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The use and impact of venture capital schemes

HMRC Research Report 355

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The views expressed in this report are those of the authors and do not necessarily represent those of HM Revenue and Customs.
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Glossary

Angel investor/business angel
An individual who provides capital for a start-up business (typically a micro or small business), usually in exchange for ownership or equity.

Crowdfunding
Funding received, typically online, via large numbers of people who support a venture and do not necessarily expect a monetary return (e.g. Kickstarter funding).

Deadweight
This term relates to the economic efficiency of investment via venture capital schemes. The higher the deadweight, the more likely a company could have met their investment requirements without the schemes.

Investor syndicate
A group formed to allow investors to pool their funds and share risks.

J curve effect
In the context of this research, the J curve effect describes an initial performance dip followed by improved performance in the long term (i.e. moving up the J curve) after firms undertake significant investment in new processes and/or product/service innovation.

Ordinary shares
Ordinary shares entitle the shareholder to one vote per share, to equal participation in dividends and, if the investee company is liquidated, to a share of the proceeds of the company's assets after all the debts have been paid.

Primary sector
The sector that makes direct use of natural resources to produce non-manufactured goods. The investee survey included a handful of companies in the primary sector that were eligible for tax-advantaged venture capital schemes. Examples were companies engaged in mining (excluding coal mining), oil and gas exploration, and animal breeding.

Subscribed shares
Newly issued shares that an investor has stated his or her intent to buy prior to the issue date.

Venture capital
Capital invested in a project in which there is a substantial element of risk, for example a new or expanding business.
Summary

HM Revenue & Customs commissioned Ipsos MORI to conduct quantitative and qualitative research into the use and impact of the Enterprise Investment Scheme (EIS) and Venture Capital Trusts (VCTs).

- EIS provides a range of tax reliefs, such as Income Tax relief, for private individuals typically investing directly in certain unquoted companies.

- VCTs offer similar tax reliefs for individuals investing indirectly in eligible unquoted companies. This works by individuals investing in a VCT, which in turn makes investments in a range of companies.

Income Tax relief appeared to be the key driver of investors’ decisions to invest, with eight in ten (79%) saying this was either very important or essential for the investment. At the same time, the qualitative research found that entrepreneurship and philanthropy were also factors in some investment decisions.

Survey data indicated that the schemes were not crowding each other out. EIS was more associated with micro and small-sized firms operating in service or hospitality sectors of the economy. VCTs were more aligned to medium-sized firms operating in capital-intensive or professional service sectors.

The quantitative research also suggested that the schemes were generally working as intended in terms of how investments were used, bridging finance gaps and wider effects on investees across both funds:

- Three-quarters (74%) had sought investment at least in part for start-up or product development reasons. Nonetheless, increasing working capital or improving cash flow was the most commonly cited main reason for seeking EIS or VCT funding (selected by 34% of all investees).

- Six in ten (60%) reported that their proposed investment would either definitely or probably not have taken place without the tax-advantaged venture capital schemes.

- The schemes were linked to increases in sales (a median growth rate of 0.4%), jobs (a median growth rate of 33%) and productivity, as well as greater innovation in products and services.

These observations in the quantitative research tended to be most strongly associated with the youngest and smallest firms (micro firms with 0 to 9 employees), those operating in primary, manufacturing and construction sectors and those who were investing for business expansion.

Both schemes underwent significant expansion in April 2012, which broadened the size of companies that can be invested in, as well as the total investment limit. Across the research, investees and VCT fund managers tended to be positive about the changes, with the majority of investees feeling that each of the changes eased investment constraints for companies like theirs. In qualitative interviews, certain groups had concerns about the changes increasing the presence of aggressive investors looking for fixed returns and guaranteed exits. However, there is not, as yet, explicit evidence to suggest that investors have changed their investment profiles following the 2012 expansion.

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1 In some cases, EIS investors might invest indirectly through an EIS fund.
2 See the glossary for a definition of “primary sector”.

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1 Introduction

This HM Revenue & Customs (HMRC) report covers findings from Ipsos MORI research into tax-advantaged venture capital schemes.

1.1 Background and objectives

Facilitating access to finance and providing support for innovative small businesses is an important part of the UK Government’s growth strategy. The tax-advantaged venture capital schemes are an integral part of this strategy. This research looks at two schemes, which aim to help certain types of smaller, higher-risk, unquoted companies to raise external growth capital by providing tax reliefs to investors. This is intended to encourage investment in firms which would otherwise struggle to access finance.

- The Enterprise Investment Scheme (EIS) provides a range of tax reliefs for private individuals typically investing directly in certain unquoted companies. Reliefs include, for example, Income Tax relief at 30%, Capital Gains Tax deferral, and Capital Gains Tax exemption.

- Venture Capital Trusts (VCTs) offer tax advantages for private individuals investing indirectly in eligible unquoted companies. Individuals invest in a VCT, which will in turn make investments in a range of companies. Subscribers of new ordinary shares in VCTs are, for example, entitled to claim Income Tax relief at 30%, and are exempt from Income Tax on dividends from the shares.

This research aimed to increase HMRC’s understanding of the use and impact of the EIS and VCT schemes, from the point of view of investee companies, investors and VCTs. This included assessing:

- the incentive effects of tax reliefs on investors;
- impacts on investees’ access to finance on business development and growth; and
- the impact of an expansion of the schemes in April 2012, which broadened the size of companies that can be invested in as well as the total investment limit.

The research also forms part of a broader evidence collection exercise as set out in a recent HM Treasury consultation on tax-advantaged venture capital schemes.

1.2 Methodology

There were two stages to the research.

- Random-probability telephone surveys were undertaken from 5 August to 5 September 2014 with 628 investee companies and 546 investors, covering both EIS and VCT schemes.

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3 In some cases, EIS investors might invest indirectly through an EIS fund.
4 Details of the consultation are available on the gov.uk website at: https://www.gov.uk/government/consultations/tax-advantaged-venture-capital-schemes-ensuring-continued-support-for-small-and-growing-businesses.
5 The surveys were piloted between 30 July and 4 August 2014.
6 Data are unweighted as there was insufficient information to develop non-response weights for certain variables. While the achieved samples were broadly in line with the population profile (where profile information was
To gather more detailed insight, qualitative in-depth interviews were carried out in September 2014 with 7 investees and 8 investors who took part in the surveys, as well as a further 5 VCT fund managers (who had not taken part in the surveys).

A Technical Annex to this report has been published separately and contains full methodological details.\(^7\)

### 1.3 Interpretation of findings

This report only comments on subgroup differences that are statistically significant at the 95% level of confidence. Statistical significance calculations were carried out with the assumption that the achieved samples are representative of their target populations. Given that data are unweighted, these calculations should be considered indicative.\(^8\)

The sample for the qualitative research was purposively selected to focus on key groups of interest. Wider inference can be drawn from the findings, but they are not statistically representative.

Where the report refers to the impact or effect of the tax-advantaged venture capital schemes, it is important to note that this research has not been designed to measure what would have happened in the absence of the schemes (i.e. the counterfactual). Instead, it is intended to measure a range of expected outcomes, and analyse the extent to which the schemes are positively associated with these outcomes.

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\(^7\) This is available on the gov.uk website at: [https://www.gov.uk/government/collections/hm-revenue-and-customs-research-report-collection](https://www.gov.uk/government/collections/hm-revenue-and-customs-research-report-collection).

\(^8\) This is of particular relevance to the VCT investee sample, whose representativeness could not be determined with certainty due to the way it was constructed. Full details are provided in the separate Technical Annex.
2 How the schemes are used

This chapter explores why venture capital investors and investees used these schemes rather than other methods of investment and fundraising. It also presents findings from the qualitative work on the factors investors, investees and VCTs considered when making decisions.

2.1 Reasons for using the schemes

What did investees seek finance for?

Three-quarters (74%) of investees had sought investment at least in part to start their business or to develop a new product or service, in line with the principal intentions of tax-advantaged venture capital schemes. However, these were not typically the main reasons, as Figure 2.1 shows. For both types of investee, improving working capital or cash flow was typically the main reason for seeking investment. At the same time, it is worth noting that most investees gave multiple reasons for seeking venture capital. Only nine per cent said they had sought an investment solely for working capital or cash flow purposes.

Compared to investees who looked for EIS investment, those who sought VCT investment were less likely to have done so primarily in order to start a new company or launch a new line. VCT investees tended to have a broader range of other reasons for seeking investment overall (see Figure 2.1). Further analysis reveals that EIS investments were 16% more likely than VCT funding to have been sought for business expansion purposes. This reflects the different ways the two schemes are being used.

Figure 2.1 – main reasons for seeking investment through EIS or VCTs

Q. Which of these would you say was the main purpose for seeking finance from a government venture capital scheme?

<table>
<thead>
<tr>
<th>Purpose</th>
<th>% of EIS investees</th>
<th>% of VCT investees</th>
</tr>
</thead>
<tbody>
<tr>
<td>For working capital/cash flow</td>
<td>34</td>
<td>38</td>
</tr>
<tr>
<td>Developing or launching a new product</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td>To start up your company</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Any other reason</td>
<td>22</td>
<td>38</td>
</tr>
</tbody>
</table>

Bases: 599 EIS investees; 69 VCT investees.
N.B. 40 investees received investment through both schemes, and these are included in both subgroups.

Figure 2.1 also shows a large proportion of investees overall giving some other reason. The other reasons listed in the survey included purchase of new machinery or property, acquisition of other firms,

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9 This is based on an econometric analysis, for which full technical details are presented in Table 4.2 of the separate Technical Annex to this report.
expansion into new markets or sectors, and relocation. Each of these was selected by very few investees – fewer than five per cent – as their main purpose for seeking finance from the schemes.

Further analysis of the investee survey reveals that the smallest and youngest companies, and those in primary, manufacturing or construction sectors, were more likely to seek investment in order to grow their business, rather than simply to facilitate cash flow. This suggests that targeting the schemes at these types of companies might generate higher levels of business growth.10

- Micro firms (with 0 to 9 employees) were the most likely (19% more likely than medium-sized firms with 50+ employees) to have sought investment through the schemes for business expansion. This is consistent with the idea that the larger medium-sized firms would have less need to expand to achieve economies of scale.11

- The older the company, the more likely they were to seek investment through the schemes to fund working capital.

- Professional service firms were the least likely to invest in capital stock (10% less likely than primary12, manufacturing or construction firms). Retail or catering firms were the least likely to invest for business expansion (14% less likely than primary, manufacturing or construction firms).

Perceived importance of tax reliefs for investors

It appears that Income Tax relief was the main driver for investors to use the respective schemes. Eight in ten EIS investors (79%) considered the Income Tax relief element of the scheme to be very important (47%) or essential (32%) in their decision to invest. More than half (54%) also considered Capital Gains Tax exemption to be either very important (37%) or essential (17%). As Figure 2.2 highlights, the other tax advantages of EIS were generally considered less important.

The incentive effects of tax relief appeared to be stronger for investors who were part of investor consortia or syndicates13 than for solo investors. This reflects the qualitative findings, which suggest that other factors such as entrepreneurship and philanthropy could be behind the investment decisions of solo EIS investors, alongside the financial returns. For instance, certain solo investors had worked or run their own business in a particular industry and saw investing in an EIS as their chance to help new businesses in the same industry. One investor also felt that EIS investments were good ways to support local businesses, in line with the other donations they had made to local charities.

“I’m not against having a bit of a punt where there is another angle than just making money – the community or feel-good factor.”

EIS investor

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10 This is again based on the econometric analysis presented in Table 4.2 of the Technical Annex.


12 See the glossary for a definition of “primary sector”.

13 See the glossary for a definition of “investor syndicate”.

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Figure 2.2 – importance of different aspects of EIS investments for investors

**Q. How important would you rate each of the following in your decision to invest through the Enterprise Investment Scheme?**

<table>
<thead>
<tr>
<th>Any tax-advantaged element</th>
<th>Income Tax relief*</th>
<th>Capital Gains Tax exemption*</th>
<th>Capital Gains Tax deferral*</th>
<th>Loss relief</th>
<th>Inheritance Tax relief</th>
<th>Flexibility of the scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>42%</td>
<td>47%</td>
<td>39%</td>
<td>17%</td>
<td>25%</td>
<td>17%</td>
<td>8%</td>
</tr>
<tr>
<td>32%</td>
<td>29%</td>
<td>25%</td>
<td>12%</td>
<td>7%</td>
<td>13%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Bases: 421 EIS investors; 183 solo EIS investors; 179 syndicate EIS investors

* For these tax reliefs there are statistically significant differences by investor type in the proportions saying “essential”.

Income Tax reliefs and exemptions were also highly important considerations for large proportions of VCT investors (who can claim relief on the value of their new ordinary shares in VCTs, rather than in the companies invested in). Many indicated that these were essential in their investment decisions as Figure 2.3 indicates. In fact, eight in ten (79%) considered the Income Tax relief on subscribed shares to be either an essential (32%) or at least very important (47%) part of their investment decision, while seven in ten (71%) considered the exemption of Income Tax on dividends to be essential (22%) or very important (49%).

Figure 2.3 – importance of different aspects of VCT investments for investors

**Q. How important would you rate each of the following in your decision to invest in a Venture Capital Trust?**

<table>
<thead>
<tr>
<th>Any tax-advantaged element</th>
<th>Income Tax relief on the value of subscribed shares</th>
<th>Exemption of Income Tax on dividends from ordinary shares</th>
<th>Capital Gains Tax exemption on shares that are disposed of</th>
<th>Flexibility of the scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>41%</td>
<td>32%</td>
<td>22%</td>
<td>17%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Bases: 242 VCT investors
How tax reliefs affect the investor thought process

Investors expanded on how tax reliefs made a difference in the qualitative interviews.

- Loss aversion was a particularly important factor in decision making. The reliefs meant that the value of their investment could effectively fall by a substantial amount before investors would start to lose money, which made them more willing to invest.

- Certain investors said they would have invested regardless of the tax reliefs – especially those investing for entrepreneurial or philanthropic reasons – but pointed out that they were able to afford to invest a higher amount due to the reliefs. Similarly, certain investors said they had made more risky investments than they normally would due to the tax reliefs, which is in line with the policy intent of the schemes.

- One EIS investor noted that while tax reliefs did not affect the affordability of an investment for them, they preferred to invest as part of a group of investors and the reliefs had helped to bring other investors on board. Being part of a group of EIS investors in a business gave reassurance about the potential of the business and helped this investor meet like-minded individuals.

Perceptions of risk among investors

In the qualitative research, several investors said they did not necessarily consider venture capital schemes, particularly VCTs, to be high-risk investments. On the contrary, they considered their investments to be prudent compared to investments in Public Limited Companies. A recurring reason offered was that the stock market had performed comparatively poorly since the 2008 crash, whereas VCTs appeared to have a better track record of more consistent returns for the time they had existed. This perception was further reinforced because the investors spoken to had typically not lost any of their investment in VCTs.

“There is this utter myth that VCTs are for wealthy people with huge assets who can afford to lose all their money if they invest in them – as if losing half your money in the financial crash in 2008 on the stock market wasn’t risky. My personal view is that most VCT shares are much more stable than most ordinary market investments.”

VCT investor

2.2 Choice of scheme

Investees

Analysis of the investee survey shows that EIS and VCTs appeared to be serving different audiences and not to be crowding each other out. The structure, sector and size of firms were key factors in determining which scheme was used.

- Firms which were in a group structure were four per cent more likely to use EIS rather than VCTs.

- Primary, manufacturing or construction firms were most likely to use VCTs (six per cent more likely than retail or catering firms, and eight per cent more likely than other service sector firms).

14 See Table 4.1 of the Technical Annex for the relevant econometric analysis.
VCTs appeared to serve larger firms more than smaller ones. Compared to micro companies, small-sized firms (with 10 to 49 employees) were nine per cent more likely to use VCTs and medium-sized firms were 26% more likely to do so.

Broadly, the survey analysis finds that firms of all ages were equally likely to use either scheme. However, while firm age was not a factor, business life stage may have been important. The qualitative research indicates that investee companies’ choice of scheme often related to how far advanced they felt they were in their business life cycle.

The new start-ups spoken to had generally sought EIS investment. This was typically because they had sought out specific solo investors or had approached investment clubs with expertise in their market, and these investors had recommended setting up an EIS. Indeed, a few of these investees had not come across the tax-advantaged venture capital schemes prior to this. In some instances, EIS investees had previously spoken to VCTs but decided against using them as they were felt to require additional due diligence, take longer to make decisions, or have more restrictive terms.

The EIS route was also chosen by certain investee companies who had not yet started trading, in order to negotiate better investment terms and conditions with individual investors (compared to VCTs). This again reflected the common investee perception that VCTs had minimum criteria for their investments, and were more interested in firms that were in profit.

Many investees that felt their business was well established and some that had previously obtained EIS investment had switched to seeking VCT funds for further expansion, or were planning to do so. This was often because they already had a large number of EIS investors and preferred not to take on more, to avoid fragmenting the business and having to deal with too many individuals.

Companies that worked in niche sectors that were either high-risk or required long investment periods (over several years) before they would make a profit, were also among those that had sought VCT investment. Examples included a company working in the hydroelectricity sector and companies that ran large annual events and festivals. These investees had sought out VCTs that specialised in their sector.

The qualitative research also highlighted distinct types of investors that tended to invest in either EIS or VCTs, and had specific reasons for doing so.

EIS investors were often angel investors15 who were looking to support specific types of companies for entrepreneurial or philanthropic reasons. Many had previously worked in the industries they were supporting. These investors typically sought out a handful of companies to invest in and were highly engaged with the companies, either by keeping up to date on company performance or by joining company boards. Many also said they intended to hold on to these investments beyond the minimum three year period to continue to support these companies in the longer term.

A small number of investees and VCT fund managers said they were aware of another type of EIS investor, who sought guaranteed returns and an exit after three years (although these types of

15 See the glossary for a definition of “angel investor”.

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investors were not evidenced directly in the qualitative research). These investors were apparently more interested in aggressive tax planning and looked for EIS investment opportunities that claimed to offer these benefits in their investor literature but were not necessarily intended to help companies to grow.

- VCT investors included several older retired (but not necessarily High Net Worth) individuals. These types of investors had typically invested because they were seeking a good continuous return through dividend payments, often to help pay for their retirement. Many said they only invested in generalist VCTs that had made investments in a wide range of sectors, and had a good track record, because this was less risky. Beyond this, they were generally not interested in where their investment went after it reached the VCT.

2.3 What informs investment decisions?

The qualitative research showed that once investees and investors had decided to use tax-advantaged venture capital schemes, various factors appeared to inform their decisions, for instance around where to seek investment or how much to invest. This section discusses the main factors raised by a range of participants.

Investees

Investee participants said they sought out investors or VCTs through a variety of channels, including investment clubs, looking at lists of VCTs online, and through word-of-mouth within their industry.

In assessing the suitability of investors or VCTs, investees said they typically met the other party face-to-face and wanted to hear about their existing investment portfolios and track record. These face-to-face conversations were considered very important to reassure investees that their funders understood industry-associated risks. For certain investees, this meant that they preferred investors and VCTs based nearby to their business.

Investors

Investor participants said they came across the tax-advantaged venture capital schemes through a variety of channels, including word-of-mouth through friends, newspapers and specialist magazines, such as the Investors Chronicle, and financial advisors. Decisions about the amount to invest tended not to be very sophisticated, with participants investing whatever cash they had spare – this reflected that they often treated these investments, particularly VCT investments, as alternatives to savings accounts or bonds.
VCTs

Various VCT fund managers said that they were contacted directly by potential investees. They also reported maintaining relationships with angel investors and relevant sector experts so they could proactively seek out investment opportunities as well.

All the fund managers interviewed said their VCTs typically had a set of minimum criteria for screening potential investees. In some cases this simply related to the current state of the company in that it needed to be in profit. Other VCTs also built in growth-related criteria – for example, one VCT fund manager said they would only take on companies that had the ambition and scope to become £100 million companies with more than one product line.

Beyond these criteria, many of the fund managers reported making decisions based primarily on face-to-face meetings with potential investees, rather than by researching the sector. They used these meetings to judge whether the team and structure in place at the company was likely to deliver a good return for their investors.
3 Impact of the schemes

This chapter covers the various impacts of EIS and VCTs on investee companies. It also explores the impact of the 2012 expansion of the schemes. Evidence of impact comes primarily from an econometric analysis of the investee survey data. Full technical details of the econometric analysis are presented in the separate Technical Annex to this report.

3.1 Bridging finance gaps

Total levels of investment sought and obtained

VCT investees tended to require much higher total levels of investment than EIS investees, though in both cases, the levels sought were usually far below the £5 million annual investment limit for the schemes. The median levels of investment sought by VCT and EIS investees were £729,000 and £242,000 respectively. The median levels obtained were £670,000 and £196,000 respectively. This equates to an un-funded gap of 8 per cent on VCT investments and 19 per cent on EIS investments.

This pattern was mirrored more broadly when looking at the amount of finance sought and obtained from any source (including sources other than venture capital). The median levels of investment sought by VCT and EIS investees were £1 million and £250,000 respectively, while the median levels obtained were £550,000 and £200,000 respectively. This suggests an overall funding gap of 45% among EIS investees and 20% among VCT investees.

Financing from outside of the schemes

VCT investees were more likely than EIS investees to say they had sought other external finance outside of their respective scheme since 2011 (70% versus 58%). Four main other sources of finance were sought by over a third of all investees:

- another source of investment or equity finance (52%);
- formal (e.g. through a bank) or informal (e.g. through a friend) loans or credit agreements (49%);
- an overdraft or loan with a bank (37%); or
- non-returnable grants for a specific purpose (36%).

Both EIS and VCTs were typically used alongside only one other source of finance.

Whilst VCT investees generally sought finance from a wider range of sources than EIS investees, VCT funding was still more likely to make up half or more of the total investment (compared to EIS funding). In other words, VCT funding was typically a dominant part of any total investment.

On the other hand, EIS funding was more complementary, tending to make up less than half the total value of a diverse funding package alongside other funding sources. This was especially the case for EIS investees requiring large total investment levels of £5 million or more.
Further analysis\textsuperscript{16} of the investee survey reveals that the type of investee and the sector they operated in were important factors in deciding where they sought finance (outside of venture capital).

- VCT investments were nine per cent more likely than EIS investments to complement asset finance.

- EIS investments were five per cent more likely than VCT investments to complement crowdfunding\textsuperscript{17}. This may reflect that an EIS itself bears resemblance to crowdfunding, both in a transactional sense and in the sense that informal equity investors also engage in crowdfunding.

- Firms operating in the retail or catering sectors used fewer complementary sources of external financing, outside of EIS and VCTs. These firms also tended to have an especially low demand for equity and grant finance.

- Professional service firms had a relatively low demand for loan, invoice and asset finance.

- Compared to firms in all other sectors, other (non-professional) service firms (e.g. in health or education services) had a relatively low demand for loan and grant finance, and for crowdfunding.

- When compared to retail, catering and other (non-professional) service firms, those in the primary, manufacturing or construction sectors and professional service firms tended to use a larger number of different finance sources other than EIS and VCTs to meet their funding needs.

Where do the schemes contribute most to financing requirements?

Analysis\textsuperscript{18} of the investee survey finds that EIS and VCTs made a greater contribution to the finance needs of younger, smaller companies with a smaller array of alternative funding options available to them, suggesting the targeting of the schemes is working as intended.

- The contribution of the schemes was positively related to the size of the investment. Where firms were seeking large total levels of investment, funding from EIS or VCTs tended to make up a greater share of the total obtained.

- The contribution of the schemes was inversely related to the number of alternative funding sources available to firms. In instances where a large number of non-venture capital funding sources were available, EIS or VCT funding tended to make up a smaller share of the total investment obtained.

- Younger VCT investee companies tended to rely more exclusively on their VCT funding than on other funding sources. This indicates that these companies had less access to other funding sources – i.e. the equity gap appeared to be higher for younger firms.

- For small VCT investees (companies with 10 to 49 employees) and VCT investees operating in professional or other service sectors of the economy, the VCT funding tended to make up a greater share of the total funding sought and obtained.

\textsuperscript{16} See Tables 4.3 and 4.4 of the Technical Annex for the relevant econometric analysis.

\textsuperscript{17} See the glossary for a definition of “crowdfunding”.

\textsuperscript{18} See Table 4.5 of the Technical Annex for the relevant econometric analysis.
- VCT funding appeared to be easier to obtain when either relatively small or large amounts of total funding were being sought (i.e. under £100,000 or above £1 million sought across all finance sources). While this may be due to greater demand for funding within this range, such that a greater number of investees are competing for investment, supply-side explanations are also viable. The smallest total investments tended to come from multiple funding sources, suggesting a wide range of willing investors were available in these cases. For the largest investments, previous research suggests there are typically greater economies of scale in transaction costs, again making venture capital investors more willing to invest at these levels.\(^{19}\)

How essential are the schemes for company funding (deadweight\(^{20}\))?  

Six in ten investee companies (62%) reported that their proposed investment would either definitely not (35%) or probably not (28%) have taken place without the tax-advantaged venture capital schemes.\(^{21}\) Just 11% felt that their proposed investment would definitely have gone ahead without the schemes.

There were no differences in deadweight between EIS and VCT investments overall, indicating that investments under both schemes were considered essential in equal measure. Further analysis\(^{22}\) of the investee survey suggests that the schemes were particularly valuable for certain types of firms.

- Deadweight increased along with company size – the smaller the firm, the more likely it was that the schemes enabled them to secure investment they would otherwise not have received.

- Investments towards working capital or towards business expansion were associated with statistically significantly lower levels of deadweight. This reflects that firms attempting to expand typically have a harder time securing investment. They can be caught in a liquidity trap, as the costs of expansion precede any increase in revenue – this is precisely the point at which external financiers are least likely to provide additional capital as future revenue streams are discounted at a high rate and are uncertain.\(^{23}\)

- Deadweight was at its highest when the total amount being sought across all funding sources was under £1 million or above £5 million, and at its lowest for mid-range investment levels. This indicates that tax-advantaged venture capital schemes may be most important at bridging finance gaps for companies seeking mid-range investments. Given that VCT funding was easier to obtain when the total investment sought was greater than £1 million (see the previous section), this suggests that this venture capital scheme is already targeted where it might be most needed.

---

\(^{20}\) See the glossary for a definition of “deadweight”. For this research, deadweight was measured based on a question in the investee survey asking respondents whether they thought their investment requirement would definitely, probably not or definitely not have been met without the EIS or VCT funding.  
\(^{21}\) In cases where investees used both schemes, this calculation includes investees that said the investment would definitely or probably not have gone ahead without at least one of the schemes.  
\(^{22}\) See Table 4.6 of the Technical Annex for the relevant econometric analysis.  
Did the schemes speed up investment timing?

Further analysis was carried out among investees who said that the investment would “definitely” have gone ahead without input from the tax-advantaged venture capital schemes. It suggests that, for this subgroup of investees, the schemes had an impact on investment timing only in cases where the total investment being sought across all funding sources (not only EIS or VCTs) was particularly large, above £5 million (i.e. in these cases it resulted in investment being acquired faster than would have happened without the schemes). This indicates that the largest investment projects are more likely to be indivisible, where a firm can only proceed with the project when the total required funding is secured.

3.2 Effect on business performance

Perceived overall impact of the schemes on performance

As Figure 3.1 shows, investees overwhelmingly agreed that the investment they received through EIS or VCTs was important to the growth and development of the company and, to a lesser extent, that the investor was important in this respect. Investees who were part of a group of companies were less likely to think this, though on balance they still agreed.

Figure 3.1 – perceived overall impact of EIS and VCTs by company type

Feedback about the importance of the investor, above and beyond their financial input, also arose in the qualitative research. The more engaged EIS investors sometimes became company directors and offered advice based on their past experience in the sector. Other EIS investors said that they had no interest in getting involved, especially when they considered the investee companies to be making good progress without their help – this may help to explain why there was more disagreement around the impact of the investor in the survey.

See Table 4.6 of the Technical Annex for the relevant econometric analysis.
I became a director of one company when I began to perceive that it was in a bit of difficulty. I have some engineering skills that perhaps they need. For the other companies I invest in, I very infrequently attend meetings, even AGMs, because I perceive that they are running satisfactorily.

EIS investor

A common theme across interviews with VCT fund managers and investees was that VCTs tended to have greater involvement in the companies they invested in. They usually had representation on company boards. In some instances, they installed chairmen or finance officers to support companies, or had regular meetings with company management teams.

Effect on costs

EIS investees were more likely to say that costs increased rather than decreased as a result of their EIS investment (42% versus 7%). This was also the case for VCT investees (57% versus 12%).

Further analysis of investee survey data also finds that costs tended to increase in particular when higher total levels of investment were being sought, or when investments were being sought for business expansion. This finding is consistent with J curve effects expected among firms undertaking larger investments or seeking to expand – these firms tend to face a short-run period of disequilibrium when they reconfigure their activities.

Effect on sales and turnover

Around three-quarters (76%) of EIS investees and two-thirds (65%) of VCT investees attributed an increase of sales to their investment.

The median growth in sales among investees since receiving their investment was 0.4%. As Table 3.1 shows, this figure varied heavily depending on the scheme used and the size of the firm. While the sales growth of VCT investees was more contained, there were some EIS investees that had grown considerably (31.3% in the 95th percentile). This might reflect that EIS investees were more likely to be micro-sized companies, some of which also had especially high rates of growth versus the average.

Table 3.1 – investee sales growth rates

<table>
<thead>
<tr>
<th></th>
<th>Median</th>
<th>75th percentile</th>
<th>95th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>All investees</td>
<td>0.4%</td>
<td>1.9%</td>
<td>24%</td>
</tr>
<tr>
<td>EIS investees</td>
<td>0.6%</td>
<td>2.5%</td>
<td>31.3%</td>
</tr>
<tr>
<td>VCT investees</td>
<td>0%</td>
<td>0.2%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Micro-sized</td>
<td>1.0%</td>
<td>4.4%</td>
<td>44.4%</td>
</tr>
<tr>
<td>Small-sized</td>
<td>0.1%</td>
<td>0.2%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

25 See the glossary for a definition of “J curve effects”.
27 This was calculated using the figures investee companies gave for their turnover in the 2013/14 tax year and in 2012 (among companies that were able to give a figure for both years). Due to the absence of a counterfactual, it is not possible to attribute this growth solely to the schemes, but the data nonetheless suggest that the schemes are positively associated with turnover growth.
Further analysis\(^{28}\) shows that sales and turnover effects were dependent on sector and market geography.

- Primary, manufacturing or construction firms recorded faster sales growth. A potential reason for this could be that firms in these sectors tend to be more advanced along the path from building capacity to commercialisation when seeking investment.

- Sales growth was faster for firms operating in local or international markets, and conversely, lowest for regional or national-focused firms. In the case of local firms, this may be because local markets represent protected geographic niches for certain products and services, and the relatively small scale of the market discourages entry. In the case of international firms, this finding may reflect that international markets generally represent opportunities for significant and rapid growth.\(^{29}\)

**Effect on productivity**

Over half (58% of EIS investees and 51% of VCT investees) said productivity had increased due to their investment. Taken alongside the fact that costs increased for many investees post-investment, this productivity growth suggests that output has typically increased faster than costs.

Further analysis\(^{30}\) of investee data finds that expansion-related investments were particularly associated with productivity improvements. This is consistent with the theory that a firm’s average costs decline as they scale up their operations. Or, turned around, the finding suggests that many firms were below their minimum efficient scale of production prior to investment.

**Effect on profit**

As Figure 3.2 indicates, EIS and VCT investees generally felt the investments had made a positive impact on profit levels. VCT investees were more likely to think that the investment had adversely affected their company’s profitability (19% agreed\(^{31}\), versus 8% of all investees).

---

<table>
<thead>
<tr>
<th>Medium-sized</th>
<th>Median</th>
<th>75&lt;sup&gt;th&lt;/sup&gt; percentile</th>
<th>95&lt;sup&gt;th&lt;/sup&gt; percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0%</td>
<td>0%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Bases: 628 investees; 599 EIS investees; 69 VCT investees (40 investees included in both subgroups); 456 micro-sized (0 to 9 employees); 134 small-sized (10 to 49 employees); 32 medium sized (50 to 249 employees)

\(^{28}\) See Table 4.9 of the Technical Annex for the relevant econometric analysis.


\(^{30}\) See Table 4.10 of the Technical Annex for the relevant econometric analysis.

\(^{31}\) The subgroup figure (19%) is not shown in Figure 3.2.
3.3 Wider effects on innovation and jobs

Propensity for investees to innovate

Three-quarters (76%) of investees said they had undertaken some form of innovation as a direct result of their EIS or VCT investment, with the most common type of innovation being the development of a new product or service, as Figure 3.3 shows. The findings also show that there is a substantial degree to which innovation of products and services and innovation of new processes are complementary.

Figure 3.3 – impact of EIS and VCT investments on innovation

Q. How much do you agree or disagree with the following statements?

- % agreeing
- % disagreeing
- % neither/don’t know

Base: 628 investees

Any innovation Developed a new product or service Radical (new-to-market) innovation Developed a new process Developed a new product or service, and a new process

Base: 628 investees
Innovation impacts were more prevalent in certain cases, including among:

- primary, manufacturing, construction and professional service firms;
- micro and medium-sized businesses (for example, micro firms were 16% more likely to be creating radical, new-to-market, products or services than small firms);
- firms seeking larger total levels of investment (the size of the investment was positively related to the introduction of new technologies post-investment, the use of “cutting-edge” technologies, and to radical, new-to-market innovation); and
- firms seeking investment for business expansion (these firms were more likely to have introduced new technologies post-investment, used “cutting-edge” technologies, introduced new products or services, or had radical, new-to-market innovation).

As well as recording more innovation effects post-investment, each of these subgroups of investees also tended to operate in wider geographical markets (i.e. nationwide and international). This indicates that market reach may also be interlinked with the extent of innovation.

Job creation

Nine times as many investees said their company had grown (71%) rather than contracted (8%) in terms of employee numbers since they first sought EIS or VCT investment. Among investees whose companies had grown, nine in ten (90%) attributed at least part of their growth in employee numbers to their EIS or VCT investments.

The median growth in employment since seeking venture capital was 33%, though as might be expected – this varied considerably depending on the size of the firm before their investment. As Table 3.2 shows, the micro-sized firms that had seen the strongest growth had expanded considerably in size.

Table 3.2 – investee employment growth rates

<table>
<thead>
<tr>
<th></th>
<th>5th percentile</th>
<th>25th percentile</th>
<th>Median</th>
<th>75th percentile</th>
<th>95th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>All investees</td>
<td>0.9%</td>
<td>8.9%</td>
<td>33.3%</td>
<td>100%</td>
<td>550%</td>
</tr>
<tr>
<td>EIS investees</td>
<td>1%</td>
<td>10.4%</td>
<td>35%</td>
<td>125%</td>
<td>550%</td>
</tr>
<tr>
<td>VCT investees</td>
<td>0.7%</td>
<td>2.4%</td>
<td>9.3%</td>
<td>66.7%</td>
<td>400%</td>
</tr>
<tr>
<td>Micro-sized</td>
<td>1.6%</td>
<td>33.3%</td>
<td>75%</td>
<td>200%</td>
<td>778%</td>
</tr>
<tr>
<td>Small-sized</td>
<td>2.4%</td>
<td>4.7%</td>
<td>8%</td>
<td>13.3%</td>
<td>29%</td>
</tr>
<tr>
<td>Medium-sized</td>
<td>0.4%</td>
<td>1%</td>
<td>1.4%</td>
<td>2.4%</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

Bases: 628 investees; 599 EIS investees; 69 VCT investees (40 investees included in both subgroups); 456 micro-sized (0 to 9 employees); 134 small-sized (10 to 49 employees); 32 medium sized (50 to 249 employees)

See Table 4.7 of the Technical Annex for the relevant econometric analysis.

This was again calculated using the figures investee companies gave for the number of employees in the 2013/14 tax year and in 2012 (among companies that were able to give a figure for both years). Due to the absence of a counterfactual, it is not possible to attribute this growth solely to the schemes.
Employment growth was more widely distributed across different types of investee companies than sales growth, which tended to be concentrated among an elite group of firms. This is consistent with the idea that firms seeking to build capacity by taking on more staff intend for this to lead to higher sales in the future rather than at present.

Further analysis also found that:

- jobs growth was between 0.5% and one per cent higher in start-up related investments; and
- smaller firms created jobs at a proportionately faster rate.

3.4 Attributing outcomes to the schemes

Over four-fifths (85%) of investee companies attributed at least some of their business growth after investment in terms of employment and sales to the venture capital schemes, as Table 3.3 highlights.

Table 3.3 – perceived contributions of EIS and VCT to employment and sales growth

<table>
<thead>
<tr>
<th>Perceived scheme contribution to employment and sales growth</th>
<th>% of investees</th>
</tr>
</thead>
<tbody>
<tr>
<td>All outcomes attributed to scheme</td>
<td>31</td>
</tr>
<tr>
<td>80 to 99%</td>
<td>8</td>
</tr>
<tr>
<td>60 to 79%</td>
<td>8</td>
</tr>
<tr>
<td>40 to 59%</td>
<td>17</td>
</tr>
<tr>
<td>20 to 39%</td>
<td>11</td>
</tr>
<tr>
<td>Under 20%</td>
<td>9</td>
</tr>
<tr>
<td>None</td>
<td>15</td>
</tr>
</tbody>
</table>

Base: 628 investees

Certain firms, which were not necessarily the smallest or youngest firms, felt they benefitted from the venture capital schemes more than others. However, these perceptions must be seen in the context of evidence presented earlier in this chapter, which found that smaller and younger companies were indeed among the greatest benefactors of the schemes.

- Medium-sized firms and firms operating in the service sector were more likely to attribute a larger share of achieved growth to the schemes.
- The faster a firm grew, the less likely it was that investees attributed their employment and sales growth to the schemes.

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34 See Table 4.9 of the Technical Annex for the relevant econometric analysis.
35 See Table 4.10 of the Technical Annex for the relevant econometric analysis.
36 The speed of growth was taken as the rate of growth in employment or sales between April 2012 and April 2014, as recorded in the investee survey.
• The schemes were considered to be of greater significance to these outcomes in firms that used the funding for non-start-up related activities. This could be because the factors that determine the growth of new start-ups are much broader than those for established firms.

3.5 Effect of the 2012 changes

In 2012, various limits on EIS and VCT investments were significantly expanded, broadening the size of companies that could be invested in, and the total investment limit. A basic outline of the changes that were discussed in the surveys and in the qualitative interviews is included in Figure 3.4.

Investor perceptions of the changes

Few investors (15% of EIS investors and four per cent of VCT investors) indicated that they changed their investment profiles following the expansion in 2012.

In the qualitative interviews, investors typically said they had not paid much attention to the changes, as they tended not to invest amounts that were ever likely to exceed the old limits. They often wanted to continue investing in similar types of companies or in the VCTs that they had previously invested in, rather than diversify, as staying in areas where they had experience was considered less risky.

Investee perceptions of the changes

Investees were generally positive about the expansion, with the majority saying that they felt each of the specific changes made it more likely for companies like theirs to receive investment (Figure 3.4). In particular, as Figure 3.4 shows, raising the tax relief available for qualifying investments from 20% to 30% was considered to have considerably reduced capital constraints.

Figure 3.4 – perceived impact of 2012 expansion on investment constraints

Q. In your opinion, do you think that the following changes make it more or less likely that investors would invest in a company like yours?

<table>
<thead>
<tr>
<th>Change</th>
<th>% saying “a little/lot more likely”</th>
<th>% saying “a lot more likely”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum income tax relief raised to 30% from 20%</td>
<td>74</td>
<td>92</td>
</tr>
<tr>
<td>Maximum amount eligible for relief raised to £1 million from £500,000</td>
<td>53</td>
<td>79</td>
</tr>
<tr>
<td>£1 million single-firm investment limit for VCTs removed*</td>
<td>62</td>
<td>75</td>
</tr>
<tr>
<td>Maximum single-firm annual investment limit increased to £5 million from £2 million</td>
<td>48</td>
<td>70</td>
</tr>
<tr>
<td>Maximum eligible company size raised to 249 employees from 49 employees</td>
<td>43</td>
<td>63</td>
</tr>
<tr>
<td>Maximum eligible company pre-investment assets raised to £15 million from £7 million</td>
<td>38</td>
<td>60</td>
</tr>
</tbody>
</table>

Bases: 628 investees overall; 69 VCT investees
* This question was only asked to VCT investees.
The econometric analysis found some variations across investees’ perceptions of the changes with larger-sized firms, and those seeking larger investments tending to be more favourable.

- Service sector firms were especially likely to perceive that all scheme enhancements would be beneficial to them.

- As might be expected, firms constrained at the high end of the investment scale (those seeking in excess of £5m in total funding) were more positive about the impact of increasing the maximum annual amount of investment allowed in a single company from £2 million to £5 million.

- Again as might be expected, larger firms were more positive about the impact of increasing the limit on the size of the company receiving an investment from 49 or fewer employees to 249 or fewer employees.

VCT perceptions of the changes

In the qualitative research, VCT fund managers were consistently positive about the removal of the £1 million single-firm investment limit for VCTs. They felt that this change would enable VCTs to follow companies to later stages in their business life cycle, sticking with the same companies for future expansion projects that took them beyond the first £1 million invested. A few also suggested it might lead to VCTs investing in a wider range of companies, which would help them to diversify their portfolios and spread their risk. In this, it is important to note that, in these cases, VCT fund managers were not considering investing in riskier companies, and wanted to continue to fund companies that would generate stable returns for their investors.

One fund manager felt that the changes further helped to fill gaps in access to finance for smaller companies in niche sectors. The example given was the medical technologies sector, where they thought banks and other institutional investors would only want to invest at levels closer to £10 million, meaning there was still an equity gap for investments below that level.

Several of the fund managers also pointed out that they had previously worked around the old £1 million investment limit for VCT investees by having more than one VCT operating as part of their group and splitting investments greater than £1 million between the group of VCTs. Those spoken to felt that this had been common practice among VCTs, and the rule changes were in part seen as acknowledging this.

Concerns about expansion of EIS limits

A small group of the EIS investees and VCT fund managers interviewed expressed concerns about how the expansion had affected the investor market. They felt that the changes had given rise to new types of EIS funds that claimed to offer guaranteed returns and quick exits. These new EIS funds had led to more aggressive EIS investors entering the market and also led to changes in the expectations of existing investors, potentially making it harder for other EIS investees and VCTs to find willing investors – especially EIS investees looking for investment periods of several years.

Overall, the extent of this impact is unknown, though the survey data indicate that both schemes are still seen to be making largely positive impacts on investee companies.

37 See Table 4.11 of the Technical Annex for the relevant econometric analysis.
Conclusions

This research provides substantive evidence on various aspects of tax-advantaged venture capital schemes that suggests they are working as intended.

- The Income Tax reliefs associated with the schemes appeared to be the key driver of investors’ decisions to invest.

- The majority of investees had sought investment at least in part for start-up or product development reasons, in line with the principal intentions of the schemes, and a majority also considered the schemes to be essential in securing these investments.

- The schemes appeared on many measures to have a particularly strong impact among the smallest and youngest companies, as well as those aiming to expand, broadly suggesting they are being targeted at those most in need of investment.

Generally, investees and VCT fund managers tended to be positive about the changes to scheme limits made in 2012, suggesting these changes could potentially broaden the types of companies benefitting from the schemes. At the same time, concerns among certain groups about the impact of the changes on investor expectations should not be overlooked. However, there is not, as yet, explicit evidence to suggest that investors have changed their investment profiles following the 2012 expansion.
## Appendix A: firmographic distribution

This table shows the characteristics of investee companies that took part in the survey. Where proportions do not sum to 100%, this is due to “don’t know” responses or rounding.

<table>
<thead>
<tr>
<th></th>
<th>All (628)</th>
<th>EIS (599)</th>
<th>VCT (69)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firm size</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nano/micro (0 to 9 employees)</td>
<td>73%</td>
<td>75%</td>
<td>36%</td>
</tr>
<tr>
<td>Small (10 to 49)</td>
<td>21%</td>
<td>20%</td>
<td>41%</td>
</tr>
<tr>
<td>Medium (50 to 249)</td>
<td>5%</td>
<td>4%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Broad industry sector</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary, manufacturing and construction</td>
<td>22%</td>
<td>21%</td>
<td>38%</td>
</tr>
<tr>
<td>Retail and catering</td>
<td>14%</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td>Professional and business services</td>
<td>46%</td>
<td>45%</td>
<td>49%</td>
</tr>
<tr>
<td>All other services</td>
<td>18%</td>
<td>19%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Firm age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>6%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>2 years</td>
<td>12%</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>3 years</td>
<td>16%</td>
<td>17%</td>
<td>4%</td>
</tr>
<tr>
<td>4 to 5 years</td>
<td>18%</td>
<td>19%</td>
<td>10%</td>
</tr>
<tr>
<td>6 to 7 years</td>
<td>12%</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>8 or more years</td>
<td>36%</td>
<td>35%</td>
<td>68%</td>
</tr>
<tr>
<td><strong>Legal status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ltd</td>
<td>92%</td>
<td>92%</td>
<td>77%</td>
</tr>
<tr>
<td>Plc</td>
<td>7%</td>
<td>7%</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single site</td>
<td>82%</td>
<td>83%</td>
<td>59%</td>
</tr>
<tr>
<td>Multiple sites</td>
<td>18%</td>
<td>17%</td>
<td>41%</td>
</tr>
</tbody>
</table>
Appendix B: additional subgroup analysis

This appendix focuses specifically on how the schemes have affected access to finance among four subgroups of investees:

- research and development-intensive (R&D-intensive) businesses
- knowledge-intensive businesses
- businesses that are both R&D-intensive and knowledge-intensive
- businesses of different trading ages

As in the main report chapters, only subgroup differences that are statistically significant at the 95% level of confidence (versus the all-investee average) are commented on. Table B.1 provides indicative margins of error that can be applied to these subgroups.

Table B.1 – margins of error for investee subgroups

<table>
<thead>
<tr>
<th>Sample size</th>
<th>Confidence interval</th>
<th>Percentage point difference required (vs. all) for statistical significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>All investees</td>
<td>628 ±4 points</td>
<td>N/A</td>
</tr>
<tr>
<td>Type of investee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D-intensive</td>
<td>162 ±8 points</td>
<td>4 to 7 points</td>
</tr>
<tr>
<td>Knowledge-intensive</td>
<td>320 ±6 points</td>
<td>3 to 4 points</td>
</tr>
<tr>
<td>Both R&amp;D and knowledge intensive</td>
<td>108 ±9 points</td>
<td>6 to 9 points</td>
</tr>
<tr>
<td>Trading age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trading for 7 years or less</td>
<td>354 ±5 points</td>
<td>3 to 4 points</td>
</tr>
<tr>
<td>Trading for 8 to 11 years</td>
<td>128 ±9 points</td>
<td>5 to 8 points</td>
</tr>
<tr>
<td>Trading for 12 years or more</td>
<td>133 ±9 points</td>
<td>5 to 8 points</td>
</tr>
</tbody>
</table>

Investment size and contribution of the schemes

R&D-intensive businesses (69%) and ones that were both R&D and knowledge-intensive (73%) were more likely than average (59%) to have sought finance from outside of the tax-advantaged venture capital schemes since 2011. They were also both more likely to have sought external finance at the same time as seeking venture capital scheme funding (58% among businesses that were both R&D and knowledge-intensive, and 55% among R&D-intensive businesses overall, versus 46% on average), rather than before.

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38 Businesses were grouped by HMRC according to their Standard Industrial Classification. The knowledge-intensive classification was based on the list of knowledge-intensive sectors published by Eurostat. R&D intensity was measured through R&D tax relief claims.

39 This has been split into three bands to ensure a sufficiently robust sample size within each band: 7 years or less trading; 8 to 11 years; and 12 or more years.

40 As per the main report chapters, statistical significance calculations were carried out with the assumption that the achieved samples are representative of their target populations. Given that data are unweighted, these calculations should be considered indicative.
Out of all investees, older companies were also more likely to have sought external finance. This was the case for 56% of companies trading for 7 years or less, versus 62% of companies trading for 8 to 11 years, and 62% of companies trading for 12 years or more.

The tax-advantaged venture capital schemes tended to be a smaller proportion of the overall investment obtained for older businesses or those in R&D and knowledge-intensive industries, as Figure B.1 shows.

Figure B.1 – contribution of the schemes to total finance

Q. What proportion of your total finance was accounted for by the Enterprise Investment Scheme or a Venture Capital Trust?

<table>
<thead>
<tr>
<th></th>
<th>All investee average</th>
<th>R&amp;D and knowledge-intensive investees</th>
<th>Trading for 7 years or less</th>
<th>Trading for 8 to 11 years</th>
<th>Trading for 12 years or more</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>67%</strong></td>
<td><strong>54%</strong></td>
<td><strong>71%</strong></td>
<td><strong>65%</strong></td>
<td><strong>60%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Bases: 628 investees, 108 R&D and knowledge-intensive investees; 354 trading for 7 years or less; 128 trading for 8 to 11 years; 133 trading for 12 or more years.

Altogether, these findings may reflect that these types of businesses (that have been trading for longer or in R&D and knowledge-intensive industries) were typically seeking larger total investments than the average investee, as indicated in Tables B.2 and B.3.\(^{41}\)

Table B.2 – levels of investment sought and obtained by specialisation (to nearest 000)

<table>
<thead>
<tr>
<th></th>
<th>All investees</th>
<th>R&amp;D-intensive</th>
<th>Knowledge-intensive</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean EIS/VCT investment sought</td>
<td>£884,000</td>
<td>£1,003,000</td>
<td>£876,000</td>
<td>£1,060,000</td>
</tr>
<tr>
<td>Mean EIS/VCT investment obtained</td>
<td>£813,000</td>
<td>£911,000</td>
<td>£769,000</td>
<td>£855,000</td>
</tr>
<tr>
<td>Mean overall investment sought</td>
<td>£1,677,000</td>
<td>£2,071,000</td>
<td>£1,847,000</td>
<td>£2,234,000</td>
</tr>
<tr>
<td>Mean overall investment obtained</td>
<td>£1,434,000</td>
<td>£1,676,000</td>
<td>£1,520,000</td>
<td>£1,752,000</td>
</tr>
<tr>
<td>Mean overall funding gap</td>
<td>14%</td>
<td>19%</td>
<td>18%</td>
<td>22%</td>
</tr>
</tbody>
</table>

\(^{41}\) The figures in Tables B.2 and B.3 exclude or correct outliers in the data where investments of £25 million or more were apparently sought or obtained.
Table B.3 – levels of investment sought and obtained by trading age (to nearest 000)

<table>
<thead>
<tr>
<th></th>
<th>All investees</th>
<th>Trading 7 years or less</th>
<th>Trading 8 to 11 years</th>
<th>Trading 12+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean EIS/VCT investment sought</td>
<td>£884,000</td>
<td>£704,000</td>
<td>£1,035,000</td>
<td>£1,251,000</td>
</tr>
<tr>
<td>Mean EIS/VCT investment obtained</td>
<td>£813,000</td>
<td>£630,000</td>
<td>£972,000</td>
<td>£1,198,000</td>
</tr>
<tr>
<td>Mean overall investment sought</td>
<td>£1,677,000</td>
<td>£1,244,000</td>
<td>£2,082,000</td>
<td>£2,487,000</td>
</tr>
<tr>
<td>Mean overall investment obtained</td>
<td>£1,434,000</td>
<td>£1,018,000</td>
<td>£1,809,000</td>
<td>£2,215,000</td>
</tr>
<tr>
<td>Mean overall funding gap</td>
<td>14%</td>
<td>18%</td>
<td>13%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Across all investees and all the subgroups reported here, the distribution of investments sought and obtained (both through tax-advantaged venture capital schemes and in total) was broadly similar. That is to say, across all firms, the majority of investees were seeking investments of less than £1 million, as the histogram in Figure B.2 indicates.

Figure B.2 – distribution of overall investments sought across the sample

However, older firms trading for 12 or more years, R&D-intensive and firms that were both R&D-intensive and knowledge-intensive each had higher proportions of investees seeking total investments of over £1 million. This is evidenced by the median overall investments sought by subgroup:

- £627,500 for all investees
- £1,100,000 for R&D-intensive businesses
- £1,240,000 for R&D and knowledge-intensive businesses
- £1,225,000 for businesses trading for 12 or more years
Financing sources from outside of the schemes

As Figure B.3 illustrates, companies that were either R&D-intensive or knowledge-intensive were more likely to have used certain additional sources of finance, such as other equity finance (and, in the case of companies that were both R&D and knowledge-intensive, or simply R&D-intensive, grants). However, they were less likely to have used many of the other sources covered in the survey, which suggests they took an overall different approach to seeking finance.

Figure B.3 – external sources of finance

Q. Which of the following sources of finance did you seek in addition to tax-advantaged venture capital schemes, regardless of whether you managed to obtain the finance?

- % of all investees
- % of R&D-intensive investees
- % of knowledge-intensive investees
- % of both R&D and knowledge intensive

[Bar chart showing the percentage of investees seeking each type of finance, with categories including Non-EIS/VCT investment or equity finance, Loans or credit agreements, Bank overdraft, Non-returnable grants, Leasing or asset finance, Invoice financing, and Crowdfunding.]

Bases: 368 investees who sought external finance; 111 R&D-intensive investees; 79 R&D and knowledge-intensive investees
How essential are the schemes for company funding?

As Figure B.4 shows, companies that were R&D-intensive or knowledge-intensive were just as likely as average to report that their proposed investment would either have definitely not or probably not gone ahead without the tax-advantaged venture capital schemes. Broadly, they were also just as likely to think that their investment happened more quickly as a result of the schemes.

Figure B.4 – self-reported impacts of the schemes on investment and investment timing

Q. Would your investment activity have happened/happened later without the finance you received from a tax-advantaged venture capital scheme?

<table>
<thead>
<tr>
<th>Any self-reported impact</th>
<th>Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>% no, definitely not happened</td>
<td>0%</td>
</tr>
<tr>
<td>% no, probably not happened</td>
<td>50%</td>
</tr>
<tr>
<td>% would have happened later</td>
<td>100%</td>
</tr>
</tbody>
</table>

Among all investees

- 35% 28% 12% 25%

Among R&D-intensive investees

- 33% 33% 11% 23%

Among knowledge-intensive investees

- 36% 27% 11% 26%

Among both R&D and knowledge-intensive investees

- 31% 32% 12% 25%

Within each trading age band, the majority of investees felt that their investment activity would definitely or probably not have happened without the schemes – although the impact was felt to be stronger among younger companies (66% among companies trading for 7 years or less, versus 60% among companies trading for 8 to 11 years, and 63% among those trading for 12 years or more).
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