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# ANNUAL REPORT ON THE BUSINESS ANGEL MARKET IN THE UNITED KINGDOM: 2008/09

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Richard Harrison is Professor in Management and Director, Queen's University Management School, Queen's University of Belfast. He has previously held chairs at the Universities of Ulster, Aberdeen and Edinburgh. His major research interests lie in entrepreneurship and economic development, and specifically in the area of access to early stage risk capital: he is a leading authority internationally on business angel finance and early stage venture capital, and has worked with DTI/Small Business Service, HM Treasury, British Business Angels Association, Scottish Enterprise, European Business Angel Network, LINC Scotland and agencies in Sweden, Finland, EU, OECD, Canada (inter alia) on research and policy in the early stage capital market. He has been co-author of an annual report on the regional early stage risk capital market in Scotland since 2001, which is the most consistent and comprehensive analysis of business angel and early-stage VC investment at regional level.

They are joint co-editors of the journal *Venture Capital: An International Journal of Entrepreneurial Finance* (published by Taylor and Francis Ltd), now in its 12<sup>th</sup> year of publication.

Together they have unrivalled knowledge of the business angel market through a 20 year record of research and engagement with policy-makers and practitioners both in the UK and elsewhere. They are the leading UK-based researchers on angel finance and their work has exerted a significant influence on other research both in the UK and elsewhere. They pioneered the study of business angels in the UK. Their subsequent research has provided significant understanding of the operation of the angel market (e.g. investment returns; angel investment decision-making; the angel-venture capital interface) and influenced both policy and practice (e.g. CGT taper, investment readiness). They undertook a previous

study on behalf of the Small Business Investment Task Force which identified ways in which angel investment activity could be measured and made recommendations on the most appropriate approaches for the UK to follow. This report has arisen directly out of this prior work.

## **ACKNOWLEDGEMENTS**

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## **DISCLAIMER**

The views expressed within this Report are those of the authors and do not necessarily reflect those of the Department of Business, Innovation and Skills, HM Revenue & Customs and other Stakeholders

## GLOSSARY OF ABBREVIATIONS

ACCA	Association of Chartered Certified Accountants
BAN	Business Angel Network
BBA	British Bankers Association
BBAA	British Business Angels Association
BERR	(Department for) Business, Enterprise and Regulatory Reform
BIS	(Department for) Business, Innovation and Skills
BVCA	British Venture Capital Association
EBAN	European Business Angel Network
EIB	European Investment Bank
EIS	Enterprise Investment Scheme
ERDF	European Regional Development Fund
EU	European Union
GEM	Global Entrepreneurship Monitor
GVA	Gross Value Added
HMRC	Her Majesty's Revenue and Customs
HMT	Her Majesty's Treasury
JEREMIE	Joint European Resources for Micro to medium Enterprises
NBAN	National Business Angel Network
RDA	Regional Development Agency
VC	Venture capital (or venture capitalists)
VCT	Venture Capital Trust



## EXECUTIVE SUMMARY

### 1. INTRODUCTION

Business angels have been recognized as an important source of finance for entrepreneurial businesses for nearly 20 years in the UK and for even longer in the USA. Government in the UK has supported business angels both directly and indirectly in various ways, notably supporting business angel networks to enable entrepreneurs to more easily find investors and vice versa; tax incentives through the Enterprise Investment Scheme (EIS); and co-investment schemes. Trends in the supply of SME finance in the UK clearly imply that business angels have become even more significant over the past decade.

Despite the importance of business angels as a source of finance for entrepreneurial businesses there are no statistics which accurately measure the size of the business angel market, profile angel investments and monitor annual investment trends. This creates a huge void in small firm financing statistics particularly when contrasted with the detailed information available on other forms of SME finance (e.g. bank lending, venture capital investments).

Since the mid-1990s these considerations have prompted various organisations, most notably the Bank of England, to call for 'more robust' data on business angel investment activity. Government recognised this and in 2006 BERR commissioned a review of data sources and methodologies that could develop a robust time series on business angel investment activity in the UK.

This report is the direct outcome of that *Developing Time Series Data* report. It is intended to be the first in an annual series of reports on the business angel market and has been commissioned by the Department for Business, Innovation and Skills (BIS) on behalf of a consortium comprising HM Treasury, HM Revenue and Customs (HMRC), British Business Angels Association (BBAA), British Venture Capital Association (BVCA), LINC Scotland and Association of Chartered Certified Accountants (ACCA). It comprises two sections. The **first section** comprises an independent analysis and commentary on business angel investment activity in 2008/09 in the visible market and an estimate of the overall scale of angel investment activity. The **second section** comprises a study by HMRC of the demographic characteristics of investors claiming tax reliefs under the Enterprise Investment Scheme, Venture Capital Trusts and Community Investment Tax Relief through Self-Assessment.

## SECTION A: THE UK BUSINESS ANGEL MARKET IN 2008/09

### 2. ANGEL NETWORKS – THE VISIBLE MARKET

Most business angels (and most of their investment activity) are invisible and so virtually impossible to identify and track over time. Our ability to discern investment activity on a systematic comparative longitudinal basis is therefore restricted to the visible market - angel networks and other portals (such as business angel syndicates) through which angel investment is channelled. The analysis reported in this Chapter is based on responses from 20 of the 24 networks that are members of the British Business Angels Association. In 2008/09 a total of 233 businesses raised a total of £44.9m from investors registered with these networks. A total of 590 investors participated in these investments. The average (mean) investment was £192,634 and involved 2.5 investors. Investors associated with LINC Scotland invested £17.9m in 74 deals. Thus, in the UK as a whole £62.8m was invested by angel investors registered with BBAA members or with LINC Scotland in 2008/09.

The current population of BBAA networks comprises a mix of long-established and more recently established organisations: 42% of networks were established prior to 1999. They are typically funded through a combination of fees and sponsorship, with most having a range of different revenue sources. The majority of networks derive income from entrepreneurs, angels and success fees. Networks undertake a wide range of activities to facilitate investment activity, notably company presentation events at which entrepreneurs 'pitch' for money. Most also produce newsletters or information bulletins, run investment clubs or other types of meetings which enable angels to network with one another, and have a database of contacts. More than half run training and capacity events for investors, hold investor forums and fairs and support investor syndicates.

The 20 networks which provided information reported a total of more than 5,500 registered business angels. Only 3% of network members were women. The distribution of registered angels was highly skewed, with four networks – all large, national, commercially oriented networks, each with over 500 members - accounting for 67% of the total. The median network had 123 investors. Turnover of angels was quite significant, with 1,700 angels (31%) joining during the year and 473 (9%) leaving.

The networks received a total of 8,685 business plans during the year. Here again the distribution was skewed, with four networks accounting for 66% of the total. The median was 220. A total of 824 companies were presented to investors, equivalent to 1 in 10 of business plans received. There were 233 companies which raised investment through these networks, comprising 28% of those companies presented to investors but just 2.8% of all the business plans that they received. In the majority of networks, the average amount raised from angels registered with the network (excluding investment from co-investors) was under £200k, confirming that these networks continue to mobilise risk capital in that part of the market most often thought to suffer from an equity gap problem. There is little correlation between those networks attracting the most business plans and those doing the most deals.

### **3. ANGEL NETWORK INVESTMENT ACTIVITY**

This Chapter is based on deal-specific information from 20 members of the BBAA covering a total of 225 (out of 233) individual investments made by their registered investors in 2008/09. Aggregated data in the same tabular formats was provided by LINC Scotland for 74 investments.

The markets in Scotland and the remainder of the UK are organised differently so the data are presented separately. The networks which provided information to BBAA operate on the basis of 'introducing' investors to entrepreneurs seeking finance, for example through presentation events, newsletters, databases, etc, and then step back from the process to let investors find investment opportunities that interest them and then try to negotiate a deal with the entrepreneur. LINC Scotland is mainly supporting organised angel groups rather than individual angels and so the investments that they report are almost exclusively made by angels investing as members of angel groups.

Particularly in the organised and visible part of the market, angels often invest alongside other investors, such as banks, venture capital funds and, increasingly, co-investment funds. Hence, it is important to differentiate between the amounts invested by business angels registered with the networks and the overall deal size. Overall deal sizes range from less than £25,000 to over £1m. Deals made through LINC Scotland are larger.

Angels who have invested through BBAA networks were the sole investors in 58% of these deals. In the remainder of the deals the share of total investment contributed by angels ranges from less than 10% to over 75%. The picture is very different in Scotland where only 8% of deals solely involved angels. In the remainder, angels accounted for between 25% and 75% of the total deal.

It follows from the extent of co-investing that the amounts invested by angels are smaller than overall deal sizes. In deals made through BBAA networks, angels invested less than £200,000 in two-thirds of cases, and invested less than £100,000 in half of all cases. At the other extreme, just 8% of businesses raised more than £500,000 from business angels. Here again there were contrasts with Scotland, where there were relatively fewer angel investments over £500k and slightly more in the £50k to £200k range.

However, this exaggerates the amount invested by *individual* angels in a single investment. This is because angels registered with the same network sometimes invest together in the same deal. Just under two-thirds of the investments made through the networks involved more than one angel investor, and that one in five of all investments involved five or more angel investors. Information on the amounts invested by *individual* angels is not available.

Over half of the companies raising finance from BBAA network investors were doing so for the first time, with a further 23% having previously raised one round of finance from network investors. At the other extreme, 6% of companies had raised at least five previous rounds of finance from network investors. Scotland again provides a contrast. First round investments accounted for only 32% of the total whereas investments in companies that had raised three or more previous rounds accounted for almost one third of all investments, compared to less than 12 per cent in the rest of the UK.

Investments by business angels through BBAA networks are largely concentrated at the start-up and early stage/early growth stages. These stages account for 69% of all investments. Scottish business angels are even more focused on start-up and early stage/early growth investments, which account for 88% of investments.

Just over half of the investee businesses of BBAA investors have fewer than five employees and 87% have 10 or fewer employees. Investments made through LINC Scotland are also skewed towards small companies but to a lesser extent (40% with less than 5 employees; 72% with less than 10 employees). Indeed, more than one-quarter of the investee companies of LINC Scotland investors had more than 10 employees. This is consistent with the bigger deals sizes that LINC Scotland investors participate in and the higher proportion of follow-on investments made.

The majority of the investments made through BBAA networks are concentrated in technology sectors, accounting for 65% of all investments, notably software/IT/Internet/telecoms and medical/healthcare/pharma/biotech. However, reflecting the diversity of angel investments, several companies in business services, manufacturing, property development, creative industries, retail and tourism/hospitality have also raised finance from business angels. LINC Scotland investors have invested in a narrower range of sectors, with technology businesses accounting for 90% of their investments.

The Scottish market is distinctive - deals are larger, there is more co-investment activity, more follow-on investing and larger investee companies. This is attributable to the different institutional structure and organisation of the market in Scotland – notably the greater prominence of angel groups and presence of the Scottish Co-investment Fund.

#### **4. ANGEL SURVEY**

Further evidence was obtained from a short questionnaire survey of individual angels. Questionnaires were distributed via various intermediaries, including networks and accountancy practices and at various events associated with the national business angel awareness campaign. The survey attracted responses from 153 business angels.

One-quarter of respondents had not made any investments in the 2008/09 tax year. The number of angels is therefore not a good indicator of the market as a significant minority may be inactive – in the sense of not making any new investments – in any particular year. Amongst those who had invested, amounts ranged from less than £10,000 to over £500,000. However, more than three-quarters had invested between £10,000 and £75,000.

Just under two-thirds of respondents had made at least some of their investment through networks and one-quarter had used networks for all of their investment. The visible market, as profiled in Chapter 3, clearly comprises only a proportion all informal investment activity. Indeed, many of the angels who invest through networks also invest in the invisible market.

Just over half had invested at least partly through angel syndicates. One-quarter invested entirely through angel syndicates.

The majority of active investors (76%) had used the Enterprise Investment Scheme (EIS) for at least some of their investments. However, only one-third had channelled all of their investments through the EIS. These tended to be smaller investors investing less than £50,000 in the year. Larger investors were more likely to use the EIS for some of their investments. Thus, there is a significant proportion of the market that operates independently of the Scheme.

#### **5. ANGEL MARKET DYNAMICS**

As the first attempt to examine angel investment activity in the UK, the analysis presented in this report has, of necessity, been a static one. We put this picture of angel investment activity in the UK in 2008/09 into some kind of comparative context in two ways. First, LINC Scotland has made available some key statistics on an annual basis for each year since 2000/01 which highlights some important trends. Second, we compare the evidence on the visible market based on investments made through angel networks with equivalent information collected on behalf of BBAA's predecessor (NBAN) on investments made through networks.

In the case of Scotland the market has become more organised as a result of the emergence of angel syndicates. However, it is worth emphasising how recent this process has been. There were just two syndicates in 2000/01 compared with the current total of 19. This growth can be largely attributed to LINC Scotland's catalytic role combined with the Scottish Co-Investment Fund, which was designed with a specific remit of helping the angel market in Scotland develop, and has been correspondingly attractive to angel groups.

Between 2000/01 and 2008/09 investment activity in Scotland has increased overall, except for a downward dip from 2001 to 2003, recovery from which reflects both post-crash upturn and the impact of the Co-Investment Scheme which came on stream in 2003. The number of deals has gone up from 31

to 74 (+44, 139% increase). The amount invested by business angels has gone up from £6.7m to £17.9 (+£11.2m, +168%). Overall deal size has increased from £7.2m to £27.6m (+£20.4m, +285%).

Comparing investment activity in the visible market in 2008/09 (BBAA networks and LINC Scotland) with equivalent data for 2000/01 reveals the following trends.

First, investment activity has increased. The number of investments has increased from 217 to 307 (+41%). Total deal value has increased from £49.6m to £123.2m (+148%) while the amount invested by angels has risen from £30m to £62.8m (+109%). Consistent with the LINC Scotland evidence, the share of the overall deal contributed by angels has fallen from 60% to 51%.

Second, and reflecting the previous point, co-investment has become more significant. The number of angels investing in each round has also increased. The number of investments with a single angel has fallen from 73% to 39%, the proportion with two angels has increased marginally from 15% to 18% while the number involving more than five angels has gone up from 4% to 17%.

Third, the amounts invested by registered angels per deal has also increased. The proportion investing less than £50,000 per deal has declined from 41% to 26%, the proportion investing between £51,000 and £100,000 has remained the same at 24%, while the proportion investing over £100,000 has gone up from 34% to 50%.

Fourth, the focus of angels on start-up and early stage deals remains unchanged. The proportion of seed investments has gone from 2% to 3%, start-ups have gone from 28% to 27% and the early stage has increased slightly from 37% to 42%.

Finally, the significant commitment of angels to investing in technology businesses has become even stronger, rising from 44% to 69%.

## **6. MARKET SCALE ESTIMATES**

Finally, we make an attempt to extrapolate from the visible market to estimate the overall size of the market. In view of the different processes used to collect data for Scotland and the remainder of the UK, and the differences in the structure of the business angel markets discussed in earlier Chapters, we estimate the scale of the business angel market in Scotland and the rest of the UK separately.

LINC Scotland estimates that their members are aware of only around 35% of identified business angel deals, equivalent to approximately 43% of companies receiving business angel investment in Scotland in 2008. Assuming no differences in the size distribution of investments made through LINC Scotland and otherwise, this suggests that total business angel investment in Scotland may be in the order of £51m.

For the rest of the UK, we have to scale up the information reported by BBAA members to take account of the following: (i) non response by four BBAA members: we assume they are typical of the networks which did report; (ii) investments made by members of BBAA networks that are not channelled through networks – the angel survey in Chapter 4 indicates the scale of such investing; (iii) investments made by angel investors who are not members BBAA networks – based on an earlier study we assume only 20% of angels are members of angel networks. Scaling up the BBAA data reported in Chapter 2 to take account of these three sources of under-counting gives an estimate for the scale of the market of

£375m. Adding the grossed-up estimate of £51m for Scotland, produces a final overall estimate for angel investment activity in the UK in 2008/09 of £426m.

## **SECTION B. SPECIAL TOPIC**

### **DEMOGRAPHICS OF ENTERPRISE INVESTMENT SCHEME, VENTURE CAPITAL TRUSTS AND COMMUNITY INVESTMENT TAX RELIEF**

HMRC: Knowledge Analysis & Intelligence (Direct Business Taxes team)

Date: February 2010

#### **EXECUTIVE SUMMARY**

The following paper provides a summary of an analysis of the Enterprise Investment Scheme (EIS), Venture Capital Trusts (VCT) and Community Investment Tax Relief (CITR) based on those investors claiming the tax reliefs through Self Assessment (SA).

The aim of the analysis is to fill a gap in our knowledge of investors, their motivations and behaviours. This will allow better evidence based policy to be developed.

The analysis compares investors benefiting from the schemes (the claimant populations) with the wider SA populations. This results in a number of new key findings being presented in this paper. The findings will be of interest to those connected to EIS, VCT or CITR either from an analytical and policy interest or an investment perspective (for example, the business angel community outside government). In particular they will be useful to HMRC Knowledge Analysis and Intelligence and Business Customer Unit, to the Treasury, Department for Business Innovation and Skills (BIS) and to their Business Angels Working Group (including the British Venture Capital Association, British Business Angels Association and Association of Chartered Certified Accountants).

The overall findings of the analysis, evident across numerous areas, show there to be:

- clear differences between the claimant and SA populations

More detailed findings show that claimants generally:

- are middle aged, male and married;
- are UK resident and domiciled, living in the South of England;
- are employed, and if not employed, in partnership rather than being sole-traders;
- have more 'schedules' completed as part of their tax returns reflecting their varied business interests; and

- have much higher overall income levels than the SA population, including larger amounts of company dividends.

In conclusion, whilst this paper does not make any particular recommendations for policy, it does pave the way for further analysis to be done in this area and for further collaborative work to be continued with the business angel community. In addition, every effort has been made to ensure no errors and omissions, however in providing this note for publication it cannot be guaranteed.

# 1. INTRODUCTION

## 1.1 Context

A business angel is an individual, acting alone or in a formal or informal syndicate, who invests their own money directly in unquoted businesses in which there is no family connection in the hope of financial gain and who, after making the investment, takes an active involvement in the business, for example, as mentor, adviser or member of the board. Where an investment involves a group of angels then only one of the investors may play this active role. As such, business angels are distinctive from friends and family, so-called 'love money', which is generally not invested for commercial gain or adds value.<sup>1</sup>

Business angels have been recognized as an important source of finance for entrepreneurial businesses for nearly 20 years in the UK and for even longer in the USA.<sup>2</sup> Academic studies, media reports and case studies that have emerged since the early 1990s have all pointed to business angels being the major source of equity finance for new and emerging businesses seeking amounts of under £250,000. These studies also noted that business angels are widely distributed across the country and so this source of funding is available regardless of location. Finally, business angels were shown to be a source of 'smart money', playing an active role in their investee businesses by putting their business or entrepreneurial experience, knowledge and contacts at the disposal of the entrepreneurs that they finance.

Government in the UK was quick to recognize the importance of business angels and the benefits of supporting the development of the market. First, in order to address information inefficiencies arising from the invisibility of business angels which makes it difficult for entrepreneurs to find investors and vice versa, Government, in 1991, funded a number of 'informal investment demonstration projects' which connected angels and entrepreneurs. Whilst some business angel groups have existed in the UK for nearly 30 years, this initiative led to the establishment of business angel networks (BANs), as they subsequently became known, by several Business Links, and in turn by the English Regional Development Agencies (RDAs) and by the development agencies in Scotland and Wales. Second, the Enterprise Investment Scheme (EIS), introduced in 1994, is designed to help small risky businesses raise finance through offering tax reliefs to investors in those companies. Such investors may include business angels. Third, and most recently, co-investment schemes, which have been established by central government and Regional Development Agencies (RDAs) as the latest approach to addressing the equity gap, rely to a large extent on partnering with business angels.<sup>3</sup> These include the UK Early

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<sup>1</sup> Unfortunately this key distinction has been lost in some recent studies of 'informal investment', based on Global Entrepreneurship Monitor (GEM) data, which do not differentiate investments by business angels and those by family and friends (e.g. Bygrave et al, 2003; Maula et al, 2005).

<sup>2</sup> The first research on UK business angels was conducted as part of the ESRC Small Firms Research Initiative between 1989 and 1991, with findings published in both the academic and non academic literature from 1991 onwards. Academic publications include the following: Harrison and Mason, 1992; Mason and Harrison, 1992; 1993; 1994; 1995. Independently of this research a report by ACOST (1993) on the constraints encountered by growing firms drew attention to the importance of business angels as a source of early stage venture capital in the USA. See Mason and Harrison (2008a) for a review of the literature of business angel investing in the UK and elsewhere.

<sup>3</sup> Pierrakis and Mason (2008)



Growth Funds in England and the Scottish Co-Investment Fund, which were established with the specific objective of leveraging angel investment.

Moreover, trends in the supply of SME finance in the UK clearly imply that business angels have become even more significant over the past decade. First, the availability of early stage finance from the institutional venture capital industry has declined. This is partly a function of the general contraction of venture capital immediately following the post-2000 technology downturn. It is also a function of low *average* returns from early stage investments. This has prompted the investment community to concentrate their investments in private equity which, at least historically, have delivered superior returns.<sup>4</sup> Public sector venture capital funds – particularly hybrid funds which have raised their money from both public and private sources<sup>5</sup> – have sought to fill this gap. However, as noted above, many of these funds operate on a co-investment basis with business angels. Moreover, they typically have an upper limit to the size of investments that they can make in individual businesses. Second, a consequence of the financial crisis is that the availability of bank finance in the period covered by this report has been significantly curtailed: there is considerable evidence from angels, reported to us by BBAA, LINC Scotland and individual networks and syndicates, that they have been seeing more opportunities as a consequence. The upshot is that angels are increasingly ‘the only game in town’ for businesses seeking smaller amounts of equity finance. Moreover, because of the contraction in the number of early stage venture capital funds, business angels now have to do follow-on funding rounds, reducing their capacity to make new investments. This creates an ongoing need to increase the pool of business angels.

## 1.2 The Need for Information

Despite the importance of business angels as a source of finance for entrepreneurial businesses, and their increasingly significant role as a focus for policy, there are no statistics which accurately measure the size of the business angel market, profile angel investments and monitor annual investment trends. This creates a huge void in small firm financing statistics particularly when contrasted with the detailed information available on bank lending to SMEs from the British Bankers Association and on venture capital investments published by the British Venture Capital Association.

Better statistics are also essential:

- to raise awareness among policy makers of the significance of business angels by demonstrating their key contribution to the supply of risk capital;
- to support the case for government spending on supporting the angel market, notably EIS tax reliefs and the costs of operating business angel networks, particularly in an era of constrained public expenditure;
- for enhancing policy responsiveness through the ability to monitor changes in the market so that government (and other organisations) can respond in an appropriate and timely manner;
- for providing angels, entrepreneurs, intermediaries and commentators/opinion formers with greater understanding of the market, thereby improving the overall connectivity of the early stage risk capital market.

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<sup>4</sup> However, whereas median returns from early stage venture capital are low, the upper quartile returns are amongst the highest.

<sup>5</sup> See Murray (2007) for an elaboration.

Since the mid-1990s these considerations have prompted various organisations, most notably the Bank of England in the annual reports on small business finance that it published up to 2004, to call for ‘more robust’ data on business angel investment activity<sup>6</sup>. This need has been accepted by Government, with the 2008 Enterprise Strategy – *Enterprise: Unlocking the UK’s Talent* – recognising the need for “improv[ed] understanding of the UK Business Angel market”.<sup>7</sup> However, as William E Wetzel jr, the pioneer of angel research in the USA, observed, the total population of business angels and the scale of their investment activity “is unknown and probably unknowable.”<sup>8</sup> This creates major challenges in gathering statistical information on angel investment activity. These challenges centre around the fundamental problem that the market is unorganised and largely invisible: angel investors cannot be systematically identified (and not all angel investors identify themselves as such) and angel investing is largely a private activity hence their investments go unrecorded. Moreover, unlike other financial markets, notably banks and venture capital, there is no single access point to the angel market (cf. BBA, BVCA). As a consequence research has been based on small, ad hoc samples, often samples of convenience, which are likely to contain biases and cannot be generalised to the wider population.

Recognition that improved information on business angel investing would be beneficial to government in developing policy to increase the availability of finance for small firms, and to stakeholders and finance providers, the Small Business Service, part of BERR, commissioned the authors in 2006 to review data sources and methodologies that could measure UK business angel activity. The objective of the study was to lay the foundations upon which a robust time series dataset can be developed to measure business angel activity in the UK. The study itself comprised four elements:

- Establishing the criteria that will define which informal investment activity will be established as business angel activity.
- Reviewing data sources currently available on the business angel market.
- Developing a methodology to collect robust time series data on the size and scope of the UK business angel market.
- Address the data collection issues.

The report, *Developing Time Series Data on the Size and Scope of the UK Business Angel Market*, was submitted in 2008.<sup>9</sup> It made four recommendations on how to measure business angel investment activity. First, it highlighted growing confusion over definitions and in particular the tendency to conflate investments by family and friends and those by business angels. The report argued that business angels were a distinct category of investors. Second, the report argued that market activity should be measured in terms of actual investments and not the number of investors. Third, based on an international review, it identified several potential approaches to measuring business angel investments. Several of these were based on building on existing data sources while other suggestions required additional survey work and so would be expensive to undertake. Finally, it argued that investment activity by business angels should be measured annually.

Developing further the recommendation to ‘build on what already exists’, the report distinguished between the visible and invisible angel markets (Figure 1.1). The UK has two visible markets which overlap. The first comprises investments that are facilitated in some way through business angel

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<sup>6</sup> Also see ACCA (2009)

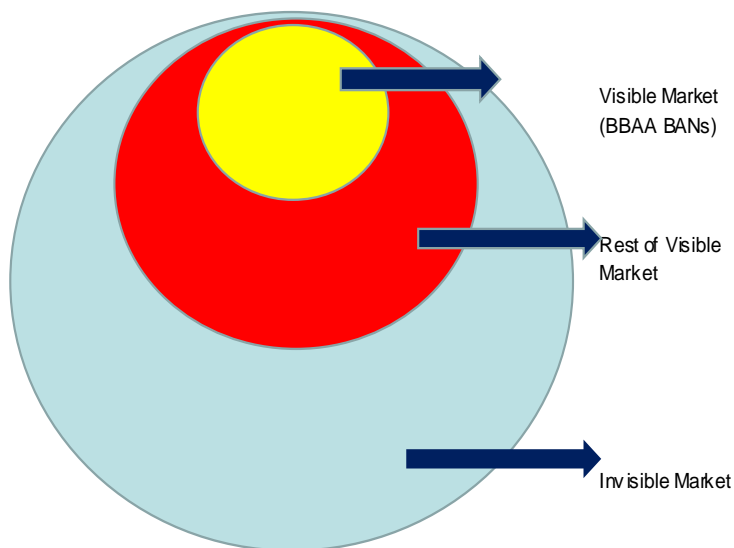
<sup>7</sup> HM Treasury/BERR (2008), paragraph4:44

<sup>8</sup> Wetzel (1983)

<sup>9</sup> Mason and Harrison (2008a; 2008b)

networks and other types of what Sohl<sup>10</sup> has termed 'portals', such as angel syndicates, and has an access point in the form of the British Business Angels Association or LINC Scotland. However, the BBAA membership does not comprise the entire visible market.<sup>11</sup> The other visible market comprises investments made using the Enterprise Investment Scheme. HMRC is able to identify from tax returns those investors who are claiming tax relief having made one or more EIS investments, and also the investee companies. However, there is only an imperfect fit between EIS investments and business angel investments. Some business angels do not use the EIS (for example, when making investments that do not meet the eligibility criteria for EIS relief), while some EIS investments would not meet the definition of a business angel investment (for example, those made through managed or pooled funds rather than directly, where the investor has no involvement in the investment decision making process on a deal by deal basis). It may be useful in future market analyses to be able to access these more detailed EIS data in order to more clearly identify business angel investors within the EIS investor group. But as the Special Report notes, as there is no specific business angels box on the Self-Assessment return, it makes identifying them very difficult. Nevertheless, the key point is that the visible market can be measured. Moreover, having measured investment activity in the visible market it may be possible to extrapolate to estimate the overall size of the angel market.

Figure 1.1 The Visible and Invisible Business Angel Market



### 1.3 This Report

This report is the direct outcome of the *Developing Time Series Data* report. It has been commissioned by BIS on behalf of a consortium comprising HM Treasury, HM Revenue and Customs (HMRC), British Business Angels Association (BBAA), British Venture Capital Association (BVCA), LINC Scotland and

<sup>10</sup> Sohl(2007)

<sup>11</sup> It must be noted that a number of these other portals would not qualify for membership of BBAA because of their constitution and modus operandi.

Association of Chartered Certified Accountants (ACCA) and, hopefully, will be the first of what will be an annual report on the business angel market in the UK. Each report will follow a common two-part structure. The **first section** comprises an independent analysis and commentary on business angel investment activity in the previous year (2008/09 in this case) in the visible market using data provided by BBAA on investment activity in their member networks, from LINC Scotland and from HMRC on the EIS. Then, using data from a new survey of individual business angels, in combination with evidence on activity in the visible market, the report provides an estimate of the overall scale of angel investment activity. The second **section** will comprise a special topic – a free-standing report which provides a detailed examination of some part of the business angel market. The special topic in this year's report is a study by HMRC of the demographic characteristics of investors claiming tax reliefs under the Enterprise Investment Scheme, Venture Capital Trusts and Community Investment Tax Relief through Self-Assessment.

Section A of this Report is structured as follows.

Chapter 2 draws upon the BBAA's survey of its member networks to provide an overview of the structure of the visible market, the supply of finance, demand for finance and aggregate investment activity.

Chapter 3, which is in many ways the core of the study, draws upon deal specific information on investments that were facilitated by the BBAA member networks or by LINC Scotland in order to provide a detailed analysis of the types of investments made by business angels.

Chapter 4 uses evidence from the survey of individual angels to comment on the wider invisible market.

As the first report in an annual series there is no scope to comment on temporal trends. However, in an attempt to provide at least some indication of market trends in Chapter 5 we compare the scale and characteristics of investment activity that were reported in Chapter 3 with similar information on network investment activity collected on behalf of the National Business Angel Network (NBAN), the predecessor organisation to BBAA, on an annual basis from 1993 to 2003. In addition, we have data from LINC Scotland covering the period since 2000.

Chapter 6 provides estimates of the overall market size, extrapolating from the survey data presented in this report and aggregated data available on EIS and from the Global Enterprise Monitor (GEM).

Chapter 7 provides a summary and makes some proposals for enhancing the exercise in future years.

This is followed by a list of references cited in the report and a statistical annex comprising a series of standard Tables that we envisage will be suitable for annual updating.

Section B of the report comprises a free-standing and unique profile of investors using the Enterprise Investment Scheme, Venture Capital Trusts and Community Investment Tax Relief that has been produced by HMRC.

## 1.4 Time Context

Before proceeding to these various analyses it is important to stress the influence of the time context on both the scale and characteristics of investment activity. The period covered in the first part of this report – the 2008/09 financial year – includes the onset and deepening of the financial crisis which pushed both the UK and world economy into recession. Based on the available evidence this is likely to have hit the disposable wealth and liquidity of many active and potential investors who will have seen losses across their investment portfolios. Meanwhile demand for angel funding is likely to have increased as a consequence of the decline in early stage venture capital and the reductions in bank lending, while exit opportunities have been limited by the scarcity of IPOs and reduced M&A activity. As a consequence angels have had to do more follow-on investing. Evidence gathered by BBAA during their regional visits in the first half of 2009 indicated that network activity was down 30-40% compared with 12 months earlier and that 30% of angels were fully invested; evidence from the EIS Association confirms that EIS investment and fund-raising activity appears to have fallen by around 25-30% in 2009.

## SECTION A

### THE UK BUSINESS ANGEL MARKET IN 2008/09

## 2. ANGEL NETWORKS – THE VISIBLE MARKET

### 2.1 Introduction

Most business angels (and most of their investment activity) are invisible and so virtually impossible to identify and track over time. Our ability to discern investment activity on a systematic comparative longitudinal basis is therefore restricted to the visible market. This comprises angel networks and other portals (such as business angel syndicates) through which angel investment is channelled, and data from surveys of individual business angels. The role of these portals is to bring greater transparency to the angel market, notably by enhancing the visibility of both investors and entrepreneurs seeking to raise finance, to facilitate investment activity through the provision of information and communication channels, to provide training to build capacity in the market, and in so doing improve the efficiency of the market.

The analysis reported in this Chapter is based on responses from 20 of the 24 networks that are members of the British Business Angels Association. This information indicates that in 2008/09 a total of 233 businesses raised a total of £44.9m from investors registered with these networks.<sup>12</sup> A total of 590 investors participated in these investments.<sup>13</sup> The average (mean) investment was £192,634 and involved 2.5 investors. To get a UK total we need to add investments by investors associated with LINC Scotland who invested £17.9m in 74 deals.

*In other words, this survey identifies a total of £62.8m invested by angel investors registered with BBAA members or with LINC Scotland in 2008/09.*

### 2.2 The Structure of the Market

The British Business Angels Association (BBAA) is the trade association for England, Wales and Northern Ireland. Its role is to promote angel investing in particular and the early stage investment market in general. It was created in 2004, replacing a previous nationally-organised network (National Business Angel Network – NBAN). It has a membership of about 100, including 24 business angel networks (BANs), 20 early stage venture capital funds and a variety of professional service providers and advisers (e.g. accountancy, law and corporate finance firms, banks, etc). LINC Scotland is the national membership organisation for the business angel community in Scotland.

The visible market in England and Wales is dominated by networks which offer a range of services (from an 'introduction service' for investors and entrepreneurs to more intensive support and training) to facilitate investment activity by improving information flow in the market and, in many cases, organising events at which entrepreneurs pitch their investment opportunity to angels. These angel networks are of two types: those that receive some public sector or quasi-public sector funding, as part of an economic development mandate; and those established by private sector organisations that operate as commercial organisations, remunerated by fees that they charge both investors and entrepreneurs and upon deal completion, with no public sector support.

However, the angel market in Scotland has evolved rather differently to its counterpart in England and Wales. In Scotland, the visible part of the market comprises privately initiated and managed angel

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<sup>12</sup> Only 19 Networks reported on the amount invested.

<sup>13</sup> Only 19 Networks reported this information

syndicates comprising groups of angels, several of whom may invest in any particular opportunity. LINC Scotland's membership therefore comprises angels operating on their own, groups and syndicates and also family offices. In other words, while the visible part of the market in England and Wales is accounted for by business angel networks and introduction services, with individual angels as members, in Scotland there has been a significant shift away from the individual investor to a more formally organised market. To illustrate, in 2002 LINC Scotland membership comprised around 300 solo angel investors and two syndicates with around 70 angel members; by 2006 there were estimated to be around 100 solo angels in Scotland and 18 syndicates with around 400 members<sup>14</sup>. Accordingly, in the remainder of this report we will comment separately, where appropriate, on angel investment in Scotland and in the rest of the UK, as well as providing national estimates of the market.

Both BBAA and LINC Scotland comprise a key part of the infrastructure of the UK business angel market, supporting investment activity, representing member interests to government at all levels and collecting statistics on the investment activity of their members. These data are subsequently fed into the European Business Angels Network (EBAN) and incorporated into its statistical compendium on BANs across Europe. For our purposes, the information on investment activity collected by BBAA and LINC Scotland from their membership provides the most systematic statistical evidence available on the visible angel market in the UK. Nevertheless BBAA data do not include internet matching services (which do not meet their criteria for network membership) nor a number of organised angel groups equivalent to those included in the LINC Scotland data.

The remainder of this chapter of the report is based on BBAA's annual survey of member networks. It covers organisational information (e.g. partner organisation, services offered, funding sources), methods of recruiting investors and entrepreneurs, number of angels registered, number of investment opportunities and investments made. Responses were obtained from 20 of the 24 networks. From this information it is possible to derive insights into the characteristics of networks, the supply of angel capital, demand for angel capital and investment activity.

## 2.3 Network Characteristics

### (a) Date of Formation

The current population of networks comprises a mix of long-established and more recently established organisations: 42% of networks were established prior to 1999 (Figure 2. 1 and Table A2.1); the earliest established network was formed in 1983 and the most recent in the survey was formed in 2008.

The number of networks has fallen from a peak of 48 in the late 1990s to 24 in 2008/09; however, it is clear that a number of the current networks (BBAA members) demonstrate significant longevity, some of them reflecting in part the long-term impact of the initial Government-sponsored initiatives to establish networks to catalyse the development of the business angel market in the UK<sup>15</sup>.

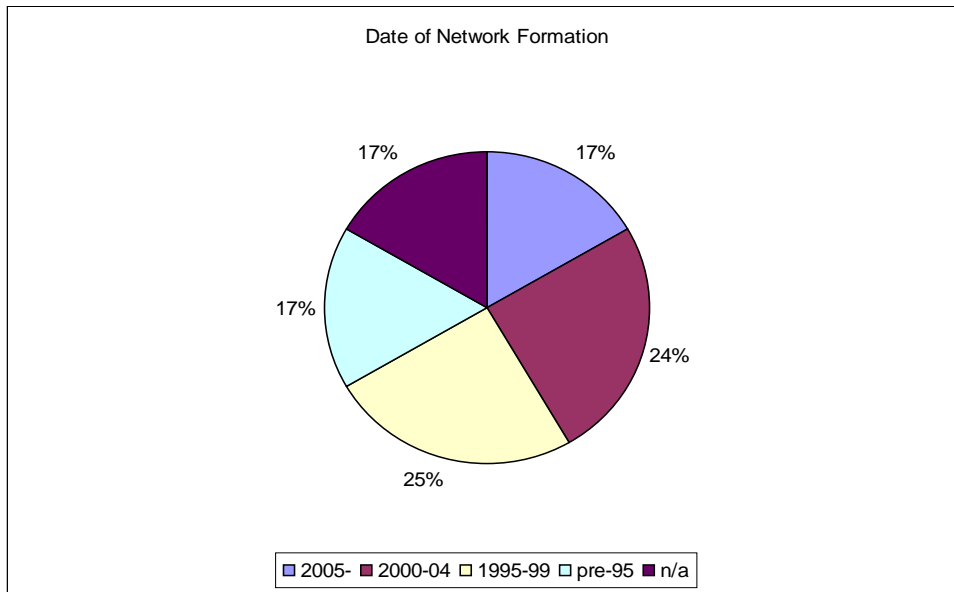
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<sup>14</sup> Grahame (2007)

<sup>15</sup> Harrison and Mason (1996a)



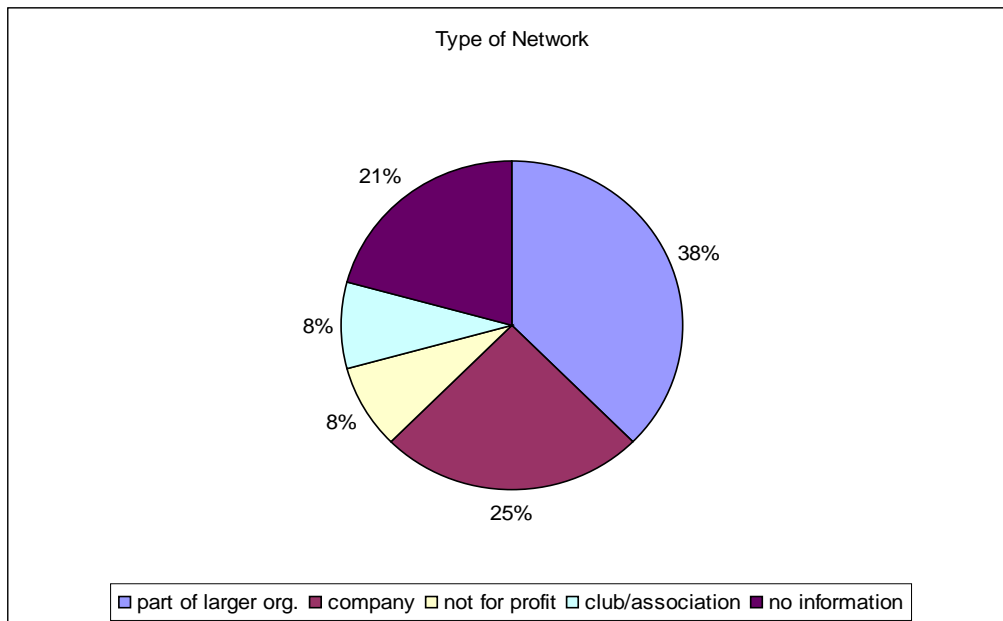
Figure 2.1 Date of Network Formation



(b) Organisational Structure of Networks

Most networks are part of larger organisations (38%) or have separate company status (25%) (Figure 2.2 and Table A2. 2),<sup>16</sup> and only 21% are organised on a not-for-profit or investment club/association basis.

Figure 2.2 Type of Network: Organisational Structure



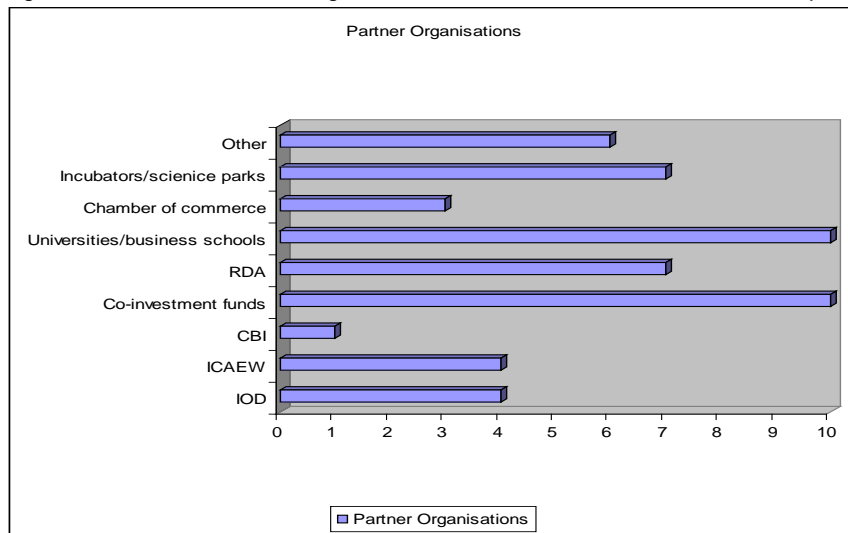
<sup>16</sup> However, it is not possible from the responses to classify organisations as being either private sector, public sector or third sector.

(c) Partner Organisations for BANs

The majority of networks operate in conjunction with a wide range of partner organisations (Figure 2.3 and Table A2.3). These include professional bodies and associations (including the Institute of Directors, Chambers of Commerce and the Institute of Chartered Accountants in England and Wales), who may provide access to professional services and advice to networks and provide channels for the referral of potential investors and companies to the networks. For other partners, notably universities/business schools and business incubators and science parks, partnership with networks provides opportunity to identify and access investment capital for spin-out/occupant businesses which would otherwise be problematic for science and technology based new ventures<sup>17</sup>.

Finally, reflecting the evolution of the early stage risk capital market in the UK, co-investment funds have been developed in most RDA regions to leverage private investment capital into new and early stage ventures (these funds are either BIS Early Growth Funds – established from 2002 directly as angel co-investment funds, to stimulate the angel community, support syndication and leverage investment around lead angels in deals - or ERDF-supported co-investment funds – generally established by RDAs to leverage private sector matched funding but with no specific remit to stimulate, leverage or develop the angel investment market). It is clear that business angel networks and co-investment funds are now working in partnership, which is likely to increase the leverage of business angel investment in the same way as the experience in Scotland. There, co-investment has allowed business angel investors (through syndicates) to make more investments, make larger investments and follow-on their investments in subsequent rounds, thereby filling at least part of the gap left by the retreat of formal venture capital from the lower end of the risk capital market<sup>18</sup>. (Figure 2.3 and Table A2. 3).

Figure 2.3 Partner Organisations for Networks (number of respondents reporting partner)



(d) Commercial Status of BANs

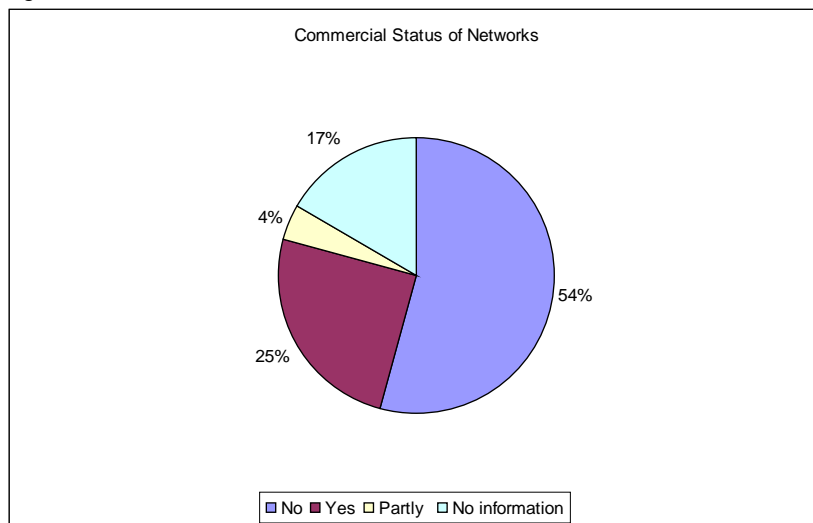
We noted earlier (see Figure 2.2) that only a very small proportion (16 per cent) of networks are organised on a not for profit or investment club basis. However, over half (54%) of respondents

<sup>17</sup> Harrison and Leitch (2010); Wright et al (2006)

<sup>18</sup> Targeting Innovation (2009); Glancey et al (2008)

reported that they are not organised and operated as a commercial venture, compared with fewer than 30 per cent of networks describe themselves as being commercially-oriented in whole or in part (Figure 2.4 and Table A2. 4). These commercial ventures tend to be the larger nationally operating networks. One operational benefit of being a non-commercial network, of course, is that it provides an exemption from regulation under financial services legislation, which simplifies the operation and functioning of the network.

Figure 2.4 Commercial Status of Networks



(e) Network Size and Scale

Most networks are small: half have three or fewer employees and only four have more than six employees (Figure 2.5 and Table A2.5). Most networks (14) have a regional focus – just six operate nationally, and just one has a sector specific focus (creative industries). Given the range of services provided by networks (see below), the generally small scale of most networks, and the constraints imposed by restricted deal flow and available investors at the regional scale, may represent a capacity constraint on their ability to fully meet the needs of both investors and companies using their services<sup>19</sup>.

(f) Sources of Funding for Networks

Networks are typically funded through a combination of fees and sponsorship, with most having a range of different revenue sources. The majority of networks derive income from entrepreneurs, angels and success fees. The median (that is, the most commonly charged) fee for an entrepreneur is £375 and £187.50 for investors. The typical success fee is 5% of the amount invested - this rate is charged by two-thirds of those networks with success fees. Only a minority of networks receive funding from RDAs or EU (six and three respectively) (Figure 2.6 and Table A2. 6).

<sup>19</sup> The small size of networks, in terms of staffing, and its implications, is not just a feature of the UK: in the US the Angel Capital Alliance increasingly uses its annual and regional meetings to address the capacity building issues through education, training and sharing of best practices in angel investing.

Figure 2.5 Size of Networks: Number of Employees

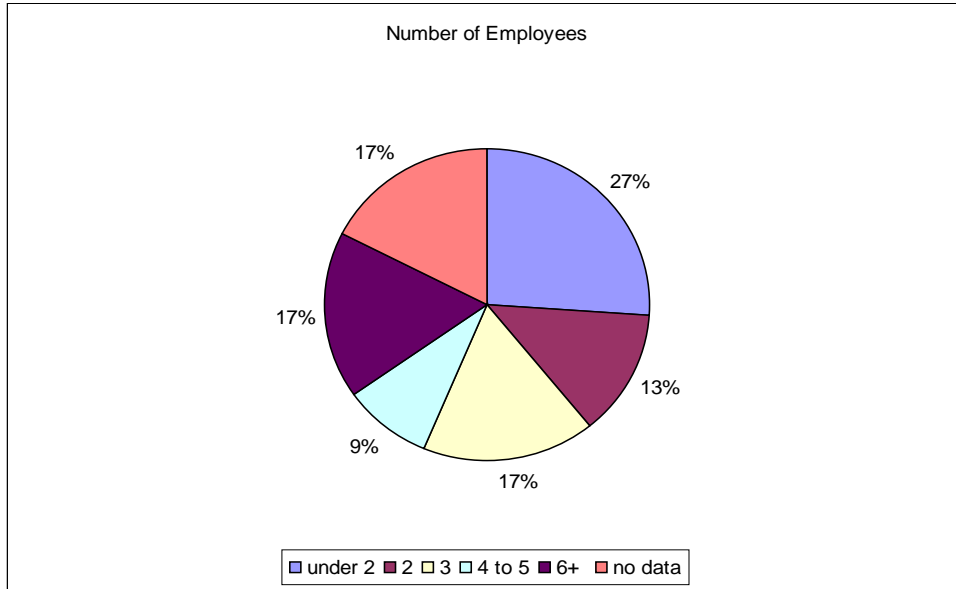


Figure 2.6 Sources of Funding for Networks

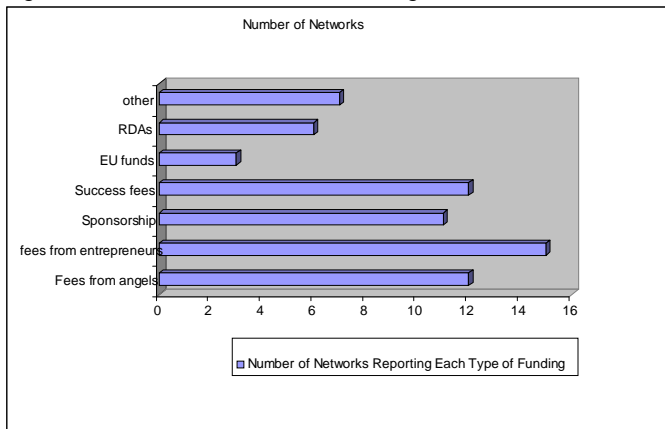
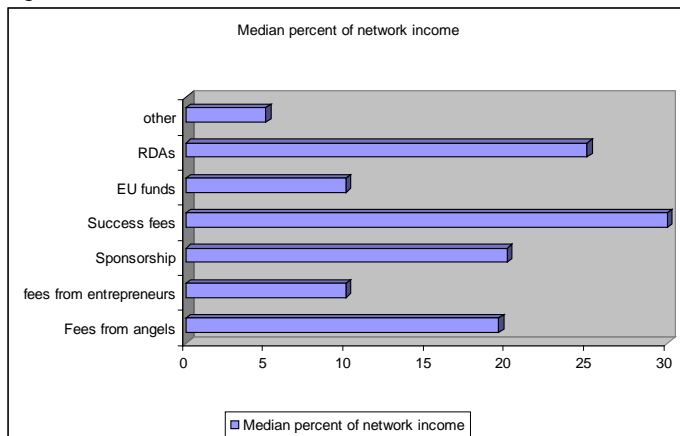


Figure 2.7 Sources of Income for Networks

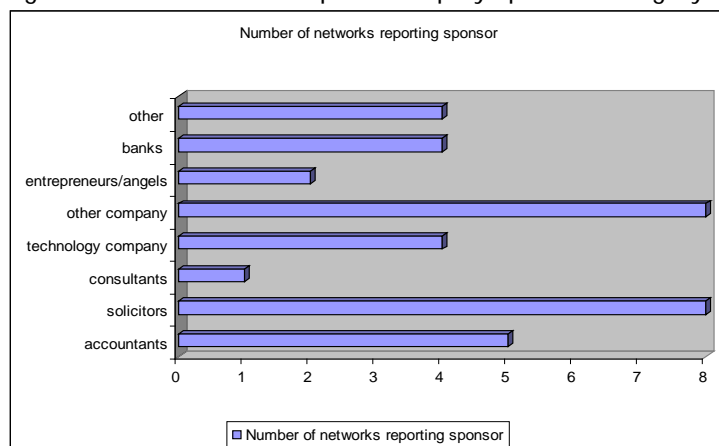


No single source of income is dominant. Based on the median responses, networks rely (in descending order of importance) on success fees, RDA funding (where they receive it), sponsorship, fees from angels and fees from entrepreneurs (Figure 2.7) for their income. The evidence points clearly, therefore, to a mixed-model of funding: for those networks levying success fees they typically provide only 30% of the network's total income, and sponsorship typically represents around one fifth of income.

(g) The Role of Sponsorship

A majority of networks (11 of the 16 reporting data on this topic) receive income from an average of three sponsors each (Figure 2.8 and Table A2. 7) and a minority (six) attract event-specific sponsorship. Sponsors range from the professional service providers (accountants, solicitors), for whom the association provides visibility and potential client leads, and corporate sponsors (technology and other companies), to banks and entrepreneurs. It is clear from these data that this sponsorship is central to the on-going operation of networks (linked in most cases to specific activities such as events) and helps support the provision of services beyond the levels underpinned by angel, entrepreneur and success fees alone. It remains the case, however, that an appropriate level of core funding is required to maintain the ability of the network to deliver services effectively to investor and company stakeholders. Given that previous analyses have suggested that there is unlikely to be a sustainable business model to support the operation of an effective business angel network based on fee income alone<sup>20</sup>, maintaining effective on-going links with sponsors is vital to the long-term success of networks in the UK.

Figure 2.8 Network Sponsorship by Sponsor Category

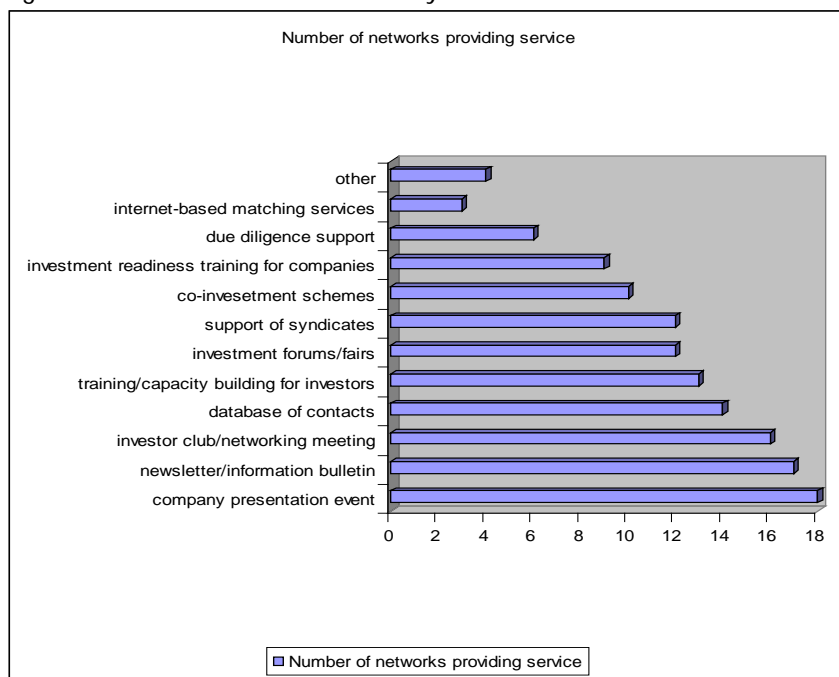


(h) Services Provided by Networks

Networks undertake a wide range of activities to facilitate investment activity (Figure 2.9). Almost all have company presentation events at which entrepreneurs 'pitch' for money. Most also produce newsletters or information bulletins, run investment clubs or other types of meetings which enable angels to network with one another, and have a database of contacts. More than half run training and capacity events for investors, hold investor forums and fairs and support investor syndicates. Half run co-investment schemes. However, although almost all networks provide support for businesses selected to pitch to investors (e.g. presentation support, advice about the investment process, preparation of investment propositions) fewer than half run formal investment ready schemes for entrepreneurs/companies or provide advice on the due diligence process for angel investors.

<sup>20</sup> Harrison and Mason (1996b)

Figure 2.9 Services Provided by Networks



## 2.4 Supply side evidence: angels registered with Networks

### (a) Investor Numbers

The 20 networks which provided information reported a total of more than 5,500 registered business angels. This represents a decline from the 7000 or so angel investors reported as network members in 1999<sup>21</sup>, which will reflect, at least in part, the rationalisation in the number of active networks in the UK outside Scotland that has occurred since around 2000. However, in the absence of comparable data on the number of active angel investors who are members of formal and informal syndicates or who invest as 'solo' investors outside the network context, we cannot at this time conclude that the market has shrunk on the scale that these figures suggest<sup>22</sup>. Confirming our previous research<sup>23</sup>, only 3% of network members were women, and understanding the reasons for this and its impact on the flow of finance into women-led ventures in particular remains an important area for further investigation.

The distribution of registered angels was highly skewed, with four networks – all large, national, commercially oriented networks, each with over 500 members - accounting for 67% of the total (Figure 2.10). The median network had 123 investors.

The data suggest a clear distinction between a few large, commercially-focused and national networks which identify investment opportunities and promote them to investors, and the much smaller regionally and sub-regionally focused networks that derive a significant proportion of their running costs

<sup>21</sup> BVCA Directory of BANs 1999; cited in Boyns et al (2003)

<sup>22</sup> The data from LINC Scotland cited above suggests that there has been both an expansion in the market (from around 370 angels in total in 2002 – of which 300 were solo angels – to over 500 angels in 2006 – of which only 100 or so were solo angels)

<sup>23</sup> Harrison and Mason (2007)

from the public sector (e.g. RDAs) and which comprise the majority of the population (Figure 2.11 and Table A2.11).

Figure 2.10 Distribution of Number of Investors Registered with Networks

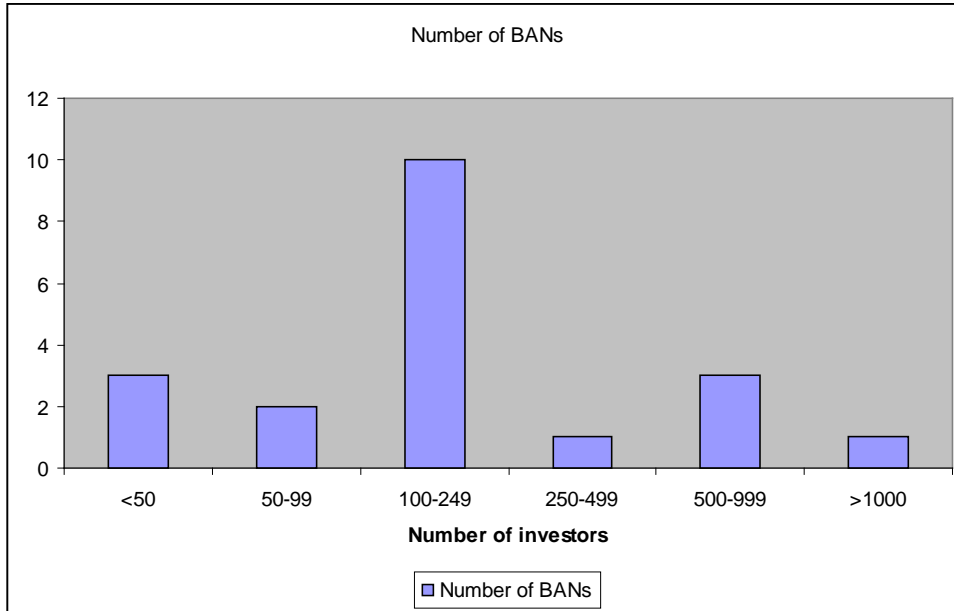
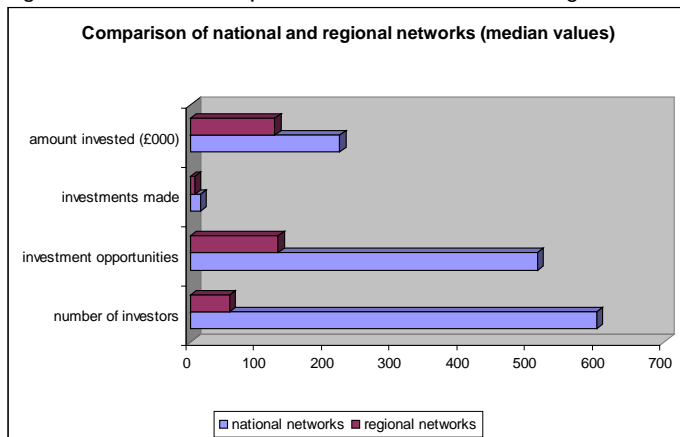


Figure 2.11 Comparison of National and Regional Networks



(b) Investor Retention and Turnover

Turnover of angels was quite significant, with 1,700 angels (31%) joining during the year (4% of whom were women) and 473 (9%) leaving. Loss rates of investors ranged from less than 5% (seven networks) to over 50% (two networks) but with a median of 5 per cent. In other words the typical network loses one quarter of its stock of investors every five years, and a proportion of those investors who remain with the network will not have the liquidity to actively pursue investment opportunities.

This is an important characteristic, as it confirms that an effective business angel market rests on the continual inflow of new angel investors. These are either first-time investors or experienced investors returning to the market as their liquidity position and investment preferences allow. They are important to maintaining liquidity in the market because existing investors may reach their investment capacity; suffer from investment fatigue as they fail to identify viable and attractive investment opportunities that meet their investment criteria; experience a lack of exits from their current portfolio; or need to spend more time on the support of companies already in their portfolio. This, in turn, has implications for the portfolio of services of networks, which are likely to have to continually invest in the recruitment, education and retention of investors and in efforts to improve the range and quality (investability) of the investment opportunities they present to angel investors members.

(c) Methods of Recruiting Investors

As in other early stage risk capital markets, networks mainly rely on word-of-mouth (17), referrals from banks and other financial institutions (11) and through current members (11) to recruit investors (Figure 2.12)<sup>24</sup>.

Figure 2.12 Information Channels Used to Recruit Investors



<sup>24</sup> The BBAA, with the support of BIS, has been pursuing a direct campaign to raise awareness and increase the pool of angel investors across the English regions during 2009-10 to supplement these usual recruitment channels. The results of this campaign are not yet available.

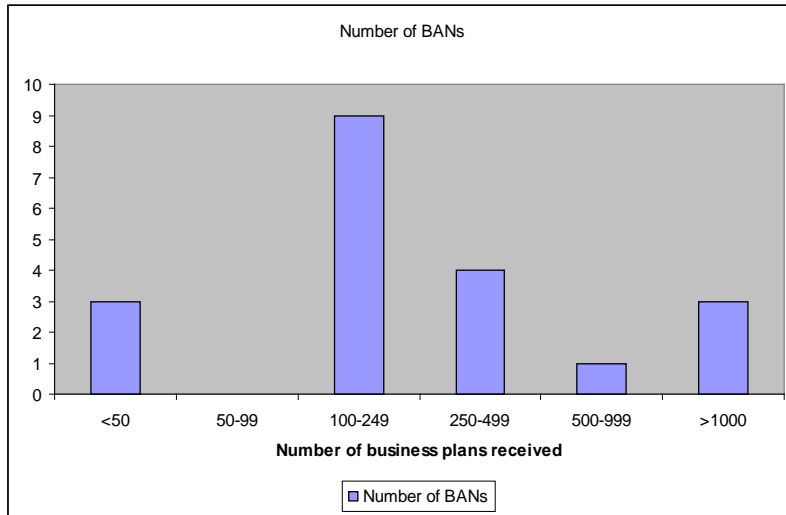


## 2.5 Demand side evidence: companies seeking finance through Networks

### (a) Business Plans Evaluated

The investment process confirms the filtering process identified in previous research<sup>25</sup>. The networks received a total of 8,685 business plans during the year. Here again the distribution was skewed, with four networks accounting for 66% of the total (Figure 2.13). The median was 220.

Figure 2.13 Number of Business Plans Received by Networks



### (b) Funding Rates for BANs

However, just 824 companies were presented to investors, equivalent to 1 in 10 of business plans received. While there are a number of reasons for not taking an opportunity forward that are not associated with its quality it does, nevertheless, suggest that the lack of investment readiness continues to be a factor limiting the availability of finance and the efficient functioning of the business angel investment market.

Table 2.1. The Demand for Angel Investment

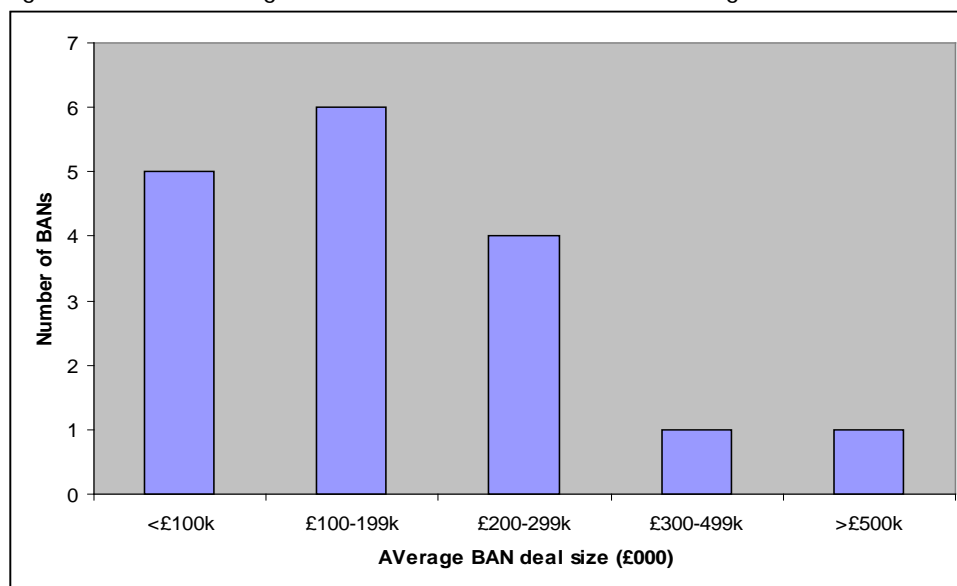
A: Number of business plans received:	8,685
B: Number of companies presented to investors <sup>26</sup> :	824
C: Number of companies attracting investment through the Network:	233
<i>Conversion rates:</i>	
The 'presentation rate' (B as a proportion of A):	9.5%
The 'success rate' (C as a proportion of B):	28.3%
The 'funding rate' (C as a proportion of A):	2.7%

<sup>25</sup> Mason and Harrison (1994)

<sup>26</sup> It is possible that business plans are submitted to and circulated by more than one network, and the reported figures may therefore overstate the number of unique plans submitted and reviewed. While detailed information is not available, discussion with network managers suggests that multiple submissions are of minor significance.

Finally, just 233 companies raised investment through these networks, comprising 28% of those companies presented to investors but just 2.8% of all the business plans that they received (Table 2. 1). In the majority of networks, the average amount raised from angels registered with the network (excluding investment from co-investors) was under £200k, confirming that these networks continue to mobilise risk capital in that part of the market most often thought to suffer from an equity gap problem (Figure 2.14).

Figure 2.14 Average Size of Investment Facilitated Through a Network



(c) The 'Efficiency' of BANs

Interestingly, there is little correlation between those networks attracting the most business plans and those doing the most deals. The four largest networks, which accounted for 67% of all business plans received, accounted for only 44% of the companies raising finance (with one network accounting for 25% of all investments). Even making allowance for one distinctive outlier case, it appears that once companies have been selected for presentation to investors there is a clear relationship between the number of companies presented and the number obtaining investment – i.e. the success rate (Figure 2.15). However, this relationship is much less clear-cut when the number of business plans received is compared with the number of companies presented to investors – i.e. the presentation rate (Figure 2.16). In other words, it appears that the key differentiation between networks is in the process used to whittle down business plans received into companies presented to investors: once they are presented, it appears that success rates in then securing finance are broadly similar.

Figure 2.15 Relationship Between Number of Companies Presented to Investors and Investments Made

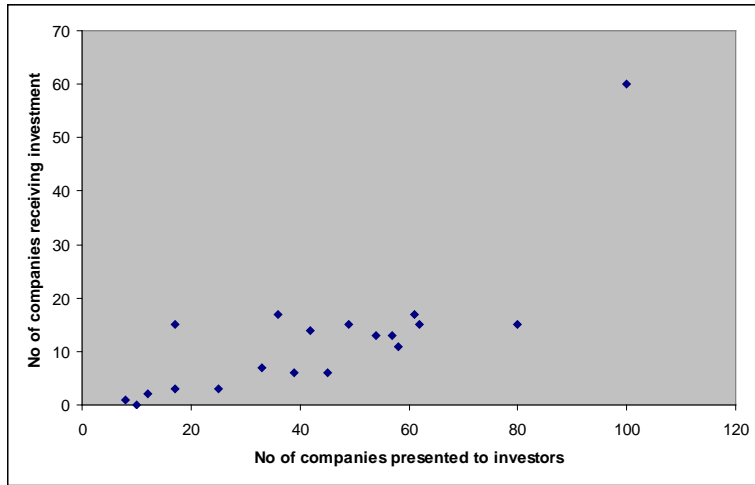
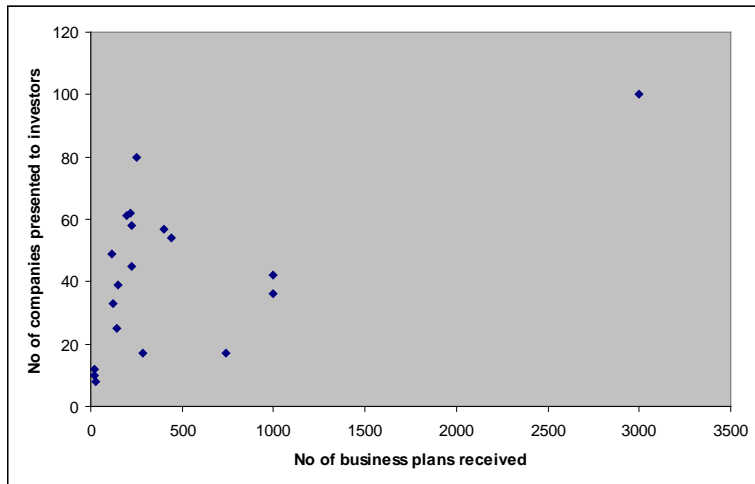


Figure 2.16 Relationship Between Number of Business Plans Received and Companies Presented to Investors



(d) The Role of Investment Readiness

One specific issue emerges from a detailed analysis of these data on business plans received, companies presented to investors and the number of companies eventually receiving investment, which suggests that there is one respect in which the success rate of converting company presentations into investments made does vary between networks. It was noted above that a number of networks offer investment readiness training as a specific service to companies. Of the 19 BANs for which data are available, eight indicate that they run investment readiness training for entrepreneurs and eleven indicate that they do not provide this service. From Table 2.2 it is clear that those networks that run investment readiness training differ from those that do not in two ways: first, they record a significantly higher rate of conversion of companies presented to investors to investments made (the success rate) (36% vs. 23%); second, they record significantly lower conversion rates from business plans received to companies presented to investors (the presentation rate) (6% vs. 15%) and business plans received to

investments made (the funding rate) (2.3% vs. 3.5%). This suggests that where a network does provide specific investment readiness training they are either more selective in the investment opportunities they present to their investors (through the work of their gatekeepers or expert committees that screen the deals) or businesses are deterred by the increased requirements made of them. In either event, these networks offering investment readiness training are, as a consequence, relatively more successful in securing investment for those companies, and the business's chance of success is greatly enhanced.

These variations suggest that there is scope for more detailed investigation of the operational dynamics of networks of various types and scales, to identify best practice as the basis for enhancing efficiencies in the market, with due recognition of variations in the operative business model, cost base and revenue streams across networks.

Table 2.2 Business Plans, Investment Presentations and Investments Made

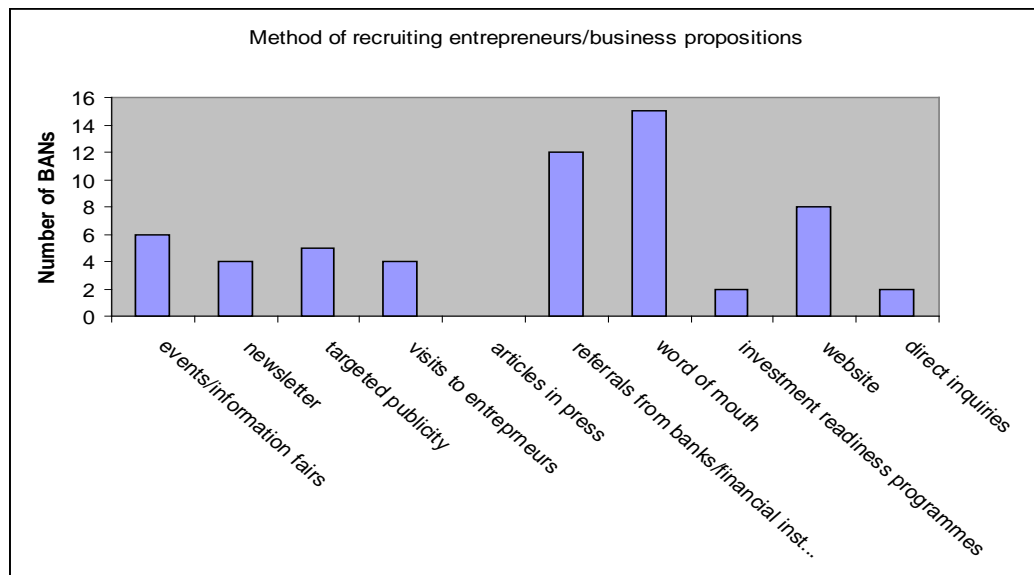
	Networks offering investment readiness training (n=8)	Networks not offering investment readiness training (n=11)	All networks (n=19)
Presentation rate (%) (ratio of companies presenting to investors to business plans received)	6.3	15.1	9.5
Success rate (%) (ratio of companies raising finance to companies presenting to investors)	35.7	23.0	28.3
Funding rate (%) (ratio of companies raising finance to business plans received)	2.3	3.5	2.7
Note: definitions of presentation, success and funding rates as in Table 2.1 above			

(e) Recruitment of Entrepreneurs/Business Propositions

Networks recruited businesses (as they do investors) mainly through word-of-mouth (15) and referrals from banks and other financial institutions (13) (Figure 2.17); this is commonplace in the early stage risk capital market<sup>27</sup>.

<sup>27</sup> For example, see Mason and Harrison (2002) for evidence on where business angels derive their deal flow.

Figure 2.17 Methods used to recruit entrepreneurs/business propositions



## 2.6 Investment Activity: Investments Made through Networks

To summarise from the survey of BANs in the UK: a total of 233 businesses raised a total of £44.9m from investors registered with the 20 networks that reported data.<sup>28</sup> A total of 590 investors participated in these investments.<sup>29</sup> The average (mean) investment was £192,634 and involved 2.5 investors. To get a UK total we need to add investments by investors associated with LINC Scotland who invested £17.9m in 74 deals. In other words, this survey identifies a total of £62.8m invested by angel investors registered with BBAA members or with LINC Scotland in 2008/09.

On the basis of these figures, it would appear that the Scottish angel market is much larger, in relative terms, than the market in the rest of the UK. The data reported by LINC Scotland represent around 29% of the UK total identified business angel investment by value, as compared to a regional share of national GVA of around 8 per cent. While it is possible that the market is indeed larger in Scotland, much of this difference may be attributable to the much higher degree of organisation and hence greater visibility of the market in Scotland, as solo angels have become relatively less important than those investing through identifiable syndicates. We discuss this further in Chapter 5.

The average investment size was skewed by three networks with average investment sizes of £246,000, £310,000 and £510,000 respectively. Two of these networks are large, nationally-focused and commercially-oriented. The median amount invested by business angels in total in 2008/09 across the networks was £166,000, and the median number of angel investors was two. The average investment by individual angel per deal in the typical network was £60,000. But here again the distribution is skewed: in the case of one network the average investment per investor is £310,000 and for another it is £637,000.

<sup>28</sup> Only 19 Networks reported on the amount invested.

<sup>29</sup> Only 19 Networks reported this information

It is important to note that the amount raised by these companies only covers the amounts invested by investors who were registered with these networks. However, as we will see below, in many cases these investors invested as part of larger deals involving other investors.

## 2.7 Summary

Two points should be emphasised in concluding this Chapter.

First, with over 300 companies across the UK raising £63m in 2008/09 from business angels registered with networks it is clear that the visible angel market is by no means insignificant. Since it is unlikely that the visible market accounts for more than half of total business angel activity – and is probably less than 20% - this suggests that business angels are making a significant contribution to the development of entrepreneurial ventures in the UK.

Second, it is important to underline the diversity of the visible market. This diversity takes several forms. There is a contrast in the types of institutions which facilitate investment. The key contrast is between angel networks which dominate BBAA membership and angel groups/syndicates which are the dominant form in Scotland, although are also found in England. Within the networks category we have a further distinction between large, commercially-focused, regulated, national networks which proactively find investment opportunities and promotes them to investors, and the much smaller regionally and sub-regionally focused networks that focus on facilitating introductions, and derive a significant proportion of their running costs from the public sector (e.g. RDAs). Although the large national networks represent a minority of all networks they dominate in terms of numbers of registered investors, number of business plans received, investments and amount invested.

In the next chapter we examine the characteristics of the investments in more detail, before developing an estimate of the overall size of the business angel market in the UK.

## 3. ANGEL NETWORK INVESTMENT ACTIVITY

### 3.1 Data Sources

The previous Chapter mapped out the broad scope of the visible angel market in the UK. In this Chapter we are able to move beyond aggregate statistics on investment activity to deal specific information. This enables us to examine investment activity in much more detail, looking at amounts invested by angels and co-investors, investments by round, stage of investments, size of investee companies and sector. The limitation is that it only covers investments made through the visible market.

The data in this Chapter come from two sources. The main source is deal-specific information from 20 members of the BBAA covering a total of 225<sup>30</sup> individual investments made by their registered investors in 2008/09. This information was provided to BBAA. Neither the names of the investee companies nor the names of the Networks associated with each deal were disclosed. This is complemented by information from LINC Scotland on all 74 investments made by their members in 2008/09. The investment specific information was not made available to us. Instead, LINC staff aggregated this information into the same tabular formats that we used to portray the information from BBAA – which, as noted earlier, does not cover Scotland.

The BBAA and LINC Scotland investment data are not entirely comparable and so are presented separately in the tables, along with the combined totals to indicate the overall UK picture. As noted in Chapter 2, the networks which provided information to BBAA operate on the basis of ‘introducing’ investors to entrepreneurs seeking finance, for example through presentation events, newsletters, databases, etc, and then step back from the process to let investors find investment opportunities that interest them and then try to negotiate a deal with the entrepreneur. The resulting investments are made by individual angel investors, syndicates of investors and ad hoc groups of angels. However, the Scottish market is very different. LINC Scotland is mainly supporting organised angel groups rather than individual angels and so the investments that they report are almost exclusively made by angels investing as members of angel groups.

### 3.2 Amounts invested

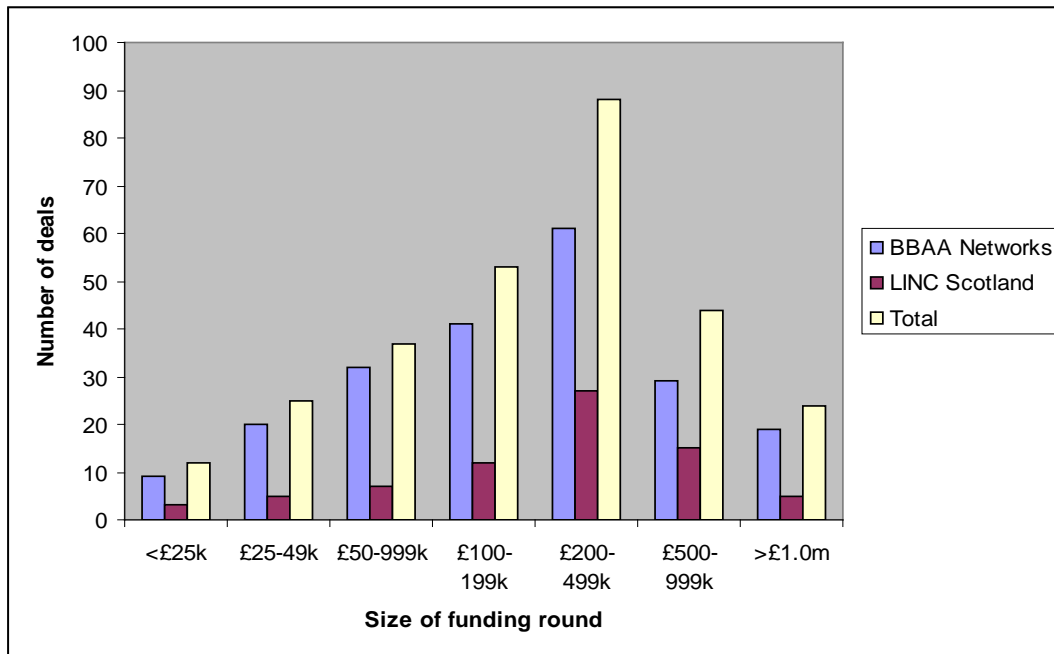
Particularly in the organised and visible part of the market, angels often invest alongside other investors, such as banks, venture capital funds and, increasingly, co-investment funds. Hence, it is important to differentiate between the amounts invested by business angels registered with the Networks and the overall deal size.

There is a wide variety in the overall deal sizes, ranging from less than £25,000 to over £1m. Most deal sizes are between £100,000 and £999,000. Fewer than 10% of deals are for £1m or more (Figure 3.1). Deals made through LINC Scotland are larger: 56% of all such investments are in the £200,000 to £999,000 range compared with 43% of BBAA investments (Figure 3.1; Table A3.1), partly as a consequence of the greater importance of syndicate investment in Scotland.

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<sup>30</sup> This is a lower number of investments than reported in Chapter 2, where the BANs collectively reported 233 investments. This is because details of 8 investments were not reported.

Figure 3.1 Size of Funding Round

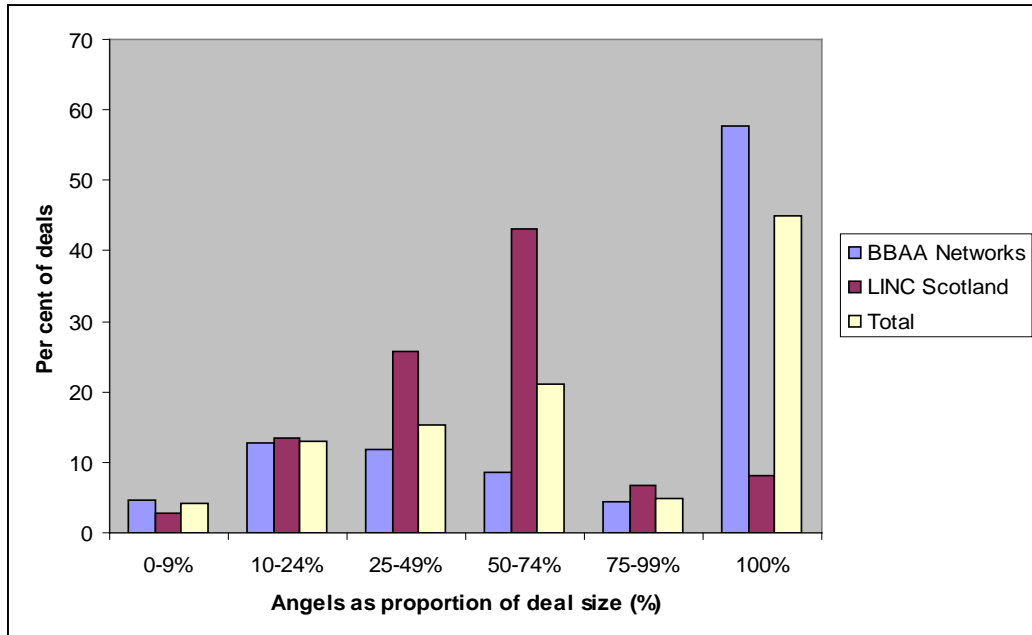


This difference in the distribution of deal sizes is also likely to be explained by the operation of the Scottish Co-Investment Fund, which is able to match investments by approved investment partners (which includes most of the angel groups) up to a maximum of £500,000 per company (i.e. £1m per deal). Although most RDA regions have public-private regional venture capital funds, the presence of co-investment funds investing alongside business angels in England and Wales is much more patchy and are largely concentrated in regions where ERDF funding is available. The availability from 2010 of the new JEREMIE funds, which draws on funding from the European Investment Bank and European Regional Development Fund in several regions of England and Wales (including the North West, North East, Yorkshire and Wales) further enhances the institutional structure of the early stage risk capital in the UK. The impact of these new funds on the development of the business angel market will be an important topic for future surveys.

Angels who have invested through BBAA networks have invested exclusively (that is, without co-investors of any kind in the deal) in 58% (122 deals) of these deals (Figure 3.2; Table A3.2). In the remainder of the deals the share of total investment contributed by angels ranges from less than 10% to over 75%. The picture is very different in Scotland where only 8% of deals (6 deals in total) exclusively involved angels. In the majority of angel deals in Scotland angels accounted for between 25% and 75% of the total deal. Here again, the greater importance of formal organised angel syndicates and the operation of the Scottish Co-Investment Scheme could explain this contrast, but the data do confirm that the Scotland business angel market operates in a very different fashion to that in the rest of the country.



Figure 3.2 Angel Investment as a Proportion of Total Deal Size



It follows from the extent of co-investing that the amounts invested by angels are smaller than overall deal sizes. In deals made through BBAA networks, angels invested less than £200,000 in two-thirds of cases, and invested less than £100,000 in half of all cases. At the other extreme, just 8% of businesses raised more than £500,000 from business angels. Here again there were some contrasts with Scotland, where there were relatively fewer angel investments over £500k and slightly more in the £50k to £200k range (Figure 3.3; Table A3.3). However these differences in the amounts invested by individual angels are less pronounced than the differences in the size of the overall funding round (Figure 3.1 above), suggesting that it is not the behaviour of angel investors per se that varies between Scotland and the rest of the UK but the organisation of the market.

However, Figure 3.3 (and Table A3.3), which reports overall angel investment by deal size, exaggerates the amount invested by *individual* angels in a single investment. This is because angels registered with the same Network sometimes invest together in the same deal. Indeed, as noted earlier, networks often seek to encourage angels to invest together on either an *ad hoc* or formal basis. It is therefore not surprising to find that just under two-thirds of the investments made through the networks involved more than one angel investor, and that one in five of all investments involved five or more angel investors (Figure 3.4; Table A3.4). Unfortunately, the information on the amounts invested by individual angels is not provided. This information is also unavailable for Scotland.

Figure 3.3 Amount Invested by Angels

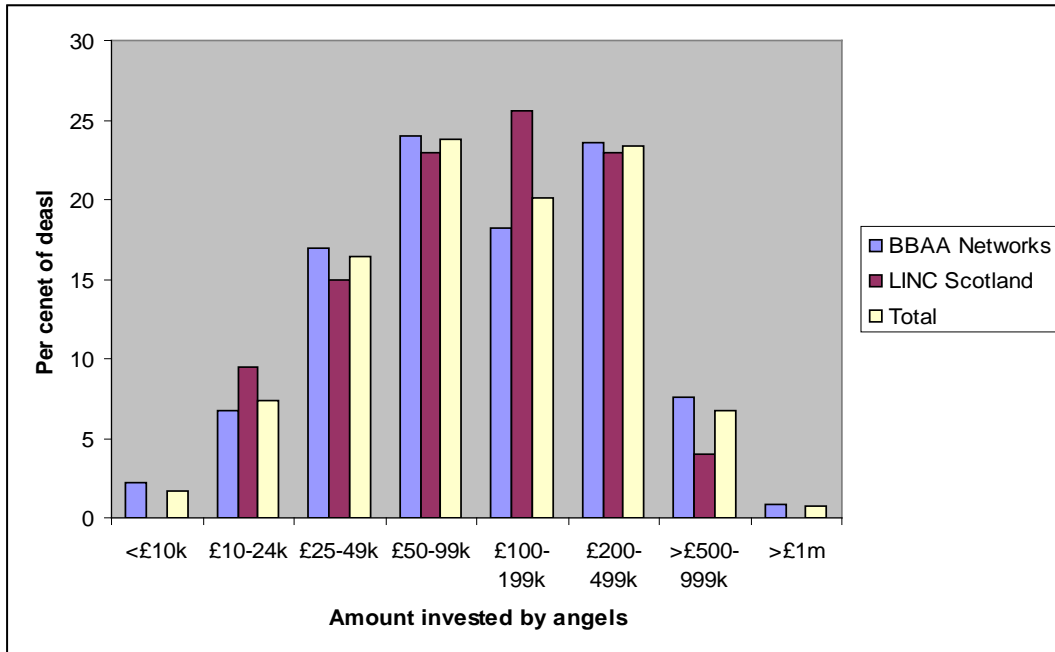
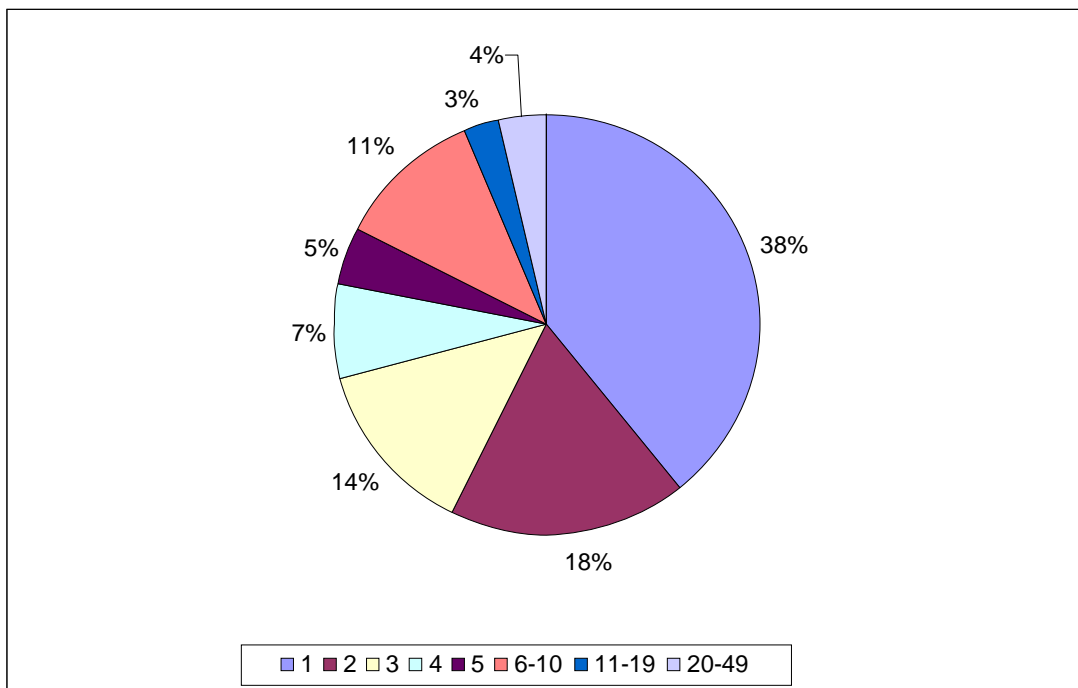
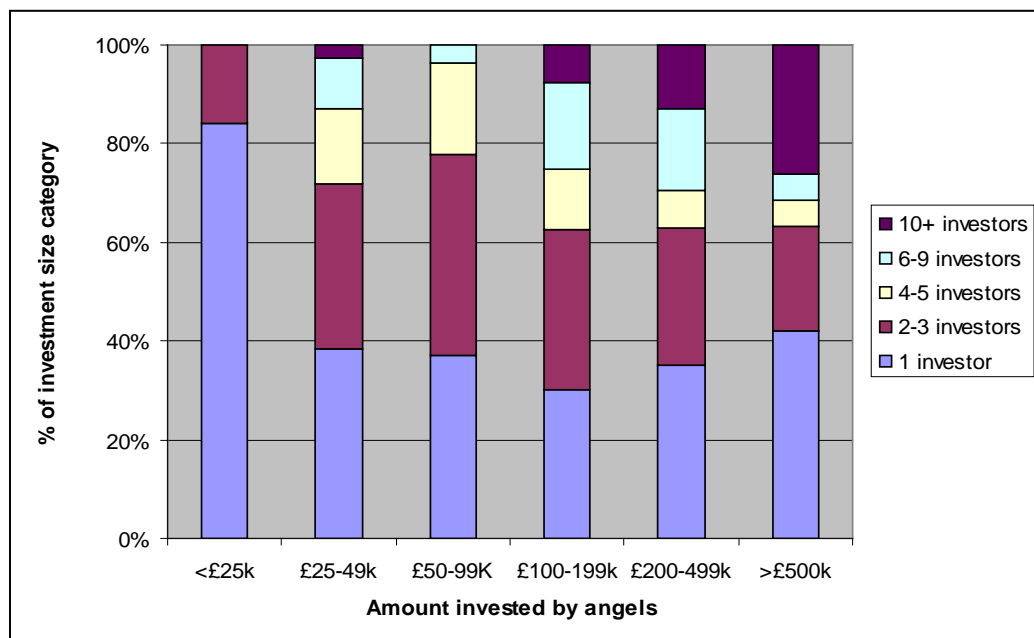


Figure 3.4 Number of Business Angels Investing in Each Investment (% of investments in each category) (BBAA data)



We can get some further insight into the structure of investments from Figure 3.5 (Table A3.5) which shows the number of angel investors by total amount invested by angels.

Figure 3.5 Relationship Between Number of Angel Investors and Amount Invested by Angels (BBAA data)



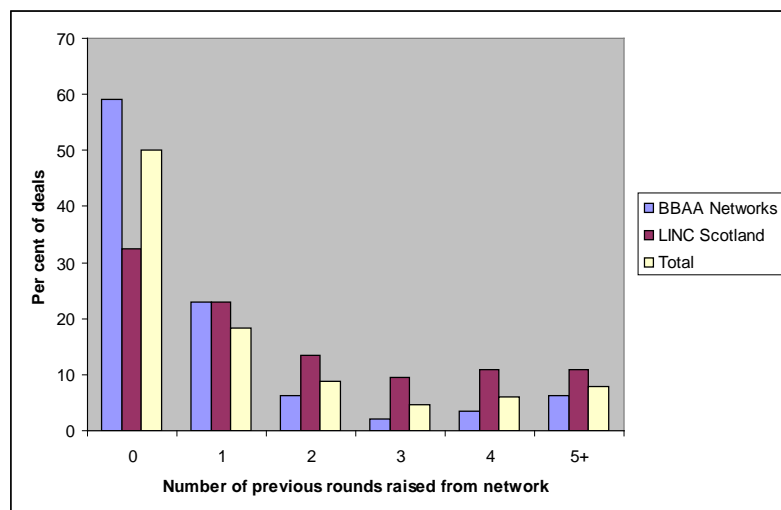
Here again, the information is only for deals channelled through BBAA networks. Not surprisingly, very small investments of under £25,000 involve one, or occasionally, two investors. The proportion of investments involving a single angel declines as the total amount invested by angels increases (although there is a small increase in the proportion of single-angel deals in the over £500k category), but, somewhat surprisingly, there is no clear tendency for the proportion of deals involving multiple angels to increase with the total amount invested by angels. Indeed, the proportion of deals in each size category involving four or more angel investors remains more or less constant for deals over £100k, although there is a sharp increase in the proportion of deals involving ten or more angels above this investment threshold.

### 3.3 Investment By Round

The available data only covers the number of times a business has raised funds from the network. We do not have information on the complete funding history of the companies so are unable to put the funding raised through the network in chronological order or to say whether there have been prior funding rounds that have not involved networks. However, analysis of investments made through BBAA networks indicates that over half of the companies were raising finance from network investors for the first time, with a further 23% having previously raised one round of finance from network investors (Figure 3.6). At the other extreme, 6% of companies had raised at least five previous rounds of finance from Network investors. Angel investment in these multiple funding rounds (3 or more) ranged from less than £20,000 to over £500,000 (median of £204,000). However, in eight of the seventeen cases the

angels were part of a much larger funding round (ranging from £489,000 to £18.7m). It might be inferred that these angels were investing to avoid being diluted (Table A3.6).

Figure 3.6 Number of Previous Rounds of Finance raised from this Network



Not unexpectedly Scotland again provides a contrast. Because angel groups have deeper pockets, plus the greater leverage provided by the Co-Investment Scheme, they are able to make more follow-on funding.<sup>31</sup> Hence, first round investments accounted for only 32% of the total. Investments in deals where there have been three or more previous rounds accounted for almost one third of all investments, compared to less than 12 per cent in the rest of the UK<sup>32</sup>. This suggests that, to some extent at least, angel investors organised in the form of syndicates and with access to co-investment fund monies are adopting a different approach to their investment portfolio. They appear to be following more of a 'cradle-to-grave' funding model in which they provide the follow-on finance necessary, rather than the 'relay-race' model in which angel investors pass deals on to other investors, typically venture capital funds, for follow-on funding<sup>33</sup>. This may be a planned or desired choice of investment strategy. Equally, it may be an enforced reaction to the widespread withdrawal of VCs from the small-scale and early stage risk capital market. If so, it suggests that there is a major change of investment strategy in the business angel market, with organised groups of angel investors acting more in line with VC investors in funding portfolio companies all the way through to exit<sup>34</sup>.

<sup>31</sup> The evaluation of the Scottish Co-Investment Fund commented that "the ability to double the investment by using the Fund meant that partners were able to fund deals, both first stage and follow-on, that they would otherwise not have had the resources to do. They were therefore involved in bigger deals than would otherwise be the case" (Hayton et al, 2008).

<sup>32</sup> In a small number of cases the LINC Scotland data will include previous deals/rounds not arranged through LINC Scotland members, and so may not be fully comparable with the BBAA data; however, this does not alter the conclusion drawn, that there do appear to be substantial differences between the positioning Scotland and in the rest of the UK.

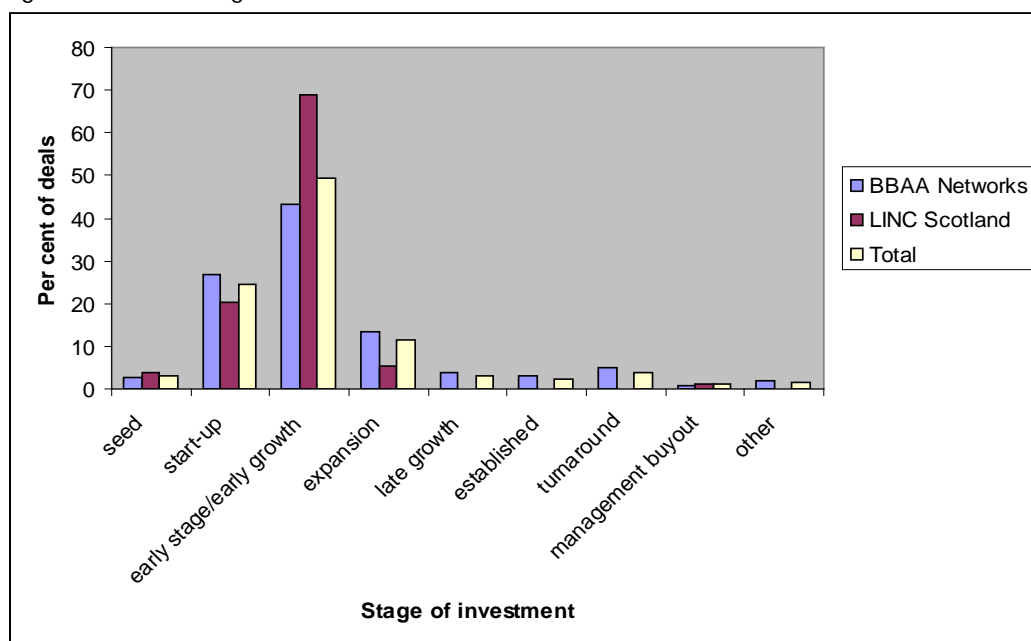
<sup>33</sup> Targeting Innovation (2009)

<sup>34</sup> See Harrison et al (2010) and Targeting Innovation (2009) for more discussion of this in the Scottish context

### 3.4 Stage of Investment

Investments by business angels through BBAA networks are largely concentrated at the start-up and early stage/early growth stages. These stages account for 69% of all investments (82% if the expansion stage is also included). Scottish business angels are even more focused on start-up and early stage/early growth investments, which account for 88% of investments<sup>35</sup> (Figure 3.7; Table A3.7).

Figure 3.7 Stage of Investment



The relatively greater commitment of angel investors in Scotland to early stage/early growth investments (69% vs. 43% in the rest of the UK) is consistent with the earlier evidence of the greater number of finance rounds reported for LINC Scotland deals and reinforces the conclusion that the operation of the angel market in Scotland is very different to that in the rest of the country. The very limited role played by business angels in the provision of seed finance is also noteworthy. Business angels also have limited involvement in financing established businesses (3%), turnarounds (5%) or management buyouts (1%).

### 3.5 Size of Investee Companies

Given this focus on start-up and early stage investments it is not surprising to note that the majority of businesses raising finance from business angels are relatively small in employment terms. Just over half of the investee businesses of BBAA investors have fewer than five employees and 87% have 10 or fewer employees (Figure 3.8; Table A3.8). Investments made through LINC Scotland are also skewed towards

<sup>35</sup> There is an apparent conflict between these data and the suggestion that organised angel syndicates are moving to a 'cradle to grave' funding model for portfolio companies. However, it must be noted that the investment stage classifications used in this report have been provided separately by BBAA and by LINC Scotland and may not be exactly comparable.

small companies but to a lesser extent than is the case with BBAA investments (40% with less than 5 employees; 72% with less than 10 employees). Indeed, more than one-quarter of the investee companies of LINC Scotland investors had more than 10 employees. This is consistent with the bigger deals sizes that LINC Scotland investors participate in and the higher proportion of follow-on investments made.

Figure 3.8 Number of Employees in Companies Raising Finance

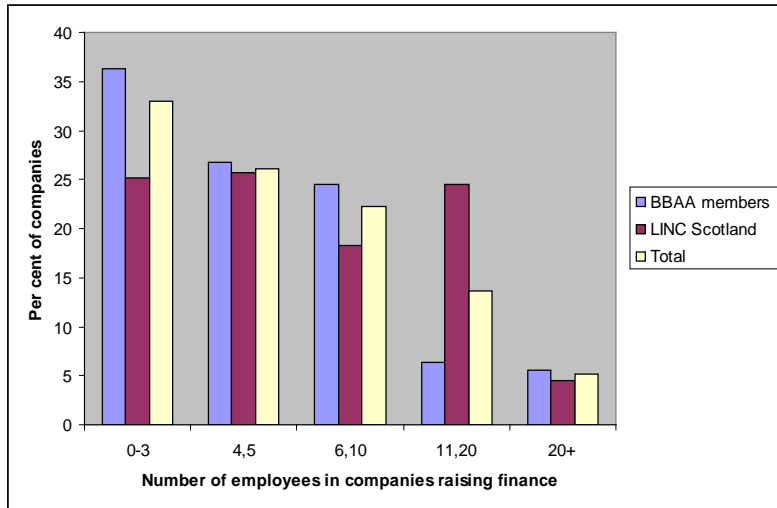
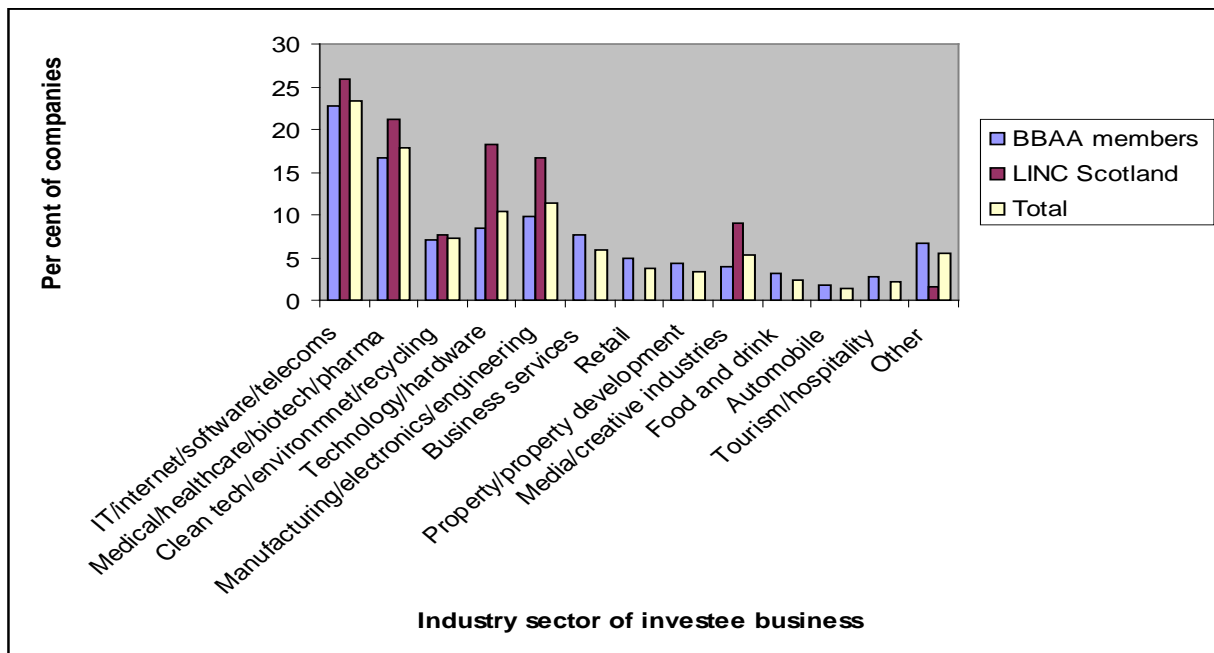


Figure 3.9 Industry Sector of Investee Businesses



### 3.6 Investment By Sector

Investments by business angels are distributed across a wide range of industries (Figure 3.9; Table A3.8). The majority of the investments made through BBAA networks are concentrated in technology sectors, notably software/IT/Internet/telecoms (23%) and medical/healthcare/pharma/biotech (17%). Smaller concentrations of angel investments can be found in environment/ recycling/clean tech and technology (each 7%). However, reflecting the diversity of angel investments, several companies in business services, manufacturing, property development, creative industries, retail and tourism/hospitality have also raised finance from business angels. Overall, 65% of investments are in technology sectors LINC Scotland investors have invested in a narrower range of sectors, but with a similar emphasis on software/IT/Internet/telecoms (26%) and medical/healthcare/pharma/biotech (21%), and also technology/hardware (18%) and manufacturing/electronics/engineering (16%). Consequently, investments in technology sectors are even more significant, accounting for 90% of all investments.

### 3.7 Summary

Examination of investments made by the visible market provides important insights into the operation of the business angel investment market, the characteristics of investments made by business angels, and the types of companies raising finance. The key conclusions to be drawn from this analysis of some 300 investments made by business angels through BBAA networks and LINC Scotland are as follows.

- The Scottish market is distinctive – deals are larger, there is more co-investment activity, more follow-on investing and larger investee companies. This reflects the different institutional structure and organisation of the market in Scotland – notably the greater prominence of angel groups and presence of the Scottish Co-investment Fund.
- Coinvestment activity is significant. In 92% of deals in Scotland and some 42% in England and Wales, business angels are investing as part of bigger deals. Information on the nature of co-investors is patchy but the available evidence indicates that it is quite varied, including existing investors, venture capital funds, VCTs, EIS funds (operated by the network), other business angels and coinvestment funds.
- Deal sizes are typically less than £1m. If, as some commentators suggest, the equity gap extends to £2m, then it suggests that a critical gap for policy intervention is from £1m to £2m. From the evidence discussed in this chapter it appears that a significant proportion of angel investments remain below £200k in value. Syndication of investments and the availability of co-investment funds investing on a pari passu basis alongside angels can extend the investment reach of angel investors up to transactions of around £1m, suggesting that for growing ventures there may be greater difficulty in accessing finance in the £1-2m range.
- The amounts invested by angels are typically much smaller than the overall deal sizes. Here again the information is patchy but it would appear unusual for individual investors to commit more than £200,000 to a single investment, with the typical investment being less than £100,000. Again, this points to the importance of syndication in meeting the investment needs of growing businesses beyond the investment capacity of individual investors.
- Angels are not just a one-time source of finance. Follow-on investments account for a significant minority of investment activity, particularly in Scotland. Angel groups are most likely to undertake follow-on investments.
- The focus of angel investments is start-up businesses and businesses in their early stage of growth. They show little interest in the seed stage or in established companies undergoing

ownership change or turnaround. Investee companies are typically fairly small, with fewer than 10 employees.

- Finally, angel investing has a strong focus on technology businesses.

These are important insights. However, the question remains: are the investments in the visible market typical of the wider market? The next chapter addresses this important issue.



## 4. ANGEL SURVEY

### 4.1 Introduction

Investments that are made through angel networks are just the tip of the iceberg. The majority of angel investments are made directly between investors and entrepreneurs and not formally captured in any database. There are two critical 'unknowns'

- The proportion of investment activity that occurs through the visible market, through networks, and angel groups, versus the proportion that occurs independently of these institutions. The answer to this is in two parts: (i) the proportion of angels who always invest in the invisible market; and (ii) the proportion of angels who operate in both the visible and invisible markets, making some investments through networks or as part of groups and others informally, and what proportion of their investments are channelled through networks and groups.
- The extent to which investors who invest through networks are typical of the population of business angels and whether their scale of investing and the types of investment they make are typical of the overall market.

Answers to these questions are important for two reasons. First, they provide an indication of the extent to which the characteristics of the investments made through networks and groups that was reported in Chapter 3 provides a reliable guide to overall market activity. Second, they can provide key data which can be used to scale up the evidence on the size of the visible market to make an estimate of overall size of the market.

### 4.2 Survey details

In order to address these issues the BIS-led consortium, working through BBAA and ACCA, undertook a short survey of angels. Questionnaires were distributed via various intermediaries, including networks and accountancy practices and at various events associated with the national business angel awareness campaign. The questionnaire was available for on-line completion, and invitations to participate were sent out to the ACCA membership (in an attempt to reach individuals through their accountants) and to all BBAA angel networks (to be circulated to all their individual angel members for completion and return at company presentation events). Unfortunately, there were low response rates from non-network channels, and only 15% of the returned questionnaires came through online sources. The remainder of responses came from the hard copy completions at BBAA company presentation events. As a result, there is some unavoidable duplication of data between the network survey (Chapter 3) and the individual angel survey (this Chapter).

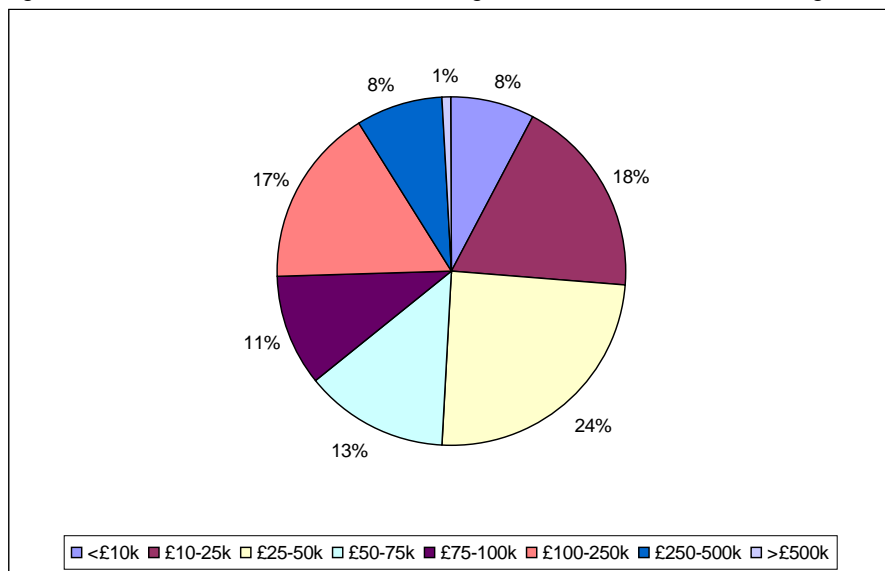
As this was the first individual angel survey to be undertaken as part of this national market analysis, it was deliberately kept very short to be completed quickly by individual investors as a means of familiarising them with completion of a regular annual survey. Just six questions were asked: amount invested in the 2008/09 tax year (in bands); proportion of the amount done through EIS; proportion of the amount made through angel networks; proportion of the amount made through angel syndicates; time spent providing advice and assistance to investee businesses; and location of the respondent. The questionnaire could be completed on-line or on paper. The survey attracted responses from 153 business angels, 130 based in England, 3 in Scotland, 19 in Northern Ireland and 1 in Wales. This is quite a sizeable sample when compared to the samples sizes obtained in previous studies of business angels. Of course, as the population of angels is unknown and unknowable we are unable to comment on the 'representativeness' of the sample.

### 4.3 Survey Results

The sample comprises three types of business angels: those operating entirely in the visible market (investing through networks), those operating entirely in the invisible market, and those operating in both. So, despite the limitations of the survey it does complement the perspective on investment activity provided in Chapter 3 that was based entirely on the visible market.

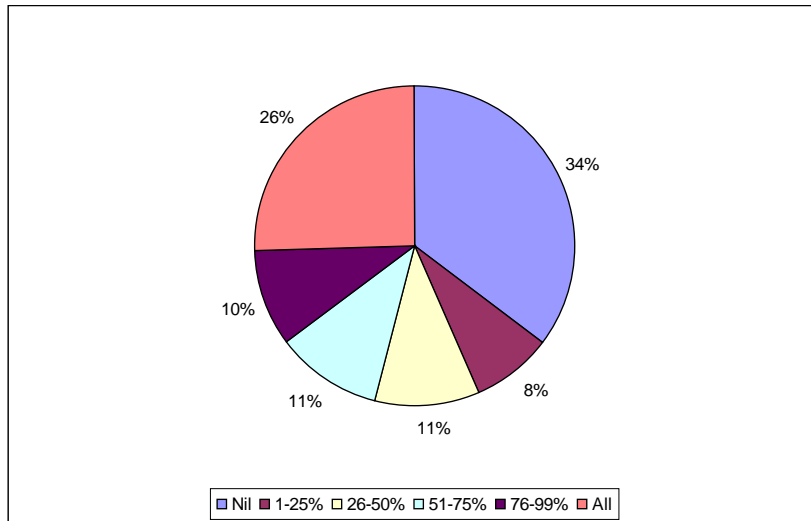
One-quarter of respondents had not made any investments in the 2008/09 tax year. Amongst those who had invested, amounts ranged from less than £10,000 to over £500,000. However, more than three-quarters had invested between £10,000 and £75,000 during the year (Figure 4.1; Table A4.1).

Figure 4.1 Amount Invested During 2008-09 Tax Year (excluding non-investors)



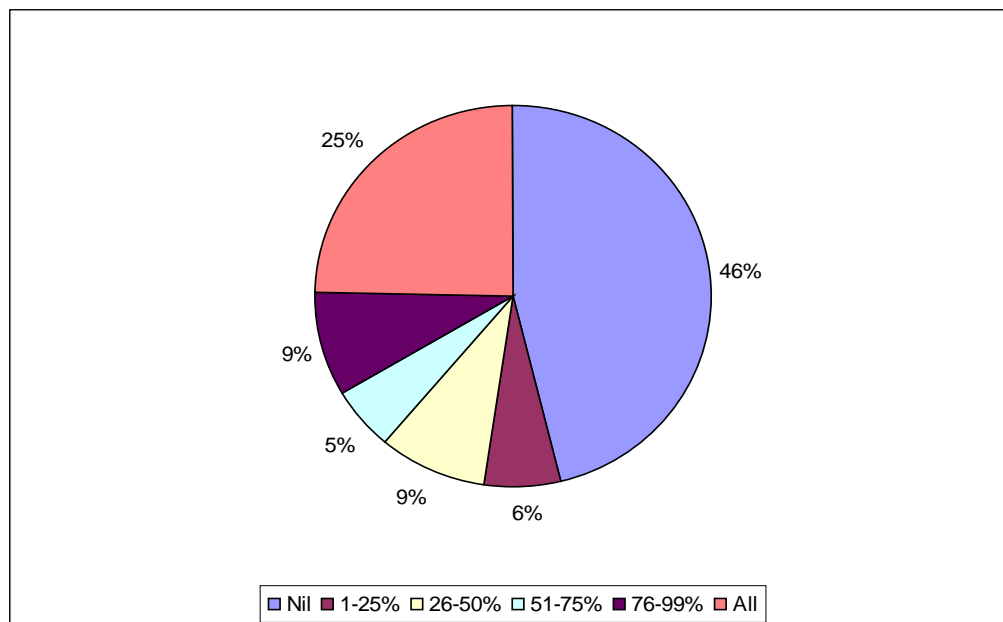
Just under two-thirds of respondents had made at least some of their investment through networks and one-quarter had used networks for all of their investment (Figure 4.2; Table A4.2). It was interesting to note that there was little relationship between use of networks and amount invested. Investors who invested less than £50,000 in the tax year were equally likely to invest exclusively through networks (31%) as not at all (36%). Bigger investors (over £100,000) were actually less likely to invest exclusively through networks (7%) but more likely to make some investment through networks. The key point, which is relevant for our market scale estimate, is that based on this evidence networks in general are not skewed towards larger investments by angels. However, it may be that networks have the ability to bring other investors into a deal, with the effect of increasing overall deal sizes, but we have no evidence on this point.

Figure 4.2 Angels' Propensity to Invest through Angel Networks, by proportion of investment



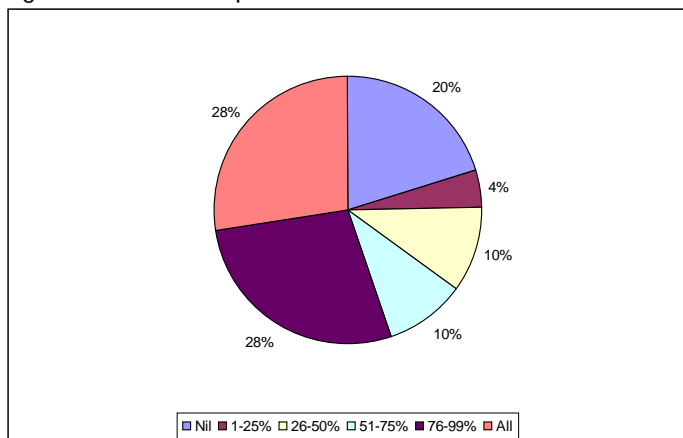
Just over half had invested at least partly through angel syndicates (Figure 4.3; Table A4.3). One-quarter invested entirely through angel syndicates. In the absence of more information about these syndicates we cannot say for sure whether these investments are in the visible or invisible market since by no means all syndicates are formally organised and with a visible presence. There is also some overlap between those angels investing through networks and through syndicates. Here again there was no clear link with size. Amongst investors who had invested less than £50,000 in the year, 55% did not invest through syndicates whereas 28% invested exclusively through syndicates. Larger investors (£100,000+) tended to neither extreme and were more likely to channel some of their investments through syndicates.

Figure 4.3 Angels' Propensity to Invest through angel syndicates, by proportion of investments



Finally, the majority of active investors (76%) had used the Enterprise Investment Scheme (EIS) for at least some of their investments. However, only one-third had channeled all of their investments through the EIS (Table 4.4). These tended to be smaller investors investing less than £50,000 in the year. Larger investors were more likely to use the EIS for some of their investments. There is, in other words, a significant minority of business angel investments that are not made through EIS (possibly because the business or the form of investment does not meet the eligibility criteria for EIS). From these figures we can also conclude that not all investors in EIS will be business angels, but in the absence of a 'business angel' box to tick on a self-assessment tax return it is not possible to conclude the exact proportion of EIS investors that are business angels.

Figure 4.4 Proportion of Investment made under the Enterprise Investment Scheme



#### 4.4. Summary

This evidence from an independent survey of business angels has gone some of the way towards answering key questions about the scale of the visible market relative to the overall market. The key insights are as follows.

First, the number of angels is not a good indicator of the market as a significant minority may be inactive – in the sense of not making any new investments – in any particular year. However, the proportion of inactive angels reported here may be unusually high given the economic conditions in 2008/09.

Second, the survey has confirmed that individual angels mainly invest less than £100,000 per annum. However, as noted in the previous Chapter, co-investing, both with other angels and also with other investors, can significantly increase deal sizes.

Third, the evidence points to a relatively organized market place with significant participation in angel syndicates.

Fourth, the visible market, as profiled in Chapter 3, clearly comprises a minority of all informal investment activity. Indeed, many of the angels who invest through networks also invest in the invisible market.

Finally, although the EIS is widely used by investors, for reasons that are unclear there is a significant proportion of the market that operates independently of the Scheme. This indicates that EIS Data offers little data for specifically developing market estimates of business angel numbers or the amounts invested by them.

## 5. ANGEL MARKET DYNAMICS

### 5.1 Introduction

As the first attempt to examine angel investment activity in the UK, the analysis presented in this report has, of necessity, been a static one. Moreover, as we emphasised at the outset, the time period and stage in the economic cycle may have a significant influence on our results. We believe that there is great value in repeating this exercise in the future in order to generate a reliable picture of angel investment trends that is based on consistent data sources and methodology.

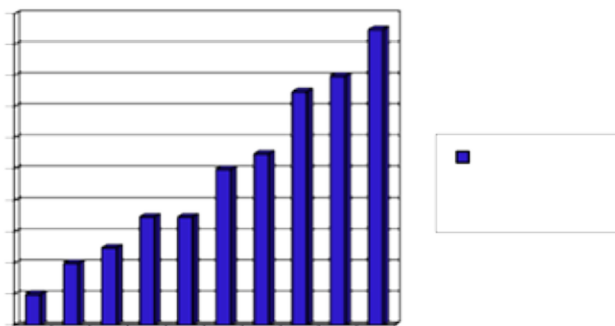
However, it is important to put this picture of angel investment activity in the UK in 2008/09 into some kind of comparative context, despite the inevitable limitations. We do this in two ways. First, LINC Scotland has made available some key statistics on an annual basis for each year since 2000/01 which highlights some important trends. The limitation, of course, is that we have shown that the angel market in Scotland is distinctive, because it is organised differently. The LINC Scotland picture cannot, therefore, be easily extrapolated to the UK as a whole. Second, we compare the evidence on the visible market based on investments made through angel networks with equivalent information collected on behalf of BBAA's predecessor (NBAN) on investments made through networks. The main limitation here is that any changes in investment activity will reflect both market change and the changing organisation of the market, as old networks leave the market and new ones enter.

### 5.2 Market Change: evidence from LINC Scotland

We have made extensive comment on the distinctiveness of the Scottish market on account of the dominance of organised angel groups. This needs to be borne in mind in the following discussion. Several changes can be identified in the period 2000-1 to 2008/09.

First, the market has become more organised as a result of the emergence of angel syndicates (Figure 5.1). However, it is worth emphasising how recent this process has been. As discussed in chapter 2, there were just two syndicates in 2000/01 (Archangels and Braveheart), compared with the current total

Figure 5.1 The Emergence of Angel Syndicates in Scotland



of 19, with others at various stages in formation. The growth in the number of syndicates can be largely attributed to LINC Scotland's catalytic role combined with the Scottish Co-Investment Fund, which was designed with a specific remit of helping the angel market in Scotland develop, and has been correspondingly attractive to angel groups<sup>36</sup>.

Second, between 2000/01 and 2008/09 investment activity has increased overall, except for a downward dip from 2001 to 2003 in the aftermath of the crash in the technology sectors, recovery from which reflects both post-crash revival and the impact of the Co-Investment Scheme which came on stream in 2003 (Table A5.1). The number of deals has gone up from 31 to 74 deals (+44, 139% increase) (Figure 5.2). The amount invested by business angels has gone up from £6.7m to £17.9 (+£11.2m, +168%). Overall deal size has increased from £7.2m to £27.6m (+£20.4m, +285%). This is likely to be an effect of the Co-investment Fund, which has provided additional leverage to angel syndicates, allowing them to undertake larger deals and to provide follow-on expansion capital to their portfolio companies (Figure 5.3).

Figure 5.2 Angel Investment Deals in Scotland 2000-01 to 2008-09

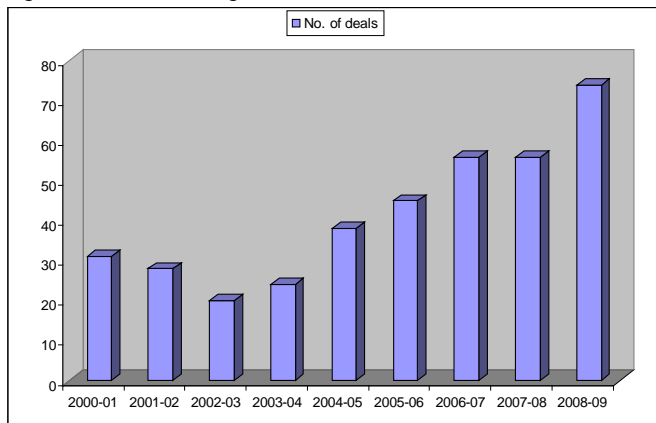
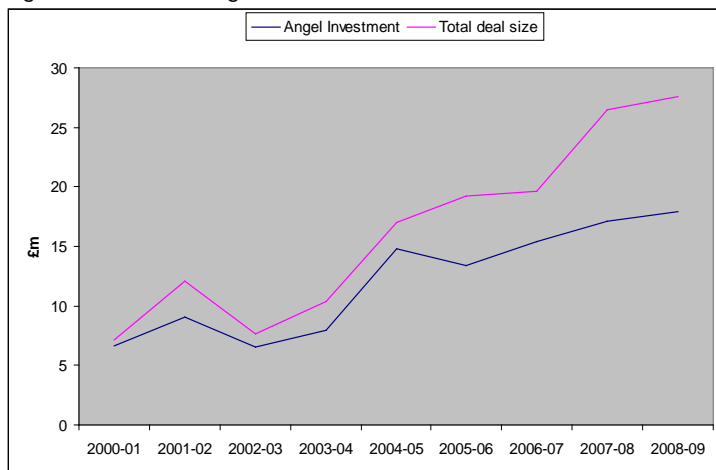


Figure 5.3 Angel Investment and Deal Size in Scotland

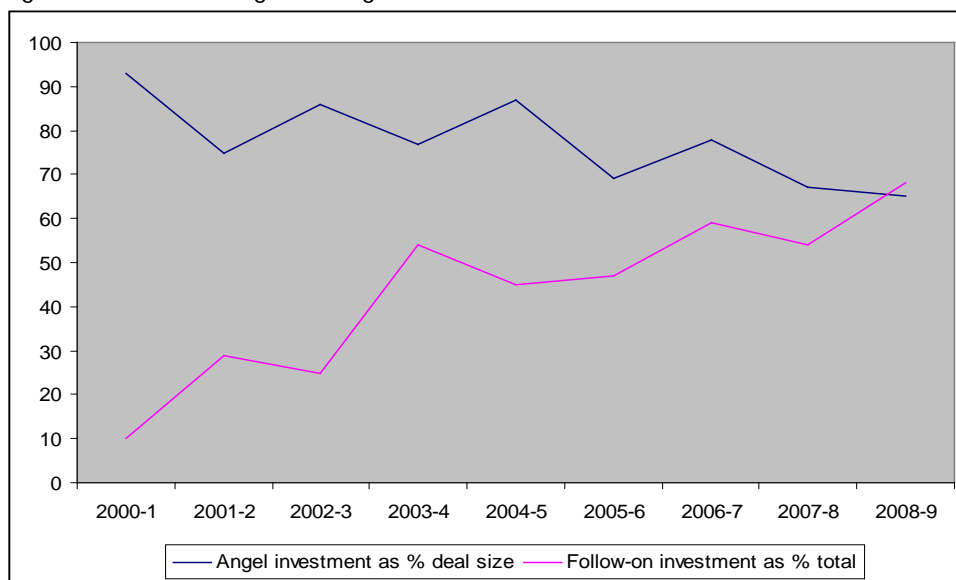


<sup>36</sup> Harrison (2009)

Third, reflecting the growth of co-investment schemes, the contribution of angels to the overall deal has fallen from 93% to 65%, with the main decline occurring since 2004-5, when the Co-Investment Scheme came on stream (Figure 5.4).

Finally, follow-on investing as a proportion of all investments has increased from 10% to 68%, and has been over 50% since 2006-7 (Figure 5.4). This reflects what we might term 'Grahame's Law'<sup>37</sup> that there is an inevitability that over time angel groups make more follow-on investments and fewer new investments, reflecting the increase in the number of firms in their portfolio and the absence of exit opportunities. The implication, of course, is that there is a need to continually increase the number of new angel groups in order to maintain the level of first-round investing.

Figure 5.4 Changes in Angel Investment in Scotland 2000-01 to 2008-09



## 5.2 Market Change: evidence from angel networks

Business angel networks (BANs) began to be created from the early 1990s onwards, following government funding for some demonstration projects – although some pre-date this period. The number of networks increased from 17 in 1993-4 to peak at 48 in 1999-2000 and then declined to its present number (24)<sup>38</sup>. This activity was initially codified by the British Venture Capital Association which published an annual directory of BANs to help entrepreneurs in their search for finance. This publication was then taken over by the National Business Angel Association, a network which had been created by Government to stimulate business angel activity on a national basis. NBAN ceased to exist in 2003 and BBAA was created in its place but with a significantly different mission as a trade association. From 1996/97 until 2003 similar data to those used in Chapter 3 were collected from angel networks.<sup>39</sup>

<sup>37</sup> Named after David Grahame, OBE, Chief Executive of LINC Scotland who was the first to make this observation.

<sup>38</sup> In addition to these BBAA members there are a number of additional networks that are not BBAA members.

<sup>39</sup> It was published annually by BVCA and then NBAN and the entire time series is summarized and analysed in Mason (2006).



The series contains some discontinuities. The main discontinuities arise from the change in responsibility for collecting the data from BVCA to NBAN. This delayed the data collection for 2000/01, resulting in higher non-response rates. There was also an associated shift from mid-year to calendar year for reporting. An upheaval in the BANs following a change in government support resulted in a rationalisation in their number. There was also a change in the criteria for the inclusion of networks in the Directory.

In order to set post-2000 trends in context it is useful to briefly highlight the trends that emerged in the visible market in the period from 1993/94 to 2003 when the market was in its infancy.

First, the number of angels registered with networks, the number of companies raising finance and the amount invested all grew significantly until 2000-2001 and then fell back in the next two years. This decline can be attributed in part to the effect of the technology crash but also to the rationalisation of networks that was occurring at the time.

Second, the number of deals involving solo angels declined sharply in 2002 and 2003, reflecting the emergence of angel syndicates, deal specific syndicates organised by BANs and other new organisations that operated on the basis of finding and evaluating the deals, negotiating with the entrepreneurs and then offering 'packaged investment opportunities' to passive investors.

Third, and an outcome of the previous trend, the size of investments by individuals in individual investments declined while at the same time deal sizes increased.

Fourth, the types of investments remained stable – with start-ups and early growth stages favoured by angels.

Finally, there was a long term trend for angels to increasingly focus their investments on technology sectors.

We now compare investment activity in the visible angel market in 2000/01 with the situation in 2008/09 as reported in Chapter 3. We chose 2000/01 for two main reasons. First, given the changes in the market and in data collection protocols immediately after this year (see above) the data are rather more robust than for the two subsequent years for which data exist (2002 and 2003). Second, as indicated above, the 2000/01 period appears to have been a significant watershed for the UK angel market, with significant new trends emerging in 2002 and 2003. The 2000/01 survey was the first to be undertaken under the auspices of NBAN. It obtained responses from 22 networks, with others reporting no investment activity or, in the case of networks of affiliated networks, reported under a collective response.<sup>40</sup> While the England and Wales data are not as robust and consistent as for Scotland, the comparison of 2000-01 with 2008-09 does draw on the only available evidence to assess broad changes in the level of business angel investment in the UK over the past decade. As the 2000/01 survey included data for Scotland, we report the comparison based on the UK figures, combining the BBAA and LINC Scotland data as reported in Chapter 2.

First, investment activity has increased over the period. The number of investments has increased from 217 to 307 (+41%). Total deal value has increased from £49.6m to £123.2m (+148%) while the amount

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<sup>40</sup> Full results are available in Mason (2002)

invested by angels has risen from £30m to £62.8m (+109%)<sup>41</sup>. Consistent with the LINC Scotland evidence, the share of the overall deal contributed by angels has fallen from 60% to 51%.

Second, and reflecting the previous point, deals now involve more investors. Co-investment has become more significant. The number of angels investing in each round has also increased. The number of investments with a single angel has fallen 73% to 39%, the proportion with two angels has increased marginally from 15% to 18% while the number involving more than five angels has gone up from 4% to 17%.

Third, the amounts invested by registered angels per deal has also increased. The proportion investing less than £50,000 per deal has declined from 41% to 26%, the proportion investing between £51,000 and £100,000 has remained the same at 24%, while the proportion investing over £100,000 has gone up from 34% to 50%.

Fourth, the focus of angels on startup and early stage deals remains unchanged. The proportion of seed investments has gone from 2% to 3%, start-ups have gone from 28% to 27% and the early stage has increased slightly from 37% to 42%.

Finally, the significant commitment of angels to investing in technology businesses has become even stronger, rising from 44% to 69%.<sup>42</sup>

### 5.3 Summary

We hope that this report will be the first of a regular series that will track angel investment activity and analyse and interpret the changes that are identified. In the absence of such a series we have taken the opportunity to look back at how the angel market has changes since the start of the century.

Both the data sources used - LINC Scotland and a comparison of the BBAA investment statistics with equivalent data for 2000/01 - suggest that the visible market has grown quite considerably since 2000. It has also changed in many respects. It has become more organized, especially in Scotland but also in the rest of the UK. This has resulted in more angels participating in each investment. Investments are also more likely to involve co-investors, at least in part because government intervention to address the equity gap now includes co-investment funds. Angels are increasing becoming only part of at least the bigger deals.

These processes have also driven up deal sizes. But, of course, there continue to be plenty of smaller investments made by individual and ad hoc groups of angels. The focus of angels on investing in technology businesses has become even stronger. But what has not changed is the focus of angel investment on start-up and early stage businesses. Unlike the venture capital community, there has been no 'investment drift' amongst angel investors. They continue to be a vital funding source for growing companies at the start of the funding escalator. What has changed is that angel groups are increasingly taking their investee companies further up the funding escalator. Indeed, some commentators suggest that angels will increasingly fund their investee businesses all the way up the

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<sup>41</sup> Note that although we have analysed data from LINC Scotland separately earlier in this section, these figures are for the UK as a whole and include the Scotland data.

<sup>42</sup> However, differences in the definition of technology used in the two studies may have exaggerated this trend.

funding escalator, albeit a shortened escalator, to an exit.<sup>43</sup> It will be particularly interesting to monitor whether this trend emerges in the UK over the next few years.

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<sup>43</sup> Peters (2009)

## 6. MARKET SCALE ESTIMATES

### 6.1 Introduction

The rationale for this study is that despite the importance of the business angel market to the financing of new and early stage ventures in the UK there is little evidence on the overall size of the market. One early study has used data obtained from business angel networks to estimate the scale of the market in the UK by estimating the number of business angels, their investment activity and the value of the investments they made<sup>44</sup>. This yielded a conservative estimate of £500m of business angel investment in the UK in 1998-99<sup>45</sup>. Although this was in the run-up to the dot com boom, angel investment in this year was lower than that reported in 1997-98 and in the following two years (1999 and 2000), but higher than the figures reported in 2001, 2002 and 2003<sup>46</sup>. This estimate remains the only attempt to provide a measure of the size of the business angel market in the UK.

In this Chapter we adapt the 'bottom up' methodology used in this earlier study to extrapolate from the visible segment of the market, namely the investment activity channelled through business angel networks. We also provide alternative 'top down' estimates of the market derived from other data sources, notably the HMRC data on EIS and that available from the Global Entrepreneurship Monitor survey for the UK, as reality checks for our own 'bottom up' estimate.

### 6.2 'Bottom-up' Market Scale Estimates

We know from the survey of Networks that £44.9m has been invested by business angels through BBAA Networks in 2008/09 and a further £17.9m has been invested by angels through LINC Scotland (Chapter 2). If we factor in non-response from BBAA membership (4 out of 24) we can add a further £9m to the amounts invested by business angels through BBAA networks, on the assumption that the size distribution of the missing networks is similar to that of those returning data<sup>47</sup>. This gives a total of around £54m invested through the visible market in the UK outside Scotland, and a national total of £72m based on the combination of BBAA and LINC Scotland data. In view of the different processes used to collect data for Scotland and the remainder of the UK, and the differences in the structure of the business angel markets discussed in earlier chapters, we estimate the scale of the business angel market in Scotland and the rest of the UK separately.

#### (i) *Scotland*

LINC Scotland estimates that their members are aware of only around 35% of identified business angel deals (based on a comparison with the data collected for the annual report on the risk capital market in Scotland published by Scottish Enterprise<sup>48</sup>), equivalent to approximately 43% of companies<sup>49</sup> receiving

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<sup>44</sup> Mason and Harrison (2000)

<sup>45</sup> This estimate was made on the basis that 20% of all active angel investors in the UK was a member of a business angel network. Relaxing this assumption to 10%, or to 5% (which was viewed by network managers in 1999 to be a more realistic proportion) would double or quadruple the investment estimate.

<sup>46</sup> Mason (2006)

<sup>47</sup> Additional evidence from BBAA confirms that this is a reasonable assumption to make for the purpose of this analysis.

<sup>48</sup> Targeting Innovation et al (2009)

<sup>49</sup> The difference between the 35% figure for deals and the 43% figure for companies reflects the fact that more than one deal can be reported in the same company

business angel investment in Scotland in 2008. Assuming no differences in the size distribution of investments made through LINC Scotland and otherwise, this suggests that total business angel investment in Scotland may be in the order of £51m (£18m (100/35)).

*(ii) Rest of the UK*

There are a number of adjustments to the reported data on angel investment that need to be made in order to estimate the overall scale of the UK business angel market:

- (a) adjustments for investment by BAN members that is not made through a network
- (b) adjustments for investment by angels who are not BAN members

*(a) Investment by BAN members that is not made through a network*

In addition to the information available from BBAA networks, we also know from the survey of angels (Chapter 4) that a significant amount of angel investment is not invested through Networks:

- (i) 39% of investors who are members of BBAA networks have channelled only part of their investment activity through networks.
- (ii) We estimate this proportion to be 50% on the basis that angel members of BBAA networks make approximately 50% of their investment through BANs (median amount invested through BANs – see Table A4.2). For this 39% of angel investors, therefore, we estimate that they will have made as much investment outside the networks as they have through them.
- (iii) Given that there is £54m of estimated angel investment made through networks, this suggests that there is a further £21m ( $£54m \times 0.39 = £21m$ ) of business angel investment in the UK (outside Scotland) represented by the non-network facilitated investments of BBAA member investors.
- (iv) This gives an adjusted market estimate (the visible market excluding Scotland) for angel investors who are network members of £75m (£54m + £21m).

*(b) Investment by angels who are not network members*

Not all angel investors are members of and invest through BBAA networks. These investors represent the invisible market referred to above (Figure 1.1) and are not included in our detailed analysis in the body of this report. However, it is important to include an estimate of their activity in order to build up an estimate of the overall scale of the business angel market in the UK. We approach this in the following way:

- (i) Based on the survey evidence above (Chapter 4), we estimate that 64% of investors have invested at least in part through networks and 36% have not invested through networks at all and are not included in the estimates of market activity so far. However, given that these respondents were sourced through BBAA presentations for the most part and non-response was higher for channels other than BBAA, this does not provide a basis for estimating the size of the invisible market in the UK.
- (ii) In the absence of any evidence-based estimates of the ratio of the visible to the invisible angel market we can apply the estimate of 20% used in the 1999 estimates of the scale of the market; this would suggest a final bottom-up estimate for the scale of the market of £375m to which must be added the grossed-up estimate of £51m for Scotland, to give a final overall estimate for the UK of £426m.

### 6.3 Reality Checks from 'Top Down' Market Scale Estimates

Data relevant to estimating the scale of the business angel market are available from two sources: GEM and EIS.

#### (i) *Global Entrepreneurship Monitor (GEM)*

GEM is a multi-national programme to monitor national entrepreneurship attitudes and activity which is based on random household surveys: in the case of the UK the most recent (2008) survey collected data from just over 30,000 households. Information is collected on informal investment activity: this is a broader category than the business angel investment which is the focus of this report. In addition to business angel investment, the GEM data captures investment in any business not owned or controlled by the respondent, notably including investment in businesses owned by family members, which is excluded in this report as falling outside the definition of business angel investment. Although detailed information on actual investment activity is not published in the most recent GEM report<sup>50</sup>, national estimates are provided relative to GDP.

Our GEM-based estimate of total business angel investment in the UK is based on the following logic:

- (a) According to the latest GEM report, informal investment (the much broader category) represents 0.4% of UK GDP.
- (b) According to previous estimates<sup>51</sup>, only around 12% of informal investment reported in GEM is 'third-party' investment external to the family, equivalent to the definition of business angel investment used in this report.
- (c) This yields an estimate of business angel investment in 2008 equivalent to 0.048% of UK GDP.
- (d) Given UK GDP in 2008 of £1296bn (headline workplace based GVA at current basic prices), this suggests overall business angel investment in the UK in 2008 of £622m

This estimate is, of course, subject to considerable unquantifiable margin of error: we are working from estimates of informal investment relative to GDP rather than actual investment data, which introduces significant rounding error; there may be variations over time in the ratio of 'pure' business angel investment to within-family investment, which will affect the 12% adjustment factor used in the estimate; and there remains uncertainty over the extent to which the wording of the investment questions in GEM corresponds with a workable definition of business angel investment, within the wider informal investment category, to ensure that there is neither systematic over or under estimation of the market<sup>52</sup>.

#### (ii) *Enterprise Investment Scheme*

An alternative reality check on our estimate of the overall scale of the business angel market in the UK comes from the EIS. This scheme, one of three tax-based venture capital schemes in the UK (the others are Venture Capital Trusts and Corporate Venturing Scheme<sup>53</sup>), was introduced in 1994 to help smaller higher-risk trading companies to raise finance by offering a range of tax reliefs to investors who

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<sup>50</sup> Bosma and Levie (2009)

<sup>51</sup> Bygrave et al (2002)

<sup>52</sup> Refer to comments in the BIS time series report?

<sup>53</sup> This scheme has been closed for new investments since 31 March 2010.

purchase new full-risk ordinary shares in those companies<sup>54</sup>. A detailed analysis of the demographics of EIS investors for 2006-07 prepared by HMRC is included as a Special Paper following this report.

Investment under EIS peaked at just over £1bn in 2000-01, since when it has averaged around £675m annually, with a provisional estimate of £692m invested in 2,131 companies in 2007-08. However, not all EIS investment will qualify as business angel investment. For example, some EIS investment is effected through pooled fund investment vehicles, and the investors in these funds neither make their own investment decisions nor have an active involvement in the investee companies post-investment, both qualities of business angel investment<sup>55</sup>. We are not, however, able to directly estimate this proportion. Furthermore, EIS investment tax relief is available for investment in AIM and PLUS quoted companies; again, this investment would not qualify as business angel investment in the sense defined in this report.

Both of these factors will reduce the amount of EIS investment that constitutes business angel investment. We also know from a recent report<sup>56</sup> that only 57% of angel investors use EIS. From Table A4.4 it is clear that just under 24% of investors in our survey did not use EIS at all, and only 32% used EIS for all their investments: the median proportion of investments made under EIS for our sample was 58%.

Taking these factors into account allows us to develop a number of estimates of business angel activity in the UK.

- (a) EIS investment recorded by HMRC, primarily from the annual EIS forms returned to HMRC by the EIS companies, was £692m (2007-08 estimate)
- (b) We extrapolate EIS investment for 2008-09 (for comparability with the BBAA survey data used above and elsewhere in this report) to have fallen to £485m, based on reports from network managers and angel syndicate leaders that their investment activity in 2008-09 was down around 30% on the previous year.
- (c) Given that 10% of EIS companies are quoted on AIM or PLUS and are therefore outwith the definition of business angel investing<sup>57</sup>, the amount of business angel investment in the UK in 2007-08 was £623m, or an estimated £437m in 2008-09<sup>58</sup>.
- (d) Allowing for the evidence that only 57% of business angels use EIS to structure their investments, we can gross up these figures to estimate that total business angel investment in the UK in 2007-08 was £1,093m in 2007-08, and £766m in 2008-09.
- (e) This estimate, however, overstates the size of the market as it includes EIS investments made by investors who would not meet the definition of business angel investor used in this report. We do know that only 27% of EIS investors have a hands-on involvement post-investment.<sup>59</sup> Adjusting the figures in the preceding paragraph, this suggests a minimum estimate of the scale

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<sup>54</sup> Taken from HMRC (2009)

<sup>55</sup> An additional complication is that a number of networks also manage EIS Funds to invest alongside their angel investor members: we have no systematic data to allow us to adjust the estimates to take account of this.

<sup>56</sup> Wiltbank (2009)

<sup>57</sup> Boyns et al (2003)

<sup>58</sup> This assumes that investments in EIS companies on AIM/PLUS are of a similar size to those in unquoted companies; if they are larger the market estimate we derive will be an over-estimate.

<sup>59</sup> Boyns et al (2003)

of the business angel market in the UK derived from EIS data of £295m in 2007-08 and £207m in 2008-09.

- (f) However, this estimate does not take account of the fact that investors investing with others in formal and informal syndicates may delegate the hands-on role to a single co-investor who represents the interests of all investors involved in the transactions. This will lead to an underestimate of the market. We know from the survey of investors (Chapter 4) that the median proportion of investments that are syndicated (from Table A4.3) is 39%. Using these figures to gross up the EIS estimates in the preceding paragraph, this produces a final EIS-based estimate of the scale of the business angel market in the UK of £413m in 2007-08 and £290m in 2008-09. The robustness of these estimates is, of course, heavily dependent on the estimate of the degree of formal and informal syndication in the business angel market, and this remains an important area for further research.

## 6.5 Conclusion

Using a conservative estimate (20%) of the proportion of the business angel market represented by the investment activity reported in the BBA survey, we estimate the overall level of business angel investment in the UK in 2008-09 to be in the order of £426m (Table 6.1).

Table 6.1 Summary Estimates of the Size of the Business Angel Market in the UK

	2008-09	2008	2007-08
Bottom-up	£426m		
GEM		£622m	
EIS	£290m		£413m

As a 'reality check' on this estimate, we have also produced estimates using a 'top down' estimating procedure from two other data sets: EIS and GEM. Our EIS-based estimate for 2008-09 is some 30% lower than our bottom-up estimate. However, the GEM-based estimate is significantly out of line with the other two estimates, reflecting the fact that there is a lack of precision in determining the boundary between family, friends and business angel investment<sup>60</sup>.

On the basis of this analysis, and allowing for the assumptions and imprecision involved in all of these estimates, we conclude that the overall visible and invisible business angel investment market in the UK in 2008-09 was in the order of £400m.

<sup>60</sup> See Bygrave et al (2003)



## 7. SUMMARY

This report is the first attempt to respond to the many calls – led by the Bank of England in its Annual Review of Small Firm Finance – for more robust data on business angel investment activity. Obtaining better data is, of course, problematic given that business angels are largely anonymous, the market is largely unorganised and invisible and hence there is no access point to the entire market. However, over time the market has become more organised. For example, business angel networks (BANs) have been created to provide a mechanism for investors and entrepreneurs seeking finance to meet. Some angels have joined together to create investment syndicates of greater or lesser formality to have the capacity to make bigger investments and follow-on investments. Thus, part of the market is now visible, enabling the investment activity which is channelled through these various portals to be documented and measured. Such information provides important insights into the operation of the market which is of value to both practitioners and policy-makers and if replicated gives valuable information on investment trends. The information of investment activity in the visible market can also be used to estimate the size of the overall market.

This study draws upon three sources of information to provide an insight into business angel investment activity in the UK in 2008/09. First, it draws on a survey of those business angel networks that are members of the British Business Angel Association (BBAA). Second, it uses information on the investments made by angels who were registered with one of these networks. This is complemented by statistics on the investments made by angels and angel groups affiliated to LINC Scotland. Third, it has access to a short survey of individual business angels.

The visible market comprises BANs, organised angel groups and other types of portals. The BBAA has a membership of 24 BANs covering England, Wales and Northern Ireland, of which 20 provided data. Members of LINC Scotland – primarily angel syndicates - comprise the visible part of the market in Scotland. The BBAA networks reported a combined total of more than 5,550 business angels at the end of 2008/09. However, the distribution was highly skewed across the networks with just 4 accounting for 67% of the total, reflecting rather different approaches across the networks. These networks received 8,685 business plans. Here again the distribution was skewed, with same four networks accounting for 66% of the total. However, just 824 companies were presented to investors of which 233 attracted investment, one in four of the companies presented to investors. These 233 companies raised £44.9m from angels registered with the networks. Investors associated with LINC Scotland invested £17.9m in 74 deals. This gives a total of £62.8m invested by business angels in the visible market in the UK.

We were able to investigate in more detail 225 of the investments reported by networks that are members of BBAA (out of a total of 233). LINC Scotland provided information on 74 investments in aggregate form. A number of points emerged. First, in more than 40% of the deals in BBAA networks business angels invest alongside other investors. In Scotland 92% of deals involve co-investors. This is in part a reflection of the emergence of co-investment funds in recent years which are designed to invest alongside business angels in order to give them greater liquidity. The majority of deals range from £100,000 to £999,000 whereas business angels are typically investing between £25,000 and £499,000, either on their own or part of a syndicate. Second, angels are doing more than just first round funding. Here again this feature is most marked in Scotland where only 32% of investments were first round. Third, investments are focused at the start-up and early growth stages. Fourth, investments are distributed across a wide range of sectors but there is a strong focus on technology.

Survey responses from 153 business angels, identified through various sources, including networks provided some further insights into the market. First, one-quarter of angels did not make any investments in 2008/09. Second, the amounts invested by individual angels during the year ranged from £10,000 to over £500,000 but with more than three-quarters investing between £10,000 and £75,000. Third, just under two-thirds had made at least some of their investments through networks and one-quarter had made all of their investments through networks. Fourth, just over half had invested at least partly through syndicates. Finally, 76% of active investors had used the Enterprise Investment Scheme for at least some of their investments but only one-third had channelled all of their investments through the Scheme.

As this is the first attempt to profile the market it is inevitably a static analysis. However, we attempted to examine market dynamics in two ways. First LINC Scotland provided some key statistics for each year from 2000. This reveals the growth of investment activity, the increase in the organisation of the market as reflected in the growth in the number of syndicates, the declining contribution of angels to overall deal size, reflecting the growing importance of the Scottish Co-Investment Fund, and finally, a significant rise in the proportion of follow-on investments. Second, we have been able to compare investment activity in the visible market in 2008/09 with similar data from 2000/01. This too revealed an increase in investment activity, an increase in the number of co-investors in deals and a decline in the proportion of deals involving a solo angel, and an increase in the amount invested by angels per deal. However, the focus of angels on start-up and early stage deals has remained unchanged and the proportion of investments in technology sectors has increased.

Finally, we made an attempt to extrapolate from the visible market to estimate the overall size of the market. This involved estimating the proportion of angels who invest through networks and the proportion of deals that angels registered with networks have made independently. Our estimate of the visible market in 2008/09 is £75m (£93m including Scotland). We estimate the total (visible and invisible) angel market in the UK to be around £426m in 2008/09. This is a somewhat lower figure than that estimated from statistics on informal investment in the Global Entrepreneurship Monitor and is rather higher than our estimate based on amounts invested through the Enterprise Investment Scheme.

This is the first attempt to profile the angel market and we expect that the methodology will evolve in future years. In particular, we hope to be able to extend the coverage of visible market in future reports from BBAA and LINC Scotland networks and groups to include other portals and angel groups that are unaffiliated to either organisation. It is also important to enhance the survey of angels: in order to provide an estimate of the scale of the invisible market it will be essential to ensure that they are identified through a range of sources, and to increase the range of information obtained but without prejudicing the number of responses. Finally, we hope to be able to refine the methodology for scaling up the data on the size of the visible market to generate an estimate for the overall market size.

Finally, in terms of implications, the study has confirmed the significance of business angels as investors in start-up and early growth companies, especially in technology sectors. It has highlighted the importance of business angels, alongside other investors, in deals up to £1m, with co-investment funds as significant partners. Angels are making bigger investments and investing in more rounds because of a combination of the apparent break down of the 'relay race' model of investing in which angels pass on their deals to venture capital funds and the lack of exit opportunities. Indeed, evidence from angel groups and key informants in the market clearly highlights an emerging liquidity problem arising on account of the increase in the length of time that angels are now having to hold their investments and

the need for ever-more follow-on investments which is becoming a critical issue for both angel groups and co-investment funds. This requires further investigation from policy-makers.

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APPENDIX

STATISTICAL TABLES

## STATISTICAL ANNEX

### CHAPTER 2

*Table A2.1 Age of Formation of Network*

Date created	number	%
2008	2	10.0
2005-7	2	10.0
2001-4	6	30.0
2000	-	-
1995-9	6	30.0
Pre-1995	4	20.0
No information	4	-

*Table A2.2. Type of Network*

Type	number	%
Part of a larger company	3	15.8
Part of a larger organisation	6	31.6
Private company	2	10.5
Limited company	4	21.0
Not-for-profit limited by guarantee	2	10.5
Investment club	1	5.3
Association	1	5.3
No information	5	-

*Table A2.3 Partner Organisation*

Partner	number	%
Institute of Directors	4	23.5
Institute of chartered accountants in England and Wales	4	23.5
CBI	1	5.9
Co-investment funds	10	58.9
RDA	7	41.2
Universities/business schools	10	58.9
Chamber of commerce	3	17.6
Incubators/science parks	7	41.1
Other	6	35.3

Responses from 17 Networks  
Multiple responses possible



**Table A2.4 Commercial Venture**

	number	%
No	13	65.0
Yes	6	30.0
Partly	1	5.0
Missing information	4	

**Table A2.5 Number of Employees**

Number of Network employees	number	%
Less than 1	1	5.0
1	2	10.0
1.5	3	15.0
2	3	15.0
3	4	20.0
4-5	3	15.0
6-10	2	10.0
Over 10	2	10.0
Missing	4	-

**Table A2.6 Income Sources**

Source of income	yes	%	Proportion of income		
			Lower quartile	Median	Upper quartile
Fees from angels	12	60.0	11.5	19.5	27.5
Fees from entrepreneurs	15	75.0	10.0	10.0	30.0
Sponsorship	11	55.0	17.5	20.0	34.5
Success fees	12	60.0	22.5	30.0	45.0
EU funds	3	15.0	-	10.0	-
RDAs	6	30.0	-	25.0	-
Other	7	35.0	-	5.0	-
Missing	4	20.0			

**Table A2.7. Sources of Sponsorship**

Sponsor	number	%
accountants	5	25.0
Solicitors	8	40.0
consultant	1	5.0
Technology company	4	20.0
Other company	8	40.0
Entrepreneurs/angels	2	10.0
Banks	4	20.0
Other	4	20.0
Missing	4	-

Multiple responses possible

**Table A2.8 Services provided**

Service	yes	%
Company presentation event	18	90.0
Newsletter/information bulletin	17	85.0
Investor club/networking meeting	16	80.0
Database of contacts	14	70.0
Training and capacity building for investors	13	65.0
Investment forums and fairs	12	60.0
Support of syndicates	12	60.0
Co-investment schemes	10	50.0
Training in investment readiness for companies	9	45.0
Due diligence support	6	30.0
Internet based matching services	3	15.0
Other	4	20.0

Based on 20 responses; Multiple responses possible

**Table A2.9 Comparison of national and regional networks**

	National networks	Regional Networks
	Median	
Number of investors	601	58
Investment opportunities	513	130
Investments made	15	6.5
Amount invested (£k)	221	125

## CHAPTER 3

*Table A3.1 Size of Funding Round*

Amount	BBAA Networks			LINC Scotland		
	number	Percentage	Cumulative Percentage	number	Percentage	Cumulative Percentage
Less than £25,000	9	4.3	4.3	3	4.0	4.0
£25,000 - £49,000	20	9.5	13.8	5	6.8	10.8
£50,000 - £99,000	32	15.2	29.0	7	9.5	20.3
£100,000 - £199,000	41	19.4	48.4	12	16.2	36.5
£200,000 - £499,000	61	28.9	77.3	27	36.5	73.0
£500,000 - £999,000	29	13.7	91.0	15	20.3	93.3
£1m - £2.4m	16	7.6	98.6	5	6.7	100.0
£2.5m - £4.9m	1	0.5	99.1	0	-	
£5m and above	2	0.9	100	0	-	
Total	211	100.0		74	100.0	
Missing	14			0	-	
Total	225			74	74	

*Table A3.2 Angel Investment as a Proportion of Total Deal Size*

Proportion of deal size	BBAA Networks		LINC Scotland	
	number	%	number	%
0 – 9	10	4.7	2	2.7
10 – 24	27	12.8	10	13.5
25 – 49	25	11.8	19	25.7
50 – 74	18	8.5	32	43.2
75 – 99	9	4.3	5	6.8
100	122	57.8	6	8.1
Total	211	100	74	100
Missing	14		-	
Total	225		74	

**Table A3.3 Amount invested by angels**

Amount	BBA Networks			LINC Scotland		
	number	percentage	Cumulative Percentage	number	percentage	Cumulative Percentage
Less than £10,000	5	2.2	2.2	0	0	0
£10,000 - £24,000	15	6.7	8.9	7	9.5	9.5
£25,000 - £49,000	38	16.9	25.8	11	14.9	24.4
£50,000 - £99,000	54	24.0	49.8	17	23.0	47.4
£100,000 - £199,000	41	18.2	68.0	19	25.6	73.0
£200,000 - £499,000	53	23.6	91.6	17	23.0	96.0
£500,000 - £999,000	17	7.6	99.2	3	4.0	100.0
£1m and over	2	0.8	100	0	0	
Total	225	100		74	100	

**Table A3.4 Number of business angels investing in each investment**

Number of angels	BBA Networks	
	number	%
0	3	1.3
1	87	38.7
2	40	17.8
3	30	13.3
4	16	7.1
5	10	4.4
6-10	25	11.1
11-19	6	2.7
20-49	8	3.6
50+	0	0
Total	225	

LINC Scotland data not available

**Table A3.5 Number of angel investors and amount invested by angels**

Amount invested by angels	BBAA Networks					
	Number of business angels					
	0	1	2-3	4-5	6-9	10+
Less than £25,000	0	16	3	-	-	-
£25,000-£49,000	0	15	13	6	4	1
£50,000-£99,000	0	20	22	10	2	0
£100,000-£199,000	0	12	13	5	7	3
£200,000-£499,000	2	17	15	4	9	7
£500,000+	1	7	4	1	1	5

Breakdown for LINC Scotland not available

**Table A3.6 Number of previous rounds of finance raised from this Network**

Number of rounds	BBAA Networks		LINC Scotland	
	number	%	number	%
0	85	59.0	24	32.4
1	33	22.9	17	23.0
2	9	6.2	10	13.5
3	3	2.1	7	9.5
4	5	3.5	8	10.8
5 and more	9	6.2	8	10.8
Total	144		74	100
Missing	81		-	
Total	225		74	

**Table A3.7 Stage of investment**

Stage	BBAA Networks		LINC Scotland	
	number	%	number	%
Seed	6	2.7	3	4.0
Start-up	58	26.8	15	20.3
Early stage/early growth	96	43.1	51	68.9
Expansion	30	13.4	4	5.4
Late growth	9	4.0	0	0
established	7	3.1	0	0
turnaround	11	4.9	0	0
Management buyout	2	0.9	1	1.3
Other	4	1.8	-	0
Total	223	100	74	100
Missing	2		-	-
Total	225		74	100

**Table A3.8 Number of Employees in Companies Raising Finance**

Number of employees	BBAA Networks		LINC Scotland	
	number	%	number	%
0	2	1.8	2	3.0
1	9	8.2	3	4.5
2	14	12.7	11	16.7
3	15	13.6	2	3.0
4	18	16.4	8	12.1
5	11	10.4	9	13.6
6-10	27	24.5	12	18.2
11-14	7	6.4	11	16.7
15-19	1	0.0	5	7.8
20+	6	5.5	3	4.5
Total	110	100	66	100
Not applicable*	11		-	
Missing	104		8	
Total	225		100	

\* turnarounds

**Table A3.9 Industry sector of investee businesses**

Industry	BBAA Networks		LINC Scotland	
	Number	%	Number	%
IT/internet/software/telecoms	51	22.7	17	25.8
Medical/healthcare/biotech/pharma	38	16.7	14	21.2
Clean tech/environment/recycling	16	7.1	5	7.6
Technology/hardware	19	8.4	12	18.2
Manufacturing/electronics/engineering	22	9.8	11	16.7
Business services	17	7.6	0	0
Retail	11	4.9	0	0
Property/property development	10	4.4	0	0
Media/creative industries	9	4.0	6	9.1
Food and drink	7	3.1	0	0
automobile	4	1.8	0	0
Tourism/hospitality	6	2.7	0	0
Other	15	6.7	1	1.5
Total	225		66	100
Missing	-		8	
Total	225		74	

## CHAPTER 4

Table A4.1. Amount Invested during 2008/09 tax year

Amount	number	% of all respondents	% of respondents making investments
Nil	39	25.5	-
£10,000 or less	9	5.9	7.9
£10,001 to £25,000	21	13.7	18.4
£25,001 to £50,000	28	18.3	24.6
£50,001 to £75,000	15	9.8	13.5
£75,001 to £100,000	12	7.8	10.5
£100,001 to £250,000	19	12.4	16.7
£250,001 to £500,000	9	5.9	7.9
Over £500,000	1	0.6	0.9
	153		

Table A4.2. Proportion invested through an Angel Network

Proportion invested through an angel network (%)	number	%
Nil	40	35.4
1-25	9	10.0
26-50	12	10.6
51-75	12	10.6
76-99	11	9.7
All	29	25.7
Missing	(1)	
	113	

**Table A4.3. Proportion invested through an Angel Syndicate**

Proportion invested through an angel syndicate (%)	number	%
Nil	52	47.0
1-25	7	6.2
26-50	10	8.8
51-75	6	5.3
76-99	10	8.8
All	28	24.8
Missing	(1)	
	113	100

**Table A4.4. Proportion invested under the Enterprise Investment Scheme**

Proportion invested under the EIS (%)	number	%
Nil	27	23.7
1-25	6	5.3
26-50	14	12.3
51-75	13	11.4
76-99	37	14.9
All	37	32.5
	114	



## CHAPTER 5

Table A5.1 LINC Scotland Summary of Angel Investment for Years 2000-01 to 2007-08

Year	No. of Deals	Angel Investment £M	Total Deal Size £M	No. of First Rounds	No. of Follow- On
2000-01	31	6.68	7.15	28	3
2001-02	28	9.08	12.1	20	8
2002-03	20	6.57	7.64	15	5
2003-04	24	7.97	10.41	11	13
2004-05	38	14.78	17.03	21	17
2005-06	45	13.37	19.27	24	21
2006-07	56	15.38	19.60	23	33
2007-08	56	17.15	26.51	26	30
2008-09	74	17.89	27.57	24	50

## SECTION 2

### **SPECIAL PAPER**

**Business Angel Data Working Group**

**Session 2009-10**

**HMRC EVIDENCE**

**FEBRUARY 2010**

**TO BIS**

**FOR THE**

**REPORT INTO**

**BUSINESS ANGELS INVESTMENT ACTIVITY**

**ALEXANDER CHISLETT &**

**PHILLIP RICE**

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## DEMOGRAPHICS OF ENTERPRISE INVESTMENT SCHEME, VENTURE CAPITAL TRUSTS AND COMMUNITY INVESTMENT TAX RELIEF

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Date: February 2010

### EXECUTIVE SUMMARY

The following paper provides a summary of an analysis of the Enterprise Investment Scheme (EIS), Venture Capital Trusts (VCT) and Community Investment Tax Relief (CITR) based on those investors claiming the tax reliefs through Self Assessment (SA).

The aim of the analysis is to fill a gap in our knowledge of investors, their motivations and behaviours. This will allow better evidence based policy to be developed.

The analysis compares investors benefiting from the schemes (the claimant populations) with the wider SA populations. This results in a number of new key findings being presented in this paper. The findings will be of interest to those connected to EIS, VCT or CITR either from an analytical and policy interest or an investment perspective (for example, the business angel community outside government). In particular they will be useful to HMRC Knowledge Analysis and Intelligence and Business Customer Unit, to the Treasury, Department for Business Innovation and Skills (BIS) and to their Business Angels Working Group (including the British Venture Capital Association, British Business Angels Association and Association of Chartered Certified Accountants).

The overall findings of the analysis, evident across numerous areas, show there to be:

- clear differences between the claimant and SA populations

More detailed findings show that claimants generally:

- are middle aged, male and married;
- are UK resident and domiciled, living in the South of England;
- are employed, and if not employed, in partnership rather than being sole-traders;
- have more 'schedules' completed as part of their tax returns reflecting their varied business interests; and
- have much higher overall income levels than the SA population, including larger amounts of company dividends.

In conclusion, whilst this paper does not make any particular recommendations for policy, it does pave the way for further analysis to be done in this area and for further collaborative work to be continued with the business angel community. In addition, every effort has been made to ensure no errors and omissions, however in providing this note for publication it cannot be guaranteed.

## BACKGROUND

EIS and VCT help small high risk companies raise funds aided by offering tax reliefs to investors. CITR is designed to increase investment in under privileged areas of the UK through investments in small businesses in those areas.

In 2006/07:

- around 2,000 companies raised around £700m through EIS. Over 12,500 individual investors (investing uniquely in EIS) claimed income tax relief on over £400m of invested funds in EIS through SA.
- around 100 VCTs raised around £230m. Over 8,000 individual investors (investing uniquely in VCT) claimed income tax relief on over £200m of invested funds in VCT through SA.
- Up to a further 1,000 individual investors investing in both EIS and VCT claimed income tax relief on over £80m of invested funds in EIS/VCT.
- under CITR, over 100 companies claimed corporation tax relief on around £500,000 of invested funds and over 250 individual investors (investing uniquely in CITR) claimed income tax relief on over £5m of invested funds for the current year of CITR claims through SA.

More information of the scheme's performance in 2006/07 can be found here

- EIS and VCT: <http://www.hmrc.gov.uk/stats/pensions/index.htm> and;
- CITR: <http://www.berr.gov.uk/whatwedo/enterprise/enterprisesmes/info-business-owners/access-to-finance/CITR/page37528.html>

Most claims are made through SA, although some are made through a PAYE code adjustment or by completing a specific form for HMRC. By comparing these claimants with other SA taxpayers (those in employment, or who are sole-traders or partners in a partnership), the aim is to better understand them and establish the differences from the general SA populations.

Characteristics of the SA population are established either by way of proxy (as in part 1, based on those taxpayers who complete particular 'schedules' to their SA return) or from information entered on the comprehensive tax calculation as part of the process of determining their tax liability. These characteristics reflect the widely varying circumstances in which an SA return is needed.

The SA population contains many different taxpayers with different circumstances, for example, sole-traders, partners in partnerships and higher rate taxpayers. It also includes non-taxpayers, pensioners with income above the aged income limit (who need to complete SA returns as full income information is needed for the purpose of tapering age-related personal allowances). This should be borne in mind

when comparisons are made between the claimant and general SA populations, especially as the claimant populations are a subset of the SA population.

## INTRODUCTION

Part 1 focuses on initial analysis of the claimant populations, based on the various 'schedules' they may complete as part of their SA return (a separate schedule is completed for each area of a taxpayer's tax affairs e.g. self-employment, capital gains, property income).

Part 2 is split into three sections. The first section looks at the size of the claimants' income, based on all sources in SA. The second section includes more detailed income analysis and looks at income tax relief claims for EIS, VCT and CITR based on the main SA return. The third section looks at the various personal characteristics of the claimants such as their age, sex, marital status and regional locations also based on the main SA return.

Further details on claimants' employment patterns are presented in part 3.

## FINDINGS

### Part 1

This part focuses on initial analysis of the claimant populations, based on information from the various 'schedules' completed as part of the SA return, specifically the sole-trader, partner or employment schedules. These were combined to make an SA 'All' population.

The average number of schedules completed by the claimant populations was generally much higher than for the SA populations, the main exception was for the self-employment (sole-trade and partners) and employment schedules. This indicates the claimant populations have much more detailed tax returns and more diverse investments and employments than the SA populations as a whole (which will include very high net-worth individuals).

Whilst the SA 'All' population may not be entirely representative (as mentioned in the background), it provides coverage of the three main employment types that make up the bulk of the SA population to give a very large population to contrast with the claimant populations. From the averages in annex 1 it can be seen that on average the claimant populations tend to have around 1 employment schedule, 0.4 partner schedules and 0.25 sole-trade schedules. This compares with SA taxpayers in the SA 'All' population that on average have around: 0.6 employment schedules, 0.2 partner schedules and 0.5 sole-trade schedules. This indicates the claimants generally have more employments and partnerships.

In addition, looking at the maximum of the number of schedules for each population for the three employment types, there is a mixture of ranges: there is at least one SA taxpayer claiming EIS relief who has 50 employments and another with over 10 partnerships. Whilst these types of returns are possible they are at the very extremes of the SA taxpayer populations.

In more detail, whilst the claimant populations have broadly higher average numbers of schedules than the SA populations, within the claimant populations it is the claimants that combine EIS with VCT investments that tend to have the highest of average number of schedules. This is closely followed by claimants of VCT and CITR (and combinations of). Why the combination of EIS and VCT provides the highest average numbers of schedules is unclear, but this may be linked to the sub-population of

Business Angels (most likely within the EIS population) who often take a keen part in their investments and are likely to have a number of other income interests.

More details of the analysis and results are shown in annex 1, but the underlying conclusion is that, as might be expected, the claimant population is significantly different from the SA population.

## Part 2

The first section in this part looks at the size of the claimants' income, based on all sources in SA.

### Income data analysis

Based on those in SA that completed the comprehensive tax calculation (which covers each captured individual SA return), table 1 below shows a clear difference in non-savings income between the claimant populations and the other three defined populations within SA. It is clear that the claimants have a much greater positively skewed non-savings income distribution, which means that they are much more likely to have far greater incomes from wages and salaries than the employees, sole-traders and partners. However, nearly 50% of the claimant distribution still has non-savings income below £50,000, indicating that many are on more modest incomes. The claimants also have three peaks to their non-savings income distributions, most notably around the £150,000 and £1m echelon.

Those taxpayers on SA that are employees, sole-traders or partners have quite similar distributions of non-savings incomes, however there is also within these distributions a high likelihood that partners earn more than employees, who in turn earn more than sole-traders. The overwhelming majority of the sole-traders have non-savings income in the £0 - £25,000 group.

Table 1

Non-savings income (£ upper limit)	Claimants (%)	Employees (%)	Sole-traders (%)	Partners (%)
25,000	27	57	77	61
50,000	20	23	16	20
75,000	11	8	3	6
100,000	7	4	1	3
200,000	15	6	2	6
300,000	6	1	0	1
400,000	3	0	0	1
500,000	2	0	0	0
1,000,000	5	0	0	1
1,000,000 plus	4	0	0	0

Further evidence of the differences in non-savings incomes can be seen in table 2, with the average non-savings income for a claimant being £230,000 compared to £25,000 - £50,000 for the SA populations.



This indicates that sole-traders on average are paid less than those in employment or partnerships. For claimants the spread of the non-savings income is also much higher at over £1m. However whilst this could be due to one particular large case skewing the results, table 1 shows it is a reflection of a more continuous stretched distribution towards the higher end.

NB population numbers in table 2 will not necessarily match those in annex 1 due to their different sources.

Table 2

Non-savings income	Claimants	Employees	Sole-traders	Partners
Number	22,000	3,250,000	2,600,000	850,000
Average (£)	230,000	44,000	22,000	50,000
Standard deviation (£)	1,230,000	200,000	80,000	300,000

Looking at the claimants' incomes in more detail (also based on those in SA that completed the comprehensive tax calculation), for reference table 3 and 4 in annex 2 breaks down the claimants' total income into various HMRC categories. They show the main component of total income for the claimants is their non-savings income. However a claimant's savings and dividends also impact on the overall total income distribution and push it upwards. In terms of the average size of the components of total income; lump sums, gains on life policies and other non-savings incomes (which is for other non-savings incomes with notional tax) all appear very low at below £3,000. Dividend averages are however much higher at around £35,000.

In addition, within EIS, VCT and CITR, the average total incomes are around £310,000, £230,000 and £70,000 respectively. Claimants of both EIS and VCT however have an average total income of around £460,000.

The second section in this part includes more detailed income analysis and the size of income tax relief claims for EIS, VCT and CITR from the main SA schedule.

#### Details of additional income (interest, dividends and other)

The following table 5 (based on those that completed the main schedule of the SA return) shows a number of variables which can be used to help understand the claimants. In addition to the average amounts on which relief is being claimed under EIS, VCT and CITR, the table shows how much the claimants other declared income is. Of the three, EIS has the largest average amounts on which relief is claimed, closely followed by VCTs. However when a claimant is involved in VCT and EIS, the average amounts on which relief is claimed generally increase substantially.

In terms of other income (interest, dividends and other taxable income from just the main SA return schedule i.e. not including income from boxes on SA schedules such as employment and self-employment), again, of those claiming just one of the reliefs; EIS claimants tend to have the largest averages, then VCT claimants, with CITR claimants last. EIS claimants receive the most dividends across the three groups and also have larger amounts of interest. This could be largely due to the impact of Business Angels who may favour EIS over VCTs as they prefer to be more closely associated with the

investment and play a larger role in its success, which VCT investments do not generally allow. In particular, the identifiable larger company dividends being shown in the EIS population could be a result of the extra involvement the Business Angels have with their EIS investments. Also, as the relief data showed, where an investor claims more than one of EIS, VCT and CITR, their other income components tend to be even higher.

From an earlier piece of analysis of those on SA who switch between self-employment and employment, it was possible to see that the company dividends of those populations generally varied from very minor amounts in the hundreds to much higher levels of between around a few thousand and up to around £15,000. Even if those populations included very savvy taxpayers with a highly focused approach to reducing their tax through a dividend strategy from incorporation of their self-employment business, these levels are nowhere near those being identified in the following table for claimants. This is a strong indication of the wide and varied set of interests associated with the claimant populations and their involvements with companies and helping them succeed (including more passively through VCT).

Table 5

Claimant population <sup>61</sup> vs. Other income (£ average)	Interest to be taxed	Interest taxed	Company dividends	Other taxable income	VCT relief claim	EIS relief claim	CITR relief claim
EIS	4,000	7,200	35,200	1,600		31,100	
VCT	1,400	6,400	19,300	700	26,100		
CITR	400	4,800	4,700	200			16,300
EIS & VCT	4,800	11,400	43,500	900	48,600	43,800	

The following section of part 2 focuses on understanding the various personal characteristics of the claimants, based on the main SA schedule.

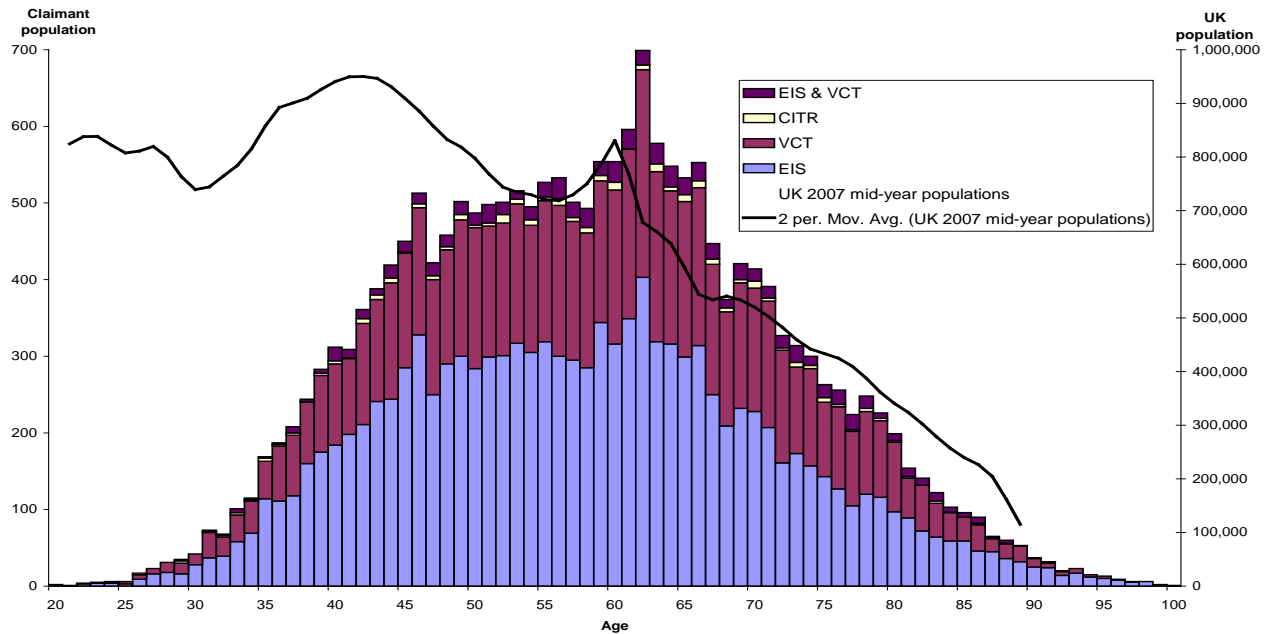
### Age

The following chart 1 presents the claimant populations by age against the backdrop of the UK population. It shows a clear pattern of claimants and is replicated across all the claimant populations. In particular, it shows that the majority of claimants are aged between 45 and 65. It also shows there is a smooth distribution of claimants either side of this central age range and that the reliefs are claimed across the age spectrum (albeit chart 1 is truncated at 20 and 100). Whilst the business impact of the claimants at the extremes may be questionable, there is no doubt there is interest in the reliefs whatever the age of the taxpayer. These findings are also interesting when compared to the overall trend of the UK population by age. Whilst the pattern of those aged 60 and above follows a similar line for the claimant and UK populations, the same cannot be said for those below 60. Specifically, there a

<sup>61</sup> There was no SA taxpayer in 2006/07 that claimed relief across EIS, VCT and CITR. That claimant population in the Venn diagram in annex 3 was therefore excluded from the results. Similarly combinations of CITR with EIS and VCT were also excluded as they were de minimis.

sizeable difference in the proportion of claimants between the ages of 20-50 compared to the same group for the UK population.

Chart1



Sex

As can be seen from table 6 below, the claimant populations are male dominated. Around four times the number of males as females involved in EIS, VCT or CITR and claiming the reliefs through SA. This is broadly the same across all the claimant populations. Across the UK there is also a similar pattern, with no particular region being overly different from this pattern of male domination.

Table 6

Claimant population vs. Sex	Female	Male
EIS	2,700	10,200
VCT	1,600	6,600
CITR	100	200
EIS & VCT	100	800
Total	4,500	17,700

## Marital status

As can be seen from table 7 below in all the claimant populations the overwhelming majority of the claimants are married. There is around five times the number of married claimants involved in EIS, VCT or CITR and claiming reliefs than there are singletons (the next highest group). This is broadly the same across all the claimant populations detailed in the table. Looking at the marital splits for the claimant populations across the UK there is also a similar pattern, with no particular region being overly different from this pattern of being married. Combining this information with the knowledge that the EIS, VCT and CITR are favoured by middle aged males, it is possible to start to build a picture of who is involved with them; as we now know they are also most likely to be married middle aged males. But what else can the data say about the claimant populations?

Table 7

Claimant population vs. Marital Status	Divorced	Married	Separated	Single	Widowed
EIS	600	9,200	100	1,600	600
VCT	300	5,800	70	1,200	300
CITR	15	190	5	40	15
EIS & VCT	40	660	5	100	35
Total	1,000	15,800	200	2,900	900

## International regions

Table 8 below shows the split between UK resident and UK domiciled claimants. The majority of claimants are both UK resident and domiciled. This means that they are most likely to have been born in the UK and to stay in the UK year after year. This is what we might expect for claimants who want/ need to be close to their investments to play an active role and be on hand to offer assistance. This is very much the role favoured by Business Angels. Looking in more detail at the splits within the claimant populations there were no obvious differences, however there did appear to be a slightly larger proportion of UK domiciled and UK resident claimants for EIS than VCT and CITR which may indicate the greater percentage of Business Angels being EIS than VCT claimants.

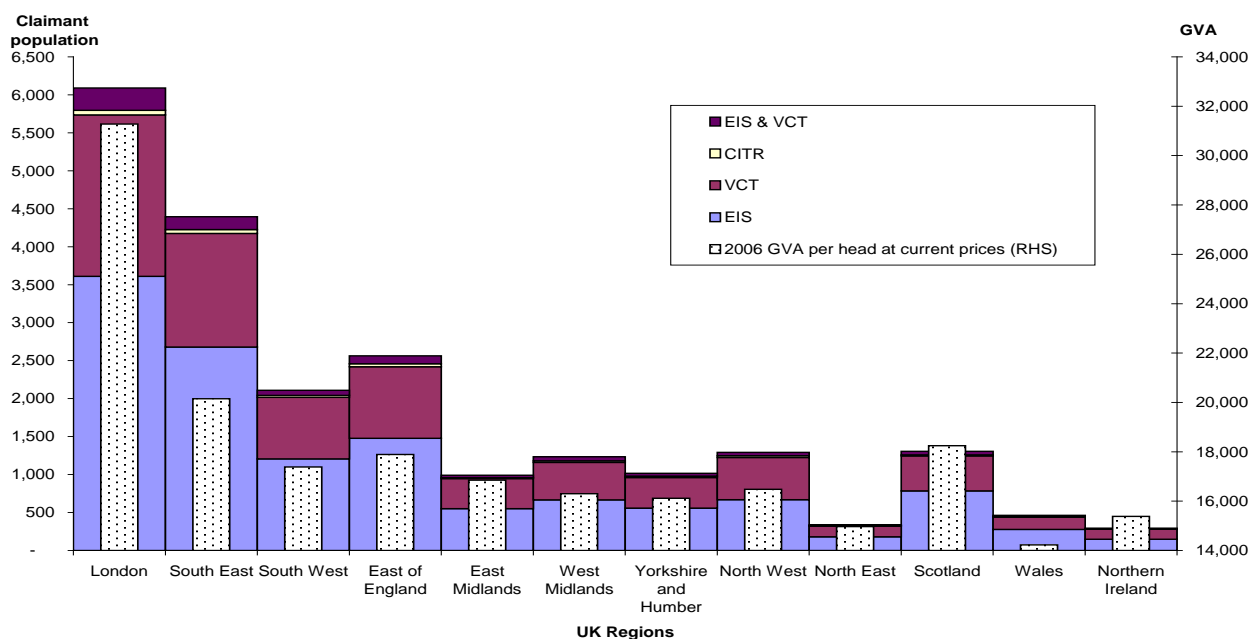
Table 8 - for all 22,000 claimants

		UK domiciled		Total
		No	Yes	
UK resident	No	50	700	800
	Yes	200	21,200	21,400
Total		300	21,900	22,200

## UK regions

The following chart 2 shows the UK regional splits of the claimant populations against their Gross Valued Added (GVA) per head for the respective regions. It shows that the majority of claimants are based in and around the South of England, with London holding the overall highest share of claimants. This is not surprising given that London is the central business district of Europe and there are many business opportunities for prospective claimants to invest in. Perhaps of more concern are the few claimants from the Midlands northwards and eastwards relative to their levels of GVA. This is useful information for any future campaign to raise awareness of entrepreneurial opportunities in such areas and for targeted campaigns to encourage investment by individuals in those areas.

Chart3



## Part 3

A three-way Venn diagram of the claimant populations and their employment interactions is attached in annex 3. Below are a few of the key points the Venn diagram draws out from the 2006/07 data, but it is worth considering the following when making views on the data in the Venn diagram: within each of the claimant populations, percentages are provided of those claimants that are employed, sole-traders or partners and will not add to 100% as an individual can have a mixture of self-employment/employment or neither. Furthermore, an individual can also have more than one self-employment/employment – this means that they will need to complete a separate SA schedule for each. The schedule numbers and splits relating to number of SA schedules an individual taxpayer completes are shown separately in the Venn diagram to those of the claimant numbers and splits.

- EIS makes up the bulk of investment relief (in terms of the number of claimants and amounts on which relief is being claimed on), closely followed by VCTs;
- There are a large number of claimants claiming both EIS and VCT relief (almost 1,000);

- Generally a higher percentage of the claimants are employed (around 50-60%), compared to being self-employed as a partner (20-30%) or sole-trader (15-25%);
- Those claimants claiming both EIS and VCT relief have the highest percentage of claimants that are partners (around 35%); and
- Although there are seven distinct populations that are mutually exclusive/separate from each other, there is no SA taxpayer in 2006/07 that has claimed all three reliefs (EIS, VCT and CITR).

## CONCLUSION

The overall findings of the analysis, evident across numerous areas, show there to be:

- clear differences between the claimant and SA populations

More detailed findings show that claimants generally:

- are middle aged, male and married;
- are *UK resident and domiciled*, living in the South of England;
- are employed, and if not employed, in partnership rather than being sole-traders;
- have more schedules completed as part of their tax returns reflecting their varied business interests; and
- have much higher overall income levels than the SA population, including larger amounts of company dividends.

This has potential implications for policy in HMT and HMRC alongside tax compliance efforts and educational campaigns. Wider than this, the analysis can help provide a clear basis for further evidence based work to be developed.

ANNEX 1

Population	Schedule	N	Average	Std Dev	Min	Max
SA 'ALL'	All those listed	6,698,495	NA	NA	NA	NA
SA EMPLOYED	All those listed	3,304,170	NA	NA	NA	NA
SA SOLE-TRADERS	All those listed	2,893,934	NA	NA	NA	NA
SA PARTNERS	All those listed	1,026,063	NA	NA	NA	NA
EIS	All those listed	12,853	2.94	2.27	0	53
VCT	All those listed	8,138	2.37	1.86	0	25
EIS and VCT	All those listed	882	3.94	3.01	0	27
CITR	All those listed	288	1.40	1.24	0	8
SA 'ALL'	Employment	6,698,495	0.61	0.78	0	50
SA EMPLOYED	Employment	3,304,170	1.24	0.66	1	50
SA SOLE-TRADERS	Employment	2,893,934	0.35	0.72	0	34
SA PARTNERS	Employment	1,026,063	0.31	0.62	0	32
EIS	Employment	12,853	0.93	1.29	0	50
VCT	Employment	8,138	0.75	0.93	0	18
EIS and VCT	Employment	882	1.03	1.45	0	20
CITR	Employment	288	0.68	0.80	0	4
SA 'ALL'	Sole-trade	6,698,495	0.44	0.52	0	15
SA EMPLOYED	Sole-trade	3,304,170	0.24	0.44	0	15
SA SOLE-TRADERS	Sole-trade	2,893,934	1.03	0.17	1	15
SA PARTNERS	Sole-trade	1,026,063	0.11	0.32	0	8
EIS	Sole-trade	12,853	0.24	0.47	0	4
VCT	Sole-trade	8,138	0.21	0.43	0	5

EIS and VCT	Sole-trade	882	0.25	0.49	0	4
CITR	Sole-trade	288	0.19	0.42	0	2
SA 'ALL'	Partner	6,698,495	0.17	0.42	0	44
SA EMPLOYED	Partner	3,304,170	0.09	0.34	0	44
SA SOLE-TRADERS	Partner	2,893,934	0.04	0.23	0	29
SA PARTNERS	Partner	1,026,063	1.08	0.41	1	44
EIS	Partner	12,853	0.43	1.06	0	16
VCT	Partner	8,138	0.32	0.92	0	23
EIS and VCT	Partner	882	0.81	1.77	0	15
CITR	Partner	288	0.11	0.46	0	5



ANNEX 1 CONTINUED

Population	Schedule	N	Average	Std Dev	Min	Max
SA 'ALL'	Capital gains	6,698,495	0.07	0.25	0	1
SA EMPLOYED	Capital gains	3,304,170	0.06	0.24	0	1
SA SOLE-TRADERS	Capital gains	2,893,934	0.03	0.16	0	1
SA PARTNERS	Capital gains	1,026,063	0.08	0.27	0	1
EIS	Capital gains	12,853	0.47	0.50	0	1
VCT	Capital gains	8,138	0.33	0.47	0	1
EIS and VCT	Capital gains	882	0.68	0.47	0	1
CITR	Capital gains	288	0.11	0.32	0	1
SA 'ALL'	Land and Property	6,698,495	0.20	0.40	0	1
SA EMPLOYED	Land and Property	3,304,170	0.21	0.41	0	1
SA SOLE-TRADERS	Land and Property	2,893,934	0.10	0.30	0	1
SA PARTNERS	Land and Property	1,026,063	0.20	0.40	0	1
EIS	Land and Property	12,853	0.36	0.48	0	1
VCT	Land and Property	8,138	0.32	0.46	0	1
EIS and VCT	Land and Property	882	0.43	0.50	0	1
CITR	Land and Property	288	0.15	0.35	0	1
SA 'ALL'	Foreign	6,698,495	0.08	0.27	0	1
SA EMPLOYED	Foreign	3,304,170	0.07	0.25	0	1
SA SOLE-TRADERS	Foreign	2,893,934	0.03	0.18	0	1
SA PARTNERS	Foreign	1,026,063	0.07	0.25	0	1
EIS	Foreign	12,853	0.38	0.49	0	1
VCT	Foreign	8,138	0.35	0.48	0	1

EIS and VCT	Foreign	882	0.56	0.50	0	1
CITR	Foreign	288	0.14	0.35	0	1
SA 'ALL'	Trust	6,698,495	0.01	0.11	0	1
SA EMPLOYED	Trust	3,304,170	0.01	0.10	0	1
SA SOLE-TRADERS	Trust	2,893,934	0.00	0.07	0	1
SA PARTNERS	Trust	1,026,063	0.01	0.09	0	1
EIS	Trust	12,853	0.07	0.25	0	1
VCT	Trust	8,138	0.04	0.19	0	1
EIS and VCT	Trust	882	0.07	0.26	0	1
CITR	Trust	288	0.01	0.08	0	1
SA 'ALL'	Non-resident	6,698,495	0.04	0.19	0	1
SA EMPLOYED	Non-resident	3,304,170	0.04	0.19	0	1
SA SOLE-TRADERS	Non-resident	2,893,934	0.01	0.08	0	1
SA PARTNERS	Non-resident	1,026,063	0.01	0.11	0	1
EIS	Non-resident	12,853	0.04	0.19	0	1
VCT	Non-resident	8,138	0.03	0.17	0	1
EIS and VCT	Non-resident	882	0.04	0.19	0	1
CITR	Non-resident	288	0.01	0.08	0	1
SA 'ALL'	Share scheme	6,698,495	0.00	0.07	0	1
SA EMPLOYED	Share scheme	3,304,170	0.01	0.97	0	1
SA SOLE-TRADERS	Share scheme	2,893,934	0.00	0.02	0	1
SA PARTNERS	Share scheme	1,026,063	0.00	0.04	0	1
EIS	Share scheme	12,853	0.03	0.18	0	1
VCT	Share scheme	8,138	0.03	0.18	0	1

EIS and VCT	Share scheme	882	0.07	0.26	0	1
CITR	Share scheme	288	0.01	0.08	0	1

## ANNEX 2

Table 3 - for all 22,000 claimants

(£ upper limit)	Lump Sum (%)	Savings (%)	Dividends (%)	Gains on life policies (%)	Non-savings income (%)	Other non-savings income (%)	Total income (%)
25,000	100	87	81	99	27	100	11
50,000	0	7	8	1	20	0	21
75,000	0	3	3	0	11	0	15
100,000	0	1	2	0	7	0	9
200,000	0	2	3	0	15	0	19
300,000	0	1	1	0	6	0	8
400,000	0	0	1	0	3	0	4
500,000	0	0	0	0	2	0	3
1,000,000	0	0	1	0	5	0	6
1,000,000 plus	0	0	1	0	4	0	5

Table 4 – for all 22,000 claimants

	Lump sum	Savings	Dividends	Gains on life policies	Non-savings income	Other non-savings income	Total income
Average (£)	1,000	18,000	35,000	3,000	230,000	10	290,000
Standard deviation (£)	40,000	110,000	280,000	280,000	1,230,000	1,000	1,380,000

### ANNEX 3

Venn diagram to show all the possible combinations of EIS, VCT and CITR investor unique populations and their interactions on Self Assessment employment and self-employment schedules in 2006-07

Please note not all components of the three way Venn diagram are shown as they are either nil or de minimis.

EIS only	
Relief claimed on:	£400m
Investors:	12,853
Employed (% in brackets)	7,830 (61%)
Sole-traders: (% in brackets)	2,893 (23%)
Partners: (% in brackets)	3,183 (25%)
Schedules:	
Employed schedules:	11,963
Sole-trade schedules:	3,080
Partner schedules:	5,493

VCT only	
Relief claimed on:	£210m
Investors:	8,138
Employed (% in brackets)	4,578 (56%)
Sole-traders: (% in brackets)	1,639 (20%)
Partners: (% in brackets)	1,535 (19%)
Schedules:	
Employed schedules:	6,075
Sole-trade schedules:	1,714
Partner schedules:	2,593

CITR only	
Relief claimed on:	£5m
Investors:	288
Employed (% in brackets)	153 (53%)
Sole-traders: (% in brackets)	53 (18%)
Partners: (% in brackets)	24 (8%)
Schedules:	
Employed schedules:	196
Sole-trade schedules:	56
Partner schedules:	31

EIS & VCT	
Relief claimed on:	£82m
Of which EIS:	£43m
Of which VCT:	£39m
Investors:	882
Employed (% in brackets)	534 (61%)
Sole-traders: (% in brackets)	198 (22%)
Partners: (% in brackets)	291 (33%)
Schedules:	
Employed schedules:	908
Sole-trade schedules:	219
Partner schedules:	718

## ANNEX 4

### Methodology note

The first stage of the analysis was to define the distinct claimant populations. These were based on the 2006/07 SA boxes used to claim the reliefs of EIS, VCT or CITR in that year. For CITR, only those that made current year claims were included; as these would be most consistent with the other SA data they would be declaring in 2006/07. However there will be CITR claimants that will claim for previous year investments (in addition to if they made any current year claims); as they can claim relief at 5% for 5 years. 2006/07 was the most up to date year of data available (and published in the associated National Statistics in December 2008) given the lag (of around two years) for claimants to file their SA returns and make a claim.

After the above, an initial analysis was done on the various 'schedules' they may have completed as part of their SA return (i.e. a separate schedule is completed for each part of a taxpayer's tax affairs e.g. if they were self-employed or had capital gains). This initial analysis forms the basis for part 1.

In detail, due to the data structure it was possible to analyse the schedules completed by the claimants as distinct claimant populations (defined by a Venn diagram attached in annex 3) against four SA populations and the schedules they completed. The SA populations were based on those that completed a sole-trade, partner or employment schedule and were combined for an SA 'All' population for a broader comparison. Here the distinction is between the claimant and SA populations, though results of all the separate populations are provided in annex 1.

The schedules considered as part of this analysis were: employment, sole-trade, partner, capital gains, land & property, foreign, trusts, non-resident and share schemes. More detail of these schedules is available from the HMRC public website link: <http://www.hmrc.gov.uk/sa/forms/content.htm>

In part 2 the focus is on extending the initial understanding by identifying details about the size of the claimants' income, specifically by looking at the claimants income from all sources in SA (i.e. from all investment types and employments based on the comprehensive tax calculation data) and how they compare to the SA populations. It then looks at more detailed other income data from the main SA schedule as well as key data on the size of the claims for which reliefs are being claimed on for EIS, VCT and CITR. In addition to this, the main SA schedule was used for analysing some of the claimants' general information. In particular, looking at the various personal characteristics of the claimants such as their age, sex, marital status and regional locations.

For part 3, it was thought useful to match the core dataset of claimants to the self-employment and employment data (based on the respective SA schedules the claimants completed) and identify further details around the claimants employment patterns. Some initial results of this matching are presented in part 3.