (SEA) rate, at 2.1%, was the same as the UK estimate and the average for innovation-driven, relatively wealthy countries.

- The proportion of Scots who invested in someone else's business was the lowest of any participating nation in 2009, at 0.4%, one tenth of the average rate for AOP countries. The UK rate was 1.2%.

- Scots who worked in their parent's business were around two and a half times as likely to be early-stage entrepreneurs as those with no family business background. A family business background can confer a wide range of benefits that increase the propensity of an individual - and particularly women and men without qualifications - to engage in entrepreneurial activity. It increases skills and opportunity perception without increasing fear of failure, it provides more role models and funding, and it seems to increase the chances that the new business will be innovative, particularly if the business is a spinoff of an existing family business.

- The motivations of male and female entrepreneurs, at least as measured by GEM, are surprisingly similar in Scotland and the UK, but they differ by age. The data suggest that many young people try starting because "they don't know it can't be done", and perhaps because they feel they have little to lose if they try to start, leading to a high rate of abandonment before they start as they realise it might fail. Their relative inexperience, combined with the appearance of other employment or business creation opportunities, results in a relatively high churn rate after starting. In contrast, the motivations of older people seem more defensive in nature but they tend to choose their opportunities more carefully and to be more persistent.

- 2009 was recognized by most entrepreneurs in Scotland as a difficult year for starting a business, but surprisingly only around 40% of them had lower expectations in 2009 for growing their business than in the previous year. Entrepreneurs from less wealthy households were less likely to be optimistic about opportunities and growth for their business as a result of the recession.

- National entrepreneurship policy in 2009 was overshadowed by the Scottish Government's Economic Recovery Plan, which focused on replacing private sector demand with public sector demand, enhancing employability of individuals, encouraging innovation by businesses, easing working capital problems of businesses and stimulating target industries rather than stimulating new start-ups. Local authorities will find it challenging to meet new business activity rate targets in their Single Outcome Agreements.

- The UK-wide GEM data on churn among young prospective entrepreneurs suggests that programmes of mentoring and training linked to "funding of last resort" are precisely what this group needs. If it did not already exist, the Prince's Scottish Youth Business Trust (PSYBT) would have to be invented.

3 Entrepreneurial Business Attitudes, Activity and Aspirations in Scotland: 2009 Update

This chapter reports measures of entrepreneurial attitudes, activity and aspirations in Scotland in 2009. Where relevant, comparisons are made with the UK, Arc of Prosperity countries, and other innovation-driven, high income nations, and with measures in previous years[1].

Entrepreneurial Attitudes

In 2007, the GEM Executive Report began to report attitudes to entrepreneurship among the non-entrepreneurially-active population – those who were not nascent, new or established business owner-managers. The reason for this is that it could be argued that the views of entrepreneurs might mask the views of those who were potential entrepreneurs.

Table 3.1 displays historical trends of entrepreneurial attitudes following this protocol. The most striking feature of this table is the drop in the proportion of non-entrepreneurially-active people in Scotland who agree there are good opportunities for starting a business in their local area, from one third in 2008 to one fifth in 2009. This appears to be a delayed reaction to the global economic slowdown; opportunity perception in held up in Scotland in 2008 but fell by 8 points in the UK and 14 points in AOP countries. In 2009, opportunity perception rates in Scotland fell by 13 points, but dropped by 7 points in the UK and just one point in AOP countries[2]. Skills perception also declined, but not as much as opportunity perception. Fear of failure among those who saw opportunities did not change, suggesting that fear of failure on its own may be somewhat independent of the economic cycle[3].

Table 3.1:
Entrepreneurial attitudes among non-entrepreneurial individuals in the Scottish, UK and Arc of Prosperity adult population samples, 2002 to 2008 (% 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			Fear of failure would prevent me starting a business (among those who see opportunities)			Have knowledge, skills to start a business		
Sample	Scot	UK	AOP	Scot	UK	AOP	Scot	UK	AOP	Scot	UK	AOP
2002	19	21	46	23	26	44	40	37	33	38	41	31
2003	23	22	50	34	32	41	37	36	38	41	43	31
2004	26	24	43	33	33	43	36	36	36	47	46	36
2005	25	25	44	29	35	52	33	36	36	42	46	36
2006	25	25	44	34	34	52	33	37	39	45	45	36
2007	22	22	44	33	35	55	31	38	34	40	45	35
2008	20	24	43	33	27	41	34	38	35	41	44	36
2009	21	20	45	20	20	40	34	35	34	37	39	34

Entrepreneurial Activity

In 2009, representative samples of the working age population (aged 18-64) were surveyed in 54 countries. Figure 3.1 shows the estimates of Total early-stage Entrepreneurial Activity (TEA) in each of the 20 innovation-driven (high income) nations participating in GEM2009, including Scotland, ordered by TEA rate[4]. 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 Forum[5].

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 rates[t]. Figure 3.1 shows that Scotland ranked in the fourth quartile of innovation-driven countries in 2009, as it did in 2008. No innovation-driven nation in the sample had a significantly lower TEA rate than Scotland in 2009, while 60% of them had TEA rates statistically higher than those of Scotland.

Table 3.2 benchmarks the TEA rate for Scotland for 2009 against the UK, participating "Arc of Prosperity" nations (Denmark, Finland, Iceland, and Norway) and all 20 high income/innovation-driven nations participating in GEM 2009. The Scottish TEA rate estimate dropped significantly below that of the UK in 2009, and registered an 18% decline in the point estimate to 3.6%, while the UK TEA rate remained essentially unchanged at 5.8%. The Scottish TEA rate

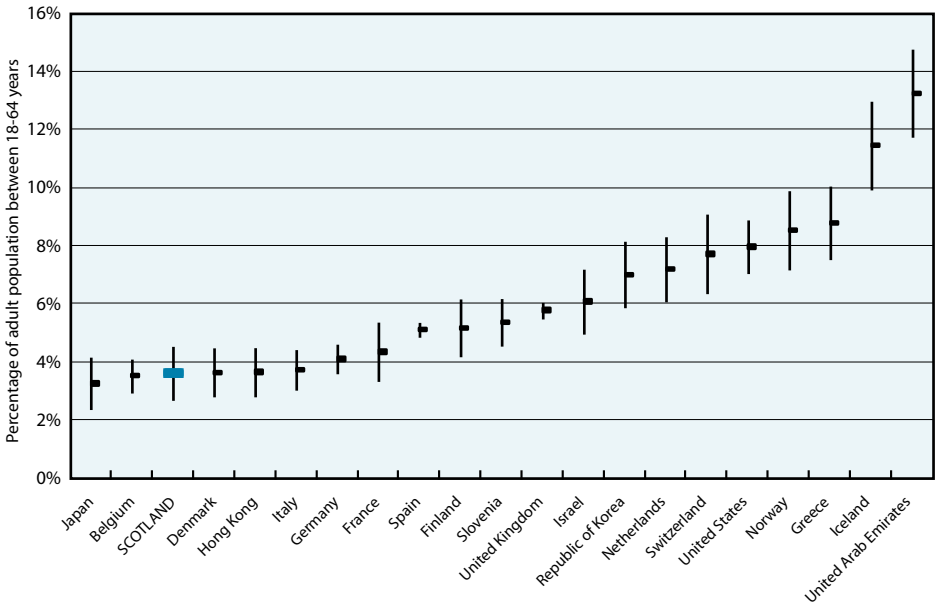


Figure 3.1:
National 2007 TEA rates for 20 sovereign innovation-driven nations and Scotland, ordered by TEA rate

Source: 2009 GEM Scotland and Global Survey

Table 3.2:
Scottish and benchmark TEA rates, 2008 and 2009

Source: 2009 GEM Scotland and Global Surveys

	TEA		% change	Scottish TEA as a % of other TEA rates	
	2008	2009		2008	2009
Scotland	4.4	3.6	-18%	n/a	n/a
UK	5.6	5.8	4%	79%	62%
High income/innovation-driven nations	6.7	6.3	-6%	66%	57%
Arc of Prosperity nations	7.6	7.2	-5%	58%	50%

estimate for 2009 is significantly below the highest rate registered since 2002, which was in 2005. It is also lower against its benchmark countries than it has been during this period.

Figure 3.2 shows suggests that TEA rates in the UK have been stable since 2002, with a four year average rate for 2002 to 2005 of 5.9%, and an average for 2006 to 2009 of 5.7%. For Scotland, however, the equivalent four year averages are 5.3% and 4.2%, and are suggestive of a decline. Figure 3.3 plots business bank account openings recorded by the Scottish clearing banks for this period.

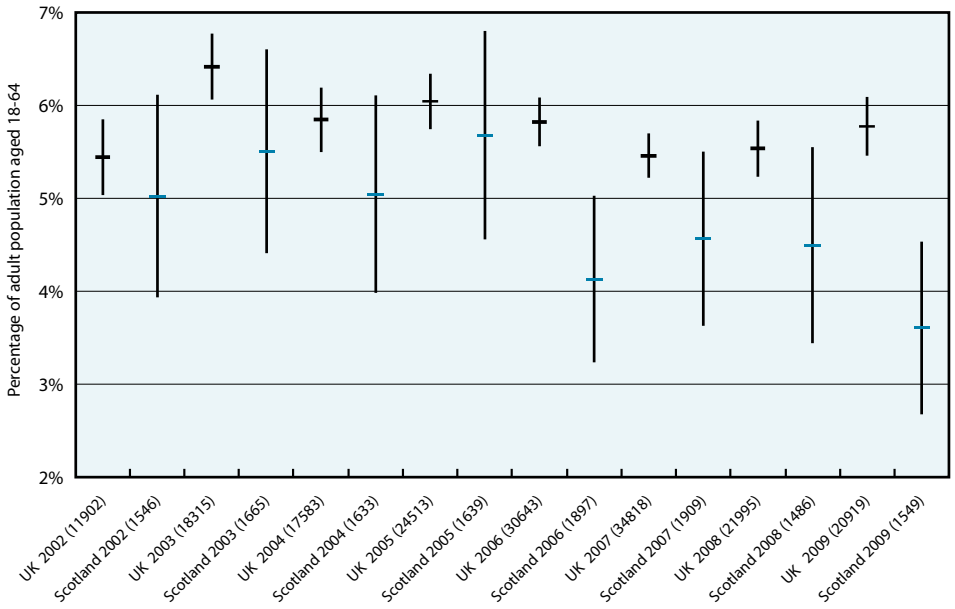


Figure 3.2:
TEA rates for Scotland and the UK, 2002 to 2009, showing 95% confidence intervals and sample sizes

Source: 2002 to 2009 GEM Scotland and UK Surveys

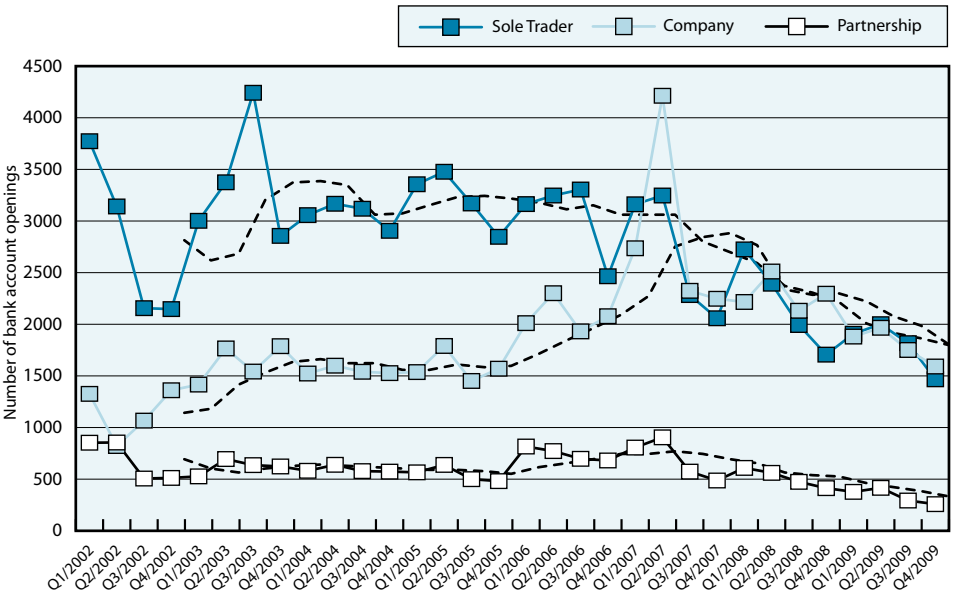


Figure 3.3:
Business Bank Account openings in Scotland by Legal Status of Enterprise, 2002 to 2009 by quarter and 4 quarter moving average

Source: Committee of Scottish Clearing Banks

It shows a decline in all three legal forms of enterprise recorded from early 2007. Figure 3.4 shows the trend in businesses registering for the first time for either VAT or PAYE, for Scotland and the UK, from 2002 to 2008, the latest available year. It shows a flat trend in the UK but a rising trend in Scotland. This reflects the trend in company business bank account openings in Figure 3.5 more than overall trends in business bank account openings or TEA rates, suggesting that the official new business measure may understate smaller, one person or sideline business activity.

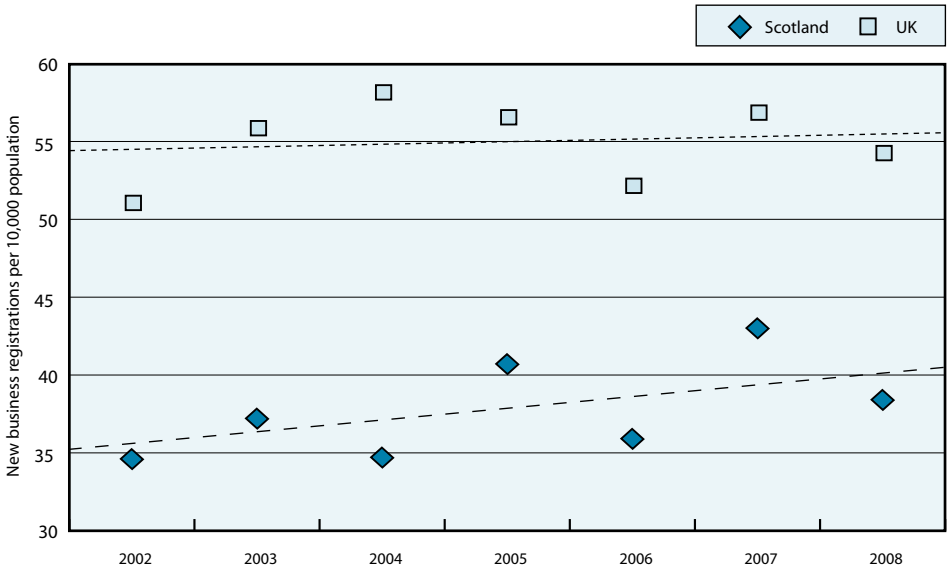


Figure 3.4:
New businesses registering for VAT or PAYE for the first time, 2002 to 2008
Source: Department of Business, Innovation and Skills

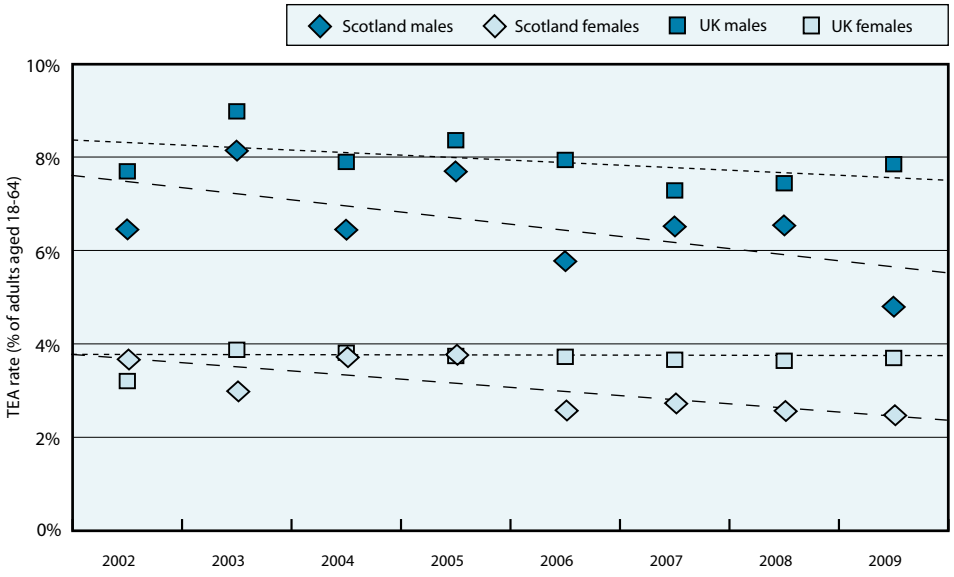


Figure 3.5:
Scottish and UK Male and Female TEA rates 2002 – 2009, point estimates and trend lines
Source: 2000-2009 GEM Scotland Surveys.

Note: Dashed trendlines are for Scotland, dotted trendlines are for UK

Table 3.3 shows that start-up intention rates have been significantly lower in Scotland than in the UK since 2004, and are about half the average rate across AOP countries over the 2002 to 2009 period. Business closure rates have been significantly lower in Scotland than in the UK since 2007, and they, like TEA rates, are around 60% the rate of AOP countries on average over the past eight years. This means that the churn rate of people entering and leaving entrepreneurial activity is low in Scotland. The average EBO rate for Scotland for this period is 65% of the average for AOP countries.

Distribution of entrepreneurial activity by gender

Figure 3.5 shows the trend in Scottish TEA rates between male and females for 2002 to 2009. Male TEA rates were significantly higher than female rates in every year except 2002,

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 (%)		
Sample	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	5.5	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	**5.2**	**6.8**	11.5	4.6	5.5	7.9	**4.6**	**5.8**	7.5	**1.3**	**2.1**	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	**1.0**	**1.7**	1.7

Table 3.3:
Entrepreneurial activity in the Scottish and UK adult population samples, 2002 to 2008 (% 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. AOP estimates include Ireland for 2002 to 2008.

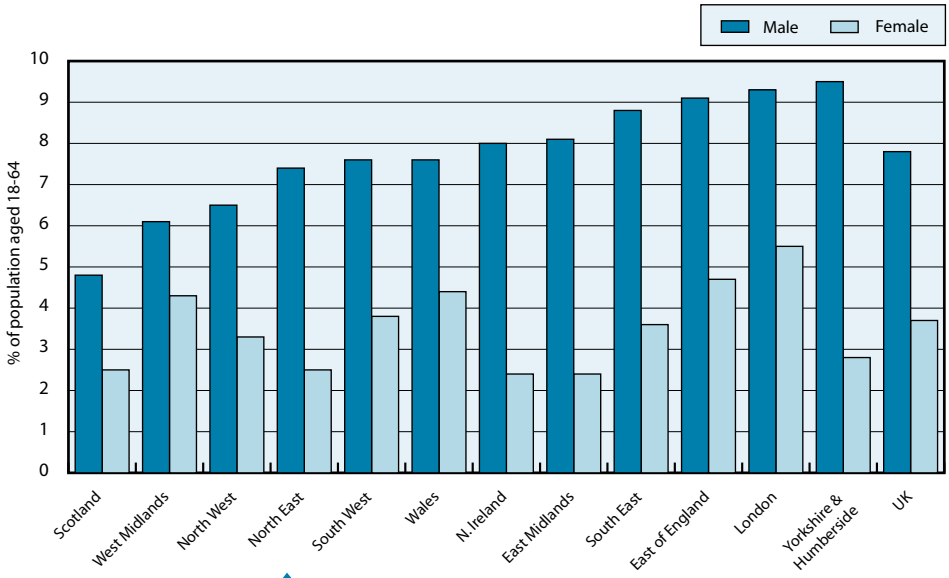


Figure 3.6:
Distribution of male and female TEA rates in UK regions, ordered by male TEA rate
Source: GEM UK 2009 Survey

2004 and 2009 during this period. The point estimates of TEA for females (2.5%) and males (4.8%) in 2009 are the lowest since recording began in 2000. In the past four years, a gap appears to have opened between female TEA rates in Scotland and the UK, in comparison with the previous four years. The drop in male TEA in Scotland in 2009 is particularly marked.

Figure 3.6 shows the distribution of male and female TEA rates across the UK regions in 2009. At 4.8%, Scotland had the lowest male TEA rate of any region. Male TEA rates in Scotland (4.8%) were significantly below those of Yorkshire & Humberside (9.5%), London (9.3%), South East (8.8%), and East Midlands (8.1%). The female Scottish TEA rate was not significantly different from that of other regions, although the point estimate of 2.5% was the third lowest of any region.

Social Entrepreneurial Activity

GEM UK has been testing measures of Social Entrepreneurial Activity, or SEA for several years, and in 2009 GEM employed a slight variant of the GEM UK methodology to measure SEA across 49 countries. SEA is defined as the proportion of people aged 18-64 who are actively trying to start a social enterprise or running a social enterprise that has been operating a service or receiving funding for less than 42 months. Social entrepreneurial activity is defined as any kind of social, community or voluntary venture, activity or initiative. This might include providing subsidised or free training, advice or support to individuals or organisations, profit-making activity, but where profits are used for socially-oriented purpose, or self-help groups for community action. The SEA rate for Scotland in 2009 was 2.1%, the same as the UK rate. The Scottish male and female SEA rates almost identical at 2.0% and 2.1% respectively. The UK SEA male rate was significantly higher than the UK female SEA rate (2.6% versus 1.7%). The innovation-driven country average was 2.1% (ranging from Hong Kong at 0.5% to Denmark at 5.4%) and the AOP average was 3.2%.

Entrepreneurial Aspirations

Table 3.4 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 four years. On each of these, the measures for Scotland do not appear very different from those of the UK or AOP countries.

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)		
Sample	Scotland	UK	AOP nations	Scotland	UK	AOP nations	Scotland	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
Average	13.2	17.3	17.6	20.0	22.4	27.2	10.4	10.2	9.6

Table 3.4:
Entrepreneurial aspirations in the Scottish, UK and Arc of Prosperity nations adult population samples, 2002 to 2008 (% 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

Informal Investment in Scottish new businesses

Figure 3.7 shows that investment by working age adults in other people's start-up businesses is around three times more frequent in Arc of Prosperity countries than in the UK or Scotland. However, in 2009, the Scottish informal investment rate appears to have collapsed to one third of its long-run level, in contrast to UK and AOP investment rates, which have held up well. Given that this is a three-year smoothed average estimate, the actual informal investment rate in Scotland in the past year was probably even lower.

Conclusion

Opportunity perception and informal investment appears to have been lower in Scotland in 2009 than in 2008, and Scottish TEA rates once again fell significantly below those of the UK. The long term trends in early-stage entrepreneurial activity in Scotland over the past eight years appear to be negative for both males and females, in contrast to the UK where the trend is neutral. Scotland had a delayed reaction to the global economic slowdown, but the reaction in terms of entrepreneurial and investment activity seems to be more severe than that in the UK as a whole and also than in AOP countries. This weakness in the face of economic challenge is worrying, since new start-ups can help drive a recovery in employment and economic activity. Scotland's unique exposure to the banking crisis, directly through jobs lost or threatened at the two main Scottish clearing banks and indirectly through wealth destruction among shareholders in those banks, may well have played a part in this reaction.

1 "Arc of Prosperity" is a term used by the Scottish Government to describe small, high income, independent nations that surround Scotland in an arc from Ireland to the west, Iceland to the North, and Norway, Sweden, Finland and Denmark to the east. There is a modest and highly significant correlation between population size and necessity entrepreneurship (R=0.50, p<0.01, 37 nations, GEM2002 data) but not with opportunity entrepreneurship. High income nations have different entrepreneurial activity to middle or low income nations (see the 2004 and subsequent GEM Global Reports). Thus by comparing Scotland with these nations, we avoid the population and income effect, and we can learn from policy measures implemented on a similar scale to Scotland. As Sweden and Ireland did not participate in GEM in 2009, they are not included in any comparisons.

2 Ireland did not participate in GEM in 2009; it is likely that the drop in the AOP estimate for 2009 would have been slightly larger if data for Ireland had been available.

3 Fear of failure did not change among those who were not entrepreneurs and did not see opportunities. In 2009 it was 39% in Scotland and 38% in the UK. In 2008 it was 37% in Scotland and 39% in the UK.

4 Comparison of Scotland with factor-driven or efficiency-driven countries is less useful because their environments are so different.

5 Porter, M.E. and Schwab, K. (2008), *The Global Competitiveness Report 2008-2009*, Geneva, Switzerland: World Economic Forum.

6 "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 A 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.

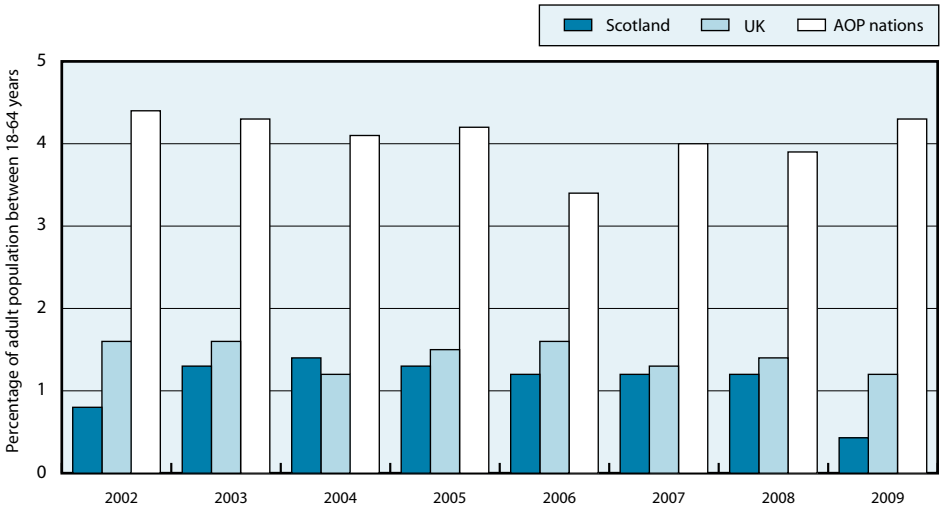


Figure 3.7:
Informal Investment rate in Scotland, UK and Arc of Prosperity nations, 2002-2009 (% of respondents aged 18-64 who invested in someone else's new business in the last three years)

Source: 2000-2009 GEM Adult Population Surveys.

Note: AOP estimate for 2009 excludes Ireland.

4

Family business and entrepreneurship

For the purposes of this chapter, family businesses are defined using a GEM measure that was developed with the Raymond Family Business Institute: "an existing business that the respondents and one or more family members, including by blood, marriage, or adoption, together own and control more than 50% of the business". According to the combined 2008 and 2009 GEM UK database, 18% of new business owner/managers and 20% of established business owner/managers in the UK were running family businesses when surveyed. The equivalent percentages for Scotland were 11% and 23%. Twenty-seven percent of UK nascent entrepreneurs expect their business to be a family business within the next five years, while 24% of new business owner/managers and 27% of established business owner/managers expected their business to be family run in five years time. The equivalent percentages for Scotland were 19%, 20% and 27 % respectively.

Family businesses often spin off new businesses. 21% of nascent business entrepreneurs, 10% of new business owner/managers and 14% of established business owner/managers in the UK reported their business was developed by or separated from an existing business controlled within their family. The equivalent percentages for Scotland were 26% , 13% and 16%. The higher percentage of nascent entrepreneurs reporting a family business as an incubator than existing entrepreneurs suggests that either family businesses are particularly prolific incubators of spinoffs, or that family business spinoffs have higher attrition than other startups. The latter possibility is supported by the finding that 15% of new business owner/managers of family businesses in the UK have closed down a business in the last 12 months, compared with only 5% of owner/managers of non-family-owned new businesses. Similarly, 15% of new business owners who reported their business as a family spinoff reported having closed down a business in the last 12 months, compared with 6% of new business owners whose business was not a family business spinoff. However, there is no difference in the percentage of established family and non-family business owner-managers (or managers of family business spinoffs versus others) who have closed down a business in the last 12 months.

	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)
Parents did not run a business	**22.1**	**25.3**	**45.8**	32.9
Parent ran a business	**32.8**	**31.4**	**57.4**	30.7
Worked in parent's business	**39.5**	**37.2**	**69.8**	29.6

Table 4.1:
Effect of a family business background on entrepreneurial attitudes in the UK, % adults aged 18-64, 2008/2009
Source: Combined GEMUK APS 2008 and 2009

Twenty-eight percent of UK working age adults had at least one parent who ran their own business (26% in Scotland) and 11% actually worked in their parent's business (11% in Scotland). Table 4.1 and 4.2 show the effect of a family business background, and the additional effect of having worked in a business that was run by either of one's parents, in the UK and Scotland. For both the UK and Scotland, a family business background significantly increases the likelihood that an individual knows someone else who has started a business in the last two years, the likelihood that an individual believes that there will be good opportunities to start a business in the local area in the next six months, and the likelihood that an individual believes that one has the skills, knowledge and experience to start a business. Family business background has no significant effect of fear of failure, conditional on seeing opportunities, although the estimates are lower in those who had some family business background. In all cases, the effect is stronger if one has worked in the family business.

Table 4.2:
Effect of a family business background on entrepreneurial attitudes in Scotland, % adults aged 18-64, 2008/2009
Source: Combined GEMUK APS 2008 and 2009

	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)
Parents did not run a business	**20.8**	**26.2**	**42.2**	34.0
Parent ran a business	**25.8**	**30.2**	**46.0**	29.4
Worked in parent's business	**38.3**	**37.9**	**65.0**	23.0

Tables 4.3 and 4.4 show the effect of a family business background on entrepreneurial intention and activity. The effect is significant across all measures except for business closure in Scotland, and as with attitudes, the effect is stronger if the individual worked in the family business.

Across the UK, those with a family business background do not show a greater tendency to aspire to create a significant business organization. However, they do show signs of more innovative activity. For example, 32% of owner-managers

of early-stage family business spinoffs across the UK reported they were exploiting new product-market combinations, compared with just 22% of other early-stage entrepreneurs. In Scotland the equivalent figures were 35% and 17% (just outside the bounds of statistical significance, but similar to the UK-wide difference). Furthermore, spinoffs from family businesses appear to be more export-intensive. Twenty percent of UK owner-managers of established spinoffs of family businesses reported that more than 25% of their customers came from overseas, compared with 11% of owner-managers of non family business spinoffs. In Scotland the equivalent figures were 23% and 15%. These differences are all statistically significant.

Nascent entrepreneurs who expect their startup to be a family business are significantly more likely to receive investment from family than those who do not. While this is not surprising, what is more interesting is that the median total startup funding for these nascent family businesses is about double that of nascent non-family businesses: £20,000 compared with £10,000.

The family business background advantage seems to be robust, and not an artefact of demographic differences (for example age, gender, education or income) or differences in formal business training[1]. However, there are interesting interactions between gender, education and family business background, and these are illustrated, for the UK, in Figure 4.1 (the sample size for Scotland is as yet too small to compare gender/education/family business combinations).

	I expect to start a business in the next 3 years (%)	Nascent Entrep-reneurship rate (%)	New Business owner-manager rate (%)	Total early-stage Entrep-reneurial Activity (TEA) rate (%)	Established Business Owner-manager (EBO) rate (%)	I have shut down a business in the last 12 months (%)
Parents did not run a business	**4.8**	**2.2**	**2.6**	**4.7**	**5.0**	**1.3**
Parent ran a business	**8.1**	**3.5**	**3.5**	**6.9**	**6.4**	**1.7**
Worked in parent's business	**11.1**	**5.4**	**4.8**	**9.9**	**11.1**	**2.5**

Table 4.3:
Effect of a family business background on entrepreneurial intention and activity in the UK, 2008/2009
Source: Combined GEMUK APS 2008 and 2009

Table 4.4:
Effect of a family business background on entrepreneurial intention and activity in Scotland, 2008/2009
Source: Combined GEMUK APS 2008 and 2009

	I expect to start a business in the next 3 years (%)	Nascent Entrep-reneurship rate (%)	New Business owner-manager rate (%)	Total early-stage Entrep-reneurial Activity (TEA) rate (%)	Established Business Owner-manager (EBO) rate (%)	I have shut down a business in the last 12 months (%)
Parents did not run a business	**3.7**	**1.1**	**2.1**	**3.1**	**4.4**	0.8
Parent ran a business	**7.0**	**2.2**	**3.1**	**5.5**	**5.3**	1.3
Worked in parent's business	**8.7**	**4.0**	**4.6**	**8.4**	**9.9**	0.3

Figure 4.1 demonstrates that different combinations of education and family business background have radically different effects on males and females. Highly educated females who worked in a parent's business are much more likely to be engaged in early-stage entrepreneurial activity than poorly educated females who did not work in a parent's business. For females, level of engagement and education have positive and reinforcing effects on propensity to engage in early-stage entrepreneurial activity. This can be seen by the positive slope (rising from left to right) of the dotted lines in Figure 4.1, with the TEA rate increasing with higher educational levels and higher levels of family business engagement.

For males, the interaction effect of education and family business engagement is different. Increased engagement in a family business appears at first sight to switch the education effect from positive to negative, although the effect may be more subtle than that. It appears that working in a parent's business gives males (but not females) with no qualifications the option of starting a business when many other options might be closed to them. Males with a graduate education and who worked in a family business also have high rates of business start-up. However, unlike their female equals, males with very high qualifications and a family business background seem to be discouraged from business creation. Perhaps business families encourage their brightest academically-minded male children to seek careers elsewhere, or this could be evidence of a combination of a glass ceiling effect and a role model effect for highly educated females.

This complex picture is based on a combined sample of over 42,000 individuals, and the differences across education level for the highest and lowest levels of family business engagement are statistically significant. Multivariate logistic regression analysis on the unweighted sample confirmed the interactions between gender, education and family business background suggested in Figure 4.1[2].

In conclusion, a family business background can confer a wide range of benefits that increase the propensity of an individual - and particularly women and men without qualifications - to engage in entrepreneurial activity. It increases skills and opportunity perception without increasing fear of failure, it provides more role models and funding, and it seems to increase the chances that the new business will be innovative, particularly if the business is a spinoff of an existing family business.

1 This is based on multivariate logistic regression analysis that identifies the independent effect of a family business background after controlling for a wide range of demographic and training variables: further details are available from the author.

2 Further details are available from the author.

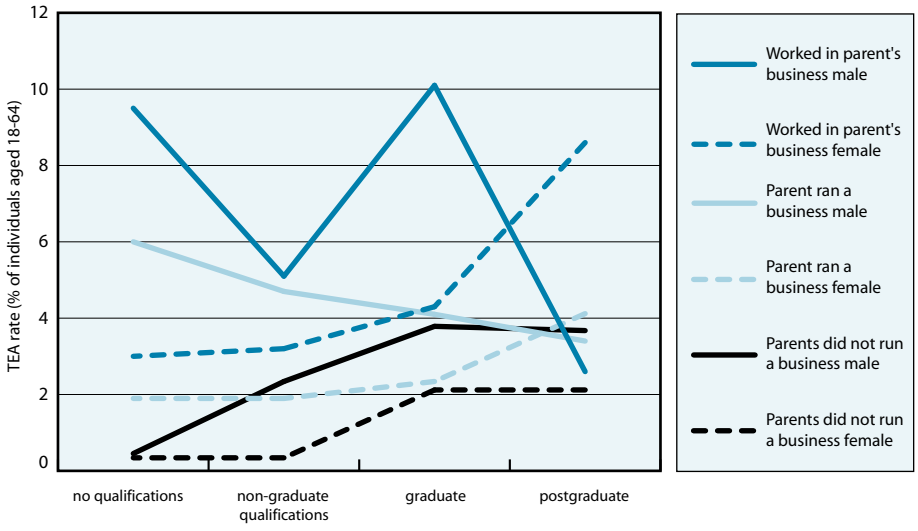


Figure 4.1:
Combined effect of education level and family business background on early-stage entrepreneurial activity rates, by gender
Source: Combined GEMUK APS 2008 and 2009

Motivation of entrepreneurs

Why do entrepreneurs start businesses instead of working for someone else? Table 5.1 shows that the motivations of business entrepreneurs are similarly distributed in Scotland and the UK, but that entrepreneurs in Arc of Prosperity countries have a different distribution of motivations.

In Scotland and the UK, around 30% of early stage entrepreneurs start a business because they desire greater independence and freedom in their working life. Another 30% or so, wish to increase their income. One in five early-stage entrepreneurs start because they believe they have no better choice for work. Five percent start up in order to maintain their income. The remainder have both opportunity and necessity motivations.

In Arc of Prosperity countries, increased income appears to be a greater motivator than in the UK or Scotland, and necessity appears to be more of a driver than independence. Around 43% of AOP early-stage entrepreneurs said their business start-up activity was because they had no better choice for work or that the start-up was to enable them to just maintain their income, compared with one quarter of Scottish early-stage entrepreneurs. Denmark is an exception; the motivation profile of Danish early-stage entrepreneurs is closer to the Scottish profile of motivations than to other AOP countries .

	UK	Scotland	Denmark	Norway	Iceland	Finland	AOP average
Opportunity motive: independence	32%	27%	31%	16%	7%	14%	13%
Opportunity motive: increase income	17%	16%	27%	38%	40%	32%	39%
No better choice for work	17%	20%	16%	35%	41%	42%	27%
To maintain my income	5%	5%	20%	7%	8%	8%	16%
Mixed motive: combination of necessity and opportunity	29%	31%	5%	5%	6%	5%	5%

Table 5.1:
Main motivations for starting a business according to early-stage entrepreneurs, 2008-2009

Source: GEM 2008 and 2009 APS databases.

Note: AOP figures are averages of 2008 and 2009; UK and Scotland are combined 2008 and 2009 database estimates[1].

There are no significant differences in motivation by gender, but age does seem to change motivation. Figure 5.1 shows that towards the end of their working life, early-stage entrepreneurs in the UK are more concerned about increasing or maintaining income and less concerned with independence. Also, early-stage entrepreneurs aged 45 or over are more likely to start through necessity than younger age groups. As they get older, early-stage entrepreneurs are more likely to have a clear primary motivation (either opportunity or necessity) rather than a mix of motivations. In summary, the balance of motivations to start a business tends to be more defensive in nature among older entrepreneurs, with income issues predominating.

Another way of illustrating the change in motivation with age is to show the difference in intention and actual startup rates, and in nascent entrepreneurship rates and abandonment of startup attempts. Measures of the latter are available for the first time in the 2009 data. Because of small numbers when the data is broken down by age, only the UK data is shown here. Table 5.2 shows that interest and activity peaks at 25-34 years of age. While females have lower rates of intention, activity and abandonment than males, their efficiency (rate of new entrepreneurs to individuals who abandoned start-up attempts) is very similar to males by age group. The most efficient age group for both males and females, the one that produces the maximum number of new entrepreneurs per abandoned attempts, is the 35 to 44 age group, even though it does not have the highest new entrepreneur rate.

The 18 to 24 age group stands out as having a low conversion rate and low efficiency. This

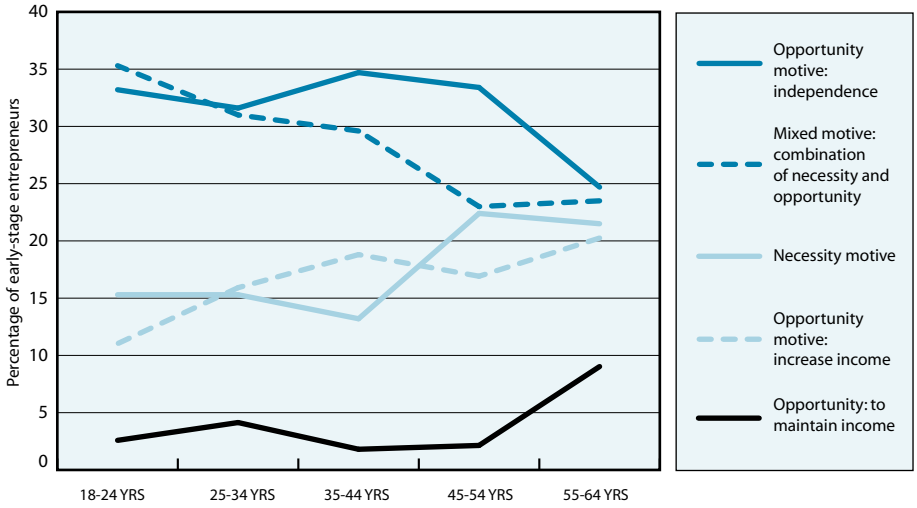


Figure 5.1:
Main motivations for starting a business according to early-stage entrepreneurs in the UK, 2008-2009

Source: GEMUK 2008 and 2009 combined APS

illustrates the tradeoff between interest and experience that results in the inverse U shape distribution of early-stage entrepreneurial activity with age. When asked for the main reasons why they did did not start a business, most people gave "getting finance" as a reason, irrespective of their age group or whether they had tried to start a business recently or not[2]. The one reason that distinguished the 18 to 24 "tried but abandoned" individuals from their older peers, and from others who had not tried to start at all, was the chance that the business might fail. Forty percent of this group cited this as a major reason for not starting, compared with 20% of older individuals who tried but did not start, and 10% of those who had not tried.

The length of time people spend trying to start a business also varies by age. For example, in the UK, 70% percent of 18 to 24 year olds who had tried to start but given up in the last 12 months had given up after less than 4 months, compared with just 35% of 55 to 64 year olds. The pattern in Scotland was similar (all abandoned attempts by 18-24 year olds took less than 2 months, all abandoned attempts by 55-64 year olds took 4 months or more). This is probably due to experience-based "pre-screening" by older individuals, coupled with greater capabilities and access to resources, leading to selection of and persistence with higher quality start-up opportunities.

These differences, which are statistically significant for the UK sample, suggest that start-up attempts were abandoned by young adults because they could see the business would fail, once they began the start-up attempt process. With experience, older individuals seem less likely to embark on trying to start

Age group	18-24	25-34	35-44	45-54	55-64
Intend to start in next 3 years	7.1%	8.8%	6.9%	5.0%	3.3%
Running a new business	1.5%	4.3%	4.0%	3.3%	2.1%
Conversion rate (ratio of new entrepreneurs to intenders)	20.8%	48.9%	58.6%	65.6%	63.5%
Actively trying to start a business	2.2%	3.8%	3.1%	2.6%	1.9%
Gave up trying to start in last 12 months	2.0%	2.1%	1.4%	1.2%	0.9%
Start-up abandonment rate (ratio of gave up to nascent entrepreneurs)	91.3%	54.7%	44.8%	46.5%	44.7%
Efficiency (ratio of new entrepreneurs to individuals who abandoned attempts)	74.6%	207.7%	291.2%	277.2%	241.1%
Closure rate	0.6%	2.2%	2.1%	1.3%	2.0%
Existing business owner/manager rate	1.9%	7.8%	10.7%	12.6%	9.6%
Churn rate (ratio of business closures by individuals to existing business owner managers)	29.5%	28.2%	19.7%	10.5%	20.4%

Table 5.2:
Conversion of entrepreneurial intention to activity and activity to abandonment by age group in the UK, 2009
Source: GEM UK 2009 APS

a business that they subsequently would discover had a chance of failing.

This proposition is supported by the trend in the rate of business closures by individuals, which declines with age up to the oldest working age group, and the reasons for closing a business by age, which are shown in Table 5.3 for the UK for the 2007 to 2009 period. Not surprisingly, retirement is the most frequent reason for the oldest working age group, while "business was not profitable" was the most frequent reason for the youngest age group, followed by "another job or business opportunity". These, and the reason "exit was planned in advance" are all most frequent in the youngest age group, and support the relatively high rate of experimentation and churn seen for this age group in Table 5.2.

Patterns for the Scottish sample were broadly similar, but with a sample of only 59 individuals who closed a business in Scotland across the 2007 to 2009 period (earlier data is not compatible), the sample size was too small to conduct meaningful age-based analysis.

Moving from personal motivations to motivations for the business, in 2009 all business and social entrepreneurs were asked to allocate points out of 100 to indicate the relative importance of their goals for the business to generate economic value, value to society and value for the environment. This enables us to see the relative frequency of entrepreneurs setting up enterprises with mainly economic, mainly social and mainly environmental goals.

Age group	18-24	25-34	35-44	45-54	55-64	Total
Opportunity to sell	0.0%	5.3%	5.6%	7.5%	8.1%	6.2%
Business not profitable	38.7%	29.9%	36.0%	33.3%	24.5%	31.6%
Problems getting finance	5.0%	3.7%	4.8%	6.3%	5.0%	5.0%
Another job or business opportunity	31.1%	26.6%	19.3%	15.6%	6.0%	17.2%
Exit was planned in advance	10.1%	8.2%	7.1%	5.7%	5.5%	6.8%
Retirement	0.0%	1.2%	1.6%	9.6%	27.7%	10.1%
Personal reasons	9.2%	24.2%	21.4%	18.3%	18.8%	19.5%
Incident	5.9%	0.8%	4.2%	3.6%	4.4%	3.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5.3:
Reasons for closing a business in the UK by age group, 2007 to 2009
Source: Pooled 2007 to 2009 UK GEM APS (N = 1457)

Figures 5.2 and 5.3 show that the distribution of allocation of economic, social and environmental goals for their business by early-stage business entrepreneurs is broadly similar in the UK and Scotland. The average allocation across these three goal categories is 56, 29 and 15 in the UK and 64, 23 and 13 in Scotland. Figures 5.4 and 5.5 (next page) show that early-stage social entrepreneurs in Scotland and in the UK allocate their goals differently. There is a significant difference between the average allocation of points to economic and social goals by social entrepreneurs across the UK (28 and 57) and Scottish social entrepreneurs (14 and 69), but no difference in allocation of environmental goals (average of 15 in UK, 17 in Scotland). Put simply, early-stage entrepreneurs in Scotland place less emphasis on economic goals.

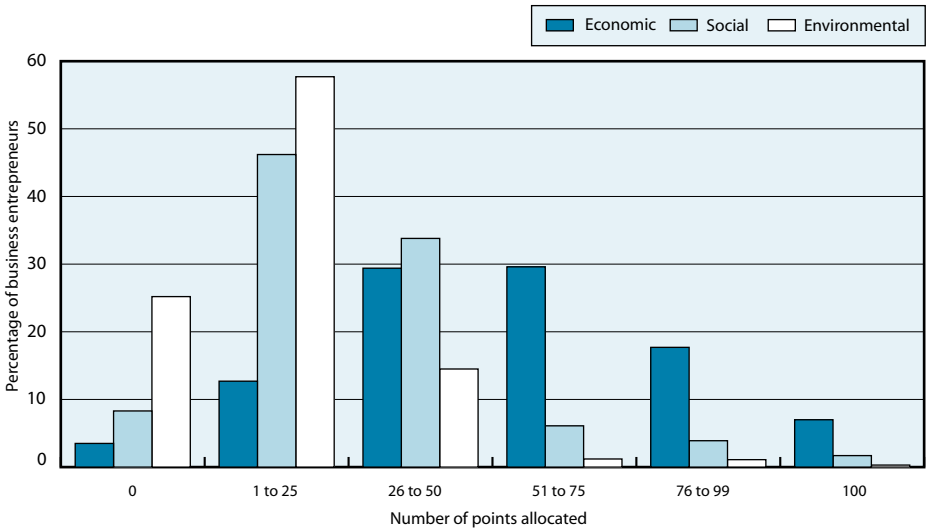
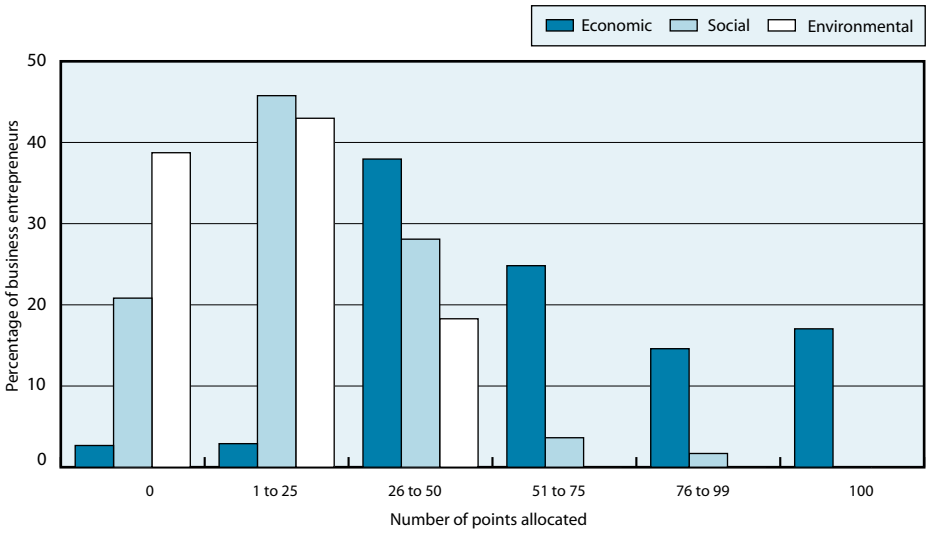


Figure 5.2:
Distributions of allocation of points to economic, social and environmental goals by early-stage business entrepreneurs in the UK in 2009
Source: GEM UK APS 2009

Looking at the distributions of goals in Figures 5.2 to 5.5, two things stand out. The first is that economic and social goals do not completely dominate in the two domains of business and social enterprise. More than 40% of UK early-stage business entrepreneurs and over 15% of early-stage business entrepreneurs in Scotland allocated less than 50% of their allocation to economic goals. Similarly, more than 45% of UK early-stage social entrepreneurs and over a quarter of early-stage social entrepreneurs in Scotland allocated less than 50% of their allocation to social goals.

Figure 5.3:
Distributions of allocation of points to economic, social and environmental goals by early-stage business entrepreneurs in Scotland in 2009
Source: GEM UK APS 2009



The second notable feature is the lack of entrepreneurs with mainly environmental goals. Across the UK, combining all business

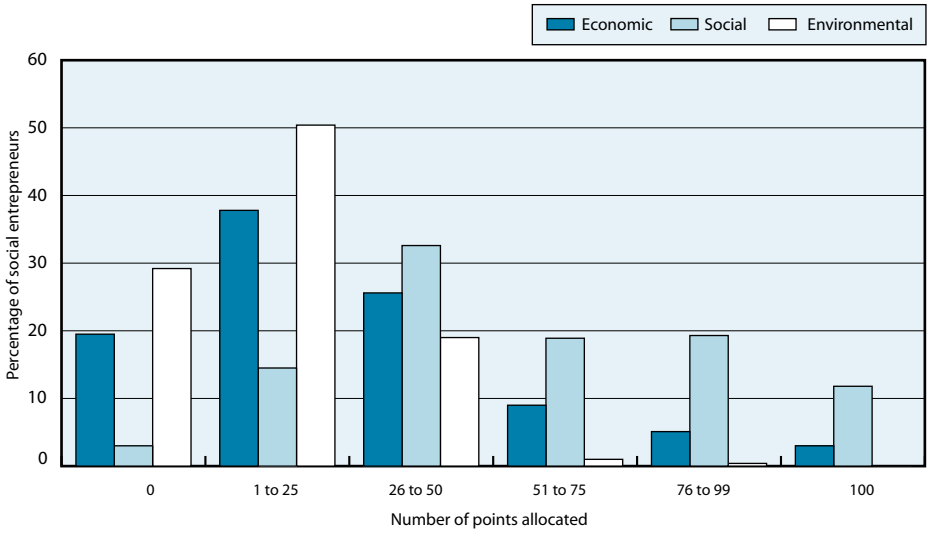


Figure 5.4:
Distributions of allocation of points to economic, social and environmental goals by early-stage social entrepreneurs in the UK in 2009

Source: GEM UK APS 2009

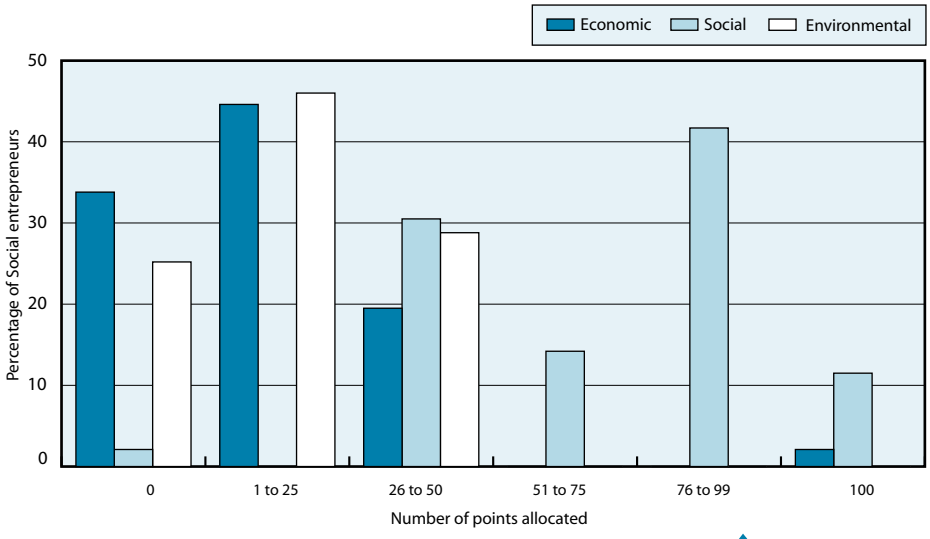


Figure 5.5:
Distributions of allocation of points to economic, social and environmental goals by early-stage social entrepreneurs in Scotland in 2009

Source: GEM UK APS 2009

and social early-stage entrepreneurs with no double counting, only 0.23% of working age individuals were early-stage entrepreneurs with mainly environmental goals.

In conclusion, the motivations of male and female entrepreneurs, at least as measured by GEM, are surprisingly similar in Scotland and the UK, but they differ by age. The data suggest that many young people try because "they don't know it can't be done", and perhaps because they feel they have little to lose if they try to start, leading to a high rate of abandonment before they start. Their relative inexperience, combined with the appearance of other employment or business creation opportunities, results in a relatively high churn rate after starting. In contrast, the motivations of older people seem more defensive in nature but they tend to choose their opportunities more carefully and to be more persistent.

1 Sample sizes were very similar in 2008 and 2009 for Scotland and the UK, and this difference in calculations should not affect the result.

2 Giving "getting finance" as a reason for not starting did not distinguish 18-24 year olds who had tried but given up from their older peers (with 72% versus 67% saying yes), although it was higher for young adults among those who had not tried to start a business in the last 12 months (with 67% versus 52% saying yes).

Entrepreneurship in a recession

After a slowing of economic growth in 2008, Scotland in 2009 experienced its first recession since the early 1980's[1], with four quarters of increasing economic decline, ending with a drop in annual GDP of 4.8% for the fourth quarter. This rate of decline was in line with experience in the UK and small EU countries[2]. For Scotland, the losses and UK Government rescue of the two main Scottish clearing banks and the sharp tightening in credit made business life more difficult and uncertain for many. However, others have seen opportunity in the recession.

In 2009, the GEM survey carried questions on the attitudes of entrepreneurs to start-up, growth prospects and business opportunities in the recession. Sixty-four percent of UK early-stage entrepreneurs (nascent and new business owner-managers) and 69% of Scottish early-stage entrepreneurs reported that starting a business was more difficult in 2009 than in the previous year (Figure 6.1). Around one in eight of early-stage entrepreneurs (12.6%) in the UK thought that starting a business was less difficult than a year ago, compared with one in 12 (7.7%) of established business owner-managers. The equivalent percentages for Scotland were 8.5% and 6.0%.

Younger prospective entrepreneurs appeared to be worse hit by the recession in 2009, while household income did not appear to affect early-stage entrepreneurship rates any more in 2009 than in 2008. Table 6.1 (next page) shows the change in the contribution of different age groups to the population of TEA entrepreneurs from 2008 to 2009. In the UK and even more in Scotland, younger age groups made a much smaller contribution in 2009 and older age groups made a larger contribution. Also, more young adults tried to start a business in the 12 months prior to the survey but gave up than older adults.

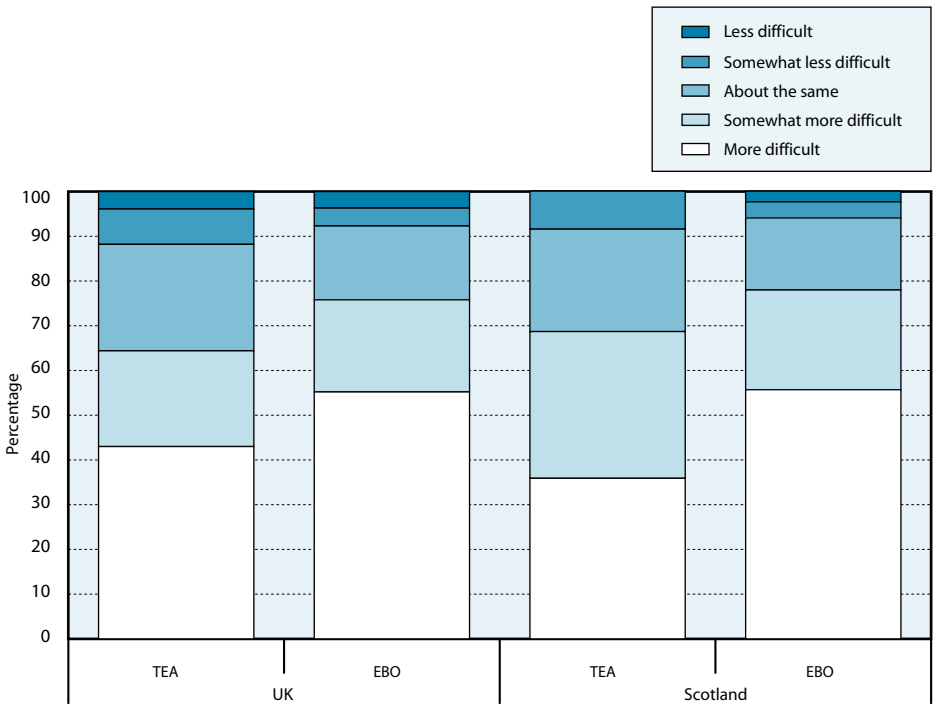


Figure 6.1:
Percentage of UK and Scottish early-stage entrepreneurs (TEA) and established business owner-managers (EBO) who thought that starting a new business was more or less difficult now than 12 months ago, 2009

Source: GEMUK APS 2009

2009 was the first year in the GEMUK series that individuals were asked if they had tried to start a business but had given up. It could be that this age effect is recession-related; alternatively, trying and giving up may be age-related. Future surveys will determine this.

In 2009, entrepreneurs appeared to be more optimistic about their prospects for business growth than for start-up. While 44% of UK and 38% of Scottish early-stage entrepreneurs saw lower prospects for growing their business in 2009 than in 2008, around one in five (21%) in both the UK and in Scotland said they had *higher* expectations for business growth than they had one year previously (Figure 6.2). As with prospects for starting a business, established business owner-managers were less positive than early-stage entrepreneurs; 50% in the UK and had lower expectations for business growth than a year previously, while 16% in the UK and only 9% in Scotland had higher expectations.

Table 6.1:
Percentage change in contribution of different age groups to overall early-stage entrepreneurship from 2008 to 2009 and percentage of working age population who tried but gave up starting a business in the 12 months prior to the 2009 GEM survey
Source: GEM 2008 and 2009 APS

		18-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs
% increase or decrease in age group's contribution to TEA, 2008 to 2009	UK	-22%	-2%	-9%	-1%	14%
	Scotland	-71%	-71%	13%	38%	68%
Tried to start a business in last 12 months but gave up, 2009	UK	2.0%	2.1%	1.4%	1.2%	0.9%
	Scotland	2.6%	0.7%	0.7%	0.6%	0.7%

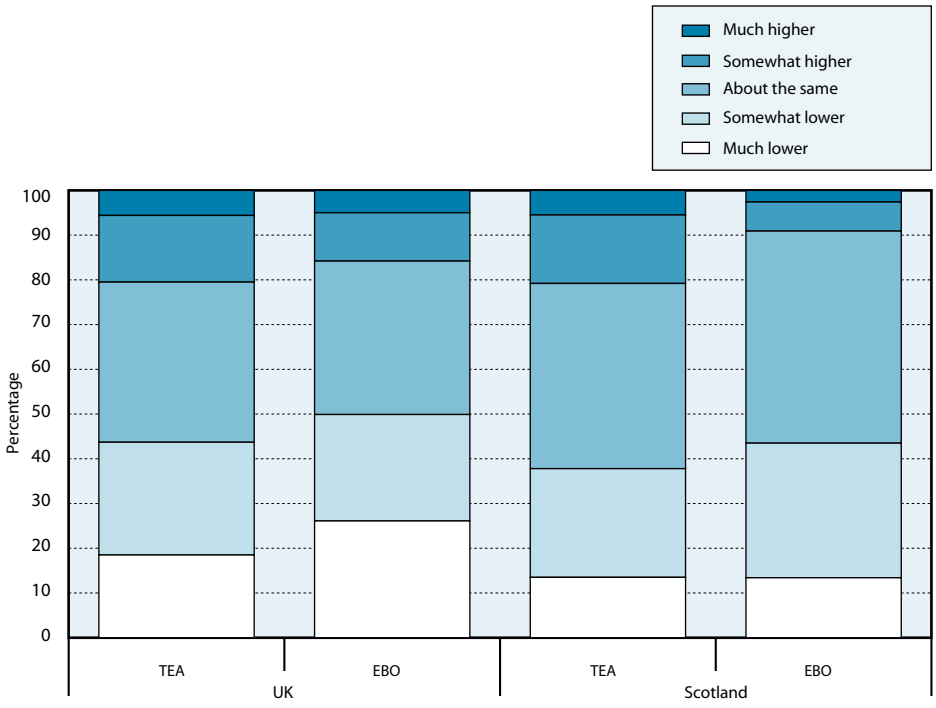


Figure 6.2:
Percentage of UK and Scottish early-stage entrepreneurs (TEA) and established business owner-managers (EBO) whose expectations for business growth were higher or lower than one year ago, 2009
Source: GEMUK APS 2009

While a majority of UK early-stage entrepreneurs and established business owners saw fewer opportunities for their business as a result of the global slowdown (51% and 54%), a *minority* of their Scottish counterparts did so (46% and 47%). A fifth (20%) of early-stage entrepreneurs in the UK and 17% in Scotland thought there were more opportunities for their business, compared with 14.2% of UK and 12% of Scottish established business owner-managers (Figure 6.3).

Around one in ten early-stage entrepreneurs in the UK and in Scotland had both higher expectations for business growth than in 2008 and thought the global economic slowdown had generated more business opportunities for them. These individuals could make an important contribution to recovery from recession, through their wealth and job creation. Across the UK, controlling for age group, income and industry sector, the odds of male TEA entrepreneurs being doubly optimistic in this way were over twice the odds for women TEA entrepreneurs, except in the business services area, where women early-stage entrepreneurs were significantly more likely to be optimistic than men[3].

Age had no effect on an early-stage entrepreneur's chances of being doubly optimistic when income was controlled for, but the odds of those in households with income above £30,000 (approximately half of the sample) being doubly optimistic were twice the odds of those in poorer households. This suggests that the lower levels of optimism among younger entrepreneurs were income-related (or more probably funding-related) rather than age-related. Unlike start-ups in general, business growth and seizing of additional opportunities requires significant resources. Entrepreneurs from less wealthy households may be less able to raise funds from family and may have less collateral for external debt funding. In a recession, when investors become more wary and banks seek additional security, these less wealthy entrepreneurs may be less able to take advantage of opportunities for growth.

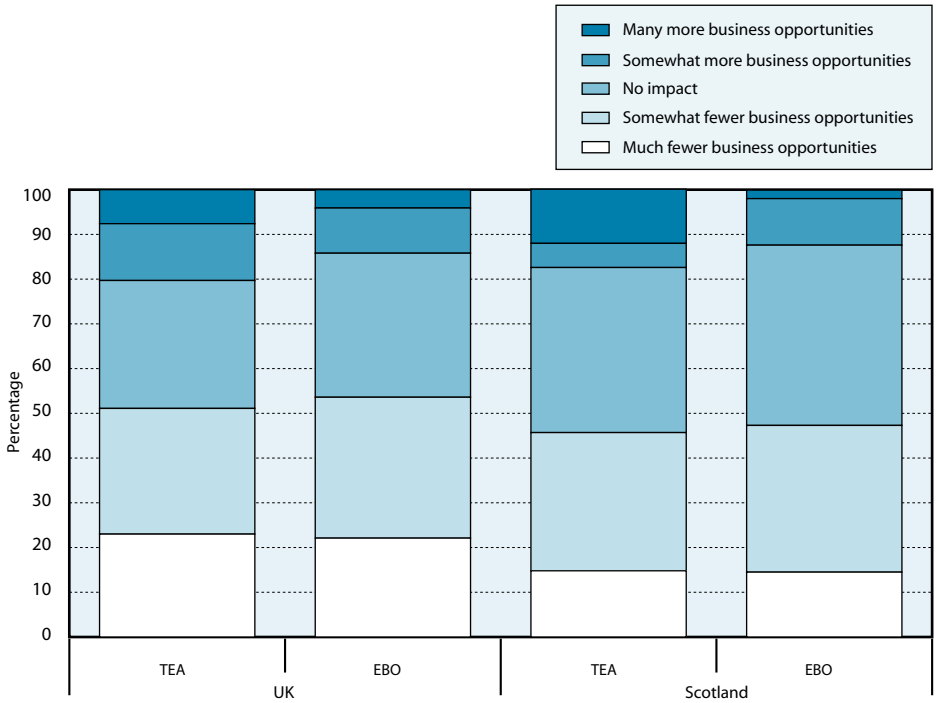


Figure 6.3:
Percentage of UK and Scottish early-stage entrepreneurs (TEA) and established business owner-managers (EBO) who thought the global economic slowdown had generated more or fewer opportunities for their business, 2009

Source: GEMUK APS 2009

Table 6.2 compares the proportion of early-stage entrepreneurs and established business owner-managers in the UK, Scotland and AOP countries who reported that was it more difficult to start a business in 2009 than in 2008, who had lower expectations for growing their business, and who saw fewer business opportunities following the global economic slowdown. Sentiment was not uniform across Arc of Prosperity countries. In fact, only around a third of early-stage entrepreneurs had negative sentiments in Norway and Finland. Norwegian and Finnish established business owner-managers also appeared to be less pessimistic than those in Denmark and Iceland. Sentiment in Scotland seemed closest to that in Denmark.

There has been an increase in the proportion of nascent entrepreneurs reporting that they had tried but failed to secure certain types of funding. Table 6.3 shows a doubling in the number of nascent entrepreneurs in the UK who tried but failed to secure funding from friends and family, other individuals, and unsecured bank loans and overdrafts. Estimates for Scotland, on a much smaller sample, are broadly similar, and fit the finding reported in Chapter 3 that informal investment was sharply down in Scotland in 2009. Other sources of funds have not seen such a rise in rejections. There has also been a change in the reasons reported by early-stage entrepreneurs for failing to raise finance. Specifically, the proportion of those mentioning the high cost of finance has increased in both the UK and Scotland.

In 2008, there was a lot of concern about the effect the impending recession might have on business failure rates. In the event, Figure 6.4 shows that company failures did not rise dramatically beyond levels seen earlier in the decade, and peaked in 2008. It is important to bear in mind that the active company stock in Scotland rose steadily by a total of 50% between 2001 and 2009, from around 50,000 to around 75,000[4]. Thus while the ten year trend in absolute company insolvencies is upwards, as a percentage of the total active company stock, the trend is downwards.

In the GEM 2009 survey, individuals who had closed, sold or quit a business in the previous 12 months were asked about the impact of the global economic slowdown on their decision to quit. Around half stated that the global slowdown had at least some impact (48% in the UK and 45% in Scotland); most of these said the impact

Table 6.2:
Entrepreneurs' views on the impact of global recession on their own business, 2009
(Source: GEM APS 2009)

	UK	Scotland	Denmark	Norway	Iceland	Finland	AOP average
TEA							
Starting a business: more difficult	64%	69%	69%	39%	80%	33%	55%
Growing a business: lower expectations	44%	38%	46%	29%	43%	41%	40%
Fewer business opportunities	51%	46%	47%	32%	49%	36%	41%
EBO							
Starting a business: more difficult	76%	78%	88%	51%	84%	48%	68%
Growing a business: lower expectations	50%	43%	45%	39%	64%	43%	48%
Fewer business opportunities	54%	47%	51%	41%	60%	40%	48%

was large. This seems in line with the spike in corporate insolvencies in 2008 illustrated in Figure 6.4. There were no significant differences in the impact for businesses that had closed for good compared with those that had continued in some form after their owner quit or sold the business.

In conclusion, 2009 was recognized by most entrepreneurs in Scotland as a difficult year for starting a business, but surprisingly only around 40% of them had lower expectations in 2009 for growing their business than in the previous year. More entrepreneurs across the UK, not just in Scotland, have been unsuccessful in raising funds for their business than in previous years, and the perceived costs of funding have also risen. The recession has affected entrepreneurs in different Arc of Prosperity countries to different degrees, with those in Iceland and Denmark more badly hit than those in Norway or Finland. In Scotland, company failures appear to have peaked in 2008. Participation in entrepreneurial activity has declined among young adults, while entrepreneurs from less wealthy households were less likely to be optimistic about opportunities and growth for their business as a result of the recession.

1 Fraser of Allander Business Review, January 2009

2 www.scotland.gov.uk/Topics/Statistics/Browse/Economy/TrendLongerGDP, accessed 29 May 2010

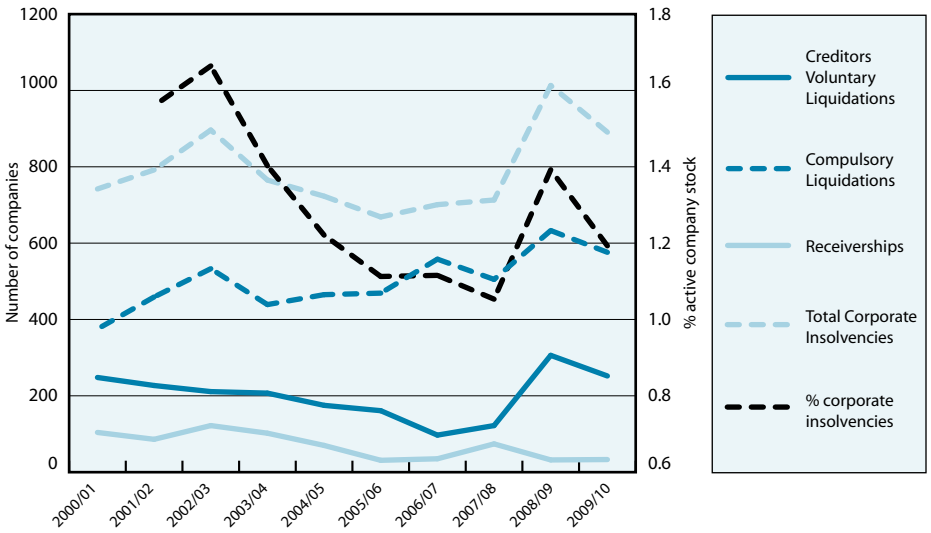
3 This calculation is based on a binary logistic regression. Further details available from the author.

4 Scottish Economic Statistics, Scottish Government, various years

% of TEA entrepreneurs	UK			Scotland		
Year	**2007**	**2008**	**2009**	**2007**	**2008**	**2009**
Type of funding sought						
friends and family	3.4	4.7	6.9	2.3	6.0	3.6
individual investors (not friends and family)	2.9	4.0	7.1	2.3	1.5	7.3
unsecured bank loans	4.6	7.0	8.8	4.6	3.0	9.1
bank overdraft	4.7	6.2	9.1	9.2	1.5	9.1
non-bank unsecured loan	2.7	2.9	3.4	3.4	0.0	3.6
mortgage or other secured loan	3.6	4.1	3.2	2.3	0.0	3.6
equity finance or formal venture capital	2.6	2.5	2.0	1.1	0.0	0.0
government grants	7.5	4.8	6.0	8.0	10.4	7.3
credit cards	3.1	3.2	3.7	4.6	1.5	5.5
Reason why unsuccessful in raising funds: Cost of funding too high	25.3	32.0	46.4	37.5	58.3	71.4

Table 6.3:
Percentage of early-stage entrepreneurs in the UK and Scotland who have been unsuccessful in raising funding, by source of funding, 2007 to 2009
Source: GEM APS, 2007 to 2009

Figure 6.4:
Corporate insolvencies, by type, and as a percentage of total registered company stock, 2000/01 to 2009/10
Source: Accountant in Bankruptcy (insolvency data); Scottish Economic Statistics (active company stock)
Note: year-end in this figure is March.



Scottish Entrepreneurship Policy and Programmes Review 2009

Entrepreneurship policy and programmes in 2009 were overshadowed by the global economic slowdown. In January, the Scottish government set out six points of an Economic Recovery Programme, which included infrastructure spending, preventing unnecessary burdens on the private sector, monitoring access to finance, and boosting the tourist industry. Other initiatives included improving access for SMEs to government contracts through a new online portal, shortening payment to business suppliers to ten working days, and a suite of energy efficiency and renewables projects.

A series of updates on the Government's response to the recession were published through the year[1], and its plan was "developed through an ongoing dialogue with Scotland's businesses, academics, community groups and individuals"[2].

In April, the Scottish Government announced that it would work towards the establishment of a Scottish Investment Bank in support of business growth, combining the existing Scottish Enterprise Scottish Venture Fund, Scottish Co-Investment Fund and Scottish Seed Fund, and later built on this using European funding. Scottish Enterprise allocated £25.5 million to these three funds for the 2009/10 period, and expanded its "Investor Ready" programme.

From January to April 2009, Scottish Enterprise conducted a "Now's The Time To Ask" marketing campaign, directed especially at new growth companies, with a series of events on issues including innovation, tackling financial issues, sales and marketing, leadership, business efficiency and inspiring action for the future. In October, the theme changed to "Strengthen your Business", with an online information service. Highlands and Islands Enterprise held a series of internet-based Virtual Conferences for businesses on challenges relating to the recession.

The Economic Recovery Plan increasingly emphasised innovation and industries of the future as the year progressed, with a range of initiatives being announced, including the most ambitious emission reduction targets in the world, such as a 42% reduction in carbon emissions by 2020. Other schemes introduced included innovation vouchers from the Scottish Funding Council to help universities contribute towards the cost of collaboration on innovation with SMEs.

Local councils and Community Planning Partnerships, which had specific responsibility for local enterprise support and increasing or maintaining local new business start-up rates, also developed local detailed responses to the recession.

Scottish Enterprise's Business Plan for 2009/12, published in March, forecast a reduction in spending on Enterprise Support Programmes from £7.7 million in 2009/10 (down from £14.8 million on 2008/09 following the transfer of responsibility for most local enterprise support to local authorities) to £6.8 million in the following two years[3].

In November, the Scottish Government published a report arguing that independence for Scotland would benefit Scottish business, because many of the key policy levers relating to supporting businesses and enterprise and improving business infrastructure were reserved to the UK government[4].

1 Updates on the Scottish Government Economic Recovery Programme, originally published in January 2009, were published on 18 March, 15 June, and October 29. The information in this chapter is taken directly from these updates.

2 The Scottish Government (2010) The Scottish Economic Recovery Plan: Accelerating Recovery. March, p.4.

3 In its 2010/13 Business Plan, published in April 2010, it forecast expenditure of £6.5 million on Enterprise Support Programmes in 2010/11 and £5.5 million in 2011/12.

4 The Scottish Government (2009) Supporting Business and Enterprise: Taking forward our national conversation. November, p.33.

8 GEM and Entrepreneurship Policy in Scotland

With the devolution of responsibility for local enterprise support to local authorities, the Scottish Government's response to the recession was to set out a framework for action and engage in a complex stakeholder dialogue to develop and implement initiatives, while using its infrastructure budget to minimise the effects on business and individuals. Looking through the list of initiatives and announcements, it is striking how little attention was paid explicitly to new business creation as a way of creating new economic activity. Replacing private sector demand with public sector demand, enhancing employability of individuals, encouraging innovation by businesses, easing working capital problems of businesses and stimulating target industries were the principal themes.

This indirect approach to encouraging entrepreneurship may pay some dividends. For example, the Scottish Government's focus and actions on renewables, while not aimed specifically at new businesses, will release new business activity as individuals identify opportunities for installation, servicing, maintenance and sub-supply businesses in addition to core manufacturing.

However deep problems remain. The Committee of Scottish Clearing Banks business bank account openings recorded a drop of 21% in 2009, very close to the 18% drop in the GEM TEA rate. This is a very different response by prospective entrepreneurs to recession to that shown across the UK, where the TEA rate was unchanged. The reduction in the informal investment rate in Scotland from a stable six year range between 1.2% and 1.4% (already one of the lowest of all participating GEM countries) down to 0.4% in 2009, and the sharp reduction in entrepreneurial activity among young people in Scotland in 2009, underlines the weakness in understanding of business across Scotland.

The UK-wide GEM data on churn among young prospective entrepreneurs, which seems even more marked in Scotland, suggests that programmes of mentoring and training linked to "funding of last resort" are precisely what this group needs. If it did not already exist, the Prince's Scottish Youth Business Trust (PSYBT) would have to be invented.

One source of this weakness in business understanding in Scotland is that less than 4% of Scots-born in Scotland have worked in their parent's business, compared with 13% of non Scots-born in Scotland. This is important because there is a clear demonstration effect of family-based entrepreneurship. Analysis of the 2008 GEMUK database found that, controlling for training and personal demographics, if someone has ever worked in their parent's business, the odds of them trying to start their own business are two times higher than those whose parents had not run their own business. If someone has a family business background, but they have never worked in their parent's business, the odds are increased by only 1.5 times. However, people whose parents ran their own business were not more likely to be trying to start a business for someone else than people whose parents did not run their own business.

In a society where knowledge of business and entrepreneurs is low, as it is in Scotland, intervention through the education and training system is necessary. In last year's GEM Scotland report, an analysis of the effect of education and training cast doubt on the effectiveness of generic business or enterprise training in schools on subsequent entrepreneurial activity. More detailed research since then on more specific "training in starting a business" has shown a significant effect, but it varies depending on whether the individual is trying to start a business for themselves or their employer and whether the training is voluntary or compulsory. This new analysis of the 2008 GEMUK database showed that compulsory training in starting a business while at school increases the odds of someone later trying to create new business activity for their employer by 3 times and for themselves by almost 2 times. However, voluntary training in school has no effect[1].

In the light of these results, which are based on a sample of 18,000 people and control for family business background and personal demographics, the ending of ring-fencing of funding for Determined to Succeed in 2011 and integrate enterprise in education across the curriculum in Scottish schools carries both possible benefits and dangers. Integration ensures that the education is universal. However, this may result in slippage of the experiential element of entrepreneurship as teachers with no knowledge of entrepreneurship take an alternative route to provision of enterprise in education. Entrepreneurship education not only provides a suitable context for the wider employability skills that enterprise education in the wider sense brings, but it introduces the business world in a personal way to the 77% of Scots who do not have a family business background.

1 Further details are available from the author.

Appendix 1

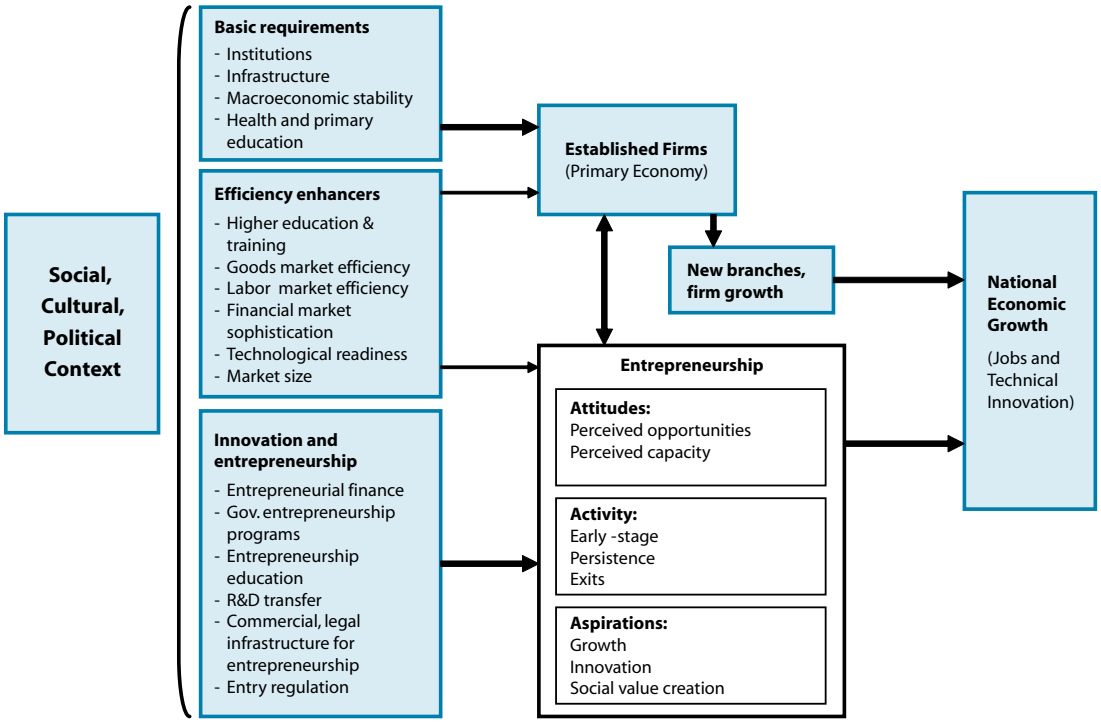
In the GEM 2008 Executive Report[1], the tenth in the series, a revised GEM model was presented. This model incorporated what has been learnt about entrepreneurial activity in the past ten years, and also what has been learnt about the economics of development and where entrepreneurship and innovation 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].

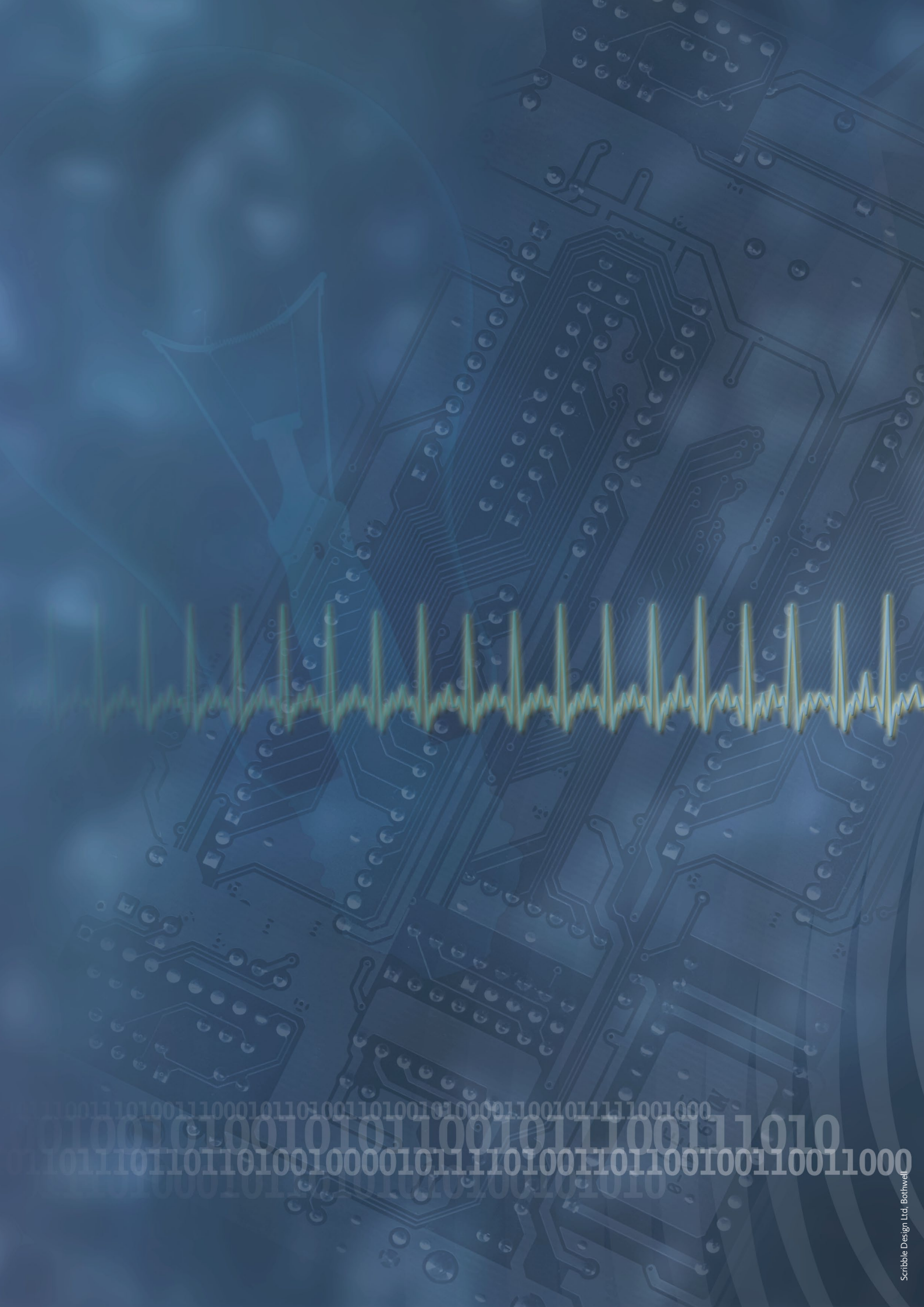
The revised model recognises that the nature and contribution of entrepreneurship may vary across countries with different levels of economic development. The model suggests a comparative study of entrepreneurship of an economy such as Scotland should focus on other innovation-driven economies rather 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.





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