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ANALYSIS

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**SMEs: The Key Enablers of Business  
Success and the Economic Rationale  
for Government Intervention**

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# Foreword

Government's vision is to make the UK the best place for businesses to start and thrive. To do this we need to understand the characteristics of our small and medium sized businesses, what determines their success and what holds them back. The key role for government is to tackle market failures, so we need to understand what these are for small and medium sized enterprises (SMEs) and how they work so as to take effective and targeted action.

SMEs represent over 99 per cent of all private sector businesses, accounting for 59.3 per cent of private sector employment and 48.1 per cent of private sector turnover at the start of 2013. As well as making a disproportionate contribution to job creation they play a key role in growth by driving competition and stimulating innovation.

Businesses, particularly small businesses, have shown great resilience in the face of challenging economic conditions in recent years, and the number of small businesses has continued to grow. There has been an increase in the numbers of start ups who claim to be doing so out of necessity, but also a welcome increase in those seeing an opportunity, and most UK start-up activity is still opportunity driven. As the UK economy recovers, it is crucial that we make best use of the potential of these businesses.

Developed by external academics and analysts across BIS, this paper sets out the current issues facing SMEs and presents the evidence that underpins Government intervention in these areas.

This paper supports "*Small Business: GREAT Ambition*" by bringing together the evidence on SMEs and providing an economic and analytical backdrop to the interventions it proposes. We hope this paper will help stimulate further interest and discussion on the issues facing SMEs and ensure that policy making continues to be underpinned by robust evidence and analysis.

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# Executive Summary

***Small and medium-sized enterprises<sup>1</sup> (SMEs) drive economic growth by stimulating innovation, acting as a competitive spur to existing businesses and making a disproportionately large contribution to job creation.***

- There were an estimated 4.9 million private sector businesses in the UK at the start of 2013, of which 99.9 per cent were SMEs.
- Despite a prolonged period of challenging economic conditions since 2008, the SME population in the UK has grown by around 14 per cent since the beginning of 2008. While necessity-driven entrepreneurship increased in both 2011 and 2012, opportunity-driven entrepreneurship also increased, and most UK start-up activity is still opportunity driven.
- SMEs in the UK accounted for 59.3 per cent of private sector employment and 48.1 per cent of private sector turnover at the start of 2013.

***The key enablers of business success can be grouped into three clusters. Within these clusters, businesses can face barriers that may reduce or stop business growth.***

- Although not all businesses can grow, or wish to grow, businesses may face barriers that hold them back from growing. Previous research<sup>2</sup> grouped a number of obstacles businesses face into three clusters; the rest of this paper uses these as the analytical framework for considering the key enablers of business success:<sup>3</sup>
  1. Internal capacity and capability;
  2. The external environment;
  3. The vision of the business owner.

***Businesses face a series of ‘tipping points’ and it is the internal capacity and capability of businesses that enable them to overcome those difficulties and hence makes business growth possible.***

- **Skills** of business owner-managers and employees within the firm provide the absorptive capacity for businesses to overcome ‘tipping points’. Skills have a positive effect on labour productivity and innovation activity and the evidence

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<sup>1</sup> Small and medium-sized enterprises (SMEs) are defined in this paper by employee size – as businesses with 0 to 249 employees (BIS Business Population Estimates for the UK and Regions, 2013)

<sup>2</sup> Durham Business School (2013) “Understanding Growth in Microbusinesses”

<sup>3</sup> Although this research related to businesses with 0 to 9 employees, the barriers faced apply to SMEs generally and the clusters are therefore a useful analytical framework for discussing the issues relating to SMEs

suggests there is a relationship between a country's levels of skills and its economic growth. Twenty-eight per cent of SME employers reported that a general shortage of skills was an obstacle to their business success. However, market failures suggest the level of investment by employers and employees may be sub-optimal.

- **Innovation** is a driver of growth, and SMEs make a significant contribution to UK innovation activity. In 2011, 37 per cent of SMEs with more than 10 employees reported undertaking innovation activity. However, this level of innovation activity is likely to be below its optimal level due to information failures, positive externalities and institutional deficiencies.

***The main obstacles to success reported by SMEs are related to the external environment, including access to finance. However, the external environment also presents opportunities for growth such as through exporting and public procurement.***

- SMEs face obstacles to **obtaining finance**, and this has become more widespread during the downturn. On the supply side, market failures mainly relating to asymmetric or imperfect information affect the supply of finance to SMEs. On the demand side, SMEs may not fully understand the potential benefits to their business of raising finance, or their likely chance of success in gaining finance.
- **Exporting** is also a driver of economic growth. Exporting SMEs are on average more productive, more innovative and more resilient than non-exporters. However, there are a number of market failures relating to information failures, knowledge spillovers and agglomeration effects, resulting in a sub-optimal level of export activity. A recent study found that 25,000 to 150,000 non-exporting UK SMEs have the potential to be competitive in export markets.
- **Public procurement** is seen as a good opportunity to provide support for SMEs and an important source of demand. SME procurement promotes competition and innovation.

***The vision of the business owner is an important growth driver, so limits growth when ambition is constrained by perceived barriers, and may stop the firm seeking useful business support.***

- **Growth ambitions** are linked to firm growth. Several large scale studies have concluded that the proportion of entrepreneurs with growth intentions in the population is a more significant predictor of economic growth than general start-up rates or self-employment rates. Research suggests that high growth outcomes are much more linked to motivations and the managerial capacities of firms than the immediate environment.
- Businesses report significant benefits from using **business information and advice**. However, less than half of UK SME employers currently use business support due primarily to difficulties in accessing information or advice; doubts about the benefits of business support, and concerns about the competence and trustworthiness of support providers.

- Government recognises that it is business itself that is responsible for building its own capabilities and **Government's role is to intervene only to address market failures**. However, economic theory, supported by evidence, provides a case for government intervention to support SMEs.

***Government wants to encourage entrepreneurship and growth, and support is targeted on those businesses that are most likely to deliver additional economic growth and hence where interventions can have the greatest impact.***

- Research found that from 2005 to 2008, seven per cent of SMEs met the OECD definition of 'high growth', and these high growth SMEs are credited with creating around a quarter of all new jobs among existing businesses. It is challenging to identify early on which businesses have the highest growth potential. Theory suggests that interventions should focus on export and innovation support, since this will lead to a lower level of displacement of other UK firms' domestic activities.
- "*Small Business: GREAT Ambition*" sets out Government's ambitious programme of policies to promote growth, create jobs, boost skills and make the UK more competitive. It is focused on making it easier for those businesses with the ambition to grow, to be able to scale up.



# 1. The Importance of SMEs to the Economy

**This section looks at the position of SMEs in the economy. This includes how, and the extent to which, SMEs contribute to the economy and recent trends in the business population.**

***SMEs drive economic growth through innovation, competition and job creation.***

The importance of SMEs is reflected in the Government's growth agenda. A key priority of the BIS Business Plan<sup>4</sup> is to boost enterprise and make this the decade of the entrepreneur. This will be achieved by helping SMEs start and thrive through better business support, improved access to finance and stronger competition with fewer barriers to entry, creating a more entrepreneurial culture.

Small and medium-sized enterprises (SMEs) drive economic growth by:

1. Stimulating innovation;
2. Acting as a competitive spur to existing businesses to increase their productivity;<sup>5</sup>
3. Making a disproportionately large contribution to job creation.<sup>6</sup>

**Stimulating innovation:** Through the established empirical relationship between innovation and firm growth, the contribution of SMEs to innovation is important to the economy.<sup>7</sup> Comparing the growth rates of innovative and non-innovative firms indicate growth rates were significantly higher among innovative firms across three different innovation measures: product innovation, process innovation and wider innovation. The research finds that a 10 percentage point increase in the share of sales from new products adds 0.7 percentage points to these firms' employment growth rates. It has been suggested that SMEs specifically can act as an important 'seedbed' for new innovations.<sup>8</sup>

**Spurring competition:** SMEs spur competition which raises productivity and in turn stimulates economic growth. The concept of 'creative destruction' is a widely recognised

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<sup>4</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/31960/12-p58-bis-2012-business-plan.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/31960/12-p58-bis-2012-business-plan.pdf)

<sup>5</sup> BIS Economics Paper No. 12 (2011) "Productivity and the Economic Cycle"

<sup>6</sup> Anyadike-Danes, Bonner and Hart (2011) "Job Creation and Destruction in the UK: 1998 – 2010"

<sup>7</sup> NESTA (2009) "Business Growth and Innovation: The wider impact of rapidly-growing firms in UK city-regions"

<sup>8</sup> Mole (2002) "Augmenting Productivity Growth in SMEs"

principle, first proposed by the economist Schumpeter,<sup>9</sup> whereby new innovative entrepreneurs challenge incumbent businesses. As competition increases, there is ‘churn’ in the market; the least productive firms exit and the most productive firms grow, resulting in an increase in aggregate productivity.

**Job creation:** The evidence shows that small firms make a disproportionately large contribution to job creation, given the percentage of the workforce they employ.<sup>10</sup> The smallest firms have been increasing their share of total employment year on year and in 2010 their share was triple that in 1998. Single employee firms increased from three per cent of the total employment in 1998 to 10 per cent in 2010, while the share of 250+ employee firms fell from 49 per cent to 40 per cent over the same period.<sup>11</sup>

A significant proportion of new jobs in the UK are created by small firms. Out of a total of 2.61 million jobs created on average each year between 1998 and 2010, existing small firms (with less than 50 employees) contributed 34 per cent (870,000 jobs). Start-ups (of which nine out of 10 employ less than five employees at birth) contributed a further 33 per cent (870,000) of new jobs.<sup>12</sup>

SMEs have a critical role in driving economic growth, but it is a small proportion of SMEs who are responsible for much of the impact. This is highlighted by the ‘five brutal facts of the UK business demography’ that have been identified:<sup>13</sup>

1. Every year around 200,000 to 250,000 private sector firms are born in the UK.<sup>14</sup>
2. Around 90 percent of newborn firms are small with less than five employees.
3. A decade later most of those newborn firms are gone (70 to 80 per cent).
4. A cohort of new firms is born with around 1 million jobs but a decade later the surviving firms employ only around 500,000.

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<sup>9</sup> Schumpeter (1942) “Capitalism, Socialism, and Democracy”. For a more recent discussion see Robinson, O’Leary and Rincon (2006) “Business start-ups, closures and economic churn: A review of the literature”

<sup>10</sup> This holds for other countries too. See Ayyagari et al (2011) “Small vs. Young Firms Across the World: Contribution to Employment, Job Creation and Growth” World Bank Research Paper 5631

<sup>11</sup> Anyadike-Danes, Bonner and Hart (2011) “Job Creation and Destruction in the UK: 1998 – 2010”

<sup>12</sup> However, by definition for start-ups, all jobs are new and therefore the long-term impact on jobs may be lower than appears as many close in their first few years

<sup>13</sup> Anyadike-Danes, Hart and Du (2013) “Firm Dynamics and Job Creation in the UK” Enterprise Research Centre White Paper No. 6

<sup>14</sup> This relates to the birth of firms registering for VAT/PAYE and does not therefore include smaller non-employing businesses. Last year it was estimated that around 500,000 enterprises in total were started (BankSearch 2012)

5. Of those firms that survive to age 10, around 75 per cent born with less than five employees will still have less than five employees.

Since many SMEs exit the market in their first few years, and of those who survive many remain small, this has important implications for the way Government targets support for SMEs in order to deliver the greatest value for money. This is discussed in more detail in section 3 of this paper.

***At the start of 2013 there were an estimated 4.9 million private sector businesses.***

At the start of 2013 there were an estimated 4.9 million private sector businesses in the UK, of which 99.9 per cent were SMEs, with almost 3.7 million of these having no employees. During a sustained period of difficult economic conditions since the start of 2008, the SME population in the UK has continued to grow (by around 14 per cent since 2008). While the necessity-driven Total early-stage Entrepreneurial Activity (TEA) rate<sup>15</sup> increased in both 2011 and 2012, opportunity-driven entrepreneurship also increased, and most UK start-up activity is still opportunity driven.

The growth in the number of businesses is part of a longer term trend which has seen the total business population increase by just over 41 per cent since the start of 2000. However, growth has not been experienced among businesses of all sizes. The number of large businesses has actually declined since 2000, while the number of SMEs has risen. The greatest increase has been among businesses without employees (see Figure 1).

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<sup>15</sup> The TEA rate is the proportion of nascent entrepreneurs (those whose businesses have been paying wages for not more than three months) and new business owner-managers (those whose business have been paying wages for more than three months but not more than 42 months), minus any double counting, in the working age population

**Figure 1: Growth in the number of businesses in the UK since 2000**



\* In 2003 Primary care Trusts and National health Service Trusts were reclassified from the private sector to the central government sector.

\* There was a discontinuity between the estimates in 2011 and 2012, when an improvement to the business register was implemented to capture some businesses that were previously excluded. See the Statistical Release for more detail.

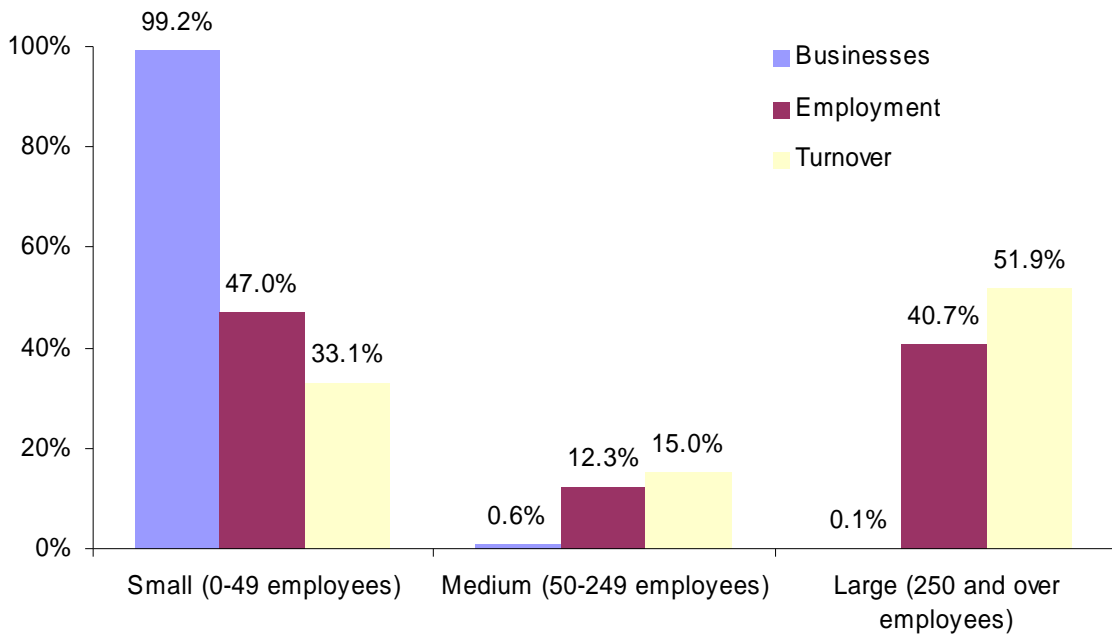
Source: BIS Business Population Estimates for the UK and Regions, 2013

***SMEs account for the majority of private sector employment and almost half of private sector turnover.***

As shown in Figure 2 (by summing across the bars for small and medium-sized enterprises), SMEs in the UK accounted for 59.3 per cent of private sector employment and 48.1 per cent of private sector turnover at the start of 2013.<sup>16</sup>

<sup>16</sup> BIS Business Population Estimates for the UK and Regions, 2013

**Figure 2: Share of businesses and their associated turnover and employment, by size of business, UK, 2013**



Source: BIS Business Population Estimates for the UK and Regions, 2013

## 2. Key Enablers of Business Success

**This section reviews the key enablers of business success, grouping these into three clusters. Within these clusters, businesses can face barriers that may reduce or stop business growth. These barriers are the consequence of both perceived and actual constraints to do with the internal capacity of the business to grow, the external environment and the vision of the business owner-manager and their attitudes towards growth.**

*The majority of SMEs would like to grow, but most do not.*

The majority of SME employers (68 per cent) aim to grow in the next two to three years,<sup>17</sup> but most actually do not show growth in any given year.<sup>18</sup> A segmentation of SME employers shows that overall in 2012, 13 per cent of SME employers were classified as 'growers',<sup>19</sup> 57 per cent 'stable'<sup>20</sup> and 13 per cent 'shrinkers'.<sup>21</sup> Although Government uses business growth to refer to increases in employment and turnover, it is useful to recognise that SME owner-managers are much more likely to conceptualise growth in terms of turnover or profit than employment.<sup>22</sup> In developed countries, like the UK, small businesses are a major source of job creation as well as being critical in driving economic growth through innovation and competition.<sup>23</sup>

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<sup>17</sup> This compares to 54 per cent of businesses with no employees who aim to grow over the next two to three years. For a more detailed discussion see section 2.3 on the vision of the business owner

<sup>18</sup> BIS Small Business Survey, 2012

<sup>19</sup> BIS Small Business Survey, 2012. SME employers that had increased the numbers employed by five per cent or more in the 12 months prior to the survey with a minimum of three new employees, or SME employers that had increased turnover by five per cent or more in the 12 months prior to the survey, with a minimum increase of £50,000

<sup>20</sup> BIS Small Business Survey, 2012. SME employers that had the same numbers, or who employed up to two more or fewer employees than 12 months previously, and whose turnover increased or decreased by less than £50,000

<sup>21</sup> BIS Small Business Survey, 2012. SME employers that had decreased the numbers employed by five per cent or more in the 12 months prior to the survey with a minimum of three employees lost, or SME employers that had decreased turnover by five per cent or more in the 12 months prior to the survey, with a minimum decrease of £50,000. In addition, this group could not have grown employment or turnover by five per cent or more

<sup>22</sup> Durham Business School (2013) "Understanding Growth in Microbusinesses"

<sup>23</sup> Anyadike-Danes, Hart and Du (2013) "Firm Dynamics and Job Creation in the UK" Enterprise Research Centre White Paper No. 6

***The small proportion of high growth SMEs that exist are important, creating around a quarter of new jobs in a three year period.***

High growth firms are particularly important to the economy, driving competition and productivity growth. Research<sup>24</sup> found that from 2005 to 2008, seven per cent of SMEs met the OECD definition<sup>25</sup> of 'high growth'. A similar proportion also achieved this over 2002-05 and 2007-10.<sup>26</sup> Over a three year period, these high growth SMEs are credited with creating around a quarter of all new jobs among existing businesses.<sup>27</sup> However, evidence suggests that the contribution of high growth firms to job creation has fallen since 2005.<sup>28</sup>

***Although not all businesses can grow, many face barriers that hold them back.***

In the short run, a business' growth often comes at the expense of others, although in the longer term competition spurs growth. In a dynamic business sector, the entry of new businesses and the growth of existing businesses displaces weaker businesses. Although this is important for raising aggregate productivity in the market, it does mean not all businesses can grow. Displacement<sup>29</sup> is likely to be higher where competition is more intense and where a market is more saturated.

***Research into microbusinesses<sup>30</sup> grouped the enablers of business success into three clusters...***

Although not all businesses can grow, businesses may face barriers that hold them back from growing. Previous research<sup>31</sup> into microbusinesses analysed 31 individual obstacles to business growth and aligned them into three clusters:

1. The internal capacity and capability to grow.
2. The external environment, including the market in which the business operates.

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<sup>24</sup> ED AU secondary analysis of data in NESTA (2009) "Measuring Business Growth" Anyadike-Danes, Bonner, Hart and Mason

<sup>25</sup> Starting with at least 10 employees and annual average growth of at least of 20 per cent in employment or turnover over a three year period

<sup>26</sup> Estimate for 2007-10 from NESTA (2011) "Vital Growth"

<sup>27</sup> ED AU secondary analysis of data in NESTA (2009) "Measuring business growth" Anyadike-Danes, Bonner, Hart and Mason

<sup>28</sup> Roper and Hart (2013) "Supporting Sustained Growth Among SMEs – Policy Models and Guidelines" Enterprise Research Centre White Paper No. 7

<sup>29</sup> Displacement is 'The degree to which an increase in productive capacity promoted by government policy is offset by reductions in productive capacity elsewhere.' HMT (2003) "Green Book: Appraisal and Evaluation in Central Government"

<sup>30</sup> Businesses with 0 to 9 employees

<sup>31</sup> Durham Business School (2013) "Understanding Growth in Microbusinesses"

### 3. The psychological limits or vision of the owner in relation to growth.

The internal capacity was a limiting constraint for 67 per cent of microbusinesses, the external environment and market constraints applied to 45 per cent of micros and the vision of the business owner to 72 per cent of micros. Microbusinesses were rarely constrained in only one of these three dimensions. This suggests that the clusters are linked and that it is necessary to address the range of obstacles businesses face. For example, misperceptions about the success of finance applications and the psychology of business owner-managers may discourage them from seeking finance.<sup>32</sup> It is interactions like this which need to be considered when seeking to address the barriers businesses face.

As expected, there was a negative relationship between the number of constraints and the growth of microbusinesses. A greater proportion (45 per cent) of unconstrained businesses had grown, whereas fewer businesses subject to all three constraints had grown (25 per cent).

***... with these three clusters used as the analytical framework in this document for discussing the issues relating to SMEs generally.***

The three clusters outlined provide a useful analytical framework for considering the key enablers of business success. This paper uses these clusters to discuss the barriers to growth that SMEs face. In the original research the clusters were developed in reference to microbusinesses, but the issues are relevant for SMEs generally. Barriers however may be more acute for smaller businesses as they have fewer resources available to overcome them. The main components of these clusters are reviewed as follows:

1. Internal Capacity and Capability
  - a. Skills and employing people
  - b. Innovation
2. The External Environment
  - a. Access to finance
  - b. Exports
  - c. Public procurement
3. The Vision of the Business Owner
  - a. Ambition and misconceptions
  - b. Business support

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<sup>32</sup> Fraser, Bhaumik and Wright (2013) "What do we know about the relationship between entrepreneurial finance and growth?" Enterprise Research Centre White Paper No. 4



## 2.1 Internal Capacity and Capability

**The first of the clusters of obstacles to business success relates to the internal capacity and capability of the business. It is the capacity and capability of businesses that enables them to overcome difficulties and hence makes business growth possible. This section discusses the skills of business owner-managers and employees within the firm, which is what drives the business' capacity and capability, and also innovation which in turn is driven by business capabilities.**

***It is widely accepted that there is not a standard model for business development, with SMEs facing a series of 'tipping points'.***

It is widely accepted that there is not a standard model for business development.<sup>33</sup> SME growth is complex and typically episodic. Periods of high growth can occur at any point in the life cycle of the firm. In the periods 2002-05 and 2005-08, around 70 per cent of high growth firms were at least five years old. However, young firms are more likely to be high growth; 11.2 per cent of firms less than five years old were high growth, compared to around five per cent of older firms.<sup>34</sup>

The challenges and drivers of success will vary from business to business and cannot easily be predicted by business characteristics such as size, age or sector – growth can therefore appear remarkably idiosyncratic and difficult to generalise.<sup>35</sup> Linear models of SME growth are now largely discredited. One area of management research,<sup>36</sup> proposes that businesses face a series of 'tipping points', which may be encountered many times, rather than a linear sequence of events. It is those businesses seeking to grow that face these 'tipping points'.

***The activities required to deal positively with these 'tipping points' are not present in a large number of SME employers.***

Success at these tipping points depends on a firm's absorptive capacity – its ability to absorb and use different types of knowledge and resources to address the issues encountered.

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<sup>33</sup> For example, Levie and Lichenstein (2010) "A Final Assessment of Stages Theory: Introducing a Dynamic States Approach to Entrepreneurship"

<sup>34</sup> NESTA (2009) "Measuring Business Growth" Anyadike-Danes, Bonner, Hart and Mason

<sup>35</sup> Coad (2009) "The Growth of Firms"

<sup>36</sup> Bessant, Phelps and Adams (2005) "A review of the literature addressing the role of external knowledge and expertise at key stages of business growth and development"

Many of the activities required to deal positively with these ‘tipping points’ are not present in a large number of SME employers:<sup>37</sup>

- People management: e.g. recruitment and delegation (47 per cent of SME employers did not provide any training for managers in 2011-12).
- Strategy: e.g. moving from an opportunistic to strategic approach (46 per cent of all SMEs do not plan – either in terms of producing regular management accounts or having a formal written business plan – although larger SMEs are more likely to plan with 30 per cent of SMEs with employees not planning).
- Formalised systems: e.g. moving from an informal approach to record keeping to a formal system for recording and utilising customer details.
- New market entry: e.g. exporting and developing new products (55 per cent of SME employers had not introduced new or improved products or services in 2011-12 and 81 per cent of SME employers do not export their goods or services).
- Obtaining finance: e.g. switching from reliance on initial funders (75 per cent of SME employers had not sought finance in 2011-12).
- Operational improvement: e.g. moving towards best practices.

***Many SMEs rate their ability to deal with these ‘tipping points’ as poor.***

In addition, many SMEs consider their ability to overcome tipping points as poor. Table 1 shows SMEs assessment of their own capabilities across areas important for business success. Particularly noteworthy is that 42 per cent consider themselves poor at accessing external finance and 33 per cent at entering new markets.

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<sup>37</sup> BIS Small Business Survey, 2012, except business planning: BDRC Continental (2013), SME Finance Monitor Q2 2013

**Table 1: Self-assessment of business capabilities**

	Strong (%)	Poor (%)
<b>Taking decisions on regulation and tax issues</b>	62	9
<b>People management</b>	57	11
<b>Developing and implementing a business plan and strategy</b>	55	13
<b>Operational improvement</b>	54	12
<b>Using formalised business systems</b>	42	23
<b>Developing and introducing new products and services</b>	40	22
<b>Entering new markets</b>	23	33
<b>Accessing external finance</b>	18	42

Source: BIS Small Business Survey, 2012

### 2.1.1 Skills and employing people

***The absorptive capacity of SMEs depends on the skills of business owner-managers and employees within the firm.***

The absorptive capacity of businesses and hence their ability to overcome tipping points, depends on the leadership and management skills of the business owner-managers and the skills embodied by employees. Skills have a positive effect on labour productivity, they enable innovations developed elsewhere to be adopted and provide the ability to generate new innovations.<sup>38</sup> In aggregate, a country's level of skills can have an impact on the

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<sup>38</sup> BIS Economics Paper No. 4 (2010) "Supporting analysis for "Skills for Growth: The national skills strategy""

growth rate.<sup>39</sup> It is estimated that improvements in skills added 0.4 percentage points to UK growth between 2000 and 2007.<sup>40</sup>

SMEs themselves recognise that skills matter. Indeed, 28 per cent of SME employers said that a general shortage of skills was an obstacle to their business success. Of SME employers looking to grow in the next 2 to 3 years, 74 per cent said they would achieve growth through increasing the skills of employees.<sup>41</sup> However, market failures result in a sub-optimal level of investment in skills and therefore Government has a key role in increasing the supply of skills.<sup>42</sup>

### ***Weaknesses in management and leadership skills are related to poor business performance...***

The evidence suggests leadership and management skills are important as the way a business is managed has a strong effect on its performance. However, previous research into leadership and management skills has related to large firms. To address the evidence gap in relation to SMEs, entrepreneurial leadership is one of the six research themes being considered by the Enterprise Research Centre (ERC).<sup>43</sup>

A study by McKinsey & Company and the Centre for Economic Performance<sup>44</sup> found that better management practice, as measured on a scale of one to five through interviews assessing firms against shop floor management, performance management and talent measurement, is correlated with a range of corporate performance metrics including labour productivity, sales growth and return on capital employed. Improving management is also related to increases in productivity and output, with a single point improvement in the management score associated with the same output increase as a 25 per cent increase in labour. In turn, they find that higher levels of education and skills in the firm are strongly correlated with better management scores. This holds true for the skill levels of both managers and workers.

Despite strong competitive pressures in the UK, which leads to the spread of good practice and eliminates poor practice through natural selection, and flexible labour markets which encourage good management practice in order to recruit and retain the best employees, the UK is middle ranking in terms of management practices. As shown in Figure 3 below, the UK ranks lower than the US, Sweden, Japan and Germany.

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<sup>39</sup> Technically in the literature, this is characterised by measures of human capital or skills entering into the growth equation in levels rather than first differences

<sup>40</sup> Gröningen Growth and Development Centre

<sup>41</sup> BIS Small Business Survey, 2012.

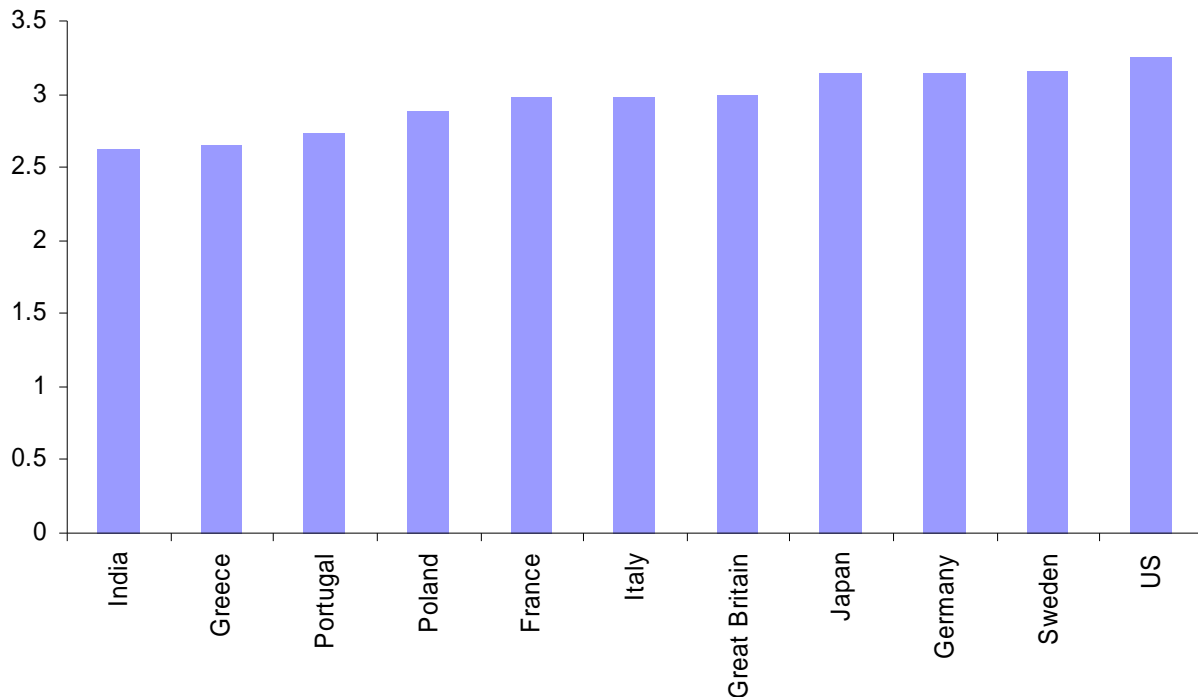
<sup>42</sup> "Rigour and Responsiveness in Skills" April 2013, BIS. This sets out the Government's new skills strategy

<sup>43</sup> The ERC is an independent research centre, partly sponsored by BIS <http://enterpriseresearch.ac.uk/>

<sup>44</sup> McKinsey & Company and Centre for Economic Performance (2007) "Management Practice & Productivity: Why they matter"

One reason for this is the qualifications of managers in the UK, as there appears to be a relationship with better management; 84 per cent of managers in the highest scoring firms had degrees compared to 54 per cent in the lowest scoring firms. The UK ranks bottom out of the countries included in the research in terms of the skills of managers, with only 43 per cent of managers educated to degree level in the UK, compared to 70 per cent in Japan and 60 per cent in the US.

**Figure 3: Average management practice score**



Source: Management Practice & Productivity: Why they matter, McKinsey & Company and the Centre for Economic Performance, July 2007

The role of boards is also important as they can help SMEs grow and avoid failure. They sit at the top of a firm's governance hierarchy monitoring managers and protecting shareholders' interests. Zahra et al.<sup>45</sup> argue that boards and absorptive capacity complement each other, but boards can also substitute for weak absorptive capacity and vice versa.

High performance working (HPW) practices is an approach to managing organisations that stimulates more effective employee involvement.<sup>46</sup> HPW is associated with positive benefits for the firm in terms of profits and sales, as well as for employees in terms of job

<sup>45</sup> Zahra, Filatotchev and Wright (2009) "How do threshold firms sustain corporate entrepreneurship? The role of Boards of Directors and Knowledge". For a further discussion see Wilson, Wright and Scholes (2013) "Family Business Survival and the Role of Boards"

<sup>46</sup> UK Commission for Employment and Skills (2013) "High Performance Working in the Employer Skills Surveys", Evidence Report 71

satisfaction, improved motivation and more opportunities for innovation.<sup>47</sup> Firm size is a strong predictor of the likelihood of adopting HPW practices with smaller firms less likely to adopt practices related to employee involvement, skills acquisition and motivational practice. While the use of HPW practices dropped for all establishments between 2007 and 2011, the decline was most pronounced for small establishments with less than five employees.<sup>48</sup> Given the positive association between HPW practices and organisational performance, there is a case for enabling SMEs to support the adoption of such practices, especially during a difficult economic climate.

***...and the human capital of employees also matters for business success.***

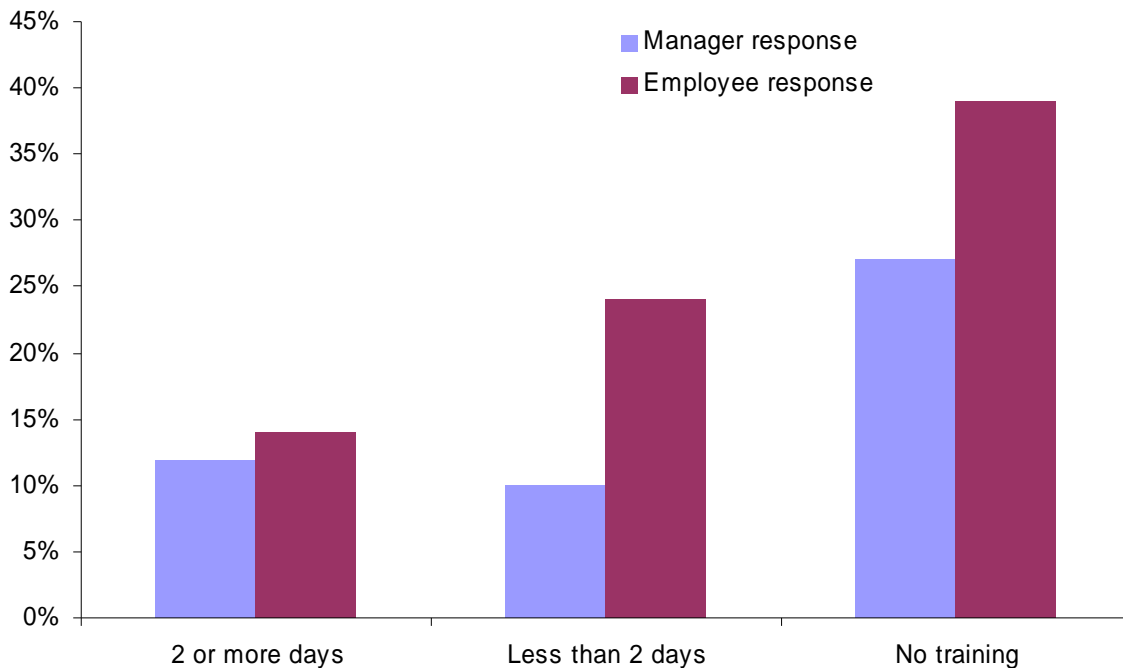
Firms which employ skilled workers and provide training are less likely to go out of business. Research<sup>49</sup> found that firms with higher qualified workers were less likely to close than those with lower qualified workers. In addition, the study found that the probability of closure declines sharply if some training is provided; 39 per cent of establishments that provided no training to employees were observed to close, compared to 14 per cent of establishments that provided two or more days of training (see Figure 4).

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<sup>47</sup> UK Commission for Employment and Skills (2013) "Going the extra mile: A Review of evidence and reports for High Performance Working"

<sup>48</sup> UK Commission for Employment and Skills (2013) "High Performance Working in the Employer Skills Surveys", Evidence Report 71

<sup>49</sup> Collier, Green and Kim (2007) "Training and establishment survival", SSSA Research Report 20

**Figure 4: Probability of closure by amount of reported training**

Source: Collier, Green and Kim (2007) 'Training and establishment survival', SSDA Research Report 20

Poor basic skills are a real issue for businesses.<sup>50</sup> According to employers, poor basic skills of workers primarily result in poor customer service and low productivity. In turn, this is likely to have a detrimental impact on the performance of the business. There are also cost implications of poor basic skills due to high staff turnover and having to recruit externally rather than promote internally.<sup>51</sup>

High level skills also matter. Graduates drive productivity improvements through both their direct labour contribution and by enhancing the productivity of others. Accounting for their full impact, a 1 per cent increase in the share of the workforce with a university degree raises the level of long-run growth by 0.2 to 0.5 per cent.<sup>52</sup> A fresh supply of graduates is also needed to keep up the production of intangible assets, such as training, marketing and software design. Investment in intangible assets in the UK has exceeded that in tangibles, as a percentage of private sector gross value added,<sup>53</sup> since around 2002.

<sup>50</sup> Fifteen per cent (5.1 million) of working age adults in the UK lacked functional literacy skills in 2011 and 24 per cent (8.1 million) lacked functional numeracy skills (Skills for Life Survey, 2011). Functional skills are the practical skills that allow people to use English, Maths and ICT in real life contexts

<sup>51</sup> ALBSU/Gallup (1993) "The Cost to Industry: Basic Skills and the UK Workforce"

<sup>52</sup> NIESR (2013) "The relationship between graduates and economic growth across countries", BIS Research Paper No.110

<sup>53</sup> Figure 3 in BIS Annual Innovation Report (2012). Source: Nesta Innovation Index 2012

Intangibles accounted for 19 per cent of labour productivity growth between 2000 and 2008.<sup>54</sup>

***Although many SMEs do invest in skills training, businesses face barriers that may hold them back from providing training.***

Skills are important for business success and therefore investment to improve skills levels of SME owner-managers and employees is vital. In 2011-12, 60 per cent of SME employers in the UK provided training.<sup>55</sup> The likelihood of an employer providing training increases with the size of the business; 54 per cent of microbusinesses provided training in 2011-12 compared to 86 per cent of small businesses and 92 per cent of mediums.<sup>56</sup> The likelihood of offering training is also positively related to establishment size; only 47 per cent of establishments with 1-4 employees, and 77 per cent of establishments with 5-25 employees had offered training to their staff in 2011, compared to over 90 per cent of establishments with 25 or more employees.<sup>57</sup> Evidence also suggests that employers experiencing skills gaps i.e. where employees are deemed to not be fully proficient in their role, are more likely to provide training than those without.<sup>58</sup>

Larger establishments are not only more likely to provide training, but also to train a higher proportion of their workforce, and to train towards a qualification. More than mid-sized establishments, it is the smaller (and larger) ones that show sensitivity to recessionary pressures by cutting back on training, when looking at recent trends in training activity.<sup>59</sup>

In terms of who received the training, 32 per cent of SME employers provided training for managers in 2011-12 and 28 per cent for employees only. Of those who did not provide training for managers, 14 per cent had considered it but had not done so. The main reason for not providing management training was because it was not considered a priority (58 per cent of SME employers), followed by a lack of money (8 per cent).<sup>60</sup>

***Market failures exist in the skills market and provide a rationale for government intervention.***

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<sup>54</sup> BIS Annual Innovation Report (2012)

<sup>55</sup> BIS Small Business Survey, 2012

<sup>56</sup> BIS Small Business Survey, 2012

<sup>57</sup> UK Commission for Employment and Skills (2011) "Employer Skills Survey"

<sup>58</sup> UK Commission for Employment and Skills (2010) "National Employer Skills Survey for England 2009: Main Report"

<sup>59</sup> Contextual analysis of UK Commission for Employment and Skills (2011) "Employer Skills Survey" by Steve McIntosh, 2013

<sup>60</sup> BIS Small Business Survey, 2012



The existence of market failures<sup>61</sup> may mean that investment in skills and training by businesses and individuals is sub-optimal, being less than socially desirable. This is important for businesses and particularly for 'stable' growth SME employers who are more likely than non-growth SME employers to say that skills shortages are a barrier to success.<sup>62</sup>

Information failures mean employers may not fully understand the benefits of training. Indeed, a third of employers with skills gaps did not provide training as they considered their staff to be fully proficient.<sup>63</sup> Individuals, including both owner-managers and employees, may also under-invest in skills if they fail to appreciate the benefits of training or do not place sufficient value on future benefits.

Training and skills<sup>64</sup> also create external benefits. Business owner-managers may under-invest in the skills of their employees from a social perspective, as they risk staff moving jobs and would therefore not benefit from the increased skill levels. Haskel and Galindo-Rueda<sup>65</sup> assess the existence of human capital spillovers by relating establishment productivity to the education of the workforce in the surrounding local authority. The hypothesis is that if knowledge is able to spillover across the workforce, individuals will be more productive in their jobs if they are located in an area that has a more highly skilled workforce. The results indicated that a 10 percentage point increase in the proportion of the local workforce educated to degree level is associated with increased productivity within the firm of around 13 per cent.

### ***Barriers to taking on employees...***

Of SME employers looking to grow in the next two to three years, 64 per cent said they would achieve growth through employing more staff. However, 25 per cent of SME employers reported that recruiting staff was an obstacle to business success.<sup>66</sup>

One recruitment obstacle relates to hard-to-fill vacancies. Although only five per cent of establishments in England report having at least one hard-to-fill vacancy, the proportion of hard-to-fill vacancies of all vacancies is significant (22 per cent).<sup>67</sup> Hard-to-fill vacancies in turn have an impact on establishments, with 81 per cent of establishments with hard-to-fill

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<sup>61</sup> A market failure is "An imperfection in the market mechanism that prevents the achievement of economic efficiency." HMT (2003) "Green Book: Appraisal and Evaluation in Central Government"

<sup>62</sup> BIS Small Business Survey, 2012

<sup>63</sup> UK Commission for Employment and Skills (2012) "UK Commission's Employer Skills Survey 2011: UK Results", Evidence Report 45

<sup>64</sup> Including management and leadership skills

<sup>65</sup> Haskel and Galindo-Rueda (2005) "Skills, workforce characteristics and firm-level productivity in England"

<sup>66</sup> BIS Small Business Survey, 2012

<sup>67</sup> UK Commission for Employment and Skills (2012) "UK Commission's Employer Skills Survey 2011: England Results", Evidence Report 46

vacancies reporting that it increases the workload for other staff. The proportion of establishments reporting a hard-to-fill vacancy increased with establishment size, but a higher proportion of vacancies in smaller establishments were hard-to-fill and when they are present in smaller establishments their impact can be greater. The main cause of hard-to-fill vacancies reported relates to the low number of applicants with the relevant skills (39 per cent of establishments).

There are also barriers related to taking on the first employee for a business. Non-employing businesses display 'satisficer behaviour', in that the most common reason for not employing staff is because they believe the size of the business is optimal – either that the business could only sustain one person or that personal income was maximised by working alone. The next most common reason for not employing staff was due to the belief that dealing with regulation was too difficult or burdensome.<sup>68</sup>

Comparing the challenges associated with taking on a first employee cited by employers and non-employers reveals that a higher proportion of non-employers reported challenges. But the proportion of employers reporting some issues was high. This indicates that the challenges associated with taking on a first employee are real, but may be exaggerated by those with no experience compared to those who have successfully recruited staff. This demonstrates the value of providing information to address the exaggerated perceptions of taking on a first employee.

## 2.1.2 Innovation

### ***Innovation supports economic growth...***

Advanced economies such as the UK rely on innovation to drive long-term economic growth and improvements in living standards. In the years 2000-08, innovation accounted for 51 per cent of UK private sector labour productivity growth.<sup>69</sup>

At the firm level innovation also supports growth. Those who persistently invest in research and development have higher productivity (13 per cent higher than those with no R&D spending and nine per cent more than firms who occasionally invest in R&D), better value added per employee and more exports.<sup>70</sup> Previous research by BIS and the OECD<sup>71</sup> has found that a one per cent increase in firms' innovation sales per employee is associated with a 0.55 per cent increase in productivity (for the UK). There are also gains beyond productivity increases. Businesses report that innovation leads to improved product

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<sup>68</sup> Durham Business School (2013) "Understanding Growth in Microbusinesses"

<sup>69</sup> BIS Annual Innovation Report, 2011

<sup>70</sup> Cefis and Ciccarelli (2005), Cefis and Orsengio (2011), Loof et al (2011)

<sup>71</sup> Drawn from BIS Economics Paper No. 15 "Innovation and Research Strategy for Growth", page 12. Source: Hodges (2010) "Investigating the links between innovation and productivity: an analysis of UK firms", report for BIS, and Criscuolo (2009) "Innovation and Productivity: Estimating the core model across 18 Countries", Innovation in Firms – A Microeconomic Perspective

quality, an increased range of goods and services and the opening of new markets / increased market share.<sup>72</sup>

***...and SMEs have an important role in innovation.***

Many SMEs innovate; 37 per cent of SMEs (with 10 to 249 employees) were engaged in innovative activities between 2008 and 2010 compared to 42 per cent of large businesses.<sup>73</sup> This gap has declined over time as advancements in IT, labour market flexibility and increased demand for bespoke products have supported small firms' commercial prospects.<sup>74</sup> Evidence also suggests that SMEs can contribute to UK productivity growth more broadly by acting as a 'seedbed' for new innovations, increasing competition and replacing unproductive firms.<sup>75</sup>

Innovation is multifaceted and spread across all sectors. However, different sectors tend to rely on different forms of innovation, and face different barriers and conditions for success. For example, some industries are more reliant on in-house research and development (high-tech manufacturing) and others on wider managerial innovating (financial services).<sup>76</sup>

***However, market and system failures hold back innovation and government intervention is therefore required.***

Innovation is subject to a number of market and system failures, which impact on economic growth when not addressed.

**Externalities:** Businesses cannot always appropriate the full returns from their own investments but rather benefits are realised by other firms. As firms do not take into account these wider benefits, investment may be lower than is socially optimal. This is more likely to be an issue with smaller businesses, who are less likely to be able to take advantage of economies of scale and scope new innovations provide.

**Information asymmetries:** Information problems may prevent businesses from investing in innovation, particularly where there are long timescales before returns can be achieved. Businesses may not be aware or in a position to understand new opportunities from emerging markets or technologies. As discussed later, information problems also affect access to finance for innovative businesses.

**Institutional deficiencies:** These occur where existing rules inhibit innovation investment. This includes inadequate property right enforcement, standards or regulation, competition regimes with high entry costs, or high switching costs to new technologies. Innovation can

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<sup>72</sup> DTI Occasional Paper No. 6 (2006) "Innovation in the UK: Indicators and Insights"

<sup>73</sup> UK Annual Innovation Survey (2011)

<sup>74</sup> BIS Economics paper No. 15 (2011) "Innovation and Research Strategy for Growth"

<sup>75</sup> Mole (2002) "Augmenting Productivity Growth in SMEs"

<sup>76</sup> BIS Economics Paper No. 15 (2011) "Innovation and Research Strategy for Growth"

be inhibited by inappropriate corporate governance frameworks, or by inadequate corporate finance systems. SMEs have less resource to overcome these obstacles such as through obtaining Intellectual Property Rights, or protecting their rights in court in the event of infringement by a larger competitor.

Protecting innovations through using intellectual property protection, patents and trademarks is also important as it incentivises innovation. Larger firms enjoy more of all forms of protection of innovation than SMEs.<sup>77</sup> Given the gap in rates between them is smallest for cheaper forms of protection, such as secrecy and design complexity, it suggests SMEs may be prohibited from exploiting more robust forms of intellectual property (IP) protection, such as patents or trademarks, due to cost. While less than 15 per cent of innovative large firms use patents, this figure is less than half of that for SMEs.<sup>78</sup> Evidence from the Intellectual Property Office (IPO) suggests SMEs have lower awareness of IP than larger firms, and among SMEs awareness is highest among medium firms and lowest among micro firms,<sup>79</sup> suggesting information on IP is not readily accessible to small firms.

**Coordination failures:** These occur where the innovation system lacks appropriate organisation for collecting, sharing and analysing information related to innovation opportunities. For instance, in high tech markets there is frequently a need to create new partnerships involving the research base and those along the supply chain.

## 2.2 The External Environment

**The second of the clusters of obstacles to business success relates to the external environment in which the business operates. This section discusses specific aspects of the external environment; namely access to finance, exports and procurement.**

***SMEs are more likely to report the external environment as the main obstacle to their success.***

There are a range of barriers that prevent businesses, particularly SMEs, from reaching their growth potential.<sup>80</sup> As shown in Table 2 SME employers have consistently cited the economy as the main obstacle to the success of their business since the start of the financial crisis, and the proportion of SME employers considering the economy a barrier has been rising. The specific issues relating to the economy are reduction in demand (cited by 72 per cent of SME employers who identified the economy as the main obstacle),

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<sup>77</sup> Figure 22 in BIS Annual Innovation Report (2012). Source: UK Innovation Survey 2011

<sup>78</sup> Mina (with Hughes) (2009) "The Impact of the Patent System on SMEs", book chapter prepared for the UK Strategic Advisory Board for Intellectual Property Policy (SABIP), forthcoming. In BIS Economics Paper No. 15 "Innovation and Research Strategy for Growth", page 70.

<sup>79</sup> IPO Awareness Survey (2010)

<sup>80</sup> BERR (2008) "The Economic Drivers of Government Funded Business Support"

followed by the pressure to reduce prices (70 per cent). Many of the things that concern businesses centre on Government activity including regulation. But on the financial side 12 per cent of SME employers reported taxation as the main barrier to their businesses success and 10 per cent considered cashflow an obstacle.

**Table 2: Main obstacle to the success of the business**

Document Name	2012 (%)	2010 (%)	2007-08 (%)	2006-07 (%)
<b>The economy</b>	38	33	16	10
<b>Taxation, VAT, PAYE, NI, rates</b>	12	8	12	12
<b>Cashflow</b>	10	11	9	10
<b>Competition</b>	10	10	14	15
<b>Regulations</b>	18	7	12	14
<b>Obtaining finance</b>	7	8	3	3

Source: BIS Small Business Surveys, 2010 and 2012; and Annual Small Business Surveys, 2007-08 and 2006-07.

### 2.2.1 Access to finance

#### ***Access to finance enables investment so businesses can start-up and grow.***

Access to finance is an important part of the free market mechanism for efficiently allocating resources in the economy. A well-functioning financial system enables new businesses with innovative products or more efficient production processes to displace older less efficient businesses. This will contribute to improvements in productivity and initiates usage of underutilised resources within the economy.<sup>81</sup>

Less than half of all SMEs use external finance, with bigger SMEs more likely than smaller SMEs to be using external finance.<sup>82</sup> The ability of SMEs to access finance is important for funding business investment, ensuring businesses reach their growth potential, and for

<sup>81</sup> There is currently a wide spread debate about the effectiveness of financial markets at targeting viable businesses. For instance, see <http://www.bankofengland.co.uk/publications/Documents/speeches/2012/speech599.pdf>

<sup>82</sup> BDRC Continental (2013), SME Finance Monitor Q2 2013. According to this survey 44 per cent of SMEs reported using external finance in Q2 2013. By size this varied from 39 per cent of businesses with 0 employees to 74 per cent of those with 50-249 employees

facilitating new business start-ups. By corollary, a lack of finance can constrain cash flow and hamper businesses' survival prospects.<sup>83</sup>

Empirical studies have found a positive relationship between start up capital and growth after controlling for characteristics of the business founder.<sup>84</sup> In addition, Aghion et al. (2007)<sup>85</sup> find that higher finance development<sup>86</sup> is associated with increased new firm entry in certain sectors and higher growth amongst those new firms. However, these studies do not necessarily provide evidence of a causal relationship.

While equity finance is only sought by a small proportion of SMEs seeking finance, funding through business angels or venture capitalists is often suitable for innovative, high-risk, high growth potential businesses. This is because these businesses do not have collateral to offer as security or regular cash flows to service debt payments. The sort of businesses equity finance seeks to support are those which make a disproportionate contribution to economic growth.

"Alternative" forms of finance, such as leasing / hire purchase, invoice finance and crowd funding have been gaining in prominence in recent years as the use of conventional lending products has fallen. In the first half of 2011, 44 per cent of SMEs reported using "core" lending products (bank loans, overdrafts and credit cards), compared to 19 per cent using alternative sources. By 2013 Q3, the relative shares were 33 per cent and 18 per cent, meaning that although use of alternative finance had fallen slightly, it accounted for a larger proportion of all SME finance products used.<sup>87</sup>

### ***Lending to SMEs has been declining since 2009.***

Total lending to SMEs peaked in early 2009; since then it has fallen by more than 20 per cent in real terms (see Figure 5). Over the same period SMEs have built up significant cash balances, and as of June 2013 were net lenders to the banking system to the tune of more than £30 billion. SMEs were already in a relatively strong financial position in the run-up to the 2008-09 crisis, with little sign of over-leveraging (credit increased broadly in line with GDP), so the subsequent decline is unlikely to be a hangover of pre-crisis irrational exuberance on the part of SMEs. Something of a contrast can be drawn here with the case of Private Non Financial Corporations (PNFCs), for whom the boom was greater and included rapid credit growth in the commercial real estate and construction sectors. The reduction in credit post-crisis has nonetheless been significant for both groups.

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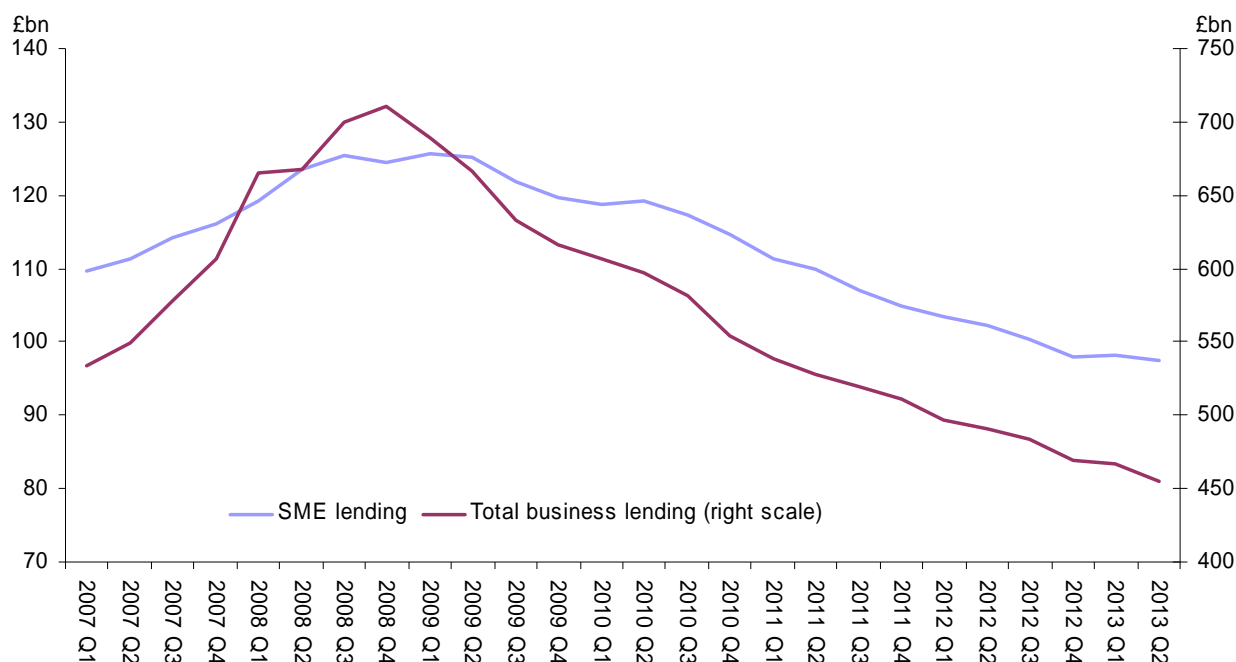
<sup>83</sup> BIS Economics Paper No. 16 (2012) "SME Access to External Finance"

<sup>84</sup> Stam and Garnsey (2008) "Entrepreneurship in the Knowledge Economy"

<sup>85</sup> Aghion, Fally and Scarpetta (2007) "Credit Constraints as a Barrier to the Entry and Post-Entry Growth of Firms"

<sup>86</sup> The authors' use the private credit and stock market capitalization as a proportion of GDP as the measure of finance development. Regulatory banking and securities market variables are used as instrumental variables to isolate causation

<sup>87</sup> BDRC Continental (2013), SME Finance Monitor Q3 2013

**Figure 5: Real SME and total business lending stock since 2007**

Source: BIS calculations, based on BBA, Bank of England and BIS data

***Evidence suggests the decline in the volume of lending to SMEs is caused by a reduction in demand as well as a contraction in supply.***

On the demand side<sup>88</sup> there has been a low level of credit applications from firms due to weak business confidence and appetite for taking on risk. For example, overdraft application rates and term loan application rates each fell by almost a third from 2001-04 to 2008-09.<sup>89</sup> On the supply side the loan and overdraft rejection rates increased significantly during the financial crisis.<sup>90</sup>

While some of these trends may be explained by increased risk following the financial crisis, further analysis conducted by the National Institute of Economic and Social Research (NIESR) shows significantly higher rates of rejection in the period from 2008-09 onwards than in the more “normal” credit environment of the early 2000s, even when controlling for firm risk factors (which are expected to rise in a recession).<sup>91</sup> The outstanding question from the NIESR research is whether the ongoing tight credit represents (or exacerbates) a market failure, in which case it is adversely affecting

<sup>88</sup> <http://www.bba.org.uk/media/article/banks-meet-merlin-commitments>

<sup>89</sup> UK Survey of SME Finance (UKSMEF). This survey provides a large representative sample of SMEs with less than 250 employees and covers three waves; 2004, 2008, 2009

<sup>90</sup> Overdraft rejection rates increased from around 11 per cent in 2001-04 to just over 16 per cent in 2008-09 and term loan rejection rates increased from 5.4 per cent in 2001-04 to 14.1 per cent in 2008-09 (UKSMEF)

<sup>91</sup> NIESR (2013) “Evaluating Changes in Bank Lending to UK SMES Over 2001-12 – Ongoing Tight Credit?” Report prepared for BIS

business performance and growth, or whether it simply represents a more efficient allocation of capital by banks.

During the credit crunch, the decrease in the supply of loans to SMEs in the UK was considerably worse than elsewhere.<sup>92</sup> However, these differences may reflect differences in risk profiles and business support rather than supply side issues.

***Many SMEs face obstacles to obtaining finance.***

Many SMEs have faced obstacles to obtaining finance, but this has become a more widespread issue recently. While seven per cent of SME employers report obtaining finance as the main obstacle to their business success, 38 per cent of SME employers consider it an obstacle.<sup>93</sup> Finance is a disproportionately important obstacle for high growth firms compared to other businesses. Eighteen per cent of high growth firms consider funding<sup>94</sup> to be the most important barrier to growth that they face compared to just 13 per cent of other firms.<sup>95</sup>

***Market failures, particularly relating to information, provide the rationale for government intervention in the finance market.***

Most businesses can obtain the finance they need, but market failures mainly relating to asymmetric or imperfect information, affect the supply of finance to SMEs.<sup>96</sup> Finance providers often have imperfect information on the likely returns to their funding, as they are less aware of the ability of business owner-managers applying for funds and the quality of their business propositions, than the owner-managers themselves. As a result, finance providers tend to rely on the existence of collateral and proven track record in business, resulting in some potentially viable businesses being refused finance, which is sub optimal for economic growth. This is particularly acute for smaller firms as the costs of addressing information barriers are higher as a proportion of the finance being sought for smaller deals. These information failures may also become exacerbated in uncertain economic conditions when lenders become more risk adverse and there is greater uncertainty.

In the case of equity finance, the high and relatively fixed costs of carrying out due diligence make smaller deals unattractive to investors when compared to larger deals. This gives rise to an “equity gap” where businesses with viable investment propositions are unable to attract the investment they need.

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<sup>92</sup> Eurostat (2011) “SME access to finance survey (2010/2007)”

<sup>93</sup> BIS Small Business Survey, 2012

<sup>94</sup> Either short-term cash flow (13 per cent) or longer-term finance (5 per cent)

<sup>95</sup> NESTA (2011) “Barriers to Growth: The views of high growth and potential high growth businesses”

<sup>96</sup> These market failures affect a small proportion of viable businesses. There are also some businesses which are not commercially viable, for instance because they have inefficient production processes or inferior products, and there are sound economic reasons why these businesses have difficulties raising finance



In addition, there are information failures affecting the demand for finance. SMEs may not fully understand the potential benefits to their business of raising finance or their likely chance of success in gaining finance, which ultimately means they do not apply. Of the 75 per cent of SME employers not applying for finance in 2011-12, 15 per cent had a need for it and one of reasons these businesses did not apply for it was the expectation of rejection (45 per cent).<sup>97</sup> Other survey evidence shows a small but significant proportion of SMEs are discouraged from applying for finance because they think they will be rejected.<sup>98</sup> The latest SME Finance Monitor survey estimates around 6 per cent of all SMEs are discouraged from applying for external finance.<sup>99</sup> These low levels of confidence contrast to actual success rates.

Demand side market failures may be most acute for businesses seeking equity finance, with many SMEs lacking information on how equity finance works and where to obtain such finance. Only 20 per cent of SMEs are aware of a local venture capital provider.<sup>100</sup> Supply and demand side factors for SMEs raising external equity finance can interact leading to a 'thin market', where a limited number of investors and high growth firms have difficulty finding and contacting each other at reasonable costs.

The supply of equity finance to young high growth potential businesses may also be sub-optimal due to the divergence of private and social benefits from investing in these businesses. This is because investing in early stage innovative businesses can lead to a number of positive spillover effects through innovation and knowledge transfers to other parts of the economy, which private investors do not take into account when making their decision to invest in venture capital.

### ***Other structural factors affect the supply of and demand for finance***

There are also other structural factors affecting the supply of finance, many of which were exacerbated through the recent financial crisis.

- **Dependence of SMEs on banks.** As most SMEs go to their bank for external finance and awareness of alternative forms of finance is low, SMEs can be vulnerable to changes in credit and risk appetite amongst the banks of the kind witnessed in the 2008-09 crisis.

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<sup>97</sup> BIS Small Business Survey, 2012

<sup>98</sup> The SME Finance Monitor defines discouragement as "those that have been put off, either directly (they made informal enquiries of the bank and were put off) or indirectly (they thought they would be turned down by the bank so did not ask)"

<sup>99</sup> BDRC Continental (2013), SME Finance Monitor Q2 2013

<sup>100</sup> Cosh, Hughes, Bullock and Murray (2007) "Financing UK Small and Medium-sized Enterprises: The 2007 Survey" Centre for Business Research Report

- **The concentration of the UK banking sector.** In 2010, the largest four banking groups had a combined market share in SME current accounts of 85 per cent;<sup>101</sup> the largest banks also provide the majority of lending products as well.
- **Lack of supply of long-term debt finance products and unsecured lending products.** Investments made by SMEs often need to be in long-term and / or intangible investments. However, finance solutions that reflect these needs are not always available to SMEs due to the expense associated with longer term funding and the risk associated with lending that is not secured on tangible assets.
- **Capital constraints in the banking sector.** Incoming prudential regulation may impact on SME lending as capital constraints encourage banks to allocate capital to activities which are more capital efficient.<sup>102</sup>

## 2.2.2 Exports

### ***SMEs contribution to total exports is substantial, but only a minority export...***

While large firms account for the largest value of goods exports in the UK, the contribution of SMEs to total exports is substantial, averaging 37 per cent of all goods exports in 2012.<sup>103</sup> SMEs contribution to exports in the services sector is particularly noteworthy; where they account for 80 per cent of exports.<sup>104</sup>

The latest data published by the ONS suggests that 11.2 per cent of registered businesses in Great Britain export either goods or services, or both in 2012.<sup>105</sup> Exporters are on average larger, older and more productive than non-exporters.<sup>106 107</sup> Studies have

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<sup>101</sup> Independent Commission on Banking, 2011.

<sup>102</sup> Various studies suggest that the new rules could lead to a decline in the stock of SME lending of between 1.5 per cent and 5 per cent and an increase in the cost of borrowing (Business Bank Advisory Group op. cit.)

<sup>103</sup> UKTI trade statistics

[https://www.uktradeinfo.com/Statistics/NonEUOverseasTrade/AboutOverseastradeStatistics/Documents/IDBR\\_OTR\\_2012.pdf](https://www.uktradeinfo.com/Statistics/NonEUOverseasTrade/AboutOverseastradeStatistics/Documents/IDBR_OTR_2012.pdf)

<sup>104</sup> Harris and Moffat (2013) "Investigation into trends in export participation among UK firms". The study used CIS data, in which export values are not directly comparable with HMRC data. In particular, many firms in manufacturing sectors export services as well as goods

<sup>105</sup> ONS, Annual Business Survey 2013

<sup>106</sup> For a recent review of this evidence see BIS Economics Paper No. 13 (2011) "International Trade and Investment – the Economic Rationale for Government Support", Chapter 3 "Drivers of the Intensive and Extensive Margins of Exports and Foreign Direct Investment"

<sup>107</sup> Mion and Novy (2013) "Gaining further understanding of the factors which influence export engagement among UK SMEs", UKTI Research Report

demonstrated that the proportion of businesses exporting tends to be much higher among innovative firms and those seeking to grow substantially.<sup>108</sup>

***...and in few businesses is exporting a big share of their turnover...***

Studies have shown that among exporting firms the share of turnover derived from exports is very skewed, with most firms exporting only a small share of their output, while a minority of firms account for the majority of export value.<sup>109</sup>

***Export development patterns are diverse.***

Around 29 per cent of all SME exporters operate in over 10 markets.<sup>110</sup> As shown in Figure 6, the number of markets firms operate in tends to increase with export experience and size. However, this pattern is not universal. There are a significant number of small firms that operate in over 10 markets and some very large firms who are only active in a small number of markets. In addition, some very recent exporters are already selling to numerous markets, while many long-established exporters have fairly limited global operations.<sup>111</sup>

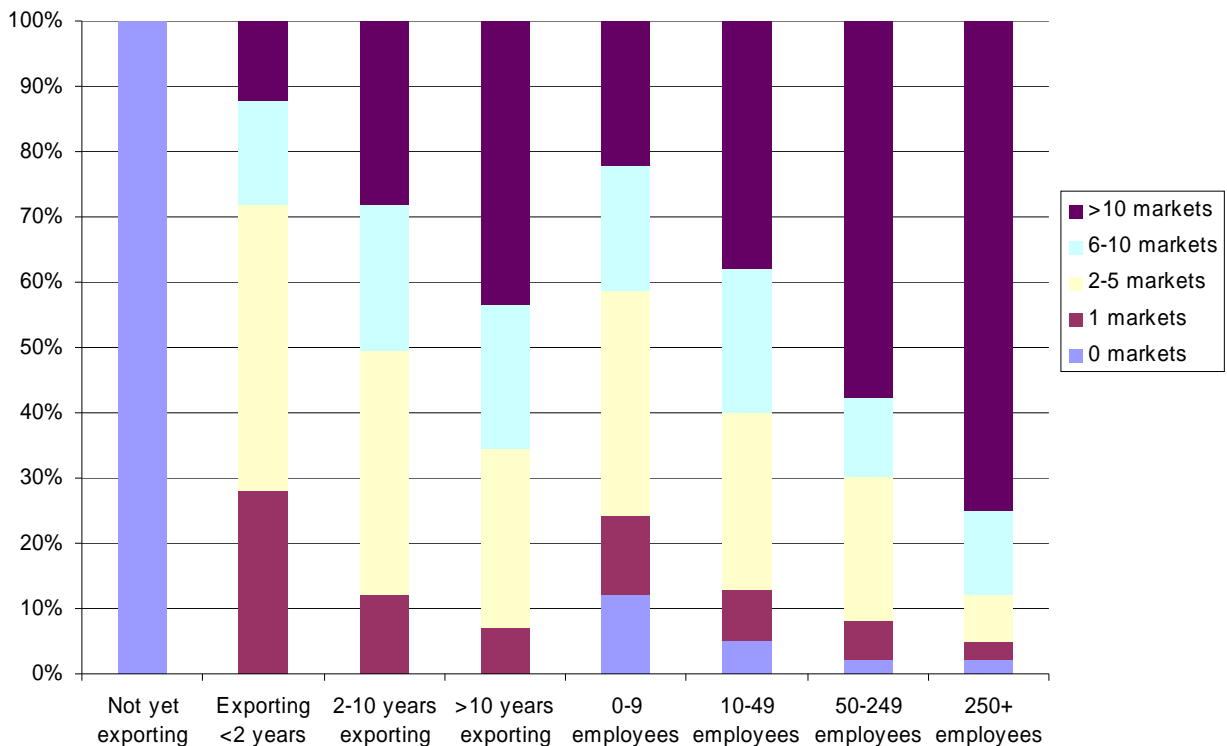
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<sup>108</sup> For a review of this evidence see BIS Economics Paper No. 5 (2010) “Internationalisation of Innovative and High Growth Firms”

<sup>109</sup> BIS Economics Paper No. 13 (2011) “International Trade and Investment – the Economic Rationale for Government Support” pp. 41-43.

<sup>110</sup> OMB Research (2013) “Internationalisation Strategies, Barriers and Awareness Survey”

<sup>111</sup> For a fuller discussion see BIS Economics Paper No. 5 (2010) “Internationalisation of Innovative and High Growth Firms”

**Figure 6: Export Development Patterns – Number of markets**

Source: OMB Research (2013), 'Internationalisation Strategies, Barriers and Awareness Survey'

### ***SMEs either internationalise in stages or from the moment they begin trading...***

There are two main ways in which business internationalisation occurs.<sup>112</sup> This is either in stages, whereby a firm first establishes themselves in the domestic market and then gradually increases the number of overseas markets to which they export, or firms export immediately from the time they begin trading. These latter firms are referred to as 'born globals' and are typically innovative and technology intensive firms. It has been estimated that such firms comprise two per cent of UK businesses and make a disproportionately large contribution to turnover and employment, making up 6.8 per cent of private sector employment and 8.1 per cent of turnover.<sup>113</sup>

### ***...with selling goods or services overseas the most common mode of internationalisation.***

When internationalising, a firm not only selects a market to enter, but also decides how to enter that market. Selling goods or services directly to customers overseas is the most common mode of internationalisation (undertaken by around 90 per cent of SMEs) and the proportion of internationalising firms using this traditional mode has remained constant

<sup>112</sup> For a fuller discussion see BIS Economics Paper No. 13 (2011) "International Trade and Investment – the Economic Rationale for Government Support"

<sup>113</sup> Harris and Li (2007b) "Born Global Companies: Evidence from FAME and CIS", Final Report Submitted to UKTI April 2007

over time. However, many SMEs also engage in other modes, such as selling through agents or distributors (43 per cent), licensing or franchising (13 per cent) and outward direct investment (12 per cent).<sup>114</sup> The analysis also suggests that these modes are not mutually exclusive and many firms (47 per cent) use more than one mode.

***Exporters are more productive, innovative and resilient than non-exporters.***

UK exporters, compared to non-exporters are:

- More productive – UK exporters have significantly higher total factor productivity and also higher productivity growth than non-exporters,<sup>115</sup>
- More innovative, and
- More resilient.

This is partly due to ‘learning by exporting’ effects as firms improve their productivity in preparation for market entry and through exposure to productivity enhancing ideas in the export market. Also as a result of exporting, some companies achieve significant economies of scale<sup>116</sup> and firms may reallocate internal resources to focus on their better performing products.<sup>117</sup> A recent qualitative study<sup>118</sup> of UK SME exporters distinguishes three main positive effects of exporting on R&D activity: gaining new ideas, generating additional funds and increasing potential returns by providing access to a wider market.

A competing explanation for the observed productivity difference highlights the role of self-selection, as the probability of beginning to export is higher among more productive and more innovative firms due to self-selection effects.<sup>119</sup>

Empirical studies support the presence of both self-selection and learning-by-exporting effects.<sup>120</sup> Studies have found evidence of a complex positive relationship in which innovation, R&D and exporting are mutually reinforcing.<sup>121 122</sup>

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<sup>114</sup> OMB Research (2013) “UKTI International Business Strategies, Barriers, & Awareness Monitoring Survey”. The data reported in the table include a very few larger firms, under 1 per cent in the 2013 wave. Full reports include breakdowns by size band and by number of years exporting

<sup>115</sup> Harris and Li (2007) “Firm Level Empirical Study of the Contribution of Exporting to UK Productivity Growth”, Report submitted to UKTI March 2007. Harris and Li (2008) “Evaluating the contribution of exporting to UK productivity growth”

<sup>116</sup> BIS Economics Paper No. 13 (2011) “International Trade & Investment – the Economic Rationale for Government Support”, pp. 65

<sup>117</sup> Mayer, Melitz and Ottaviano (2010) “Market Size, Competition, and the Product Mix of Exporters”. National Bank of Belgium Working Paper No. 202, cited in BIS Economics Paper No. 13 (2011) op cit

<sup>118</sup> OMB Research (2007) “Internationalisation, Growth and Novel Product Development in Young Innovative Businesses”. Research Report submitted to UKTI October 2007

<sup>119</sup> Harris and Li (2007) op cit; Harris and Moffat (2013) “Investigation into trends in export participation among UK firms”. For a fuller discussion of this issue see BIS Economics Paper No. 13 (2011) op cit

Research has shown that exporting significantly increases firm's financial health, as exporters have access to a much larger market, and this improvement is mostly attributable to the effect of export market entry rather than self-selection.<sup>123</sup> Exporters were shown to have 11 per cent lower probability of firm closure, compared to a matched sample of non-exporters.<sup>124</sup> Furthermore, survey evidence suggests that during the economic downturn, exporting significantly benefited firms through providing a continued source of demand for their products or services.<sup>125</sup>

### ***Exporting contributes to aggregate productivity growth...***

Not only does exporting bring benefits to individual firms, but in turn exporting contributes to aggregate UK productivity growth. For the UK, Harris and Li (2007)<sup>126</sup> found that exporters contributed 60 per cent of UK productivity growth over the period studied. Two-thirds of this is accounted for by market share changes due to dynamic competition effects, including net entry, and a third is accounted for by within-firm productivity growth. By contrast, the study found that non-exporters contributed to productivity growth mainly through the exit effect.<sup>127</sup>

### ***...and more SMEs have the potential to export, and thus contribute more to economic growth.***

Just three per cent of SME employers not exporting plan to do so in the next 12 months.<sup>128</sup> For those not currently exporting and with no plans to do so, the main reason reported for this was not having a suitable product or service (66 per cent). A more detailed investigation into the export potential of businesses reveals important unlocked potential.

<sup>120</sup> A firm-level empirical investigation of UK exporters estimates that companies that start exporting experience a 34 per cent increase in total factor productivity in the year of entry, and firms that exit export markets experience negative productivity effects in the year they stop exporting and subsequently (estimated to be around 7-8 per cent). (Harris & Li (2007) op cit)

<sup>121</sup> BIS Economics Paper No. 13 op cit pp. 69-71

<sup>122</sup> Harris and Li (2009) "Exporting, R&D, and Absorptive Capacity in UK Establishments". Harris & Li (2010) "Study of the Relationship between Innovation, Exporting and use of E-commerce" (CISS)

<sup>123</sup> Greenaway Guariglia and Kneller (2007) "Financial Factors and Exporting Decisions"

<sup>124</sup> Harris and Li (2007) "Firm Level Empirical Study of the Contribution of Exporting to UK Productivity Growth"

<sup>125</sup> OMB Research (2009) PIMS Non-User Survey (PIMS) Main Report

<sup>126</sup> Harris and Li (2007a) "Firm Level Empirical Study of the Contribution of Exporting to UK Productivity Growth". Harris and Li (2008) "Evaluating the contribution of exporting to UK productivity growth"

<sup>127</sup> Harris & Li (2007) op cit. For a fuller discussion of this effect see BIS Economics Paper No. 13 op cit pp. 56

<sup>128</sup> BIS Small Business Survey, 2012

Two different studies have been conducted to estimate the number and profile of businesses that could export successfully but are not currently exporting.<sup>129</sup> The results present robust evidence that there is a substantial population of UK businesses who have the characteristics required to export successfully, but are not currently doing so. The evidence shows that exporters are characterised as significantly more productive, more likely to engage in R&D, more likely to have a written business plan, have a higher proportion of staff educated to a degree level and have a foreign-born manager.

The results suggest that between four per cent and 10 per cent of all non-exporting SMEs,<sup>130</sup> and up to 12 per cent of non-exporting establishments with 10 or more employees<sup>131</sup> could potentially export successfully. Applying these percentages to the population of UK businesses the studies conclude that:

- Between 25,000 and 150,000 non-exporting firms could potentially export on a sustainable, continuous basis. These estimates include firms with 0-9 employees (Mion & Novy).
- Between 14,000 (Harris) and 18,000 (Mion & Novy) of non-exporting businesses with 10 or more employees could potentially export sustainably.

***However, SMEs face barriers to exporting and may lack the know-how and capabilities to overcome these barriers.***

Firms can face a number of barriers to entering new overseas markets which represent an initial fixed cost to business. Econometric studies of export behaviour find evidence consistent with the idea that such fixed costs exist and are significant.<sup>132</sup> These barriers include gaining access to contacts, navigating the legal and regulatory environment and coping with local culture and language. In turn, a lack of internal know-how and capabilities, including not knowing who to approach for information and expertise, and a lack of confidence, means businesses may not be able to successfully overcome these barriers.

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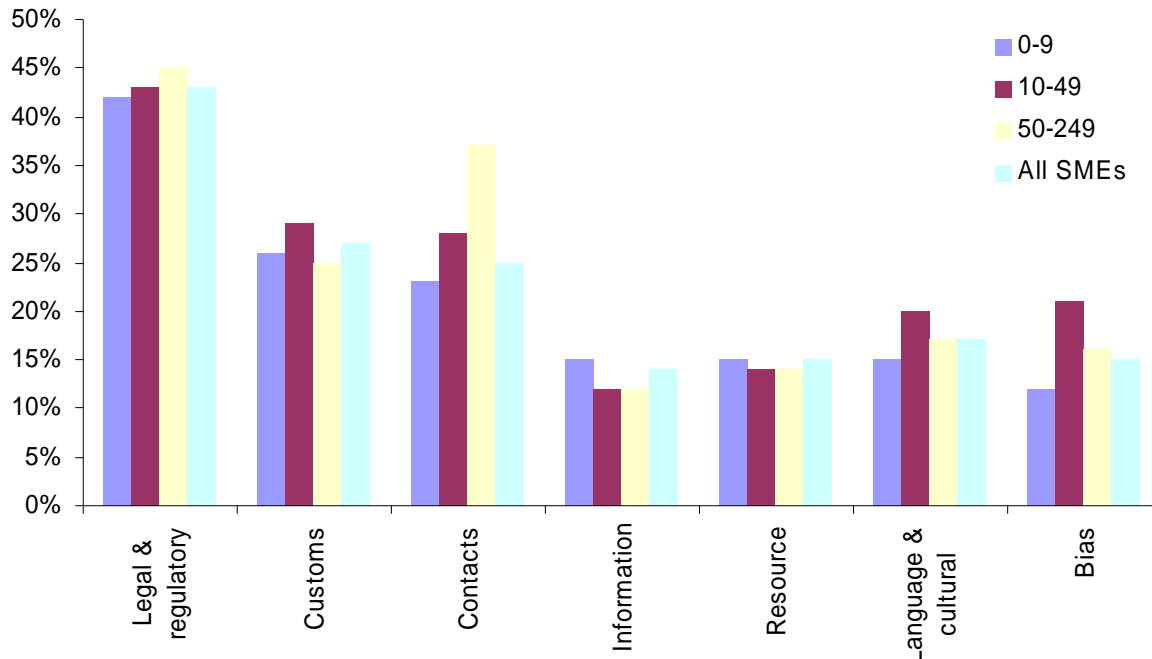
<sup>129</sup> Mion and Novy (2013) "Gaining further understanding of the factors which influence export engagement among UK SMEs" UKTI Research report. And Harris and Moffat (2013) "Investigation into trends in export participation among UK firms"

<sup>130</sup> Mion and Novy (2013) "Gaining further understanding of the factors which influence export engagement among UK SMEs" UKTI Research report

<sup>131</sup> Harris and Moffat (2013) "Investigation into trends in export participation among UK firms"

<sup>132</sup> For a comprehensive discussion see BIS Economics Paper No. 13 (2011) "International Trade and Investment – the Economic Rationale for Government Support"

**Figure 7: Barriers to exporting reported by SMEs who currently export or plan to start exporting in the next year**



Source: OMB Research (2013), 'UKTI International Business Strategies, Barriers & Awareness Monitoring Survey 2013'

Figure 7 shows the range of barriers to exporting SMEs face. These barriers can negatively influence firms' export activity even when export market entry could be potentially profitable. The most frequently cited barriers, by 43 per cent of SMEs, are legal and regulatory issues.<sup>133</sup> While only 17 per cent of SMEs reported language and cultural barriers, research suggests this figure is understated due to UK exporters over reliance on English and lack of awareness of the adverse effects on their business from this strategy.<sup>134</sup> The research found that exporters are significantly less likely to enter non-English speaking markets and that the costs of this language barrier to the economy are very substantial.

Recent research shows that perceptions of risks and potential difficulties can influence firms' willingness to tackle particular markets. Just under two-thirds of internationalising firms have been put off from entering a market because of the perceived risks.<sup>135</sup> The

<sup>133</sup> Such barriers include adapting to a different legal system, different product standards, compliance procedures and difficulties enforcing intellectual property protection

<sup>134</sup> Foreman-Peck (2007) "Costing Babel: the Contribution of Language Skills to Exporting and Productivity in the UK", Welsh Institute for Research in Economics and Development

<sup>135</sup> OMB Research (2013) "UKTI International Business Strategies, Barriers & Awareness Monitoring Survey 2013"



most frequently cited deterrents were the perceived risks of 'not being paid' and 'political and economic instability'.<sup>136</sup>

Analysis of the incidence on barriers by firm size and export experience shows that the incidence of barriers is not linked to firm size, and that firms continue to encounter barriers irrespective of the number of years exporting. However, the evidence suggests that innovative firms and those in fast-growing markets tend to be more likely to report barriers to entering overseas market.<sup>137</sup>

Successfully dealing with the barriers to exporting requires significant resource; both financial investment and management time. However, SMEs often have insufficient resources to prepare themselves for entering a new market. Fifteen per cent of firms find it difficult to find the necessary management time to devote to doing business abroad.<sup>138</sup>

***Market failures relating to information and externalities provide the rationale for government intervention in exporting.***

There are two sources of market failure, which can lead to an inefficiently low level of engagement in exporting: information failures and externalities.

**Imperfect information** means that SMEs may be unaware of the benefits of exporting or may have an inaccurate perception of the associated costs. Market entry barriers may not be understood and for some businesses there is a lack of awareness of the social networks that underpin international trade and investment flows. Market-related barriers to exporting may lead firms to underestimate the associated benefits of exporting and therefore they may not enter export markets, even if over the long run they would actually be competitive and profitable abroad.

**Positive externalities** from exporting can result from businesses acquiring export related knowledge and skills or gaining access to export related networks. The increase in such knowledge and contacts brings a collective benefit to UK businesses in addition to benefiting the exporting firm itself. As well as reducing the costs to other firms of entering new export markets, these spillovers can influence other firms' perceptions of the benefits of exporting. Surveys of UK exporters show that movement of staff with export related expertise and contacts is common. Around half of those who had used UKTI trade services, and 27 per cent of those who had not, report having employees who had brought with them export experience built up while working for a previous employer. In most cases, the employee had also brought export related business contacts with them.<sup>139</sup> Further, a

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<sup>136</sup> OMB Research (2013) "UKTI International Business Strategies, Barriers & Awareness Monitoring Survey 2013"

<sup>137</sup> OMB Research (2013) "UKTI International Business Strategies, Barriers & Awareness Monitoring Survey 2013"

<sup>138</sup> OMB Research (2013) "UKTI International Business Strategies, Barriers & Awareness Monitoring Survey 2013"

<sup>139</sup> OMB Research (2010), UKTI 2010 Non-User Survey (PIMS)

study of UK manufacturing firms found strong positive benefits associated with agglomeration effects on exporting activity, evidencing geographical spillover effects.<sup>140</sup>

### 2.2.3 Public procurement

#### ***SME participation in public procurement promotes competition and innovation.***

SME participation in public procurement promotes competition and innovation. Increasing SME involvement in the public procurement process and hence increasing competition among tenders, could lead to cost savings as well as improved quality. Public procurement has been found to have a large influence in promoting innovation, particularly among smaller firms in geographical areas under economic stress.<sup>141</sup> A study of UK SMEs found strong links between firms' R&D activity and having public sector customers. In addition, procurement by local authorities generates spillover effects. In particular, it has been found to have strong effects on job creation at the regional level.<sup>142</sup>

#### ***Public procurement can benefit SMEs by providing a source of demand.***

Public procurement is seen as a good opportunity to provide support for SMEs and an important source of demand. It has been suggested that government support for SMEs can simultaneously reduce the need for direct financial support and improve the delivery of government services.<sup>143</sup> Some small businesses see the Government as an attractive customer due to the stability, security of payment and prestige of supplying the Government.<sup>144</sup> Meanwhile, SME suppliers could potentially offer significant benefits for Government, namely; responsiveness, flexibility, specialist knowledge, innovativeness, quality of service and lower cost.<sup>145</sup> In central Government, direct SME spend has increased from 6.5 per cent in 2010 to 10.5 per cent in 2013 and supply chain spend with SMEs increased from 6.5 per cent in 2012 to 9.4 per cent in 2013.<sup>146</sup>

Despite the benefits of working with Government for SMEs, 41 per cent of SMEs said they had never tendered for public sector work and 29 per cent tendered only rarely. One of the reasons is that often the size of contracts means that SMEs do not have the capacity to

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<sup>140</sup> Greenaway and Kneller (2008) "Exporting, productivity and agglomeration"

<sup>141</sup> Aschhoff and Sofka (2009) "Innovation on Demand-Can Public Procurement Drive Market Success of Innovations?"

<sup>142</sup> Pickernell, Kay, Packham and Miller (2011) "Competing Agendas in Public Procurement: An Empirical Analysis of Opportunities and Limits in the UK for SMEs"

<sup>143</sup> Loader (2007) "The challenge of competitive procurement: value for money versus small business support"

<sup>144</sup> Loader (2013) "Is Public Procurement a Successful Small Business Support Policy? A Review of the Evidence"

<sup>145</sup> Glover (2008) "Accelerating The SME Economic Engine: Through Transparent, Simple and Strategic Procurement", prepared for HM Treasury

<sup>146</sup> Cabinet Office (August 2013) "Making Government business more accessible to SMEs: Two Years On"

undertake them. Other barriers to tender participation faced by SMEs, include lack of information and high levels of bureaucracy.

## 2.3 The Vision of the Business Owner

**The third of the clusters of obstacles to business success relates to the vision of the business owner in relation to business growth. This section discusses two specific aspects of this cluster of obstacles; the first relates to the mindset of business owner-managers in terms of their growth ambition and views about business growth, and the second relates to how this mindset is manifested in the behaviour of business owner-managers in terms of accessing business support.**

### 2.3.1 Growth ambition and misconceptions about business growth

***SME employers with higher ambition are more likely to grow.***

Several large scale studies<sup>147</sup> have concluded that the proportion of entrepreneurs with growth intentions in the population is a more significant predictor of economic growth than general start-up rates or self-employment rates. In other words, entrepreneurship quality matters just as much if not more than entrepreneurship quantity.

Research<sup>148</sup> suggests that high growth outcomes are much more linked to motivations and the managerial capacities of firms than the immediate environment. The evidence shows that growth intentions seem to really matter for future growth in companies. For established business owners, there was a small but robust effect on growth intention of having run a business previously.

Entrepreneurship in the UK appears to suffer from a growth intention gap in relation to the US. There are twice as many early stage entrepreneurs with high job growth expectations in the US than in the UK (or France or Germany) as a proportion of the working age population.<sup>149</sup> Some possible explanations may be the higher Total early-stage Entrepreneurial Activity (TEA) rate in the US, the larger domestic market in the US, higher

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<sup>147</sup> Levie and Autio (2013) "Growth and growth intentions" Enterprise Research Centre White Paper No. 1. Stam, Suddle, Hessels, and van Stel (2009) "High growth entrepreneurs, public policies and economic growth", in: Leitao and Baptista (eds.), Public Policies for Fostering Entrepreneurship: A European Perspective. New York: Springer, pp.91-110; Stam, Hartog, van Stel and Thurik (2011) "Ambitious entrepreneurship, high growth firms, and macro-economic growth", in: Minniti (ed.): The Dynamics of Entrepreneurship: Evidence from the Global Entrepreneurship Monitor Data. Oxford: Oxford University Press, pp231-250

<sup>148</sup> Blackburn, Kitching, Hart, Brush and Ceru (2008) "Growth Challenges for Small and Medium-sized Enterprises: A UK-US Comparative Study" UK Treasury and BERR Report URN 09/683

<sup>149</sup> Levie and Hart (2012) "Global Entrepreneurship Monitor United Kingdom Monitoring Report 2011", Aston Business School and Strathclyde Business School, p.25; Autio, Cleevely, Hart, Levie, Acs, and Szerb (2012) "Entrepreneurial Profile of the UK in the Light of the Global Entrepreneurship and Development Index", Imperial College London

prevalence of wealth-driven motives among entrepreneurs in the US, higher prevalence of individuals in tertiary education in the US, and greater employment protection in the UK.

Four-fifths of SMEs assert they want to grow but only around a third grow in practice.<sup>150</sup> Although only 22 per cent have substantive growth ambition, meaning they intend to grow their business significantly and are determined to do so, the remaining 59 per cent have moderate growth ambitions. This matters as SMEs with higher ambition are more likely to grow; 46 per cent of substantive ambition SMEs increased turnover in the past three years while 32 per cent of low ambition SMEs increased turnover.

Increasing levels of ambition is difficult as most SME owner-managers already have moderate growth ambitions. Of more importance is increasing levels of substantive ambition among SME owner-managers, as these SMEs are more likely to grow. Also, targeting certain groups of SMEs to help them realise their ambition is possible. For example, a disproportionately large number of SME owner-managers with substantive ambition are young, possibly making it harder for them to achieve growth as they have less experience.

***For some microbusinesses the decision to remain small may be driven by misconceptions and unconscious influences.***

Recent research suggests that many microbusinesses may well be being held back by misconceptions.<sup>151</sup> These are underpinned by a reluctance to plan, strategise or develop the business and a focus on working in rather than on the business. These myths include, for example, being unable to grow in a recession. This causes businesses to defer growth and investment plans. However, recessions can offer specific opportunities for growth.

For some business owner-managers the decision to remain small or not is a rational decision underpinned by considering all the relevant information. As a firm grows the unit cost of production falls, as fixed costs are spread over a larger number of units of output and because firm growth also allows specialisation. The minimum efficient scale is the output level at which average costs are minimised. In some circumstances business growth may therefore not be desirable as there may not be economies of scale to be realised. However, for other business owner-managers the decision to remain small is driven by incomplete understanding of the relevant information and unconscious influences on their behaviour, such as their biases and beliefs. Addressing these issues by providing more complete information and challenging perceptions is therefore important.

There may also be misconceptions about the risks of starting and growing a business. Fear of failure is higher in the UK than the US while entrepreneurial activity is lower, and in Germany fear of failure is higher than in the UK while entrepreneurial activity is lower.<sup>152</sup> Government therefore has a role in providing information and dispelling misconceptions.

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<sup>150</sup> TBR and Qa Research (2012) "Business growth ambitions amongst SMEs"

<sup>151</sup> Durham Business School (2013) "Understanding Growth in Microbusinesses"

<sup>152</sup> GEM Consortium (2012) "Global Entrepreneurship Monitor 2012 Global Report"

Market failures can also stem from ‘non-rational’ behaviour identified by behavioural economics such as hyperbolic discounting.

### 2.3.2 Accessing business support

The mindset of the business owner-manager is manifested in their behaviour, particularly in terms of accessing business support.

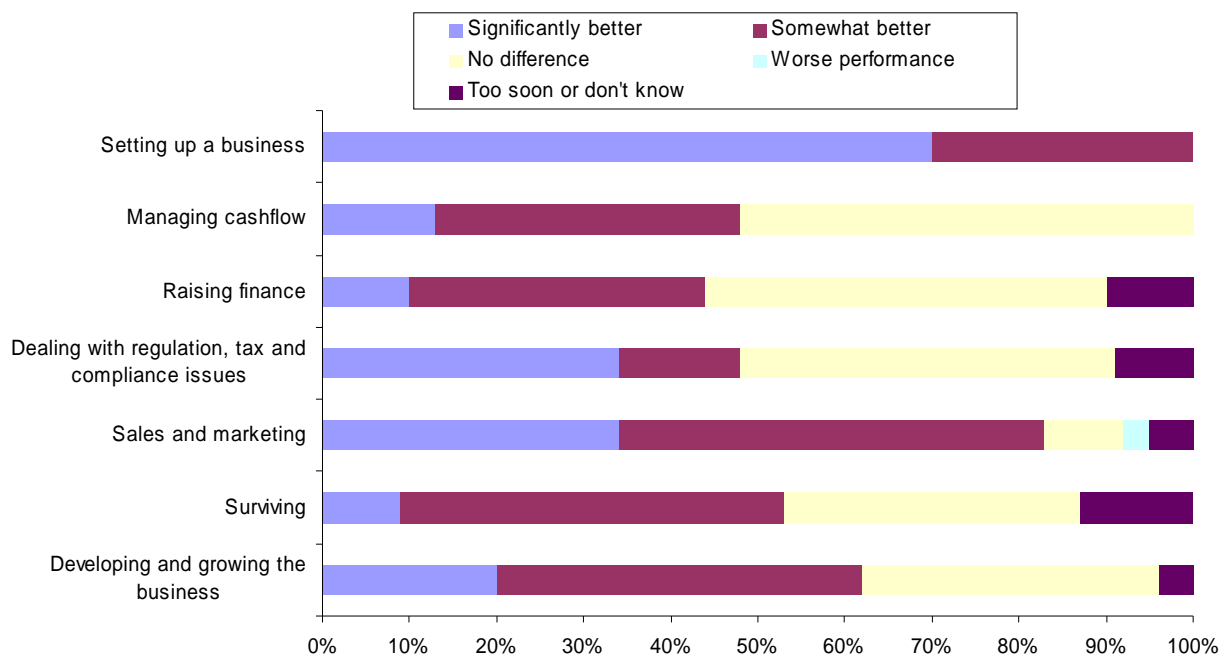
#### ***The majority of SME employers who use strategic advice believe it improved business performance...***

Business support includes both information and advice, but there is an important distinction between them. Advice is mainly sought to support business growth, while information is mainly sought on financial matters related to the general running of the business.

Use of external information, advice and guidance can improve business skills and in turn business outcomes, with almost 6 in 10 SME employers who use strategic advice believing they have improved business performance as a result and 20 per cent believing they have significantly improved business performance.<sup>153</sup> SME employers reported that business advice helped to increase sales, improve profitability and safeguard firm survival. Figure 8 shows the impact on business performance of different types of advice.

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<sup>153</sup> BIS estimates from BIS Small Business Survey, 2010 and CEEDR (2011) “Research to understand the barriers to take up and use of business support”

**Figure 8: Extent of impact on performance by type of advice**

Source: CEEDR (2011), 'Research to Understand the barriers to take up and use of business support'

A recent study in Mexico<sup>154</sup> is one of the few Randomised Control Trials (RCT) evaluating the effect of business support. RCTs are often described as the 'gold standard' in evaluation and the best way of determining whether a policy is working.<sup>155</sup> The Mexican Government decided to subsidise 'consultancy' services for small businesses. Applicants were randomly allocated to treatment and control groups so that a causal impact of the support could be identified. The results show that the consulting services had a large impact on the performance of the enterprises in the treatment group: monthly sales went up by about 80 per cent; similarly, profits and productivity increased by 120 per cent compared to the control group.

Quasi experimental techniques have been used to assess the impact of assistance on firm performance. For example, Mole et al (2007)<sup>156</sup> used econometric modelling – based on a two-stage Heckman approach which allows for selectivity – to estimate the impact of assistance from Business Link assistance on firm performance. Their results identified a significant positive effect of intensive Business Link assistance on employment growth, increasing employment growth rates of clients by 2.4 per cent. More recent research

<sup>154</sup> Bruhn, Karlan and Schoar (2012) "The Impact of Consulting Services on Small and Medium Enterprises: Evidence from a Randomized Trial in Mexico"

<sup>155</sup> Cabinet Office, Behavioural Insights Team (June 2012) "Test, Learn, Adapt: Developing Public Policy with Randomised Controlled Trials"

<sup>156</sup> Mole, Roper, Hart, Storey and Saal (2006) "Economic Impact Study of Business Link Local Services"

indicates that this impact is likely to have been sustained for several years after treatment.<sup>157</sup>

***...but despite the benefits of support, fewer than half of SME employers sought external advice in 2011-12.***

However, despite the benefits of external assistance, just 45 per cent of SME employers in England had sought external advice or information on matters affecting their business in 2011-12. For 26 per cent of these SME employers it was strategic advice, for 42 per cent information only and for 25 per cent information and advice.<sup>158</sup>

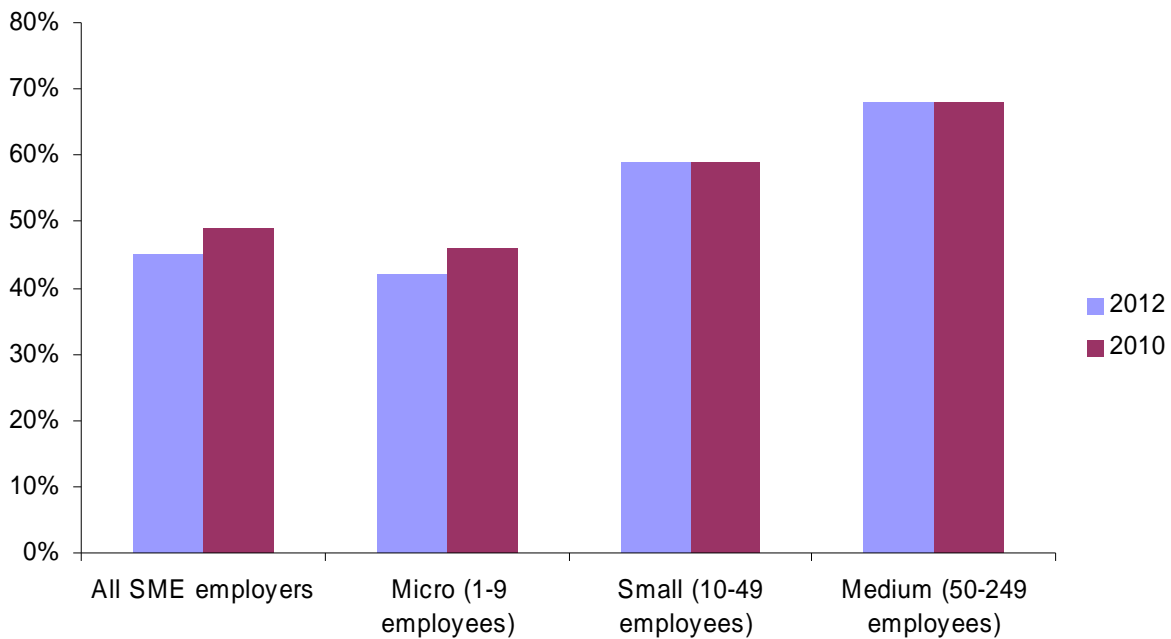
Use of business support varies by size and sector of businesses. As shown in Figure 9 use increases with firm size. By sector, businesses in the primary (54 per cent), information / communications (52 per cent), business services (52 per cent) and other services (49 per cent) sectors were significantly more likely to have used information or advice, while those in the construction (36 per cent) and transport, retail and distribution (42 per cent) sectors were significantly less likely.<sup>159</sup> There appears to be no correlation between the use of business support by sector and sector's growth rates. For example, the construction sector where business support incidence was lowest grew -8.1 per cent in 2012, and the primary sector where the use of support was highest grew -4.1 per cent, while the information / communications sector grew 1.9 per cent. On one hand, low growth sectors may have the largest potential gains to be realised from seeking business support but may be less receptive to support, while high growth sectors may grow regardless of receiving business support.

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<sup>157</sup> Hart and Drews (Forthcoming) "Exploring the Long-Term Impacts of Business Improvement Services"

<sup>158</sup> BIS Small Business Survey, 2012

<sup>159</sup> BIS Small Business Survey, 2012

**Figure 9: Use of information or advice by employment size**

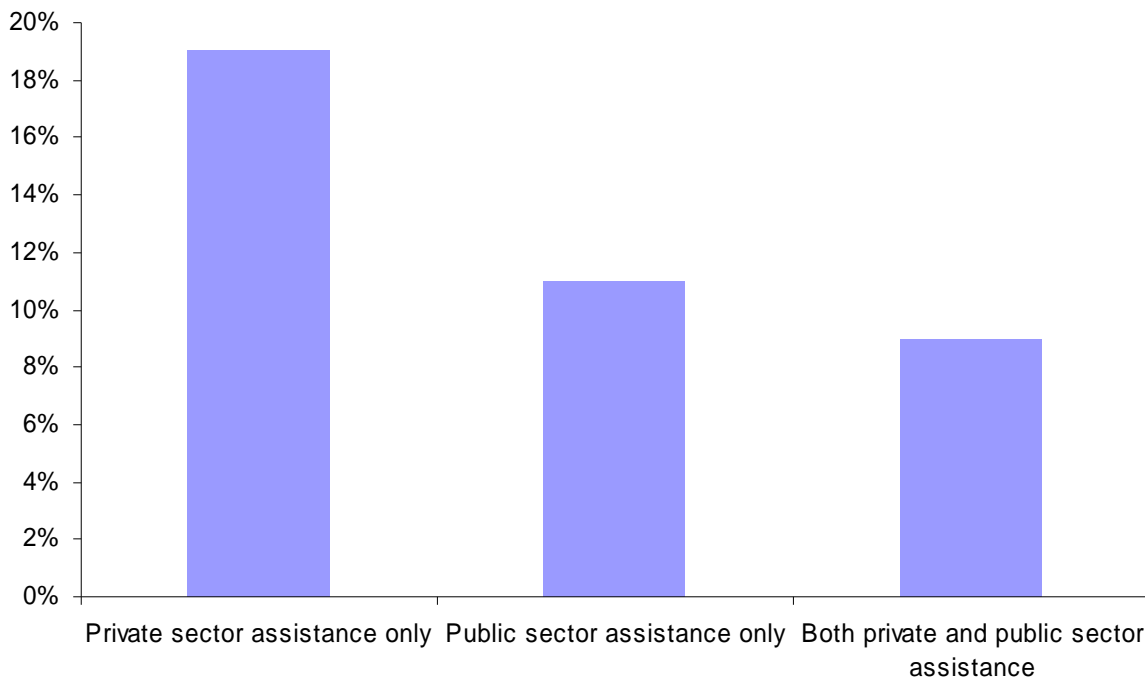
Source: BIS Small Business Survey, 2012

In 2011-12, 30 per cent of SME employers in England have used advice on growing their business, 23 per cent used support on how to run their business and 10 per cent on how to access finance. Just over half paid for this support.<sup>160</sup>

Most business information and advice comes from the private sector. Almost one fifth (19 per cent) of SME employers used only private sector assistance, while just over one in ten SME employers (11 per cent) used only public sector assistance and less than one in ten (9 per cent) used both, as shown in Figure 10.

<sup>160</sup> BIS Small Business Survey, 2012



**Figure 10: Sources of information and advice for SME employers**

Source: CEEDR (2011), 'Research to Understand the barriers to take up and use of business support'

Accountants are the most commonly consulted source of information (by 34 per cent of SME employers in England) and strategic advice (by 40 per cent of SME employers in England), followed by consultants / business advisers for advice (15 per cent), and banks for information (10 per cent).<sup>161</sup>

***Market failures affect the use of business support and provide the rationale for government intervention in this area.***

Government recognises that it is business itself that is responsible for building its own capabilities and Government's role is to intervene only to address market failures.

Economic theory, supported by evidence, suggests market failures prevail which may limit the use of business support.

***On the demand side, information failures result in sub-optimal demand for business support...***

Information failures may prevent people knowing how to start a business or how to grow an existing business, and where to go for such information. Asymmetric information about the quality and value of business support may also make people reluctant to pay for it. As a result, this may drive high quality suppliers out of the market, reducing the average quality of providers and may ultimately destroy the market (Akerlof, 1970). However, even

<sup>161</sup> BIS Small Business Survey, 2012

if a business is willing to pay the market cost of support, credit constraints<sup>162</sup> can mean they are not able to do so.

SMEs may also face capacity constraints which contribute to the sub-optimal use of business support. SMEs have been identified as operating with scarce or stretched resources. These constraints relate to many factors including: access to resources such as finance, operating scales below minimum efficient scale, tendencies to pay lower salaries compared to larger firms and holistic management structures compared to the specialisation in larger firms. SMEs operating under such constraints may have limited resource to search for business support and there is also an opportunity cost in terms of foregone business activity from searching. In turn, this may deter take-up of business support.<sup>163</sup>

Recent evidence estimates<sup>164</sup> the scale of latent demand for using formal business assistance to be just under 30 per cent of SME employers. This includes:

- SME employers that used formal business assistance but had a recognised need for further assistance for which they did not seek help (4 per cent).
- Non-users of formal business assistance who had a recognised need for assistance but did not seek it (10 per cent).
- Non-users of formal business assistance who had not been able to recognise their need for assistance despite the problems and challenges they faced that they were unable to deal with (14 per cent).

Estimates of the prevalence of market failures, while recognising they are difficult to make and rely on survey information, suggests they are significant. The most common market failure identified was that businesses find it difficult to place a value on the benefits of formal assistance (being the main reason for 26 per cent of non-users). Businesses also face difficulty assessing the competence and trustworthiness of external information or advice (being the main reason for 14 per cent of non-users) and face difficulties accessing information and advice (being the main reason for 14 per cent of non-users).

***...and on the supply side, information displays ‘public good’ characteristics and creates positive externalities, possibly resulting in under provision by the private sector...***

The private sector may fail to provide information if the economic benefits from doing so are not sufficient, or may fail to make such information available universally. Information displays ‘public good’ characteristics, being non-rivalry (the consumption of information doesn’t reduce the amount available to others) and non-excludable (it is impossible to

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<sup>162</sup> Growing businesses are more likely than those not growing to report cash flow difficulties as a barrier to success (BIS Small Business Survey, 2012)

<sup>163</sup> European Commission (2002) “A Study of Business Support Services and Market Failure”

<sup>164</sup> CEEDR (2011) “Research to understand the barriers to take up and use of business support”

exclude anyone from consuming publicly available information). As a result, obtaining payment for such information is difficult and therefore may be underprovided by the private sector.

Positive externalities in relation to the provision of information and advice, such as business growth, also mean it may be underprovided by the private sector compared to the socially optimal level. Therefore there is a key role for Government in information and advice provision, with publicly funded business support for SMEs being justifiable.

The private market may also not have the incentive to provide comprehensive information or sign-posting that would help businesses understand their needs and navigate the range of both private and public support available. Business advice is a competitive market with many providers competing for business demand. Providers may underinvest in attracting 'reluctant' customers and those unsure of what support they need.

Business support providers may also face capability constraints. These arise when staff do not have the skills and competencies to fully satisfy SMEs expectations and requirements.<sup>165</sup> Providers may struggle to understand the concerns of SMEs and the extent to which they can help them – particularly if the SMEs themselves are unsure.

These supply side market failures may explain the unmet information and advice needs that are evident. While 59 percent of SME employers that obtained strategic advice in England said it fully met their needs, 33 per cent said it only partially met their needs and five per cent said it did not meet their needs. For information received, a similar picture emerges; 71 per cent said it fully met their needs, 24 per cent of SME employers said it only partially met their needs and for four per cent it did not meet their needs.<sup>166</sup>

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<sup>165</sup> European Commission (2002) "A Study of Business Support Services and Market Failure"

<sup>166</sup> BIS Small Business Survey, 2012

## 3. Prioritising interventions

**The existence of market failures suggests a key role for Government in helping potential businesses start-up and existing businesses grow. Previous interventions in the market for business support demonstrate that interventions can address market failures and create more efficient outcomes.**

Government wants to target support on businesses who are most likely to deliver additional economic growth and hence where interventions can have the greatest impact. However, there is a problem identifying early on those businesses with the greatest potential. Therefore Government support is targeted on businesses that are more likely to create jobs and where displacement is likely to be lower. These are typically more innovative firms and exporters.<sup>167</sup>

### 3.1 Cultivating high growth businesses

#### ***More SMEs could be high growth.***

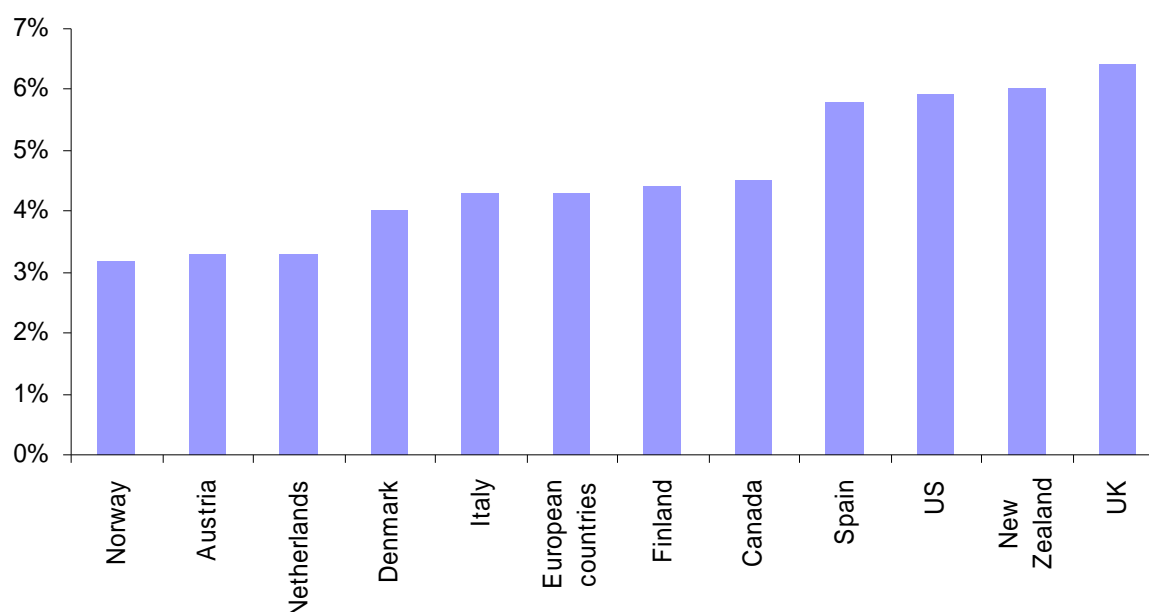
There is the potential to increase both the number of high growth firms and their long-term impact. Research<sup>168</sup> suggests that far more SMEs have the potential to become so-called 'champions', but never go on to achieve it. By identifying the factors driving champions and applying this model to the business population between 2003 and 2006, Experian estimate that of the 30,000 businesses that had the potential to become champions, only 6,500 actually did so. Although the businesses that did not become champions still contributed jobs to the economy, they had a far greater potential which was missed. Nonetheless, the proportion of UK businesses achieving high growth compares well internationally (see Figure 11).<sup>169</sup>

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<sup>167</sup> "Small Business: GREAT Ambition" details key policies to make it easier for those businesses with the ambition to grow to be able to scale up.

<sup>168</sup> Experian (2010) "Tomorrow's Champions: Finding the Small Business Engines for Economic Growth"

<sup>169</sup> NESTA (2010) "Growth Dynamics"

**Figure 11: Share of high growth firms**

Source: NESTA (2010), Growth Dynamics

### ***Identifying high growth businesses is challenging...***

High growth firms can be found in all regions and across all sectors. More than 40 per cent of UK high growth firms are located outside of cities; in towns or more rural areas.<sup>170</sup>

Common to high growth businesses is that they are far more likely to be innovative and their innovation is a source of growth.<sup>171</sup> Analysis by Experian<sup>172</sup> also found that champions were more likely to be young, small businesses, with directors showing entrepreneurial appetite and successful business experience, be part of a wider corporate network with others achieving champion status and be engaged in international activity.

Many experts, including Experian,<sup>173</sup> NESTA,<sup>174</sup> OECD<sup>175</sup> and The Work Foundation,<sup>176</sup> have called for a greater focus of Government funded business support on businesses

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[http://www.nesta.org.uk/areas\\_of\\_work/economic\\_growth/high\\_growth\\_firms/assets/features/geography\\_of\\_growth](http://www.nesta.org.uk/areas_of_work/economic_growth/high_growth_firms/assets/features/geography_of_growth)

<sup>171</sup> NESTA (2009) "The vital 6 per cent"

<sup>172</sup> Experian (2010) "Tomorrow's Champions: Finding the Small Business Engines for Economic Growth"

<sup>173</sup> Experian (2010) "Tomorrow's Champions: Finding the Small Business Engines for Economic Growth"

<sup>174</sup> NESTA (2011) "Vital Growth" and NESTA (2009) "The vital 6 per cent"

<sup>175</sup> OECD (2010) "High Growth Enterprises: What Government can do to make a Difference"

<sup>176</sup> The Work Foundation (2011) "Ready, Steady, Grow! Identifying what high growth firm need to succeed"

with the highest growth potential, as this should deliver the greatest return to public investment.

***...but growth of businesses engaged in innovation and exporting should have lower levels of displacement.***

As high growth businesses are more likely to be innovative and engaged in exporting than other SMEs, their growth should have lower levels of displacement. Growing businesses are also more likely to encounter ‘tipping points’ and therefore support should be more beneficial. Growth Accelerator (GA) focuses on high growth firms, with the aim of helping England’s businesses achieve their ambition and potential.

### 3.1.1 Catalysing innovation

Innovation may be stimulated in the following ways:

**Helping businesses fund the development of ideas:** Uncertainty around innovation’s outcomes, and the long timescales it takes to achieve returns, limits businesses, and particularly SMEs risk appetite for early stage research; 21.5 per cent of small firms cited excessive economic risks as a barrier to innovation over 2008-10 (compared to 14.8 per cent for large firms).<sup>177</sup> This phenomenon is known as the ‘valley of death’, where there is a funding gap between basic research and market-finance in the development of new products. To address this SMEs in the UK are supported through both R&D tax credits and direct grants through the Technology Strategy Board (TSB) ‘SMART’ programme.

**Connecting businesses with expertise and equipment:** As production processes become more complex there is an increasing need for firms to engage in ‘Open Innovation’;<sup>178</sup> accessing services and working collaboratively to innovate. These issues are more acute for small businesses who lack the scale and scope to develop solutions in-house.<sup>179</sup> Innovative firms benefit from clustering together, as it allows them to share services, learn from one another and attract skilled labour. This enhances their productivity and gives them a competitive advantage. Firms in clusters are more likely to be engaged in innovative activities,<sup>180</sup> and firms engaged in R&D and those more reliant on tacit information are the ones who tend to benefit more from co-location.<sup>181</sup> TSB provides a range of support to small firms to enable collaboration and access specialist expertise and equipment through Catapults, innovation hubs and incubator units.

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<sup>177</sup> UK Innovation Survey 2011

<sup>178</sup> Chesbrough (2003) “Open Innovation: The New Imperative for Creating and Profiting from Technology”, Cambridge: HBS Press

<sup>179</sup> Small businesses are less likely to collaborate. Proportionally fewer small firms (4.7 per cent) acquired external knowledge than large firms (8.6 per cent) between 2008 and 2010

<sup>180</sup> European Commission (2008)

<sup>181</sup> Uyarra & Ramlogan (2012) “The Effects of Cluster Policy on Innovation”, Nesta Working Paper 12/05

**Helping businesses find a route to market:** SMEs often have innovative solutions to offer the public sector. However, it can be challenging for innovative small firms and government to connect. In addition, procurement practices focusing on short-term cost considerations can preclude innovative solutions being found. The SBRI programme builds on the successful SBIR programme from the US which awards contracts to deliver innovative solutions to small companies.<sup>182</sup>

**Helping businesses exploit their ideas:** The benefits of interventions to support R&D in firms can be improved if accompanied by complementary support such as HR and skills, managerial support or market introduction of new products and services.<sup>183</sup> Protecting innovations through using intellectual property protection, patents<sup>184</sup> and trademarks<sup>185</sup> is also important. These protections incentivise innovation and protects businesses from competitors. Growth in capital deepening of IP protected assets contributed 10.6 per cent to growth in UK labour productivity in the period 1990-08.<sup>186</sup> For small firms, intellectual property rights (IPR) use is associated with improved survival rates and firm growth.<sup>187</sup> However, only 2.1 per cent of small firms protected an innovation with a patent in 2008-10 (compared to 6.3 per cent for large firms).<sup>188</sup>

### 3.1.2 Stimulating exporting

Policies to support SME internationalisation in the UK and in other developed countries can be broadly grouped in two areas:<sup>189</sup>

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<sup>182</sup> One independent study found that over ten years, SBIR funded companies generated five times more growth than other companies. Lerner (1999) "Public Venture Capital: Rationale and Evaluation"

<sup>183</sup> Nesta, Impact of the Innovation policy mix

<sup>184</sup> Patent use is associated with better use of knowledge within firms, higher rates of knowledge transfer between firms and universities, and better knowledge creation. Criscuolo, Haskel and Slaughter (2006) "Global Engagement and the Innovation Activities of Firms", National Bureau of Economic Research Working Paper 11479. Crespi, Criscuolo, Haskel, and Slaughter (2007) "Productivity Growth, Knowledge Flows and Spillovers" discussion paper, Centre for Economic Performance, LSE

<sup>185</sup> Trademark use is associated with higher productivity performance in firms. Greenhalgh and Rogers (2007) "Trademarks and Productivity in UK Firms", working paper, University of Oxford

<sup>186</sup> Goodridge, Haskel and Wallis (2011) "UK Innovation Index: Productivity and Growth in UK Industries", Nesta in BIS Annual Innovation Report (2012). Capital deepening is an increase in capital intensity per labour hour worked

<sup>187</sup> Helmers and Rogers (2008) "Innovation and the Survival of New Firms Across British Regions", working paper, University of Oxford

<sup>188</sup> See the Hargreaves Review for a discussion on the importance of getting the IPR framework right to ensure it has the intended impact

<sup>189</sup> A fuller discussion of these issues is provided in BIS Economics Paper No. 5, "Internationalisation of Innovative and High Growth SMEs"

**Helping individual firms overcome barriers to entering new markets:** In the UK, as well as in other developed countries, officers in a network of offices in consulates and embassies overseas provide a range of tailored commercial services. Services typically include identification and facilitation of access to specific potential business partners and other important contacts in the market, as well as tailored information and advice.

**Helping firms build internationalisation capabilities:** These policies are likely to focus specifically on building capabilities related to international business, including the know-how that may be needed to evaluate and exploit potential opportunities, and to identify what changes may be required to product offerings or marketing strategy in order to succeed overseas. Services typically involve providing advice to individual firms – including advising firms not to export where appropriate – as well as providing information or training to groups of firms who are exporting or interested in doing so.

### **3.2 Interventions should be designed to support businesses preferences and needs**

***Policy interventions can be more effective if they are delivered in a way which meets businesses preferences.***

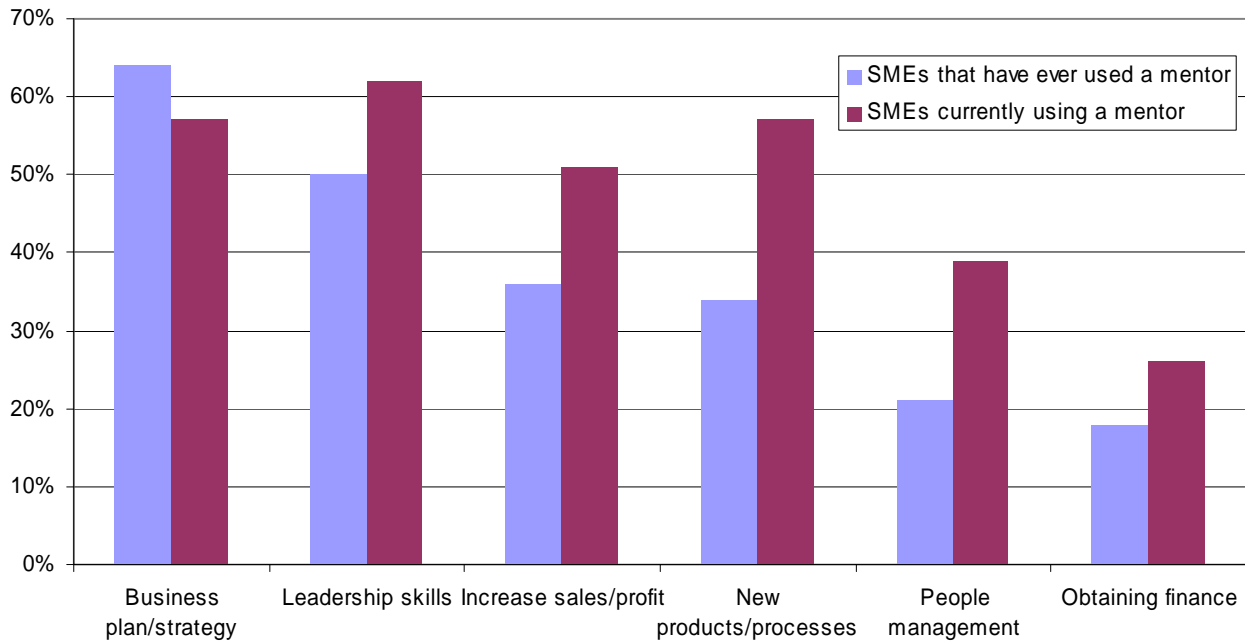
Businesses have a preference for learning to be informal, delivered by peers and individually tailored. To make policy interventions effective it is necessary to develop interventions to meet businesses preferences.<sup>190</sup> One suitable way of therefore engaging with SMEs that has been identified is mentoring.

Mentoring has been shown to deliver benefits across a range of areas, including leadership skills and business planning. Those SMEs that have ever used or are currently using a business mentor, report that it can boost their business performance in terms of sales / profit (see Figure 12).

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<sup>190</sup> SQW Consulting (2009) “A review of mentoring literature and best practice”, report for NESTA



**Figure 12: Ways in which mentors have helped businesses**

Source: BMG (2013), 'Demand for mentoring among SMEs'

***Human behaviour can be irrational. Behavioural insights can be applied to 'nudge' people into changing their behaviour to achieve better outcomes, such as encouraging use of business support.***

Influencing people's behaviour is integral to much of the work of Government. Human behaviour observed in the real world often violates the rational choice model of neoclassical economics, with people behaving seemingly irrationally. Behavioural economics attempts to connect economic and psychology, and provides insights into how people can be 'nudged' into changing their behaviour to achieve better outcomes.

Government are using behavioural insights to encourage businesses to seek business support, which in turn is beneficial for their success and has positive spillover effects on the economy as a whole. Examples of Government's work in this area are discussed in more detail in Annex A.

***Designing effective policies to support sustained growth needs to consider a range of issues.***

The ERC recently reviewed international measures designed to support SMEs in achieving sustainable growth.<sup>191</sup> Designing effective policies to support growth needs to consider the target businesses, the type of support provided, the timing of support and at what geographical level support should be delivered. Their findings suggest the need for

<sup>191</sup> Roper and Hart (2013) "Supporting Sustained Growth Among SMEs – Policy Models and Guidelines" Enterprise Research Centre White Paper No. 7

partnership based, regional delivery and the value of holistic support, which combine business development and leadership development, provided over a continuous time.<sup>192</sup>

However, many of the business support policies in the UK and elsewhere have not been robustly evaluated and therefore it is difficult to learn what the most effective forms of intervention are. Hence there is a need to design and implement robust evaluations to enable Government to learn what policies are effective at supporting sustainable growth and for this to inform future policy design and delivery in the business support area.

Growth Vouchers is a leading example of effective evaluation. It is the largest randomised control trial of business support, with £30 million available to support around 26,000 firms. The trial will answer three fundamental questions:

1. What is the impact of providing subsidised business support on firm behaviour and performance?
2. Which area of advice offered provides the greatest return?
3. What is the value added by a face-to-face diagnostic function compared to online self-diagnosis?

Furthermore, the What Works Centre for Local Economic Growth aims to significantly improve the use of evidence in the design and delivery of policies for local economic growth. The first of their evidence reviews focuses on business support and the findings will be used to inform future policy making.

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<sup>192</sup> Qualitative research into the customer experience of key business support services provided by BIS or its partner organisations, highlights specific issues where the customer experience could be improved. (Durham Business School/St Chads College (2013) "Customer Journey Research in Business Support")

# Annex A: The use of Behavioural Insights

**Influencing people’s behaviour is integral to much of the work of Government. Human behaviour observed in the real world often violates the rational choice model of neoclassical economics. Behavioural economics attempts to connect economics and psychology and provides insights into how people can be ‘nudged’ into changing their behaviour.**

## A.1 Behavioural Economics

### *Human behaviour can be seemingly irrational...*

The simple rational choice model of neoclassical economics assumes people analyse the information available to them and make choices to maximise their benefits and minimise their costs. According to this theory preferences satisfy three conditions; completeness (preferences can be ranked), transitivity (preferences can be compared with others so if a is preferred to b, and b is preferred to c, then a is preferred to c) and independence (expanding the choice set should not reverse the ranking of preferences so if a is preferred to b, introducing option c should not make b preferable to a). This model has proven a useful predictor of choice. However in practice there are a number of areas of human behaviour where the rational choice assumption can be unhelpful. People can be seemingly irrational and inconsistent in their choices, relying on automatic processes of judgement which can be influenced by surrounding factors.<sup>193</sup> Behavioural economics attempts to connect economic theory with lessons from psychology to provide insights into how people can be ‘nudged’ into changing their behaviour.

### *...but greater understanding of how people behave can achieve better outcomes for society.*

Much of what Government does is about changing behaviours, such as encouraging people to re-enter the labour market, improving the skills of the population and creating a healthier society. This is also true in the enterprise area with Government encouraging business start-ups and promoting the use of business support. Understanding how people respond to different contexts and incentives is essential for designing more effective policy interventions.

Behavioural economics can help us select the most effective way of changing behaviour through ‘nudges’. A nudge alters people’s behaviour without forbidding any options or significantly changing their economic incentives. At the simplest level, marketing the benefits of business support is a nudge; mandating business support is not.

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<sup>193</sup> Institute for Government (2010) “MINDSPACE – Influencing behaviour through public policy”

MINDSPACE outlines nine robust influences on human behaviour and change. These are briefly explained in Table 3.

**Table 3: MINDSPACE**

MINDSPACE	
<b>Messenger</b>	Who communicates information matters
<b>Incentives</b>	Responses to incentives are shaped by predictable mental shortcuts
<b>Norms</b>	People are influenced by how much a behaviour is exhibited and how much society approves of that behaviour
<b>Defaults</b>	Inertia means people readily accept the default option
<b>Salience</b>	Attention is drawn to what is novel and seems relevant
<b>Priming</b>	Sub-conscious cues can influence behaviour and decisions
<b>Affect</b>	Emotional associations can shape actions
<b>Commitment</b>	People seek to be consistent with promises
<b>Ego</b>	People act in ways to make them feel better about themselves

Source: MINDSPACE – Influencing behaviour through public policy

Behavioural interventions tend to be context specific – it can be difficult to know what intervention will be effective in what situation. Following the ‘Test, Learn, Adapt’ approach<sup>194</sup> which advocates running randomised controlled trials (RCTs) allows an assessment of the impact of policy interventions and for interventions to be adapted to reflect the findings.

## **A.2 Case Study: Mentoring (by Leandro Galli of Warwick Business School)**

***Behavioural insights were used to increase the supply of trained mentors.***

<sup>194</sup> Cabinet Office, Behavioural Insights Team (June 2012) “Test, Learn, Adapt: Developing Public Policy with Randomised Controlled Trials”

The mentoring action plan<sup>195</sup> set out Government's ambition to increase the supply of and demand for mentors. Since then work has tested the application of behavioural insights to stimulate demand and supply.

The Get Mentoring campaign aimed to train 15,000 volunteer mentors. This campaign was delivered by SFEDI, the sector skills council for enterprise. However, despite lots of people registering to become mentors, relatively few had completed the necessary training. Insights from behavioural economics were applied to email reminders sent out to volunteers to nudge them into completing their training, with RCTs being used to evaluate the success of different nudges. The volunteer mentors could also sign up to become members of the Institute of Enterprise and Entrepreneurs (IOEE),<sup>196</sup> which would provide access to learning and training materials. Behavioural insights were also applied to emails sent out to the volunteers to encourage them to sign up. As a result of this work an additional 778 trained mentors joined the national mentoring network. The following message made the emails particularly effective:

***Priming altruism increased the number of people completing their mentoring training by 18 per cent.***

- Priming<sup>197</sup> altruism, by including a quote by Adam Smith about the value of volunteering, increased the number of people who completed their training by 18 per cent.
- Expressing gratitude, either in terms of helping future mentees or for their contribution to economic growth, only had a significant effect when it was combined with priming altruism, it did not have a significant effect when it was used alone.
- A 'fit' between the messenger saying thank you and the recipient of the benefits is important. So if the expression of thanks comes from the minister, the benefits highlighted should be for the economy, whereas if the message is coming from the mentees the benefits highlighted should be for the mentee.
- Prospective mentors also responded better to thank you messages from the mentees rather than the Minister.
- Anticipated pride<sup>198</sup> messages could also persuade people to become mentors.

The trial also highlighted some interesting differences between men and women. For women, the anticipated pride message needed to be combined with an emotional norm, for response rates to be as high as male response rate. For men, adding the emotional norm made no statistically significant difference. This may be because men inherently tend

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<sup>195</sup> Department for Business, Innovation and Skills (2012) "Mentoring Policy – the action plan"

<sup>196</sup> Membership of the IOEE later became automatic once volunteers had completed their training

<sup>197</sup> Creating sub-conscious cues

<sup>198</sup> i.e. how proud people could feel for helping future mentees

to experience pride more easily than women. There was also some tentative data to suggest that men (compared to women) may be more receptive to particular types of messages; messages which could be regarded as “ego” enhancing. For instance, men respond better to calls for action that state how their business community looks up to them and needs them. Women, on the other hand, are more attracted than men by the prospect of obtaining their mentoring certificate.

***Behavioural insights have also been used to learn how to influence the demand for mentoring.***

Following from the success of stimulating the supply of mentors, the next challenge was to stimulate demand for mentors. The application of behavioural insights was tested as a part of the ‘Demand for Mentoring among SMEs’<sup>199</sup> research conducted by BMG. 902 SME owner-managers took part in the structured telephone interviews, used as a basis of this research.

Two types of behavioural interventions were used to shape the entrepreneurs’ attitudes towards mentoring:

1. **Priming prevention / promotion** – creating sub-conscious cues that can influence one’s mindset, decisions and behaviour. In this context, it was done by asking SME owners questions that focused either on the expected negative (prevention)<sup>200</sup> or positive (promotion)<sup>201</sup> outcomes of running a business.
2. **Prevention / promotion messaging** – describing the benefits of mentoring in ways that would be more in line with a promotion or prevention mindset and that focused either on positive (promotion)<sup>202</sup> or negative (prevention)<sup>203</sup> outcomes.

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<sup>199</sup> Department for Business, Innovation and Skills (2013) “Demand for mentoring among SMEs” BIS Research Paper 158

<sup>200</sup> What do you see as the major risks and threats to the smooth running of your business over the next two to three years?

<sup>201</sup> Over the next two to three years what do you aspire and hope to achieve for your business?

<sup>202</sup> Mentors bring a fresh pair of eyes and can provide friendly tailored and impartial support to help you advance your business, by helping you to identify opportunities and to make the most of your business’s specific areas of strength.

A mentor can be a sounding board for new ideas and out of the box thinking; and can help you to transform your business.

<sup>203</sup> Mentors bring a fresh pair of eyes and can provide friendly, tailored and impartial support to help identify the specific areas of weakness and threats to your business and can help you to tackle potential problems and pitfalls in advance, reducing your business’s exposure to risks.

A mentor can help to bring control and focus to the running of your business and can help you to make fewer mistakes.

The trial had four comparison groups to determine the effect of combining priming (prevention or promotion focused) with messaging (prevention or promotion focused). The effectiveness of different interventions was assessed using two main self-reported outcome measures:

- **Attitudes towards mentoring** – measured by a person’s overall reported opinion of mentoring<sup>204</sup> and how good an idea they think mentoring is.<sup>205</sup>
- **Motivation to succeed** – measured by a person’s reported desire to succeed<sup>206</sup> and determination to progress as an entrepreneur.<sup>207</sup>

***Theory distinguishes between people with advancement needs, and people with security and safety needs.***

The distinction between prevention and promotion has its roots in Regulatory Focus Theory. The theory posits that in achieving their goals, individuals differ in the way they approach their goals, i.e. their “regulatory focus”. A promotion-focused individual has advancement needs and places an emphasis on positive outcomes: accomplishments, hopes and aspirations, and therefore they try to maximise the gains associated with specific endeavours. Such individuals tend to favour idea generation, creativity eagerness and change. On the other hand, prevention-focused individuals tend to have stronger security and safety needs. As a result they are more concerned by negative outcomes and thus try to avoid risks and minimise losses rather than maximise their gains.<sup>208</sup> They also show a preference for stability and a concern for making mistakes.

***Certain groups of businesses tend to be significantly more receptive to mentoring.***

The findings revealed that different types of interventions had different effects on reported attitudes towards mentoring and reported motivation to succeed, and that it is unlikely that a single intervention can serve all purposes. At the same time, the results obtained do provide insight on the kind of techniques that should be considered depending on the target audience and purpose of the intervention.

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<sup>204</sup> The question used was, “Again, based on what you have just heard about mentoring, what is your overall opinion of mentoring?”

<sup>205</sup> The question used was, “How good an idea do you think mentoring is?”. Both questions on attitudes were based on Cesario and Higgins “Making message recipients feel right. How non-verbal cues can increase persuasion”, Psychological science, 2008

<sup>206</sup> The question used was, “To what extent do you agree with the following statement: ‘I have a strong desire to be a successful entrepreneur?’”. The responses were measured on a 1 to 5 scale, where 1 corresponds to “do not agree at all” and 5 corresponds to “agree very strongly”.

<sup>207</sup> The question used was, “How determined are you to progress as an entrepreneur?”, 1 meaning “not at all determined” and 5 “extremely determined”. Both for motivation to succeed and attitudes, Cronbach’s Alpha – coefficient of consistency between two different questions – was above the minimum of 0.7, indicating the questions were measuring the same concepts i.e. motivation, attitude.

<sup>208</sup> Higgins, E. T. (1998) “Promotion and prevention: Regulatory focus as a motivational principle”

It is also worth noting that regardless of the type of messaging or priming used, certain groups of businesses tend to be significantly more receptive to mentoring, reporting more favourable attitudes of mentoring. Specifically it is those SME owners that: work in the services sector, have no employees, are younger than 50 years old and those who experienced an increase in revenue over the last year. The profile of entrepreneurs with reported higher motivational scores was similar, being those in the service sector, those that experienced revenue growth over the past year, younger entrepreneurs and those with higher revenues<sup>209</sup> in the past year.

***Promotion priming significantly outperforms prevention priming in terms of improving reported attitudes towards mentoring.***

If the primary goal is to improve attitudes towards mentoring, promotion priming<sup>210</sup> significantly outperformed prevention priming.<sup>211</sup> The type of messaging which accompanied the priming (prevention vs. promotion) did not appear to have a significant effect on the reported attitudes toward mentoring. The positive effect of promotion priming is supported by earlier research in psychology. It has been argued that when promotion primed, people tend to focus on gains and think more broadly.<sup>212</sup> Since mentoring represents an opportunity to receive the support needed to grow their business and realise their ambitions, it stands to reason that when promotion-focused, entrepreneurs tend to form more positive perceptions of mentoring. This effect was especially pronounced among older businesses, and businesses that have experienced an increase in revenue over the past year.

***Promotion messaging is more effective than prevention messaging at improving entrepreneurs' reported level of motivation to succeed***

If the goal is to improve the entrepreneurs' level of motivation to succeed, promotion messaging was more effective than prevention messaging, and this result is highly significant. On a theoretical level, this suggests that entrepreneurs are intrinsically more promotion-focused, meaning that promotional messaging may be more effective at influencing their actions. The effect specifically applies to entrepreneurs that operate in the non-service sectors, those with stagnating or falling revenues, and those with a high need for closure.<sup>213</sup>

While the effects of either type of priming on entrepreneurs' motivation were not significant at the SME population level, the data suggests that prevention priming is more effective than promotion priming in specific sub-sections of the SME population:

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<sup>209</sup> Above £73, 000

<sup>210</sup> Asking what business owners aspire and hope to achieve for their business

<sup>211</sup> Asking what business owners see as the major risks and threats to their business

<sup>212</sup> Tumasjan and Braun (2012) "In the eye of the beholder: How regulatory focus and self-efficacy interact in influencing opportunity recognition"

<sup>213</sup> Meaning they are uncomfortable dealing with ambiguity and uncertainty



- SMEs with employees – it can be argued that being responsible for the welfare of others makes them more loss-averse.
- SMEs that have experienced a rise in revenue over the past year or
- Those with higher absolute revenues – again it implies that those groups are probably more averse to losses in light of their higher / increased incomes.

Therefore, it might be useful to segment the SME population, if we want to maximise the effectiveness of behavioural interventions.

***The most effective intervention is likely to be prevention priming plus promotion messaging.***

The data suggests a trade-off between the objectives of motivating entrepreneurs and improving their attitude towards mentoring. If the aim is to achieve both of these goals the evidence suggests that the most effective intervention is likely to be prevention priming + promotion message.

In addition to the two main metrics of attitude and motivation, the effects of the interventions were assessed on a number of other relevant indicators. It was found that promotion messaging outperforms prevention messaging at:

- Making people feel mentoring is right for them and their business.
- Increasing entrepreneurs' willingness to recommend mentoring to other SME owners.
- Reinforcing the belief that mentors with sector-specific knowledge are available in their local area.

Promotion priming was shown to be more effective at strengthening a person's:

- Reported trust in a mentor.
- Belief that mentors are available in one's area with the relevant knowledge.
- Belief that it is easy to find a mentor.<sup>214</sup>
- Belief that mentors can help bring growth.
- Acceptance of having to pay for mentoring services.

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<sup>214</sup> This effect largely applies to those entrepreneurs who report no prior concept of mentoring

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### **A.3 Case Study: Communications with SMEs** (by Leandro Galli of Warwick Business School)

#### ***Aspiring entrepreneurs and recent starters may not yet see themselves as 'entrepreneurs'.***

The GREAT newsletters are sent on a monthly basis in the form of an email to SMEs to share information about available business support and business events. The newsletters are sent to around 18,000 existing and potential SMEs that have subscribed to receive the newsletter. Behavioural insights are being applied to the subject lines and content of the newsletters to try and increase opening rates and click through rates to the links contained within the emails. By conducting randomised control trials it is possible to test and learn what the most effective interventions are and apply the findings to other communications with SMEs.

To date, four newsletters have been sent out, each time testing the application of different psychological concepts. The monthly nature of the newsletters will most likely have had a moderating effect on the findings, as recipients will have already formed certain expectations of the newsletter content and its value. Nevertheless, the results obtained have provided a number of insights. The key results:

Using the word 'free' in the subject line in reference to the information and advice contained within the newsletter had no positive effect on the opening rates and click through rates to links, and even had a pronounced negative effect when coupled with promotion priming. When comparing the subject line containing the word 'free' to the control, the added value of using free may have been undermined by the fact that readers may have already been aware that most of the support and advice was free. When 'free' was combined with a promotion prime, the fall in opening rates could be because promotion priming makes people more ambitious as they seek to realise their aspirations and consequently also more quality conscious. Under these conditions 'free' could assume negative connotations; being associated with lower quality.

Applying prevention priming to the email content by framing the message in terms of the negative effects of inaction in the face of an improving economic climate,<sup>215</sup> increased click through rates to links by 30 per cent in the case of pre-start-up businesses, suggesting they might respond better to negative than positive message framing.

Entrepreneurial identity priming had mixed effects. The idea was that if being an entrepreneur is an important part of the newsletter readers' self-image, appealing to that identity<sup>216</sup> should make emails appear more personally relevant to them. However, for pre-start-up entrepreneurs and start-up businesses entrepreneurial identity priming reduced

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<sup>215</sup> "UK GDP figures and other economic data are beginning to point to higher growth and an improved trading environment for UK. Make sure your business is not selling itself short (vs. realises its potential) in the improved economic climate. Log on to the show, where David Riches, Director of Operations at the British Chambers of Commerce will...discuss how SMEs can avoid missing out on opportunities (vs. make the most of opportunities)."

<sup>216</sup> "You are an entrepreneur"

opening rates by 23 per cent. For growth businesses on the other hand, opening rates were 10 per cent higher, but this result was not statistically significant at the 5 per cent level. These findings imply that aspiring entrepreneurs and recent starters do not yet see themselves as entrepreneurs, whereas in the case of the more experienced business owners, even though they may have adopted an entrepreneurial identity, the priming used (“You are an entrepreneur”) in most cases, may not have been sufficiently strong to activate the relevant core traits and behavioural tendencies associated with being an entrepreneur. The next planned trial will explore the effect of additionally including the key traits and benefits associated with being an entrepreneur as part of the entrepreneurial identity priming (e.g. “You are an entrepreneur; innovate and make your own rules”).

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