

Baseline Review of Angel Investment in New Zealand (Undertaken as Part of the Formation of the Seed Co- Investment Fund)

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November 2007

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Executive summary

Background

The Seed Co-Investment Fund

The Seed Co-Investment Fund was established to help develop New Zealand's angel equity market and, in doing so, catalyse angel investment into New Zealand seed and start-up companies that would not occur otherwise. There are two programme mechanisms:

1. market development initiatives, i.e. education and market collaboration (for which there is an annual budget of \$100,000) and;
2. passive investment by the Crown in seed and start-up investments (of up to \$8 million per annum) alongside pre-qualified angel investment partners.

Policy documents underpinning the programme specify that the Crown can invest \$250,000 for any new private investment proposed by investment partners and a further \$250,000 in follow-on co-investment per investment, provided certain provisions are met. Crown investment must be: matched 1:1 by investment partners, limited to a total of \$4 million per single investment partner over 12 years, and subject to ownership rules.

The programme commenced operations in July 2006. Four co-investment partnerships were announced in September 2006. NZVIF Ltd, the Crown owned entity responsible for managing the programme, is currently seeking more co-investment partners.

This report is a baseline review of the angel investment market. The purpose of the baseline review is to describe the current state of New Zealand's angel investment market and analyse performance expectations of the Seed Co-Investment Fund to use as a basis for subsequent evaluation.

Policy rationale

Angel investors are an important source of capital for a subset of firms that would otherwise find it difficult to access traditional forms of finance. These firms include start-up firms with high growth potential, innovative firms, firms that are technology-intensive and are seeking to develop unproven products or technology, and firms with assets that are difficult to value. By helping to develop the angel investment market the government is seeking to stimulate the emergence of these innovative New Zealand firms.

Specifically, angel investors supply finance available for high risk/return investments in seed, start-up and early expansion projects. Angel investors also have the business experience to help create and grow new firms to commercialise their outcomes. Through assisting entrepreneurial firms, angel investors can contribute to competition and productivity within the New Zealand economy.

Conclusions

Angel investment activity in New Zealand

Our baseline of angel investment activity in New Zealand is based on interviews with angel investors from August to October 2006 and a comparison with angel investment activity overseas. New Zealand's angel investment market has been operating for less time than markets in other comparable countries and thus is less developed. In New Zealand, approximately twice as many investment deals are done through informal, versus formal networks. This makes it more difficult to collate data and estimate the total size of our angel investment market. However, we estimate that currently there are at least 100 active angel investors currently in New Zealand (active investors are more hands on in their investments than passive investors and tend to be more knowledgeable and experienced as investors).

While angel investors are regionally spread across New Zealand, they tend to be concentrated within Auckland. As most angel investors tend to invest in their own region, regardless of preferences, the majority of angel investment activity is also occurring within the Auckland region. The most common sectors for angel investment are ICT and biotechnology and approximately two thirds of investments occur at the seed and/or start up stage.

On average, angel investors invest in 13 percent of the deals considered, and hold approximately three deals at a time (these results are similar to Infometrics (2004) estimates). However, the average amount invested per deal has increased in the last two years (from \$100,000 to \$765,000). The average time to exit an investment is six years.

Despite New Zealand lagging behind more sophisticated and advanced angel investment markets abroad, we believe there is excellent potential for New Zealand to develop a successful angel investment market.

Current understandings

The current policy has provided a basis for forming the fund and this has gone ahead as planned. To reduce the likelihood for any disconnect between the original intent of the Seed Co-Investment Fund and its operation, it is important to consider whether the policy rationale is fully comprehensive.

Research indicates that access to finance is not a barrier to growth for most New Zealand firms with a marketable position. However, a subset of firms (i.e., technology intensive start-ups) can have difficulty obtaining financing, on account of their lack of collateral, limited cash flow and investment risks to investors. These difficulties can be further compounded by a shortage of investors who understand these types of investments. The government can help by stimulating the availability of angel investment for high-growth potential firms and by helping to increase the relevant skill set of angel investors.

More broadly, the government is using the Seed Co-Investment Fund to accelerate the development of the angel investment market. To ensure an ongoing pool of angel investors, it is important that angel investors know where to start and what practices they need to employ. Angel investors tend to invest within their own area of expertise. Therefore, a greater understanding of other investment opportunities and what is required to manage such investments is also beneficial. Our interviews with angel investors also

indicated that entrepreneurs needed to have a greater understanding of the investment process.

Performance expectations

The Seed Co-Investment Fund is expected to help develop the angel investment market. Development of the angel investment market would be evident in the policy objectives, or outcomes, that are expected of the programme. According to policy documents underpinning the Seed Co-Investment Fund these objectives are to:

- i. develop greater professional capacity in the market for intermediating funds between investors and newer technology-based firms;
- ii. increase the depth in the specialist skills needed to assess and manage early-stage technology-based investment;
- iii. increase the scale and enhance developed networks for early stage investment;
- iv. catalyse investment that would not have occurred without the programme, and;
- v. minimise fiscal risk and cover costs.

These objectives are an important guide to NZVIF Ltd, who is responsible for managing the programme. However, whilst these policy objectives are relevant, it is our view that they are insufficiently defined and require clarification. In the report we distinguish between objectives that are achievable in the near term and those which are longer term objectives. We also seek to clarify what the objectives mean and consider their priority to the development of angel investment in New Zealand.

There is the possibility for ambiguity in the fifth objective. Within policy papers the Seed Co-Investment Fund does not have a mandate to achieve a particular rate of return. The programme is essentially about getting better investment through more competent investors, better networks, and more quality deals.

We recommend that performance measures be set and agreed between MED and NZVIF Ltd to clarify the programme objectives. Such measures will apply to future evaluations of the programme.

It is our view that networking will help develop the other programme objectives. Developing the market for angel equity finance is about ensuring the players in the market are more connected and integrated. However, angel investors themselves will decide the nature of networks and processes that best suit them. The government is just a participant, not a manager of the angel investment process.

Will the policy deliver benefits and what are the interdependencies for programme success?

The challenge in relation to angel investment rests with the Ministry of Economic Development (MED), as part of its economic development advice. The Seed Co-Investment Fund is a cornerstone in the development of New Zealand's angel investment market. However, passive co-investment through the Fund may be insufficient, on its own, to fully develop New Zealand's angel investment market.

More importantly, the government needs to ensure the existence of a sound business framework which encourages angel investors to undertake investments and start-up companies to expand. If the angel investment market is to grow and make a maximum contribution, we need to make the environment as favourable as possible. MED is currently undertaking a review of financial products and providers to address the regulatory and taxation issues in this regard.

The success of the Seed Co-Investment Fund is ultimately dependent upon good quality investment deals (i.e. finding investor ready firms). New Zealand needs to work particularly hard to ensure that entrepreneurs are ambitious, recognise the role of capital in their growth, and can have an informed discussion with investors. Some of the recommendations we make within this report are thinking, at the margin, how to make New Zealand a top performer in angel investment.

In overseas markets, universities are viewed as a vital source of start-ups. Overseas universities have mandates to commercialise research. They have also established valuable partnerships with the private sector, including angel investors. As a result, people are encouraged to enter university to pursue business ideas that can successfully be brought to market. This approach has not yet been developed in New Zealand. We recommend an increased emphasis on the commercialisation of university innovations in New Zealand, to the same degree that excellence in research is currently encouraged. This commercialisation should occur in collaboration with angel investors and the wider business community to ensure its success.

Escalator and Connect New Zealand are two programmes that are designed to increase the investment readiness of firms and link firms with equity capital from angel investors. A closer and more harmonious working relationship between these programmes and the Seed Co-Investment Fund would augment the development of New Zealand's angel investment market. We recommend regular meetings between the delivery agencies of these programmes to understand each other's strengths and limitations, and review opportunities for further development. It may be feasible, over time, to create an 'arena' where one programme addresses both investment readiness and the facilitation of investment deals.

Links between angel investors, venture capitalists, and incubators are also important in ensuring the effective development of angel investment in New Zealand. Venture capitalists and incubators are important sources of deal referral for angel investors. In addition, venture capitalists often share their operational processes and provide a point of exit for angel investments.

1 Background

The purpose of this report is to present the findings and recommendations from the baseline review of angel investment in New Zealand. The baseline review was undertaken as part of the formation of the Seed Co-Investment Fund.

This report is presented in two parts. In Part One we examine New Zealand's angel investment market. In Part Two we discuss government policy to develop the angel investment market.

1.1 What is an angel investor?

A 2004 study by Infometrics into New Zealand's angel capital market identifies an angel investor as an investor who invests directly, either as an individual or as part of an informal group or syndicate, in a privately owned business for which they have no prior connections (this definition is consistent with international literature). Angel investors typically bridge the gap between capital provided by founders, families and friends and structured capital provided by Venture Capitalists.

Angel investors may take a passive approach to investing (i.e. backing others' judgements) or be more hands-on in their investments, offering advice or direct management input to help a business become established and grow. The latter group of investors are termed 'active angels' and the capital that they provide is referred to as 'smart money'.

Statistically, angel investors tend to have high net worth or high incomes and have an appetite for risk or adventure. They are more likely to be male, aged between 45 and 60 years of age, and have experience in running their own business. They often have extensive business and/or technical experience.¹

Most angel investors seek financial rewards from an investment (usually via increased capital rather than cash yield), and are motivated by a desire to turn a business idea into a winner. Angel investors focus on an entrepreneur's capacity and combine financial reward with guidance and challenge. Some angel investors also look to contribute to local or national wealth and growth, more generally.

Angel investors are not particularly visible in the marketplace. Some angel investors will consider a range of investment opportunities, whilst others prefer to invest in opportunities in a particular region or within a particular industry.

1.2 Scope of the baseline review

The purpose of the baseline review was to establish a description of the angel investment market in New Zealand and provide comment on government policy parameters around

¹ Stedler and Peters (2003), Reitan & Sorheim (2000), Hindle & Lee (2002), and Liu (2000) provide a more specific age range of 45-55 years for angel investors in Germany, Norway, Singapore, and Canada. Hindle & Wenban's (1999) survey indicates that the average age of angel investors in Australia is 30 to 39 years. Tashiro's (1999) research indicates that the typical angel investor in Japan is aged in their early 60's. A survey by San Jose et al (2005) suggest angel investors in Spain are aged between 35 and 55 years of age. For research into the experience of angel investors refer to Feeney, Haines and Riding (1999).

this market. Aided by information on angel investment overseas, our research will help us to understand New Zealand's angel investment market as it exists currently. As a result, we will be able to establish a baseline. Baseline data is important as it provides a reference point for future comparison and thereby helps to determine how New Zealand's angel investment market has developed over time.

The baseline review coincides with the appointment of the first co-investment partners for the Seed Co-Investment Fund.

With the above aims in mind we set out to answer the following questions:

- i. What is the current landscape of angel investment in New Zealand?
- ii. What are the gaps in the market?
- iii. What are the key performance drivers for the growth of New Zealand's angel investment market?
- iv. What is our understanding of the policy rationale for the Seed Co-Investment Fund?
- v. Are the objectives for the Seed Co-Investment Fund clearly elaborated and are they relevant?
- vi. Is the Seed Co-Investment Fund feasible and capable of delivering benefit?
- vii. What are the interdependencies for the success of the Seed Co-Investment Fund?
- viii. What performance measures would determine success of the Seed Co-Investment Fund and how will the programme be evaluated?

1.3 Methodology

1.3.1 Data sources

Interviews

Interviews were conducted between August and October 2006 with participants in New Zealand's angel investment market. The idea behind these interviews was to understand the respective roles that exist in New Zealand's angel investment market and the operational investment practices used by investors. We were also keen to compile a set of numbers on angel activity, and, where possible, investigate market perceptions of the Seed Co-Investment Fund.

Interviews were conducted with the following:

- 32 angel investors (both participants and non participants of the Seed Co-Investment Fund);
- one angel network facilitator (attached to an angel investor network)²;

² See Appendix 13.1 for an explanation about how angel investors were selected for interview, the regions they were located, how they were interviewed, and the questions they were asked.

- five angel investment facilitators (one within an Economic Development Agency and four Chartered Accountants);
- four commercialisation managers (three attached to universities and one attached to a technology institute);
- two financial officers representing companies that are involved in angel investment (but the goal of such companies is not angel investment);
- one Venture Capitalist;
- one international business advisory company (attached to the Venture Capital industry);
- one Chamber of Commerce representative; and
- the NZVIF Ltd Programme Manager for the Seed Co-Investment Fund.

Existing studies and data

Other data drawn upon for this review included:

- our own survey of the international literature on angel investment;
- New Zealand's Angel Capital Market: the supply side: Infometrics Ltd, June 2004 (summarises a Ministry of Economic Development survey of angel investors);
- Bank Lending Practices to Small and Medium Sized Enterprises, Price Waterhouse Coopers, July 2003;
- Statistics New Zealand Business Finance Survey, 2004; and
- an analysis of the above survey in Mind the Gap: Small Firm Financing in New Zealand, Blair Robertson, 2006.

1.3.2 Data limitations

The information obtained is limited by the number of angel investors interviewed. As angel investment predominantly occurs outside the public arena, angel investors are hard to identify. Our sample of angel investors was obtained by using a snowball approach (i.e. we contacted known angel investors and asked them to seek the participation of their associates on our behalf). On the basis of market estimates presented within the Infometrics (2004) report we have captured approximately 33 percent of the key angel investors in the market.³

A longer timeframe for the review may have allowed for a wider sample to be identified, which may have more adequately captured the views of the angel investment market. However, we note that, within our sample of angel investors interviewed, we found a wide

³ It is our view, however, that given the ease with which we identified our sample, the number of active investors in the market is higher than indicated within the Infometrics (2004) report.

cross-section of angel investors. Hence the views of our sample may be indicative of the angel investment landscape in New Zealand at this time.

PART ONE

THE NEW ZEALAND ANGEL INVESTMENT MARKET

2 Why angel investment is important

Angel investors provide New Zealand businesses with:

- management expertise and advice to help them to realise their potential; and
- risk capital that is not available through traditional sources.

In this chapter we explore why angel investment capital is so important to a group of New Zealand firms that would otherwise have difficulty accessing finance.

2.1 Financing difficulties

New Zealand firms that experience financing difficulties include start-ups with high growth potential, innovative firms, firms that are technology-intensive and are seeking to develop unproven markets or technology, and firms with assets that are difficult to value. These firms' difficulties in accessing finance occur at the concept, or seed, stage; when they are developing a product or service and undertaking initial marketing (referred to as the 'start-up' stage); and in the first three years of production and delivery (referred to as the 'early stage' of their lifecycle).

In terms of economic development, the above firms are of specific interest. Through their innovations, such firms contribute to competition and potentially to productivity growth.⁴

International studies suggest firms' difficulties accessing finance are related to the presence of asymmetric information, or the different sets of information that are held by firms and potential investors. In this situation investors are likely to have significantly less information than firms about the prospects for the success of a business. This situation makes it hard for investors to decide whether to invest, agree on the terms of investment, and monitor whether the management will act in the best interest of the firm. Conversely, firms have less information about the investment process. Firms may not be aware of all of the financing options available to them, may misunderstand the requirements of investors, and/or not know how to make an attractive investment pitch to potential investors.

Asymmetric information prevails throughout the market for finance. However, it is more likely to affect the above group of firms. These firms have little or no record of performance for investors to assess them against and lack readily-available collateral (which can be used to overcome information problems). They also tend to lack a track record with investors, and often have intangible assets. In the case of new or untested products, it can be difficult for investors to predict how profitable these products will be. Robertson (2006) also asserts that the fixed costs of screening and monitoring young firms could be proportionally larger in relation to the amount of profit that an investor may expect to generate from such investments.

⁴ Innovation within firms is widely accepted as being critical to firm success and aggregate economic growth (Fabling and Grimes, 2002). And, the entry of new firms contributes to competition within the economy.

2.2 The New Zealand evidence

A substantial amount of work commissioned by MED has explored New Zealand's market for finance. This work has investigated bank lending practices in New Zealand, the extent of the informal (i.e. angel) investment market, and surveyed firms' own views on whether access to finance is a constraint to growth.

The overall conclusion reached from this work is that access to finance is not a barrier to growth for *most* New Zealand firms. However, access to financing *can be* an issue for start-up firms and firms that have intellectual property on account of their lack of collateral and likely cash flow.

The Price Waterhouse Coopers (2003) study, which relied on information on bank lending practices provided by seven key banks in New Zealand, reported negligible loans made to firms without any collateral backing. In the absence of collateral, banks have to rely on a detailed investigation and analysis of a borrower's business. Yet, often banks do not have the specialist knowledge nor expertise to understand the risks involved of firms that enter new or untested markets. The study also reported that, in lending to start-ups firms, banks require a guaranteed or likely cash flow.⁵

This research is backed by evidence from the 2004 Business Finance Survey (BFS) by Statistics New Zealand, the first comprehensive dataset on the demand for business finance in New Zealand. In the 12 months to August 2004, 90 percent of the New Zealand businesses surveyed that requested debt financing, received financing.⁶ However, although the chances of being declined debt financing were small, firms that were more likely to experience issues were young and/or small firms (i.e., start-ups). The main reasons for declined debt finance were insufficient income or cash-flow (particularly for young businesses) and insufficient collateral or security.⁷

To determine whether access to finance is actually an issue for a subset of firms, consideration needs to be given to whether such firms can more readily access equity financing versus debt. The BFS found six percent of businesses surveyed requested equity financing in 2004 (34 percent of surveyed businesses sought debt financing). Robertson (2006) suggests that, rather than being equity averse, a low demand for equity may be linked to a general misunderstanding of equity financing itself and a lack of knowledge about equity financing options (i.e. due to information asymmetries).⁸

⁵ To an extent, there is an element of trade-off between security and cash flow. While, ideally, all banks in the survey would prefer strength in both cash flow and asset backing, if a firm was particularly strong in one dimension it would tend to lower the extent to which reliance was placed on the other dimension.

⁶ In the BFS, successful sources of debt finance included banks, finance companies, trade creditors, existing owners, friends and family, individuals, and other businesses.

⁷ Robertson (2006) records that 11.2 percent of firms with 1- 5 employees and 10 percent of firms with 6 - 20 employees were declined requests for debt financing, versus just over 4 percent of firms with 21 - 100 employees or 101 – 500 employees. 11.2 percent of businesses that were six months to three years old had their requests for debt financing declined, versus 9.7 percent for firms that were over three years old.

⁸ This assertion is further evidenced by anecdotal evidence from the BFS, whereby a number of completed surveys included handwritten accounts from respondents noting that they did not understand the equity questions. Also, McLennan (1994) found that many small business owners in New Zealand do not

Younger businesses were relatively more likely to seek equity than older businesses. Nine percent of businesses six months to three years old requested more equity finance compared to businesses over three years old. Robertson (2006) asserts that this result may be because younger firms have more constrained options when it comes to debt financing (as noted above, providers of debt demand collateral and/or cash flow from borrowers).

86 percent of the firms surveyed were fully or partially successful when seeking equity financing. The main reason for being declined equity finance was insufficient income or cash-flow. Over 80 percent of successful equity in the BFS survey was sourced from founders, family and friends. The BFS did not have a particular category for 'angel investment finance' within the equity requests.

For investors, start-up firms with high-growth potential, innovative firms, firms that are technology-intensive and are seeking to develop unproven markets or technology, and firms with assets that are difficult to value are inherently risky investment propositions. As indicated above, such firms usually lack collateral and cash flow, and the promise of investment rewards are not guaranteed. Angel investors have the experience and networks to understand the risks involved in investing capital into such firms.

The OECD (2007) Review of New Zealand's Innovation Policy, identified that equity finance was a major challenge in New Zealand, as there were relatively few angel investors. Consequently, private sector investment in innovation was modest. The business angel community in New Zealand was small and angels tended to take a low public profile and were not easy to identify or to organise into networks. The report also noted that New Zealand's angel investment market was 'embryonic' and needed government assistance, especially in the policy area for developing technology-based products. Barriers to business growth were also identified, which related to capital market failures, tax disincentives to offshore expansion and insufficient public support to innovation-related investment, including fiscal incentives of R&D. These barriers still existed despite New Zealand's favourable business environment and the growth of new firms being higher than many European countries.

understand external equity finance, confuse it with debt and have a negative perception of their ability to attract external investment.

3 New Zealand's angel investment landscape

In this chapter we present the findings from our interviews with 32 New Zealand angel investors. As our sample of angel investors was very diverse, in most cases we found it helpful to summarise the findings. However, where useful, we report on an individual basis.

3.1 Angel investor types and networks

New Zealand's angel investment market, like angel investment markets overseas, is heterogeneous. From the sample of 32 angel investors that we interviewed, we have identified three broad categories of angel investor in New Zealand:

- i. solo investor:* these investors have a preference for investing on their own;
- ii. informally networked investor:* these investors invest with others through informal, or non visible, networks.
- iii. formally networked investor:* these investors are a member of and make investments through a formal, or visible, angel investment network.

The most common category for our sample was the informally networked investor. 14 angel investors, or 44% of the angel investors interviewed, prefer to invest via informal networks. However, within this category there were variations in angel investment activity. For example, approximately half of these investors indicated that they were professional investors (i.e. they actively sourced investments and lived off their investment returns). The other investors were currently running a start-up business. Three such investors stated that they held key management positions in such businesses as a direct result of investing in them (their investment strategy, which was readying start-up businesses for sale to the market, dictated that they be actively involved in the day to day running of the business).

Two of the 32 angel investors we interviewed always invest alone. Three other investors had a preference for investing on their own, but usually invested with one or two other angel investors (so, to some extent, these investors could also be categorised as informally networked investors). Their co-investment partnerships tended to be through business or personal contacts. Another investor, who we have defined as an informally networked investor, invests alone just at the inception stage of an investment. Once an early prototype has been developed, he invites other angel investors into a deal.

We found seven formal angel networks in New Zealand (with the possible forthcoming addition of another). From the known formal networks, we interviewed 13 angel investors. These networks range in membership from two to 55 members. They either consist of a tight group of angel investors with similar or complementary experience, or are comprised of angel investors with a wide range of backgrounds. Four of the networks are based in Auckland. The other formal networks are based in Wellington, Christchurch and Dunedin. Four networks invest in specific sectors, whilst three networks are open to investment opportunities in any sector.

We found that angel investors were either 'active' or 'passive' depending on their degree of involvement in an investment (which, in turn, reflects their experience and knowledge as an entrepreneur and/or investor). Active investors offer leadership, advice and knowledge

to entrepreneurs through mentoring. As they are hands-on in their investments, they tend to have a good understanding of the specific risks of their investments. 'Passive' investors are less involved with their investments, and tend to rely more on the judgement of other investors when deciding to invest in the first place.

From the 2004 survey of angel investors, Infometrics (2004) argue that passive investors (or passive-dabblers as they call them) are more likely to have a higher appetite for risk than active angel investors and do not elect to join formal investor networks. Anecdotal comments obtained from our interviews dispute these assertions. Some active angel investors view passive investors as risk averse, free riders. In the largest formal network, we found that 33 out of 55 members are deemed to be passive investors. In another network of eight investors, four investors are deemed to be 'less active'. Note, however, what constitutes a passive investor may differ between networks. Also, an angel investor may vary their degree of 'activeness' between investments.

Infometrics (2004) note that any attempt to define an angel investment market is fraught with difficulty. Angel investment markets tend to be fragmented, and the majority of investments are unreported. From an environmental scan, Infometrics estimate that the number of genuinely active full-time investors in New Zealand in 2004 was less than 100. All of the 32 angel investors we interviewed for this review appeared to be active investors. The total size of the market is unknown. However, Infometrics estimate that, in 2004, passive and active angel investors in New Zealand numbered between 1,000 and 20,000.

In Chapter 4 we discuss the number of angel investors operating in overseas markets. However, we note that on account of a lack of comparable data and accurate statistics, it is not possible to directly benchmark New Zealand's angel investment market against markets overseas⁹.

Angel investors can be a member of more than one (informal or formal) network. However, as most networks are private and unstructured, it can be difficult to identify which investors belong to which networks.

3.2 What angel investors offer New Zealand businesses

The angel investors that we interviewed indicated that there is plenty of capital available for investing in seed and start-up companies in New Zealand. Their view was that the real value of angel activity comes from the hands on involvement that active investors have with the entrepreneur/business. Experienced active angel investors bring crucial business knowledge to their investments, have the right analytical tools, and know the right experts to bring into a business at the right time. Such knowledge can help start-up businesses grow strategically, expand globally, and push barriers. The common view was that New Zealand seed and start-up businesses primarily need knowledge, not money.

In terms of being able to actively invest, the following experiences (ordered in terms of importance) were seen to be the most relevant by our sample:

⁹ However, there are commonalities across jurisdictions; for example, Maula, Autio & Murray (2005) found in Europe that independent venture capitalists (i.e., angel investors) add value in early-stage establishment activities, such as helping raise additional finance, recruiting key employees and professionalizing the organisation.

- i. *operational experience*: the ability to successfully establish, run and exit a company; and expert knowledge and experience in operational areas such as finance, marketing, governance, management, strategy, merchant banking, and human resources. Operational experience also encompasses a knowledge of how to grow a business globally;
- ii. *technical experience* in a particular sector;
- iii. *investment experience* (often in a particular sector) and/or the ability to raise capital from other investors; and
- iv. *a good understanding of people*, which helps investors to assess the quality of a management team.

3.3 Investment motivators

The decision to participate in New Zealand's angel investment market is both a head and heart decision. Our sample of angel investors were motivated to invest for three reasons:

- i. for enjoyment;
- ii. for financial returns; and
- iii. for altruistic motives.

Angel investors usually need a desire to become involved in an investment in the first place. The investors interviewed predominantly liked creating new businesses. They were motivated by the idea that a particular innovation may 'fly', and enjoyed working with the raw talent of entrepreneurs. Angel investors said that they could add value to a business by contributing their own expertise. They found their investments to be exciting and personally stimulating.

While the question of what motivated them was open-ended, most of the angel investors interviewed also said that they liked making money from their investments. In this regard, the common view was that the return from successful investments would outweigh the results of non performing investments. Out of ten investments, most angel investors expected one or two investments to return in excess of 20 percent, two to four investments to provide reasonable returns, three to five investments to continually suck capital from investors (referred to as 'the living dead'), and two to three investments to die off (referred to as 'dogs'). While some angel investors said that it was difficult to predict which investments would succeed, one formal network of angel investors and three solo investors said that their investment strategy was to pick fewer, but good quality investments, based on their operational and technical experience.

The above investment motivations indicate that, in order for angel investment to occur, an entrepreneurial spirit for start-up companies must first exist, and then potential investment opportunities need to be seen as financially viable.

A small number of investors stated that they are motivated by a passion to see a community or New Zealand as a whole do well. These investors see their involvement as helping to turn small companies into larger companies, creating technology, and stimulating wealth and economic growth. Their altruistic motivations also include creating

a new business culture, or way of doing business. This involves fostering investment into non-traditional areas and the creation of start-ups, more generally.

3.4 Angel investment activity

30 angel investors reported on their investment activities for the period July 2004 to June 2006. A summary of their investment activities is shown in Table 3.4(a).

Of those angel investors who provided us with data, on average each investor had considered 31 investment deals, and invested in three deals over the period. The overall median deal size was \$550,000. The total amount invested per investor ranged from \$50,000 to \$6 million.¹⁰

Table 3.4(a) Angel investment activity: July 2004 to June 2006

Region	Median deal size (for 27 investors)	Number of deals considered (for 25 investors)	Number of investments made (for 27 investors)		
			Total	Via formal networks	Via informal networks
Auckland	\$425,000	348	63	27	36
Wellington	\$720,000	88	13	2	11
Canterbury	\$850,000	66	12	7	5
Otago	\$625,000	255 ¹¹	10		10
Southland	\$305,000	13	3 ¹²		3
Total sample	\$550,000	770	101	36	65

(Note: our category for informal networks includes solo investors)

Angel investors interviewed reported an abundance of potential angel investment opportunities available. However, actual deals made represented 13 percent of the deals

¹⁰ The two largest total amounts invested were \$5 million and \$6 million. These investments were outliers: the next largest total amount invested was \$2 million. A 2005 survey by Ernst & Young of New Zealand private equity and venture capital firms found that informal (angel and venture capital) investments were typically valued between \$50,000 and \$1 million. Infometrics reported from the 2004 survey of angel investors that, on average, angel investors had three investments at any one time and invested \$100,000 in each deal.

¹¹ One angel had considered 200 proposals.

¹² It is likely that there have been more than three deals done in Southland over this period (one of the angel investors chose not to report on their investment activity).

considered. The number of deals made outside of formalised networks was approximately twice that of deals done within formal networks.

All actual investments we are aware of were made by active angels. Whilst passive investing occurs, the investors interviewed for this baseline review did not appear to have a preference for passive investing. On average, the active investors invest 22 percent of their portfolio in any one deal. The average time to exit an investment was six years.

In table 3.4(b) we compare the preferred regions of investment with actual investments (25 angel investors responded to this question). The majority of investors invested within their own region, regardless of their regional preferences. In considering the location of their investments, respondents said that both the stage of the investment and the people involved were relevant. The more hands on an investor needed to be in an investment, the more likely that an investment would be located within their own region.

Table 3.4(b) Preferred versus actual angel investments, in regional terms: July 2004 to June 2006 (for 25 angel investors)

Angels by region	Actual investments		Preferred investments	
	Percentage of total for region	Region	Percentage of total for region	Region
Auckland	60	Auckland	40	All regions
	10	Kerikeri		
	10	Wellington	10	Wellington
	10	Ashburton		
	20	Australia/Australasia	10	Australia
Wellington	75	Wellington	25	All regions
	25	Lower North Island		
	25	Upper South Island		
	50	Auckland		
Canterbury	100	Christchurch	34	All regions
			66	Auckland
Otago	100	Otago	25	All regions
Southland	75	Southland	25	South Island

(Note: On account of multiple responses, percentages may not add to 100)

The sectors that our sample of angel investors have invested in are shown in Table 3.4(c). The most common sectors are ICT (33%) and biotechnology (24%). Angel investors tend to invest in their area of expertise, especially those investors with ICT experience, which was perceived as providing a return on investments quicker than investing in other sectors (e.g., manufacturing).

The type of investments made is shown in Table 3.4(d). Most investments were made in seed and/or start-up businesses (66%). (Generally, angel investors did not differentiate between seed and start-up investments). Six percent of angels had invested at all stages of a companies' development.

**Table 3.4(c) Investment by sector
July 2004 to June 2006**
(for 32 angel investors, multiple responses)

Sector	% of total
ICT	33
Biotechnology	24
Medical/pharmaceutical	12
Property/business services	12
Manufacturing	10
Food and beverage	6
Agriculture	4

**Table 3.4(d) Investment by type
July 2004 to June 2006**
(for 28 angel investors, multiple responses)

Investment stage	% of total
Seed/start-ups	66
Start-up/early expansion	9
Expansion	6
Mezzanine	6
Established/advanced	6

(Note: totals do not add to 100 due to roundingSyndication)

Three key factors determine whether an angel investor will invest with others: their individual preferences; the deal size; and the risk profile of an investment. The larger and more risky a deal is the more likelihood that an angel investor will invest with others. In doing so, however, an angel investor will be cognizant of the competencies of their co-investors (i.e., whether they are passive or active). Some angel investors dislike passive investors as they view them as risk averse, free riders. Other investors said that there will always be tensions between passive and active investors in terms of work done and share of investment returns.

Most angel investors interviewed are able to link up with other investors, *when they want to*. As shown in table 3.4(a) syndication is more common in informal versus formal networks. However, it is not common for syndication to occur between networks (we know of only one such deal). The investors within a network tend to have complementary skills and therefore do not need to bring in outside investors. Also, networks typically do not like to dilute their investments with others. According to the investment undertaken by our sample of angel investors, the number of investors within a deal varies: from two to 40 investors.¹³

Syndication always requires a lead angel investor (who usually has some familiarity with the investment opportunity). However, in terms of formal angel networks, there appears to be a lack of experienced lead investors. This may be a reason why, to date, formal networks have made relatively less investments than informal angel networks¹⁴.

One way that passive angel investors learn about angel investment, in terms of the investment process and how to mentor businesses, is by investing alongside active investors. Within a network, interested passive investors are often invited to work alongside a more active member, or are given relatively more junior tasks to complete.

Angel investors who prefer to invest alone like to do so because it enables them to more readily retain control of their investments.

¹³ Some angel investors reported syndication with venture capitalists.

¹⁴ Lower relative investment by formal networks may also reflect the fact that they are a recent development and/or that formal networks conduct a more rigorous due diligence process.

3.5 Investment processes

Angel investment involves four steps, of which the first three relate to pre-investment activity:

- i. the identification of a deal;
- ii. considering whether to invest in a deal;
- iii. conducting due diligence on a deal; and
- iv. post-investment activity.

The most common way to identify a potential deal or investment was through networking. Such networking could be in terms of actively seeking investment opportunities, or could be more informal, via relationships with personal and business associates.¹⁵ In order to generate good deal flow, however, networking needs to be fairly broad. Once an angel investor has a profile for investing, and/or has publicity around good deals, investment opportunities seem to come to them.

The main factor influencing an angel investor's decision to invest is people (both the management team and other investors) and whether they can work alongside each other. A management team has to be committed to the investment process, understand the potential risks and rewards, and be realistic in their expectations. They also have to be honest, credible, and open to advice.

A good product or idea that is investment ready, is also important when deciding whether to invest. As indicated in table 3.4(a) there are an abundance of investment pitches being made to angel investors. However, judging by the proportion of investments undertaken, and also on account of anecdotal comments, entrepreneurs do not understand how to make an attractive investment pitch. This is a concern, given that the government has invested in enhancing the investment ready capability of high-growth potential firms through the Escalator programme. Many entrepreneurs are unable to even adequately prepare an investment 'drop sheet'. Angel investors said that a significant proportion of their time is spent educating entrepreneurs. While most angel investors do not charge for this service, a minority do. We need to understand what the issues are in relation to investment readiness, i.e. it may be that the Seed Co-Investment Fund and Escalator would benefit from closer connections.

Other factors reported as influencing the investment decision included: global opportunities, synergy with existing work, and government regulations.

Almost all due diligence by our sample of active investors is done on a formal basis. Formal due diligence includes: a competitive analysis; validation of intellectual property and product; an assessment of a company's structure, financials, and contracts; a check of

¹⁵ Specific networking vehicles referred to included Incubators, Connect showcase, referral from venture capitalists, industry associations, SPARK Programme, and visibility by way of the Beachhead Advisory Board. Private brokers (i.e. Escalator) were sometimes used to identify deals, but were not popular on account of the brokerage fee charged. Also, angel investors felt that the brokers were not required, as angels could do what they do.

compliance issues; and reference checks. A small number of angel investors thought that formal due diligence was overrated and just generates costly paperwork. Due diligence should essentially be about whether people listen, and whether they can prove what they are saying is true. Outside experts will be brought into the due diligence process, when required.

While most active angel investors are not keen on sharing information about actual deals with each other, they seem to be keen to share their knowledge of angel investment and their investment processes.

Within a formal network typical pre-investment activity includes: (1) investment proposals are pre-screened by a lead investor, (2) potential deals are presented to active investors, (2) passive investors are then invited in, if necessary, (3) due diligence is conducted. Post-investment activity includes ongoing involvement with a company to assist and drive it to reach its milestones, and providing follow-on funding. Ultimately, angel investors may also implement an exit strategy from their investments.

4 Comparison with angel investment markets overseas

The absence of comparable data and accurate statistics preclude direct benchmarking of the New Zealand angel investment market versus markets overseas. However, in terms of deal size, and subtracting two outliers, on average, our sample of angel investors in New Zealand invested \$765,000 per deal. This compares to average deal sizes reported in different surveys of £338 in Scotland in 2004, US \$33,236 in the U.S./Canada in 2005/06, 180,000 to 218,000 euros in 2004 in the U.K., and 95,000 to 664,000 euros in 2004 in France.

Angel investment markets in most other countries have been operating for longer and appear to be more developed than in New Zealand.¹⁶ Specifically, networks are more formalised and angel industry groups are common. The motivations and investment processes of New Zealand angel investors appears to accord with those of angel investors overseas.

4.1 The U.S. and Canada

In relative terms, the angel investment market in the U.S. and in Canada is the most developed. According to Jeffrey Sohl, director of the University of New Hampshire's Centre for Venture Research, 170 angel groups existed in the U.S. in 2004, compared with just a handful five years previously. And, demographic data reviewed by the Angel Capital Education Foundation showed that angel groups in the U.S. and Canada had grown by 67 percent in the three years to 2006, with on average 41 accredited investors per group. As quoted by McGee (2004) more angel groups have brought more organisation, more formality, and more sophistication into the angel investment market.

From 94 membership applications to the Angel Capital Association (a professional alliance of angel groups) in 2005 and 2006, there were 4,100 investors from 44 US states and Canadian provinces. (On their website the Angel Capital Association currently lists 140 formal angel groups across the U.S. and 14 in Canada). In the U.S. there is an annual angel organisation summit, which offers links to some 100 angel investment groups.

4.2 Europe

In 2002 the European Commission estimated that the U.K, Germany and France had over 80 percent of the business angel networks in Europe. Four years ago, several types of angel network were identified within Europe. Regional networks were more like investment clubs and some of the larger regional networks resembled national networks. As in New Zealand, there are networks that concentrate on a certain industry or sector. In Europe there now exists a European Business Angel Network and a European Private Equity and Venture Capital Association.¹⁷

¹⁶ As most angel investors share a desire for anonymity, and may be unwilling to divulge information about their investment activities, all inferences about the true and potential size of angel investment markets are based on guesswork, and there is no way of knowing whether a sample of angels is representative or not. Caution is needed when drawing conclusions concerning an angel market.

¹⁷ The European Business Angel Network (EBAN) was established by the European Association of Development Agencies (EURADA) with the support of the European Commission in 1999. It is a non-profit association whose purpose is encouraging the exchange of experience among business angel networks and

The pioneer among European national networks is the National Business Angels Network (NBAN)¹⁸ in the UK. A survey in 1999/2000 estimated that there were 20,000 to 40,000 angels in the U.K, who invested on average £0.5 to 1 billion per annum into 3,000 to 6,000 businesses. A survey in 1998 reported 50 angel networks representing 386 registered angels. Mason and Harrison (1997) found that private sector Business Angel Networks in the U.K. were primarily involved with larger, later stage deals whereas investments made through not-for-profit networks were generally smaller, involved more early stage businesses, and were local. In 2004 there were estimated to be 600 angel investors in Scotland, 90 percent of whom were active.

For more data on angel investment markets overseas, by country, refer to Appendix 13.2.

4.3 The Scottish Co-investment Fund

New Zealand's Seed Co-Investment Fund was developed on a somewhat similar scheme run in Scotland, called the Scottish Co-investment Fund (SCF), which is a £45 million equity fund run by the Scottish government, through Scottish Enterprise (the national economic development agency). Through SCF, Scottish Enterprise provides equity funding to small and medium-sized firms on a commercial basis with selected co-investment partners. These partners include corporate ventures, institutional investors, professional fund managers and investors, business angel syndicates, and private individual investors. Investment can be made between £50,000 and £500,000 in company finance deals of up to £2 million. The SCF is open to SMEs based principally in Scotland, in an approved business sector (technology, creative business, electronics, manufacturing, pharmaceuticals and biotechnology) with up to 250 employees and net assets of less than £16 million. As detailed in Appendix 13.2 the average co-investment deal is larger through SCF than through other avenues.

encouraging "best practice"; promoting recognition of business angel networks; and contributing to local, regional and national programs of assistance for the creation and development of a positive environment for business angel activities. The European Private Equity and Venture Capital Association (EVCA) was established in 1983 and has over 925 members. The role of the EVCA includes representing the interests of the industry to regulators and standard setters; developing professional standards; providing industry research; professional development and forums; and facilitating interaction between its members and key industry participants including institutional investors, entrepreneurs, policymakers and academics.

¹⁸ The NBAN is structured as a federation of independent local/regional and national business angel networks who 'pool' information on their investment opportunities so that they are available to all investors across the system. They offer: (1) a best match service, which is a web site containing searchable business opportunities; (2) a monthly Bulletin, listing new business opportunities; and (3) a regular presentation by businesses to investors at locally held meetings. NBAN receives sponsorship from several private sector companies, mostly in the financial sector.

5 Key performance drivers for the growth of New Zealand's angel investment market

Without preconceptions, we asked a sample of 47 participants in New Zealand's angel investment market for the key issues relating to the growth of the market, outside of government policy to develop angel investment (i.e. the Seed Co-Investment Fund). The issues raised primarily relate to the government creating a better business framework conducive to angel investment – the rationale being that it is business that creates jobs, not government.

For our sample, the key issues were (respondent percentages are given in brackets):

- Securities Act regulations pertaining to angel investment (45%);
- government assistance with the operational costs of formal angel networks (26%¹⁹);
- a more equitable taxation regime for companies (25%);
- the collection of industry statistics on angel investment (11%); and;
- addressing issues pertaining to staff dismissal (1%).

These issues are discussed below.

In addition, 45 percent of respondents thought that the government could provide assistance with promoting angel investment and educating market players about the benefits of angel investment. In Chapter 7 we note that the Seed Co-Investment Fund has an annual budget of \$100,000 for such market development initiatives. 41 percent of respondents also suggested that New Zealand should focus on developing or targeting certain niche sectors (e.g., ICT, GE free products). However, government policy is not necessarily a reliable source of the next best idea from a particular sector. Also, investments that originate in one sector can end up morphing into another sector.

5.1 Securities Law

The Securities Act (1978) is investor protection legislation. The protection of investors lies in full, timely, and accurate disclosure of information by companies seeking finance, and the recognition of who is eligible to invest.

45 percent of our sample expressed concern about securities regulations in relation to angel investment. Their main concern was around investor eligibility criteria. Under Section 5(2CD) of the Securities Act only people who are designated as wealthy are able to invest equity in New Zealand businesses. A person is 'wealthy' if an independent chartered accountant is satisfied on reasonable grounds that they have net assets of at least \$2 million or an annual gross income of at least \$200,000 for each of the last two financial years.

¹⁹ 7 percent of respondents thought the government shouldn't provide assistance for operational costs.

Section 3 of the Securities Act offers exclusions to the above on investment offers to: relatives and close business associates; sophisticated investors (i.e., those who are professional, habitual and experienced); any person selected other than as a member of the public²⁰; and for investments of \$500,000 or more (it is assumed that an investor making this size investment would have adequate information about the venture).

Angel investors are often not eligible to invest under these two Sections of the Securities Act. To circumvent this problem, angel investors utilise 'local authority venture capital exemptions', which are Codes of Practice²¹ issued by the Securities Commission to Economic Development Agencies and EDANZ. To access this exemption investors fill out a one-page 'Scheme Risk Disclosure Statement' allowing them to register their interest in investing in venture and development capital, and gain access to New Zealand based business investment opportunities. Additionally, investors state their understanding of any risks associated with potential investments. There is no cost for registering investors.

The Codes of Practice also enable issuers (businesses seeking capital) to obtain exemption from the obligation to comply with the requirements of the Securities Act (1978) and the Securities Regulations (1983) relating to the disclosure of information material to enable investors to make an informed investment decision. Issuers are required to fill out an eight page 'Seeking an Investor' form which identifies whether a business is registered or provisionally registered and provides information on the investment profile. A 'Registered Business Information Pack' is also required and outlines details about the relevant business opportunity. Issuers use this exemption to avoid the high costs associated with putting together a prospectus to raise capital. Disclosure of information is very costly (in some cases, it can cost up to \$150,000 in legal and business fees for the purpose of raising \$500,000). The cost of the Codes of Practice to issuers ranges between \$700 - \$1500.

In relation to the exemptions under the Securities Act our sample of angel investors think that there is too much bureaucracy (i.e., 'form filling') which was cumbersome and disconcerting. Whilst this view is acknowledged, it appears that, in the case of utilising local authority exemptions, the process is not cumbersome for investors in declaring their interest to invest and acknowledging awareness of the risks involved. Additionally, the local authority venture capital exemptions appear to reduce costs and 'form filling' for issuers (i.e. companies seeking capital).

As part of a review of financial products and providers²², the Securities Act (1978) is currently under review. Through consultation with regulators, industry, and consumers a number of areas where the regulatory regime could be improved have been identified. Possible improvements include reducing compliance costs for market participants (i.e.,

²⁰ This is a 'with-all' clause, i.e., one which covers all persons who need to raise capital but who are not included in the categories to which exclusions are offered.

²¹ These codes of practice are called Securities Act (Local Authority and Other Venture Capital Schemes) Exemption Notice 2003.

²² The Ministry of Economic Development, in conjunction with other government officials and agencies, and in consultation with stakeholder advisory groups, is conducting a review of financial products and providers. The purpose of this review is to develop an effective and consistent framework for the regulation of non-bank financial institutions and financial products. Submissions to the review closed on 1st December, 2006.

companies offering securities) and enhancing investor protection²³. One angel investor suggested that exemption notices should not to be used to get around the Securities Act and that that the Act should be 'overhauled'. It is hoped that the review will refine the issue of investor eligibility criteria, offer clarity for issuers as to when the disclosure regime applies, and simplify access to capital for issuers making offers to sophisticated and professional investors.

The general concern about investor eligibility criteria was indicative of the underlying view of respondents that the government needed to have a greater understanding of how business worked and therefore develop a better business culture and ethos within the community.

5.2 Operational costs of angel networks

Angel investors within two formal networks requested government assistance with the costs of running their network. This was due to staffing and overhead costs. These investors suggested that funding would allow more money to be used for actual investment and enable angels from different networks to meet and exchange ideas. However, investors within another formal network, and an investor not associated with any formal network, suggested that government should not provide funding for network operational costs. Primarily, this was because angel investors were wealthy enough to pay for these types of costs.

The issue of the government providing financial support for network operational costs is debatable. On the one hand, angel investors, by definition, are financially competent and wealthy individuals, hence they have the funding to successfully operate a formal network, should they choose to do so. On the other hand, some angel investors may not consider an organised structure to be necessary and therefore are unwilling to contribute to operational costs.

An objective of the Seed Co-Investment Fund is to increase the scale and enhance developed networks for angel investment. As noted in Part Two of this report, in this regard the role of government is about facilitating, motivating, and promoting angel investment activity in formal networks. We do not believe that government should compromise the independence of formal angel investment networks by assisting them with their operating costs. Rather, networking costs should be covered via the equity holdings of angel investors in investment firms.

5.3 Taxation

The key issues raised by angels in relation to taxation were: lowering the company tax rate, providing incentives to investors (i.e., being able to claim back losses when there is a

²³ Specific improvements being targeted are:

- whether there are minimum protections that should apply to all offers of securities (i.e., private investors may not need the protection of a disclosure regime);
- providing greater clarity to the exclusions from the Securities Act (i.e., clarifying existing definitions for 'relatives and close business associates', 'professional and habitual investors');
- considering whether there are additional exemptions from parts of the Securities Act that could be provided for certain types of offers (e.g., small offers, in terms of number of investors, value of issue and the time period for which the offer is open); and
- seeking feedback on whether the definitions in the Securities Act are working appropriately.

change in the capital structure of a company of more than 50 percent); providing more support to new and innovative companies (i.e., through tax free profits for the first year); not taxing overseas investments or adversely taxing companies going off-shore; and eliminating preferential tax treatment for different ethnic groups.

These issues are important to our sample of angel investors as they could augment their attempts at developing high growth potential firms. Angel investors feel that the current taxation structure can restrict firm profits and expansion options and limit their own investment options.

Some of these issues, and others, are under consideration as part of the government's Business Tax Review. In this regard, a discussion document designed to engage the public on tax policy initiatives and to elicit suggestions on other initiatives that might be explored was released in July 2006. Within this document a reduction in the company tax rate has been suggested and a range of possible tax base changes and compliance cost reduction initiatives have been explored.²⁴

Further changes to the taxation environment, in terms of venture capital, were suggested within the LECG (2005) report. These changes include limited partnership arrangements, capital/revenue account distinctions for income tax, sale of shares from off-shore investors, retention of research and development tax deductions through ownership changes, trans-Tasman tax arrangements, New Zealand/United States double tax agreement, sale of patent taxation, GST and venture capital funds and employee share option schemes.²⁵

5.4 Industry statistics

In Scotland company law requires investors to provide detailed information about themselves and their investments. Having this type of information on public record allows for accurate assessment of the angel investment industry, especially by investors and entrepreneurs.

11 percent of our sample respondents think that statistical data on angel investment activity in New Zealand would further encourage the development of our market. The idea behind such data is that "success will breed success", or in other words, by celebrating the investments that work, more angels would want to invest and 'cash-in' on New Zealand's innovative, high-growth potential firms.²⁶

An international business advisory company (attached to the venture capital industry) stated that it is difficult to obtain statistical information on angel investment activity in New Zealand. Our angel investment industry is still primarily informal and angel investors are

²⁴ These initiatives are designed to increase competitiveness, productivity, and the potential for growth. See Appendix 13.3 for a description of the possible initiatives.

²⁵ For an in-depth description of these changes, refer to: Lerner, Moore & Shepherd (2005). *A study of New Zealand's venture capital market and implications for public policy*. LECG Ltd, Wellington. www.lecg.com

²⁶ For example, an article entitled 'The Business' in the New Zealand Herald dated November 20, 2006 reported that wealthy American businessmen are coming to New Zealand and investing their money and time in New Zealand start-up businesses. These entrepreneurs who are 'over corporate life', are making new starts in New Zealand, following their ideals, and making profits through angel investing.

not required to report on their activity. In contrast, the New Zealand venture capital industry is legally required to report on their investment activity to shareholders and investors. Additionally, annual surveys of the venture capital industry are conducted.²⁷

Obtaining information on angel investment activity in New Zealand is problematic. Until the industry becomes more developed (e.g., when there are more formal networks) it may not be possible to obtain accurate and up-to-date data on angel investment. However, even with the development of formal angel networks, accurate statistical information may not be able to be collected. There is no legal requirement for angel investors to provide data; there are no designated resources to provide such data; and there are no processes to standardise information across the industry. Also, it is highly unlikely that any information will be able to be obtained on informal investment activity as, by its very nature, it is covert (or in other words, angel investors are not willing to publicise their investment activities).

It is envisaged that an outcome of the Seed Co-Investment Fund will be developing industry norms for angel investment practice. This may provide an opportunity for the collection of angel investment data, at least from formal networks. However, in order to collect data on informal investment activity, it will be necessary for such practices to be adopted by the wider angel community. If we are to accurately understand New Zealand's angel investment landscape there needs to be more thought given as to how angel investment data can be collected nationally.

5.5 Employment law

Employment law issues related to not being able to 'sack' incompetent employees. For seed and start-up companies such employees are of particular concern. Incompetent employees inhibit company growth, and for small and struggling companies, can ultimately affect the survival and success of a company.

Employment law currently protects the rights of employees against unfounded dismissal. One angel network follows the standard dismissal procedures but this process takes approximately six months before an employee can be dismissed. This time period can be too long for some entrepreneurs. An alternative may be to hire staff under a probationary period or under a specific contract.

²⁷ The New Zealand Venture Capital (NZVCA) Monitor is a joint initiative launched by the NZVCA and Ernst & Young (in September 2003) to create accurate information on the size and structure of the venture capital and private equity industry in New Zealand. The Monitor also facilitates analysis of industry trends and portfolio returns over time, better quantifies the impact of the industry on the New Zealand economy, and assists the NZVCA to set its strategic objectives.

6 Other factors to improve the quality and dynamics of the angel investment industry

The efficacy of capital invested by angel investors in New Zealand's high-growth potential firms is contingent upon several factors. These factors include the co-dependencies of the Seed Co-Investment Fund with: Escalator, the Enterprise Training Programme, Connect New Zealand, and the Young Enterprise Scheme. Links between angel investors and venture capitalists, incubators, and commercialisation arms of universities/technical institutes are also important in ensuring the effective development of angel investment in New Zealand.

6.1 Escalator

Escalator was established in November 2003 and is delivered by New Zealand Trade and Enterprise (NZTE). Escalator endeavours to enhance business growth by enhancing firm investment readiness and assists innovative firms to raise capital through providing a training and brokering service. The programme was reviewed by the Ministry of Economic Development in 2005. From that review, it was found that the programme was successfully assisting innovative firms to become investment ready and raise capital.

The Escalator brand is known in the market²⁸, especially by angel investors. Angel investors consider investment proposals from companies that have been through the programme.²⁹ Angel investors also, although not commonly, refer companies to Escalator for assistance with investment readiness. (Most angel investors do not like the idea of a brokerage fee as they feel that they are just as competent as the brokers at getting a firm investment ready. Also, after referring companies to Escalator, one investor reported never hearing back from brokers, nor from the companies themselves).

Escalator addresses the demand for equity capital. While the Seed Co-Investment Fund directly addresses the supply of equity capital, the programme also indirectly educates firms on the investment process, including investment readiness, via a focus on angel investment competencies and networks (refer to Part Two of this report for details).³⁰ It is important that there is an understanding between the delivery agencies of these two programmes about their similarities and their relative strengths and limitations.

6.2 Enterprise Training

The Enterprise Training Programme (ETP) delivers training services (both group and one-on-one) to SME owners and start-up entrepreneurs. The services are designed to improve management capability to enable businesses to more effectively and efficiently manage their business. Seminars, courses and workshops are delivered annually by NZTE on a contract basis. Training is delivered in six broad subject areas: business planning,

²⁸ In May, 2006, Escalator won a Vero Excellence in Business Support Award for the most significant contribution by a government department.

²⁹ We did not investigate whether such proposals went on to receive funding.

³⁰ Competent angel investors can assist a firm to become investor ready. And, by virtue of structured angel investment networks, investors are encouraged to publicise their investment knowledge to entrepreneurs seeking investment.

marketing, finance, business systems, managing resources and exporting. An investment ready training component is also provided, through two workshops and follow-up coaching session. Seven modules are taught: understanding the capital raising process; understanding what investors look for; preparing a business case; valuation; legal implications of raising funds; finding an investor, and understanding the deal-making process.

The investment readiness of entrepreneurs is a key element in fostering angel investment. The ETP could be seen as providing investment ready training at an 'undergraduate' level, with Escalator providing more advanced investment ready training at a 'graduate' level (i.e., ultimately preparing firms to be invested in by angels).

6.3 Connect New Zealand

This programme is a collaboration between [Connect Auckland](#), [Connect Canterbury](#) and NZTE. The aim of the programme is to stimulate inter-regional collaboration between industry and investors and deliver national level events to bring together investors, firms, and government. Such events encourage the growth of technology based firms in international markets and enhance technology commercialization.

Connect Auckland

Connect Auckland helps technology businesses become investor and market-ready by providing evaluative expertise of a company's current position.

Connect Canterbury

Connect Canterbury is a joint initiative of NZTE and the Canterbury Development Corporation. It connects researchers to developers, developers to industry, local companies to national and international companies, and local companies to the people, capital and channels they need to access global markets.

Connect Auckland and Connect Canterbury use the 'Springboard' approach to accelerate a company's potential growth. Springboard brings together seasoned investors and entrepreneurs to advise companies on specific business issues relevant to the company's growth. Refer to Figure 6.3 for the Springboard approach. In addition, workshops are held on various business topics (e.g., making successful investor pitches); meetings with entrepreneurs occur where information on successful technology businesses is shared, and technology presentations are given from experts in their respective technological fields.

Many angel investors we spoke with said that they attend Springboard.

6.4 Young Enterprise Scheme

The Young Enterprise Scheme is an education programme that links business and education, allowing students to use school based knowledge and skills in an enterprise setting. The scheme operates internationally and is administered in New Zealand by NZTE, with private sector sponsorship. As a learning experience, the scheme enables senior secondary school students to form a company, become directors, develop products and services, which they market and sell. Students are taught skills in budgeting,

planning, interpersonal relations, decision making, reporting, communications; risk management and teamwork.

The benefits of this type of programme are that there is an increase in the potential for creating future entrepreneurs, some of whom may go on and (it is hoped for New Zealand's success) form global corporations. Whilst the emphasis by the government is on supporting entrepreneurs in the business environment, it is also fundamentally necessary to expose youth to alternative options, such as entrepreneurship, for it is the young of today who will be the leaders of tomorrow.

Figure 6.3: The Springboard approach



6.5 The venture capital industry

The government is helping to develop the venture capital (VC) industry in New Zealand via the Venture Investment Fund (VIF). The VIF was established in 2002 and at its inception was to provide up to \$160 million for co-investment with private sector investors on a 1:2 ratio, concentrating on funding seed, start-up and early investment stage firms. As part of the ongoing development of the programme, VIF has recently been extended to include expansion and late expansion stages of firm growth. Additionally, investment at the seed and start-up stages has increased to a 1:1 ratio.

We interviewed one venture capitalist regarding their views about the overlap between angel and VC investment. He suggested that the VC industry would be assisted if angel

investors have more funds to invest. For example, the Seed Co-Investment Fund could provide more funding for initial and follow-on investments to assist firms to globalise their business³¹.

We also talked with an international advisory company attached to the VC industry, canvassed the views of angel investors about VC investment, and researched the international literature on VC. The European Commission (2002) record three types of complementarities between angel investors and venture capitalists: sequential investment, deal referral, and co-investment.

On the face of it, there is a natural progression from angel investment to VC investment. Venture capitalists can provide angel investors with an exit route to realise their investments by providing follow-on finance to start-up companies. However, some researchers believe that a gap in financing exists between angel and VC investment (termed the 'second equity gap'). This gap occurs when venture capitalists move towards larger deals and shift away from the more riskier and labour intensive deals. This gap is augmented by the fact that VCs are often reluctant to pay angel investors their asking price to exit a deal. Within the New Zealand angel investment market, some respondents perceive that this equity gap may be starting to occur, given the lack of suitable later-stage investments available to the VC industry (however, other respondents felt that good investment opportunities will always be filled). If such an equity gap exists, it will be somewhat off-set by the ongoing development of the VIF, which has recently been extended to include expansion and late expansion stages of firm growth.

Harrison and Mason (2000) assert that angel investment networks provide venture capitalists with a potential on-referral mechanism for investment proposals which, while potentially fundable, do not meet their criteria in terms of deal size, stage of investment, and sector. VC funds have the potential to fund deals which lie outside their resources or expertise, thereby increasing both the quantity and quality of their deal flow.

Co-investment between angel and VC investors occurs both overseas and in New Zealand. Angel investors benefit from better quality investment opportunities and more intensive due diligence undertaken by venture capitalists. Venture capitalists benefit from angel investors commercial and sector-specific experience and their post investment relationships with a firm.

The European Commission (2002) asserts the different motives, expectations, and exit horizons of angel and VC investors can create difficulties. Therefore, cooperation between these groups of investors is paramount.

6.6 Incubators

There are two areas that would benefit from co-operation between incubators and angel investors. Incubators and angel investors could leverage the entrepreneurial expertise and experience of each other. Incubators could also refer potential investment deals to angel investors (with the added bonus that such deals are likely to be investment ready), and angel investors could recommend some of their start-up investments for business incubation.

³¹ The respondent thought that \$1 million rather than the maximum of \$500,000 was needed to successfully enable this to happen.

In New Zealand, two formal angel networks are currently associated with existing incubators. To date, we also know of another two angel networks that are in the process of being established that will have a business relationship with incubators.

In the United States, business incubators work closely with universities and private sector investors. The largest technology incubator in the United States is the Business Technology Center³² (BTC) in Los Angeles, California. This incubator aims to assist start-up and early stage technology firms to grow and prosper. The BTC offers key support services, including access to capital, business consulting and mentoring from an Advisory Committee that has a wide range of skills, experience and contacts in California.

6.7 Commercialisation from universities and technical institutes

The four Managers of university commercialisation arms/technical institutes interviewed for this review emphasised that New Zealand needs to support the development of high-growth potential businesses, which can globally compete. In their opinions, to achieve this development more funding for research is required, especially at the proof-of-concept stage. Specifically, both the budget and funding contribution levels for the Pre-Seed Accelerator Fund (PSAF)³³ need to be increased. (The Managers suggested that a budget of \$20 million per annum and a funding level of 1:1 would be sufficient to meet New Zealand's university commercialisation needs). Early-stage investors (such as angel investors) either do not seem to have enough money to commercialise an innovation or are averse to investing at the proof-of-concept stage.

The four Managers interviewed agreed that the government needs to show political leadership in re-focusing university mandates to include the commercialisation of innovations (i.e., IP creation and turning research ideas into profitable businesses). Such leadership would be in addition to the current emphasis on assessing the research performance of tertiary education organisations and then funding them on the basis of their performance (i.e., the Performance-Based Research Fund (PBRF)). Additionally, the managers suggested New Zealand should attract foreign direct investment and match New Zealand ideas with global capital.

³² <http://www.labtc.org>

³³ The PSAF was established in 2003 to encourage public research organisations to develop promising research results to the point where commercial investment decisions can be made. The fund provides \$4.8 million per annum for experimental development or related pre-commercial activities that develop research to a working prototype or 'investor-ready' stage. Funding is provided for up to 33 percent of individual project costs.

The PSAF was evaluated in May 2005. Key findings included: the contribution to individual project costs should be raised to at least 50 percent; financial contributions from partners have proved difficult to obtain; PSAF projects may be difficult to commercialise due to a lack of existing New Zealand companies to sell or licence technologies and the limited availability of seed funding for spin off companies; there needs to be an increased awareness amongst researchers to engage in commercial projects; and there needs to be a positive influence on partnership development through developing truly investor ready prototypes, making institutions more businesslike in their negotiation, and showing industry the capabilities that are present in a research organisation.

From our interviews, we know that angel investors have money to invest and are interested in being more closely involved in the commercialisation of research. It is our view that there is an opportunity here for the government to re-think how to commercialise university research. The key issue for the government is to consider how to integrate private sector commercialisation interests (and their financial contributions) with current university research endeavours. Fundamentally, angel investors will only invest in university research innovations if they think that they can be successfully brought to market. However, for this to work, angel investors investing in and working closely with university commercialisation arms need to be 'technologically savvy', or in other words, understand the implications involved in successfully commercialising research innovations, which are often highly risky and IP based. The Managers that we spoke with from the universities and the technical institute believe that there is a shortage of these types of angel investors in New Zealand.

The European Commission (2002) found that cooperation between universities, research institutes and financiers was singled out in Europe as a crucial factor in increasing the amount of financing available for the commercialisation of research. This has led to the development of European-level finance forums. Gitelman (2005) notes that in Canada a crucial justification for government involvement in angel investment is to address the pre-commercialisation of innovations (to reduce the bottleneck in government innovation and productivity programmes).

Australia has also taken an integrated approach to commercialising university research. Uniseed is a joint venture pre-seed and seed fund that aims to commercialise outcomes of Australian research and ingenuity from the University of Queensland, the University of Melbourne and the University of New South Wales. In 2005 Uniseed's budget was \$60 million, comprised of contributions from the private sector and universities.³⁴ Uniseed represents a combination of the private sector and universities working together to un-lock the wealth-creating potential of Australian research. The key success of the fund lies in the research having a commercial focus (i.e., research that the private sector considers worthy to invest in because of potential commercial success).

³⁴ Uniseed began in 2000 as a \$20 million very early stage venture fund between the commercialisation arms of the University's of Queensland and Melbourne. Westscheme (Australia's largest superannuation fund) contributed \$15 million in January 2005 and the University of New South Wales contributed \$10 million in December 2005. The founding universities contributed a further \$8 million each, taking the fund to over \$60 million. For more details refer to www.uniseed.com/index.htm.

PART TWO

GOVERNMENT POLICY TO GROW THE ANGEL INVESTMENT MARKET

7 Introduction

In Part Two of this report we discuss government policy to grow the angel investment market; namely the Seed Co-Investment Fund.

7.1 Overview of the Seed Co-Investment Fund

The Seed Co-Investment Fund was established in May 2005 by the Cabinet Economic Development Committee to assist the development of the market for angel equity finance. The programme commenced operations in July 2005 and the first co-investment partnerships were announced in September 2006.

The overall objective of the Seed Co-Investment Fund is to help develop New Zealand's angel investment market and, in doing so, catalyse investment by angel investors that would not occur otherwise³⁵. There are two programme mechanisms: (1) an annual budget of \$100,000 for market development initiatives³⁶, and (2) up to \$8 million per annum for passive investment by the Crown in seed and start-up investments alongside pre-qualified angel investment partners.

Co-investment partners are pre-qualified on the basis of:

- investment and commercialisation skills, including experience in identifying investment opportunities and contributing to their commercialisation;
- a credible strategy for identifying and selecting early-stage investment opportunities;
- a demonstrable capability in raising private sector capital; and
- a credible syndicate or investor network and investment structure.

To date, three co-investment partnerships have been contracted in Auckland: ICE Angels, Sparkbox Ltd, and Chrysalis Ventures Ltd. One co-investment partnership has been contracted in Christchurch: Powerhouse Ventures Ltd.

New Zealand Venture Investment Fund Ltd (NZVIF Ltd), a Crown entity company, has responsibility for managing the Seed Co-Investment Fund, in accordance with policy. NZVIF Ltd is also an investor, on behalf of the Crown (who is the shareholder). As an investor, NZVIF Ltd will accept the same terms on investments as proposed by co-investment partners.

Policy documents underpinning the Seed Co-Investment Fund specify that Crown investment will be limited to:

³⁵ The OECD (2007) Review of New Zealand's Innovation Policy suggested that the Seed Co-Investment Fund (in addition to the Venture Capital Investment Fund) were commendable initiatives at improving the supply of seed and venture capital in New Zealand.

³⁶ Market development initiatives include educating the investor market and assisting angel investment networks to form collaborative links.

- \$250,000 for any new private investment proposed by investment partners;³⁷
- up to a 50 percent share of a seed and start-up investment, provided such investment is matched 1:1 by investment partners;
- up to a 35 percent share in a single company or group of companies when measured in terms of public share ownership (with the exception of co-investments in companies originated by Crown Research Institutes or universities,³⁸ or when shareholding changes occur and no new investment by the Fund is provided);
- follow-on co-investment above \$250,000 for any existing investment, including investments originating from Crown Research Institutes and universities,³⁹ to a total limit per investment of \$500,000, provided that the aggregate value of investments over \$250,000 in the Fund is never greater than 15 percent of the total investments made; and
- up to \$4 million via a single investment partner.

The Seed Co-Investment Fund is expected to operate for 12 years, with up to \$40 million capital available for investment. The objectives of the programme are discussed in Chapter 9.

³⁷ Investment proposals in financial intermediaries, property development, mining, retailing, and hospitality industry businesses are excluded.

³⁸ Public share ownership of co-investments in companies originated by Crown Research Institutes or universities can exceed 35 percent, however, such investments must materially reduce the overall proportion of Crown ownership.

³⁹ Any follow-on investment into Crown Research Institutes and university-originated companies must not increase the overall government proportion.

8 Policy rationale

The Seed Co-Investment Fund has been established in accordance with the policy outlined in Chapter 7. However, a normal part of any evaluation is to understand the core rationale of a programme. Following, we discuss our understanding of the rationale for the Seed Co-Investment Fund. To reduce the likelihood for any disconnect between the original intent of the Seed Co-Investment Fund and its operation, we also consider whether the rationale for the programme is substantiated.

8.1 The policy rationale for the Seed Co-Investment Fund

The rationale for government involvement in the New Zealand angel investment market is that angel investors are an important source of capital for firms that would otherwise have difficulty accessing finance. These firms include start-ups with high growth potential, innovative firms, firms that are technology intensive and are seeking to develop unproven markets or technology, and firms with assets that are difficult to value. By helping to develop the angel investment market the government is seeking to stimulate the emergence of these innovative New Zealand firms.

Economic studies show that firms can find it difficult to access finance on account of asymmetric information in financial markets. Specifically, potential investors have relatively less information about the success of a business, than the owner of a business. And, business entrepreneurs have relatively less information about the investment process, than those who are actively engaged in investing.

We noted in Chapter 2 that the above group of firms are more likely to suffer from informational problems when accessing finance. Such firms often have no investment track record and lack collateral and cashflow. As a result providers of traditional sources of finance are usually unable to evaluate how their investment will perform and deem investment in such firms to be risky.

In contrast to other investors, angel investors have the experience and networks to understand the investment risks of these firms. In Chapter 3 we noted that angel investors are also personally motivated by becoming involved in an investment and working with the raw talent of entrepreneurs.

8.2 Is the policy rationale substantiated by evidence?

We considered the evidence for firm financing difficulties in Chapter 2. From this discussion we could assert that a refusal to invest in the above group of firms is based on the market recognition of investment risk and the fact that some investment propositions are preferred over others. Hence financial markets are able to adjust on their own and do not require government assistance. However, if the above group of firms are unable to obtain financing actually merit financing, business opportunities will be lost (e.g., some investments will not proceed and research will be difficult to commercialise). In such cases, government intervention is warranted.

The policy rationale for the Seed Co-Investment Fund appears to be substantiated in terms of encouraging angel investors to invest in the above subset of firms. Yet, as will be seen in Chapter 9, the objectives of the programme appear to be wider than just assisting these firms. The Seed Co-Investment Fund is also being used accelerate the angel investment market more generally. The programme can help to reduce problems arising

from angel investor inexperience, the assessment and management of investments regardless of type of firm, and the search by angel investors for investment opportunities. As the angel investment market becomes more developed, all firms seeking financing will hopefully also understand the requirements of angel investors.

9 Policy objectives

In this chapter we discuss the policy objectives for the Seed Co-Investment Fund.

9.1 What are the policy objectives?

The overall objective of the Seed Co-Investment Fund is to support the development of New Zealand's market for angel equity finance. Development of the angel investment market would be evident in the policy objectives, or outcomes, that are expected of the programme. According to policy documents underpinning the Seed Co-Investment Fund these objectives are to:

- i. develop greater professional capacity in the market for intermediating funds between investors and newer technology-based firms;
- ii. increase the depth in the specialist skills needed to assess and manage early-stage technology-based investment;
- iii. increase the scale and enhance developed networks for early stage investment;
- iv. catalyse investment that would not have occurred without the programme, and;
- v. minimise fiscal risk and cover costs.

9.2 The policy objectives elaborated

Within policy documents for the programme, there is no discussion as to the prioritisation of these objectives, if any. As they stand, the policy objectives are also undefined. Following, we distinguish between objectives that are achievable in the near term (i.e. intermediate outcomes) and those which are longer term objectives (i.e. final outcomes). We also seek to clarify what the objectives mean and consider their importance.

NZVIF Ltd is responsible for managing the Seed Co-Investment Fund in accordance with policy. Their success in achieving the objectives of the programme is contingent on a shared understanding of the policy objectives. Once shared understanding is achieved, it is up to NZVIF Ltd to determine the most effective way to achieve the programme objectives, within the policy design parameters.

The programme logic model on page 38 represents MED's view as to how the programme is designed to address identified needs and achieve desired outcomes.

Angel investor competency

Objectives (i) and (ii) above are intermediate objectives and are related to the development of the competency of angel investors. Specifically, "professional capacity for intermediating funds" refers to the mentoring capability of angel investors in making potential investors investment ready and able to raise external capital. "Specialist skills to assess and manage early-stage technology-based investment" refers to the operational practices (i.e. finding deals, filtering them, inviting investment, and documenting deals), portfolio investment methods (i.e. documentation conventions, pricing, risk strategies, and governance), and technical experience of angel investors.

There are no restrictions on the type of investments that can be undertaken under the Fund other than those noted in footnote 35. Therefore, the development of angel investor competency is not limited to the capability of investors to undertake technology investments.

As noted in Chapter 3, experienced and more competent investors can help start-up businesses grow strategically, expand globally, and push barriers. They are also able to effectively manage risk.

It is our view that, via the Seed Co-Investment Fund, the competencies of angel investors in the market can be developed through one or more of the following:

- through the competency of angel investment networks (i.e., in terms of better investment selection strategies, mentoring practices, investment management, and investment execution);
- through the competency of individual angel investors within a network (i.e., through their exposure to network practices); and/or
- through the competencies of individual angel investors outside a network (i.e., by adopting best practice in the marketplace).

Increase the scale and enhance developed networks for early stage investment

Within this objective, “scale” refers to the size of formal networks for early stage investment (i.e., the number of formal networks operating and/or the number of investors within such networks). By directly targeting formal networks it is envisaged that the angel investment market will develop more generally. The broader benefits from such development include more quality investment deals done and a greater number of investors in the market (both passive and active investors, who operate on their own or within formal or informal networks).⁴⁰

It is important to note that increased scale is not about the size of individual angel investment deals, nor is it about government providing funds for investment that would otherwise be provided by the private sector. As noted in Chapter 3, angel investors we interviewed do not think there is a shortage of capital for investing in seed and start-up companies. Deal size also varies amongst investors.

“Enhanced developed networks” means increasing the scope and quality of formal networks. This encompasses:

- better matching of angel investors with entrepreneurs;
- encouraging the transfer of skills and learning amongst member angel investors;
- encouraging syndication of investment deals; and

⁴⁰ As investors continually move into, and out of, the market, and investors may be active in one investment but passive in another, more active and passive investors are required.

- establishing a framework for investment.

What makes up the activity of networking is ambiguous. Networking could refer to activity between angel investment groups, relationships amongst angel investors themselves, encouraging individuals to form a network, or the broader relationships within the investment community. As discussed in Chapter 3, networking can be deal specific.

Other than the pre-qualifications listed in Chapter 7, there are no restrictions on the types of formal angel investment networks that can apply to become co-investor partners.

Increased scale and enhanced developed networks are intermediate outcomes of the programme.

Catalysing investment that would not occur otherwise

Ultimately, the Seed Co-Investment Fund is about catalysing investment by angel investors that would not occur otherwise. This objective is therefore a final outcome of the programme. Crown investment with co-investment partners should be additional to funds that would be available from private sources.

Minimise fiscal risk and cover costs

This objective is confusing and requires explanation.

The Seed Co-Investment Fund does not have a mandate to achieve a particular return on funds.

Therefore this objective is not about maximising the return of investments, nor avoiding the risk of investment transactions. While there is the potential that some investments will generate high returns, investment in seed and start-up ventures is inherently risky, and there will be business failures. Also, the time taken to achieve a reasonable investment return is uncertain.

The Seed Co-Investment Fund aims to develop New Zealand's angel investment market by developing the competencies of angel investors, and increasing the scale, scope, and quality of formal angel investment networks. Successful investment deals are indicative that these outcomes have been achieved. Therefore, "minimise fiscal risk and cover costs" is a high level outcome that encompasses the intermediate objectives.

This objective is a prudent measure concerning the operation of the programme. This objective is also encapsulated in the design of the programme, seen in the limits set on Crown investment by Cabinet. As outlined in Chapter 7 these include limits on investment size, eligibility factors and share of ownership. In addition, in policy documents it is stipulated that the Crown must accept the same terms on investments as co-investment partners, and that the Seed Co-Investment Fund shall operate for a fixed period of time.⁴¹

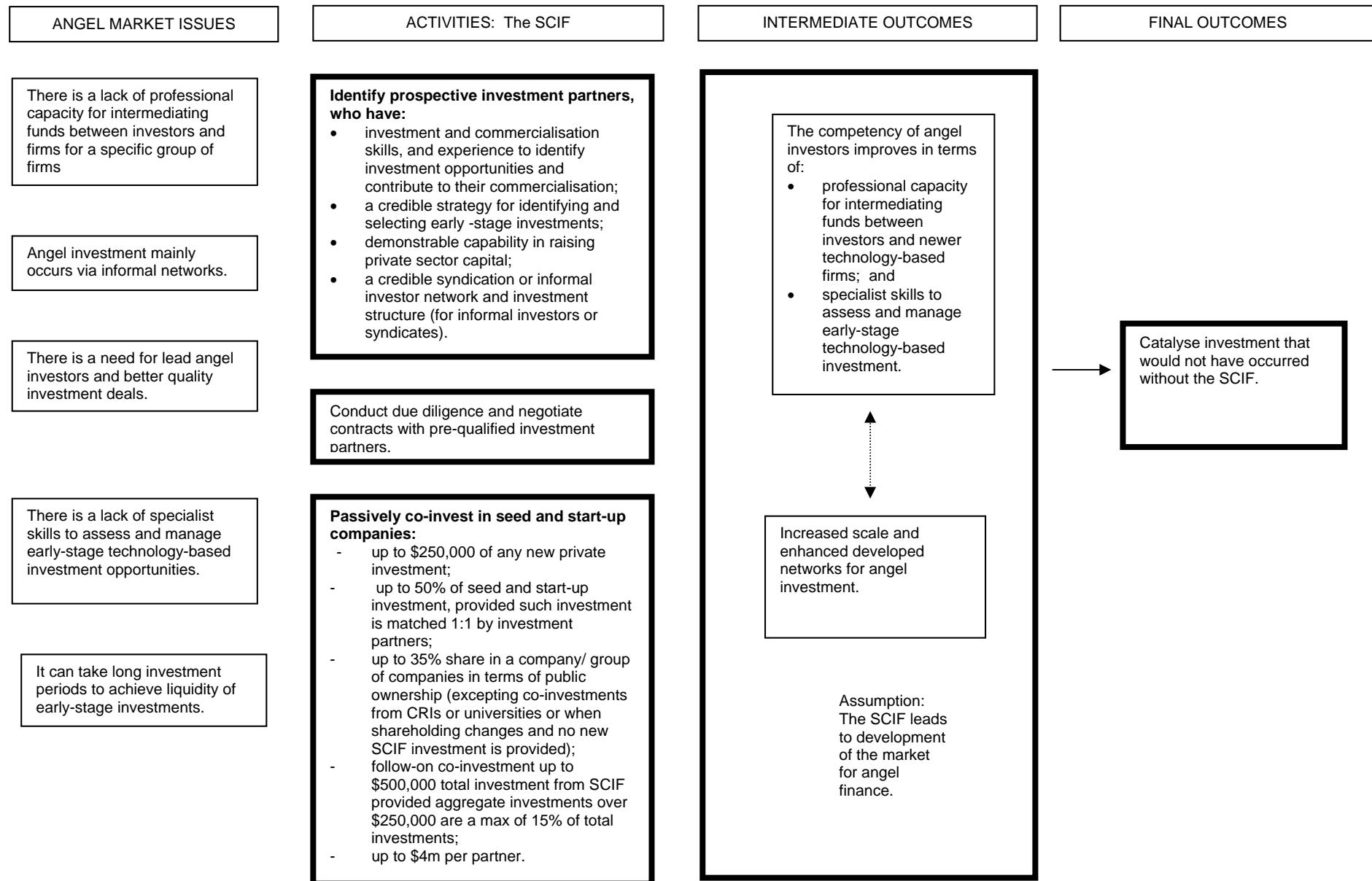
To some extent the decision (made in July 2006) to allow follow-on investment above \$250,000 suggests that the Seed Co-Investment Fund *is* about maximising investment returns, or minimising losses. Policy papers indicate that this change was made to enable

⁴¹ When the Crown exits from the angel investment market such an exit would need to be facilitated by a planned and published design to allow the market to adjust.

NZVIF Ltd to manage their portfolio of investments in a way that a prudent investor would. A prudent investor will want to maximise the return from a successful investment by investing more capital in it. Discussions with NZVIF Ltd and potential co-investors revealed that the inability to make follow-on investment over \$250,000 could deny some companies the funds needed to survive and grow. Thus, without follow-on funding the Seed Co-Investment Fund investment could be lost (or not maximised). While it is not an objective of the Seed Co-Investment Fund to achieve a particular rate of return, it is envisaged that follow-on funding will help to protect the overall value of the fund.

Follow on investments that are more likely to manage financial risks are less likely to have programme additionality and provide little market development. Investing additional capital into successful investments means there will be less capital available to invest into other companies, potentially narrowing the pool of companies able to access programme funding. To strike a balance between these two tensions, the NZVIF Board is only allowed discretion to approve follow-on co-investment above \$250,000 up to a maximum of \$500,000, provided that the total value of such co-investment does not exceed 15 percent of all investments made.

SCIF logic model



10 How the Seed Co-Investment Fund will develop the angel investment market

As noted in Chapter 8, the government is seeking to develop New Zealand's angel investment market more rapidly.

Conceptually, funding provided via the Seed Co-Investment Fund means that angel investors can do more deals, more quickly. Angel investors also have the potential to invest smaller amounts in each deal, thereby allowing the funds of investors to go further, across more deals. As a result, more good projects can be funded and individual investor risk will be diluted which, in turn, should encourage more investment activity.

However, the message from investors in the market is that the dynamics of the industry have more to do with connections and expertise. It is our view that increasing the scale, scope, and quality of angel investment networks through the Seed Co-Investment Fund will be pivotal in making this happen.

10.1 Angel investor networks

Angel networks are a way of distributing knowledge and practices to the marketplace and its participants. There are varying degrees of knowledge and expertise amongst angel investors. The angels interviewed for this baseline review were active investors and appeared to have good business knowledge to augment their angel investment activity. However, as noted previously, there appears to be a lack of active angel investors in New Zealand, particularly within formal networks. This is a concern, given that angel syndication requires experienced lead investors. The sharing of experience and collaboration with others that tends to occur in networks can help develop angel investor competencies.⁴²

Formal networks, such as Seed Co-Investor partnerships, can bring more organisation into the market and encourage the development of best practice. Better quality investment deals result from better investment processes.

The development of formal angel networks (and the promotion of angel investment activity more generally) will also help to create an 'arena' for angel investors and entrepreneurs to come together. They are also public vehicles for educating entrepreneurs about the investment process. Ultimately, the process for obtaining equity capital can become more transparent, entrepreneurs may better understand investor's needs, and better matching between entrepreneurs and investors can occur. However, as indicated from our research, formal networks may not always be the 'first port of call' for entrepreneurs⁴³.

From the above discussion it is evident that networking is an important process that will help to develop the other programme objectives. While networks rely on the competencies of angel investors within them, a desirable intermediate step in developing the market for

⁴² Raising the profile of the market via angel investment seminars and workshops may also encourage investors with capital and experience to participate in the market and share their knowledge.

⁴³ 45 percent more investment deals were reported through informal versus formal networks by our sample.

angel equity finance is ensuring the players in the market are more connected and integrated.

10.2 Positive consequences

If the Seed Co-Investment Fund is a successful investment and market development catalyst, the following positive consequences might result:

- angel investors will be encouraged to increase their knowledge and learn from each other in terms of the assessment and management of their investments and mentoring of entrepreneurs (i.e. encourage best practice);
- potential and existing angel investors will be encouraged to invest; (thereby ensuring a pool of investment experience);
- where practical, syndication of deals will occur (to minimise investment risk and encourage learning between investors); and
- investors will be encouraged to relay their investment knowledge to entrepreneurs seeking investment (so they have a better understanding of the needs of investors and investment proposals are more likely to be investment ready).

Overriding the existence of the Seed Co-Investment Fund is for firms to be aware of the financing options available to them and for the need for entrepreneurial spirit, in the first place. Entrepreneurial spirit can both increase opportunities for angel investment, and ensure a supply of potential investors with appropriate operational and technical experience.

11 Evaluation of the Seed Co-Investment Fund

11.1 Is the policy feasible and capable of delivering benefit?

As noted previously, the Seed Co-Investment Fund has a budget for two programme mechanisms: market development initiatives and passive investment alongside pre-qualified angel investment partners.

NZVIF Ltd will prepare an annual market and education plan to guide the former. One such known initiative, to date, is a guide to angel investing aimed at angel investors new to the investment space.

Four co-investment partnerships were announced in September 2006. Reports from NZVIF Ltd suggest these partnerships have started to generate investment opportunities. (The relative success of such opportunities will be gauged by NZVIF Ltd and reported to government). The Seed Co-Investment Fund has also encouraged new networks to form in order to access matching funds for private equity investment.⁴⁴

However, the Seed Co-Investment Fund is just one cornerstone of the angel investment market. Both passive and active angel investment is already occurring in the market unhindered. There are also a number of other angel network models within the market.⁴⁵ In this regard, some angel investors are concerned that the programme will be anti-competitive and squeeze out deals to non Seed Co-Investment Fund investment partners. The angel investors themselves will ultimately decide the nature of networks and processes that best suit them. The government is just a participant, not a manager of the angel investment process.

Time will tell whether the programme is successful. The extent to which this programme will deliver economic benefit will fundamentally rely on the government creating a better business framework conducive to angel investment and quality investment opportunities. Passive co-investment is a start, but on its own may not develop a thriving and successful angel investment market.

Below we discuss how the programme will be evaluated and what are the measures of success.

11.2 Evaluation timetable and scope

Cabinet agreed that evaluations of the Seed Co-Investment Fund will be performed by MED in consultation with the Ministry of Research, Science and Technology (MoRST), the Crown Company Monitoring Advisory Unit (CCMAU), Treasury and other relevant

⁴⁴ An article in the National Business Review on 24 November 2006 reported that almost 100 high net worth individuals in Otago and Southland had joined a fledgling angel network (Upstart Angel Investors). This network was formed as a direct result of Seed Co-Investment Fund so \$4 million in matching funds could be sought from the programme for private equity investment.

⁴⁵ Another such model entails a local body, within an Enterprise Development Agency (EDA) facilitating deals between angel investors and entrepreneurs. This is done through investor networks developed by the local body and assisting companies to become investment ready. The advantages of this type of model are the extensive networks created by the local body.

agencies. An implementation evaluation is scheduled for 2008/09 and an impact evaluation is scheduled for 2011/12.

The implementation evaluation will involve a review of programme outputs from a quality, quantity, and process perspective. The impact evaluation will involve an assessment of the achievement of programme outcomes or objectives. Consideration will be given to whether the programme has effected change, and whether this change is over and above what would otherwise be the case without the programme.

CCMAU is responsible for ownership monitoring. NZVIF Ltd is to prepare legal documentation, establish reporting systems, undertake aspects of due diligence on approved investors, and manage the relationship with co-investment partners.

The terms of reference for future evaluations will be mutually agreed between NZVIF Ltd and MED. However, key questions for the two evaluations may include:

Implementation evaluation

- Has the Fund been implemented as planned?
- What outputs (quantity and quality) has the Fund delivered and have agreed performance standards been met?
- What is the operating cost of implementing the Programme?
- Without compromising quality, how does the cost of delivering this Fund compare over time and what were the drivers for this?
- Can we compare the cost of delivering the Programme to similar programmes elsewhere?

Impact evaluation

- What are the observed outcomes of the Programme?
- Has implementation of the Programme led to the intended outcomes?
- Would observed benefits have been realised in the absence of the Programme (i.e., what is the level of additionality associated with the outcomes of the Programme?)
- What are the unintended outcomes (positive and negative) of the Programme?

Wider policy questions

- Are there changes that could be made to the design of the Fund that would improve its effectiveness?
- Are there any other policy changes that could be made to improve the overall effectiveness of the Programme and the wider angel investment environment?
- How effectively does the programme work with other related programmes?

- Does the policy problem still exist (i.e., is there still a role for government? Is this role the same or different to when the programme was established)?

The two evaluations will rely on regular reports from NZVIF Ltd together with information collected via interviews and surveys. A suggested information collection strategy for these evaluations is outlined in Table 11.2. The evaluations will also be informed by other work on complementary instruments to promote economic development.

Table 11.2. Information collection strategy.

<i>Evaluation</i>	<i>Information source</i>	<i>Purpose</i>
Implementation evaluation	NZVIF Ltd administrative records, financial records, reports, and internal guidelines for the Fund.	To gain information about the evolution, implementation, and delivery of the Fund.
	Discussions with Treasury, MoRST and CCMAU.	
	Discussions with NZVIF Ltd.	
	Survey and/or interviews of angel investment partners.	To confirm information about implementation and delivery.
	CCMAU reports	To understand the process of compliance monitoring.
Impact evaluation	NZVIF Ltd administrative records and regular reports.	To gain information about the evolution of the Fund and evidence of outcomes.
	CCMAU reports	
	Discussions with NZVIF Ltd.	
	Survey and/or interviews of angel investors, companies, and the wider angel network.	To understand the nature of early stage investment support. Also, to gain evidence of outcomes.

11.3 Performance measures

In order to adequately evaluate the Seed Co-Investment Fund it is necessary to obtain measures of performance for the programme. Such measures should be transparent and agreed between MED and NZVIF Ltd, who is responsible for managing the programme.

Some of the performance measures will be obtained via NZVIF's Statement of Intent and Annual Report. Other measures will need to be provided directly by NZVIF Ltd to MED. The performance measures will include both quantitative and qualitative information.

A workshop was held between NZVIF Ltd and MED in December 2006 to discuss possible performance measures. As a result of that meeting, MED has proposed a set of performance measures – refer to Appendix 13.4. While some measures will be limited in their value because of the short timeframe of an activity and other variable influences, we believe these performance measures are a good basis for further discussion. These performance measures cover data required for both the implementation and impact evaluations.

11.4 What will programme success look like?

The success of the Seed Co-Investment Fund is contingent upon the following factors:

- the creation of formal angel investment networks;
- co-investment deals being made;
- co-dependencies with other government programmes (refer to Part One);
- interaction of the angel investment market with the wider industry, e.g., venture capitalists, incubators, and commercialisation arms of universities (refer to Part One); and
- a business framework which does not inhibit angel investment (refer to Part One).

The timeframe for achieving programme success is uncertain. So, too is what constitutes success within New Zealand's market, relative to overseas angel investment markets. This is because New Zealand's market (whilst facing similar issues to overseas jurisdictions when developing angel markets) is unique and therefore, needs to reflect measures of success that are pertinent to it.

However, with this in mind, the results from the Scottish Co-Investment Fund, which was established in April 2003, are promising. The Scottish Co-Investment Fund was used as a basis for the design of the Seed Co-Investment Fund, as Scotland's population size is relatively similar to that of New Zealand's. Since the Scottish Co-Investment Funds inception in April 2003, 162 deals have been completed, with the Scottish Co-Investment Fund investing £23 million and the private sector investing £54.5 million. Scottish Co-Investment Fund results are an indication of what could be achieved by the Seed Co-Investment Fund in another three-to-four years.

New Zealand's angel investment market is in its infancy. The government and the private sector are just embarking on forging a relationship for the purpose of growing the angel investment market. While it is envisaged that a vibrant angel investment market will be developed as a result of this new co-investment programme, such development does not happen overnight.

12 Conclusions and Recommendations

12.1 Conclusions

The New Zealand angel investment market

- Our starting point for the baseline review was the Infometrics (2004) report. Infometrics estimated that, in 2004, 100 active angel investors existed in New Zealand. In this baseline review we identified, fairly quickly, 32 active angel investors. Based on the research conducted in this review, we believe that the Infometrics (2004) estimate of 100 active angel investors is a fairly accurate assessment of the number of current investors in New Zealand's angel investment market.
- New Zealand's angel investment market is mostly comprised of investors who operate through informal networks. However, our research identified seven known formal angel networks, with the forthcoming addition of another. Angel investors reported being able to syndicate when they want to. Syndication commonly occurs within a network, versus between networks.
- According to our sample of angel investors, there is a lack of active angel investors in New Zealand, particularly within formal networks. Active investors are hands on in their investments and, by mentoring entrepreneurs, help companies grow strategically, expand globally, and push barriers.
- From our research there appears to be a large number of investment pitches being made to investors. However, judging by the proportion of deals done versus deals considered and by anecdotal comments, entrepreneurs do not understand how to make an attractive investment pitch. A significant proportion of investors spend time educating entrepreneurs in how to become investment ready.
- In order for angel investment to occur potential investment opportunities need to be seen as financially viable and entrepreneurs also need to be aware of the financing options available to them.
- The development of the angel investment market is complex and incorporates factors that are inextricably linked. Simply providing money through passive involvement may not be sufficient to successfully develop this market. Perhaps even more importantly, the government needs to ensure that the business framework does not discourage angel investment nor limit company growth. In this regard regulatory and taxation issues need to be addressed. We believe that the current review by MED of financial products and providers will address the regulatory and taxation issues raised by angel investors in this baseline review.
- The government should not assist angel investment networks with their operating costs. In terms of assisting networks, the government's role is about facilitation, motivation, and the promotion of angel investment activity.
- Links between angel investors, venture capitalists, incubators, and universities are important in ensuring the effective development of angel investment in New Zealand.

- Development of entrepreneurship is critically important for angel investment. An entrepreneurial spirit both creates opportunities for investment (through the establishment of start-up companies) and encourages those with adequate financing and experience to become angel investors. The influence from the entrepreneurship environment comes as much from education as business. In this regard, the promotion of entrepreneurship within the secondary school curriculum could increase the probability of students developing and pursuing a successful business career.

Government policy to grow the angel investment market

- The Seed Co-Investment Fund was established to encourage angel investors to invest in firms that merit investment but who have difficulty assessing finance. Start-up firms with high-growth potential, innovative firms, firms that are technology intensive and are seeking to develop unproven markets or technology, and firms with assets that are difficult to value can have difficulty accessing finance due to a lack of collateral, limited cash flow, and investment risks to investors. Yet, these firms can be a source of innovation.
- At present, the government is using the Seed Co-Investment Fund, more broadly to accelerate the development of the market.
- While the policy objectives for the Seed Co-Investment Fund are relevant, they are insufficiently defined and require clarification. It is our view that networking is an important process that will help to develop the other programme objectives. Developing the market for angel equity finance is about ensuring the players in the market are more connected and integrated.
- While the policy for the Seed Co-Investment Fund is working, angel investors themselves will ultimately decide the nature of networks and processes that best suit them. The government is just a participant, not a manager of the angel investment process.
- The success of the Seed Co-Investment Fund is co-dependent upon other a number of other government programmes. These programmes include Escalator, the Enterprise Training Programme, Connect New Zealand, and the Young Enterprise Scheme.
- An implementation review of the Seed Co-Investment Fund is scheduled for 2008/09. This review will involve an assessment of programme outputs from a quality, quantity and process perspective. An impact review is scheduled for 2011/12. This review will involve an assessment of the achievement of programme outcomes.

12.2 Recommendations

12.2.1 Collection of angel investment data

There is no legal requirement for the collection of angel investment statistics and there are no processes to standardise information across the industry. If we want to accurately assess the New Zealand's angel investment market and, therefore, successfully determine its progress, national data on angel investment activity needs to be collected. Currently, it is very difficult to obtain information on angel investment activity because angel investors are private individuals and their investment activities are concealed.

In other jurisdictions, for example Scotland, there is legislation to collect angel investment information via Companies Office requirements. Another data collection option includes the possibility of utilising the taxation system (e.g., the registration for capital purposes such as capital gains tax write-off) as an incentive to encourage angel investors to provide this information.

We recommend that the Minister of Economic Development's agreement be sought for MED to examine the feasibility of collecting angel investment data on a national basis and ask for a report back in twelve months.

12.2.2 Alignment of supply and demand for equity capital

The Escalator and Connect New Zealand are two programmes designed to increase the investment readiness of firms and link firms with equity capital from angel investors. The Seed Co-Investment Fund is designed to encourage angel investors to provide capital for New Zealand firms that would otherwise have difficulty accessing finance. As these programmes involve different actors they are currently delivered independently of each other. It may be possible that a more integrated approach between these programmes would deliver better results for investors and entrepreneurs.

We recommend that the Minister's agreement be sought for MED to examine options for establishing a closer working relationship between the Seed Co-Investment Fund, Escalator and Connect New Zealand. It is our view that the respective delivery agencies meet twice annually to review opportunities and issues arising. By June 2009⁴⁶ we recommend that NZTE, NZVIF Ltd and Connect NZ come up with a proposal to harmonise the delivery of these programmes. Such a proposal may encompass a single body overseeing and delivering the Seed Co-Investment Fund, Escalator and Connect New Zealand.

12.2.3 University commercialisation

In overseas markets, the commercialisation of university innovations is a significant factor in helping to develop start-ups and high growth potential firms. Overseas universities have mandates to commercialise research. Valuable relationships have also been established between universities and the private sector, including angel investors. Internationally, universities face incentives to commercialise innovations and this leads to a virtuous set of interactions between angel investors and innovators.

In the New Zealand context, there is relatively less emphasis on commercialising innovative research ideas as there is on publishing research.⁴⁷ If New Zealand is to successfully commercialise innovations, consideration needs to be given to integrating private sector commercialisation interests (and their financial contributions) with current university research mandates.

⁴⁶ This date coincides with the evaluations of Escalator and the Seed Co-Investment Fund.

⁴⁷ Within the Economic Transformation Agenda the government has made a commitment to improving Crown Research initiatives, tertiary education Initiatives and firm linkages to progress globally competitive firms [Refer to CAB Min (06) 31/3].

To achieve this integration we recommend that policy advice be developed for the Minister of Economic Development on how angel investment can link into innovations from New Zealand universities. Specifically, policy should:

- Review the overall effectiveness of funding instruments and related policies to incentivise innovations from universities.

A consequence of this work may include assessing the recommendations made in the May 2005 evaluation of the PSAF (i.e., raising Fund contributions of each project to a 50:50 ratio). Consideration should be given to increasing funding to the PSAF.

- Investigate initiatives to incentivise angel investors to invest in university commercialisation activities.

It may be feasible to consider tax incentives explicitly for angel investors. This is because such incentives may be the best way to incentivise industry growth and to provide a means to measure the size of the angel investment industry.

There are a variety of initiatives for New Zealand's commercialisation of university innovations. To accelerate the growth of angel investment, New Zealand needs to have excellent innovative growth coming out of universities.

12.2.4 Policy measures

Performance measures will be set and agreed between MED and NZVIF Ltd for the achievement of programme objectives. Such measures will remove the potential for ambiguity in future evaluations of the programme. The performance measures are to be finalised within the next three months. The performance measures presented within this report are to be used as a basis for discussion.

13 Appendix

13.1 Methodology

Participants were recruited using a 'snowball' approach. Angel investors already known to the researchers were sent a recruitment email (refer 13.1.1) with questions attached (refer 13.1.2). The researchers requested angel investors to pass on the recruitment email to their associates, who in turn could pass on the request to other investors.

Participants were recruited from Auckland, Wellington, Christchurch, Oamaru, Dunedin and Invercargill.

Structured face-to-face interviews were conducted with all participants, except two angel investors, where telephone interviews were conducted.

13.1.1 Recruitment email

Dear Angel Investor

The Ministry of Economic Development is seeking your help in establishing a baseline for the Seed Co-Investment Fund. The Seed Co-Investment Fund aims to support the development of the market for angel equity finance. Through the Seed Co-Investment Fund the Crown will passively co-invest in seed and start-up companies alongside pre-qualified angel investment partners.

We would like to interview you to hear your views and experience on angel investment activity in New Zealand. The information that you provide will help us to assess the performance gap that exists in the New Zealand's angel market.

The interview would take approximately one hour and is confidential (individual responses will not be identified and other government agencies or departments will not have access to individual responses). The type of questions that we would like to ask are attached.

Subject to your availability, we would like to meet with you in August or early September. If you wish to participate we would appreciate you contacting us by the end of August, indicating your preferred time to meet.

As part of our approach for contacting angel investors, we would appreciate you forwarding this email onto other angel investors whom you think would be willing to assist the government with this research.

Yours sincerely

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13.1.2 Angel Investor Questionnaire

Proposed Questions

The government wishes to help develop and grow the angel investment market.

As part of this objective the government is funding the Seed Co-Investment Fund. From August 2006 the government will passively co-invest alongside pre-qualified angel investment partners in seed and start-up companies.⁴⁸

Research was undertaken two years ago on the supply side of New Zealand's angel investment market. As a result of this research, funds available for investment by angels in New Zealand were estimated to be around \$1 billion. While the research indicated that the process for networking amongst angels was underway, there were differences in how angel investment operated regionally.⁴⁹

As part of the implementation of the Seed Co-Investment Fund we are now required to establish current information on angel investment activity. This information will help us to assess the performance gap that exists in the angel market.

The Ministry of Economic Development is conducting this interview. Participation is confidential and individual responses will not be identified. Other government agencies or departments will not have access to individual responses. The interview should take approximately one hour.

⁴⁸ Via the Seed Co-Investment Fund the government will invest:

- up to \$250,000 for any new private investment proposed by the co-investment partners;
- up to 50 percent of the first round of a seed and start-up investment;
- up to a 35 percent share in a single company or group of companies when measured in terms of public share ownership (with the exception of co-investments in companies originated by Crown Research Institutes or universities, or when shareholding changes occur and no new investment by Seed Co-Investment Fund is provided);
- up to \$500,000 in total in follow-on investment provided that the aggregate value of investments over \$250,000 in the Fund is never greater than 15% of the total investments; and
- a maximum of \$4 million via a single pre-qualified investment partner.

⁴⁹ The research report was prepared by Infometrics Ltd and summarises a survey of angel investors conducted by the Ministry of Economic Development (MED). A copy of this research report is available upon request from MED.

Background

1. Please indicate why you are interested in angel investment.
2. Which aspects of your business experience have you found to be most important to angel investment?
3. In your experience, what value do angel investors bring to New Zealand business?

The angel investment market

4. What do you see as the role for government in supporting angel investment?
5. What is the extent of your involvement in the Seed Co-Investment Fund?

Statistics

We would like to publish some national figures on the size of the angel investment market.

These would be aggregate figures and would update data published in 2004.

6. Are you able to provide us with approximate figures on your involvement in the market as follows:
 - Number of investment proposals considered and the number of investments made since July 2004.
 - For the investments you have made since July 2004, what sectors did you invest in and what type of investment did you make (e.g., seed and/or start-up)?
 - What is the average time you tend to invest in a company before exiting?
 - What is the percentage of your portfolio that you tend to invest in a particular deal?
 - Typically, how many other angel investors have participated in your deals?

Operational practices

7. Does the size of the deal and the risk profile determine whether you invest through a network/syndicate or whether you invest alone?
8. Are there difficulties in linking up with other angel investors?
 - How good are the current processes and where are improvements needed?
9. How do you identify a potential deal/investment?
10. What factors influence your decision to invest in a company?
11. What other due diligence process do you employ?

Thank you for your participation and valuable contribution. If you have any questions about this interview or the Seed Co-Investment Fund, please contact:

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13.2 Angel investment activity overseas

United States and Canada

The Angel Capital Education Foundation (ACEF) (2006) reported on American angel investment activity in 2005-06. Data collected from a survey of 50 Angel Capital Association (ACA) members, showed that the average amount invested was US\$1.45 million, with an average of 5.46 investments and 4.49 companies invested in. The average per angel, per deal was US\$33,236, with an average of US\$386,963 invested per company. The ACEF also reported that in 2005, angel investors invested US\$23.1 billion in entrepreneurial businesses in America. Demographic data reviewed by the ACEF from 94 ACA membership applications in 2005 and 2006, showed that the 94 angel groups represent 4,100 investors from 44 US states and Canadian provinces. Angel groups had grown by 67 percent in the last three years and on average, have 41 accredited investors per group. Group membership ranged from having fewer than ten investors to having 100 or more member investors. Lipper and Sommer (2002) reported that there were approximately 400,000 angel investors in America, who tended to be organised into unspecified groups that were informally networked. However, they also suggested that the frequency of formal networks was increasing. The ACA lists on their website one-hundred and forty formal angel groups across America and fourteen in Canada.

Data on angel trends in 2006 in the United States from the University of New Hampshire shows that the value of investments over the first two quarters of 2006 reached US\$12.7 billion. The growth rate of these investments was 15 percent higher than occurred in the first half of 2005. Over the same period, 40 percent of angel investments were at the seed and start-up stage. Investment in post-seed/start-up stages represented 45 percent of investments. With the preference for investing via more formal and larger angel groups, investments are occurring at later stages. The health care and medical devices are the sectors of choice for angels, with 27 percent of investments in these sectors in the first half of 2006. 18 percent of investments were in software.

Europe

Some statistics on angel investment activity in Europe are shown in Table 13.2. The European Business Angel network (EBAN) survey had a 49 percent response rate and reported at least 12,773 active angels in Europe in 2004 in 263 networks. A total of 580 deals had been done, from 9,471 projects considered. The European Private Equity and Venture Capital Association (EVCA) surveyed 1,160 private equity companies in 24 European countries. The survey response rate was 72.5 percent.

Scottish company law requires detailed disclosure of investors and amounts invested on the public record. Thus, accurate statistics on Scottish angels can be gathered. In 2004, Scotland contained 539 identifiable business angels, although an approximate number was 600 (Don & Harrison, 2006). Of these 600, 90 percent had been active from 2000 to 2004. From 2000 to 2004, £843 million of risk capital had been invested in 732 deals done by 490 young Scottish companies. The average deal size in 2004 was £338,000, compared with £199,000 in 2003 and £213,000 in 2002. When angels were co-investing with funds from the Scottish Co-Investment Fund the average deal size was larger (i.e., £475,000) than the average transaction without passive funding (i.e., £179,000). Angel investors have provided 25 percent of risk capital to young Scottish companies from 2000 to 2004, rising to 31 percent in 2004.

Table 13.2. A snapshot of angel investment statistics for Europe

<i>European seed industry</i>	<i>EBAN statistics (2004)</i>	<i>EVCA statistics (2004)</i>
Number of companies financed	580	355
Amount invested	N/A	€1,480,000
<i>BELGIUM</i>	<i>(4 networks)</i>	
Number of deals	29	14
Amount invested	€3,354,000	€3,935,000
Average size of deal	€115,655	€281,071
<i>DENMARK</i>	<i>(8 networks)</i>	
Number of deals	30	43
Amount invested	€4,000,000	€15,821,000
Average size of deal	€100,000	€367,930
<i>FRANCE</i>	<i>(28 networks)</i>	
Number of deals	146	55
Amount invested	€13,000,000	€36,532,000
Average size of deal	€95,150	€664,218
<i>ITALY</i>	<i>(12 networks)</i>	
Number of deals	12	9
Amount invested	€1,305,300	€4,378,000
Average size of deal	€108,775	€486,444
<i>THE NETHERLANDS</i>	<i>(1 network)</i>	
Number of deals	17	4
Amount invested	€1,700,000	€1,305,000
Average size of deal	€100,000	€326,250
<i>UNITED KINGDOM</i>	<i>(14 networks)</i>	
Number of deals	165	67
Amount invested	€35,934,875	€12,069,000

Average size of deal	€217,787	€180,134
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Asia/Pacific

Hindle and Lee (2002) provide a descriptive profile of the angel market in Singapore. The angel market in Singapore is very reserved and, therefore, it is hard to identify angel investors. Consequently, the authors obtained a 2.4 percent response rate (29 qualified angel responses). Thus, the following statistics give a tentative profile of the Singaporean business angel in 1997. The size of the average investment made was SGD\$350,000, with a total of SGD\$7.3 million invested. 65 percent of angels had made two investments, with 14 percent making three or more investments. 72 percent of angels were employed in an entrepreneurial activity.

Hindle and Wenban (1999) researched the Australian angel investment market and found that there were two types of investor. The first type, were what the authors called a 'Seraphim' investor who invested between A\$200,000 and A\$500,000, whereas the second type were classified as 'Cherub' investors, who invested between A\$20,000 and A\$50,000. The average income of investors was A\$180,000, with a net worth of A\$2 million. There was also two groups of angels – older, more experienced investors (with little or no education) and highly educated younger professionals.

A study of the business angel market in Australia was recently conducted by the Australian government (Vitale, Everingham & Butler, 2006). Key findings from this study were that angels were a hidden and private groups of investors, with entrepreneurial expertise. These investors understood the risks involved and were willing to take them in exchange for potential returns. Deals were sourced informally through personal networks, with investments typically for \$500,000 or less. The average investment made was \$350,000. When angels co-invest with others, the 'syndicate' value can be \$5m or more. This is as large as a venture capital investment. Angels suggested improvements could be made in the market by improving information and education for entrepreneurs and potential angels, and tax incentives for angels.

Tashiro (1999) conducted the first detailed study of Japanese business angels, examining their characteristics and their role in developing new venture business. Japan's business angel environment is very early stage compared to other countries (e.g., the USA). Angel investors had a mean age of 62 years, of which 41 percent owned their own businesses. 58 percent of investors had general management speciality and were educated in law, economics or management. The average annual income of Japanese angels was ¥59 million (US\$472,000), with an average of ¥250 million (US \$2 million) in financial assets. Interviews with ten active angels revealed that they made investments of ¥12.5 million (US\$106,000) in five ventures in 1997.

13.3 Tax review: Summary of possible initiatives

POSSIBLE INITIATIVES	
<i>Description</i>	<i>Cost per year (\$m)</i>
<u>Tax rate measures</u>	

Reduction in the company tax rate to 30% (from 33%)	540
<u>Tax base measures</u>	
Targeted tax credits for	
• R&D activities,	45 to 350
• Export market development activities, and	Uncosted
• Skills improvement	Uncosted
Deferral of losses from significant upfront expenditure (extension to Budget 2005 R&D measures) to allow losses to carry through a shareholder change	Uncosted
Deduction for other 'blackhole' expenditure, such as losses on buildings	150 to 300
Increased depreciation loading on new assets to:	
• 30%	120*
• 40%	203*
Reduced depreciation loading new assets to:	
• 10%	(120)*
• 0%	(250)*
Aligning depreciation loading at 20 percent on new and second-hand assets	90*
<u>Tax compliance measures</u>	
Increasing low value asset write-off threshold (figures given for increase from \$500 to \$1,000)	170*
Reducing compliance costs for assets that reach a low depreciated value (say, \$100)	Uncertain
Increasing the threshold for taxpayers allowed to submit an annual FBT return	0**
<p>* These are average costs over the first five years. The cost of depreciation changes is a matter of timing, and no allowance is made for depreciation outside the five-year period.</p> <p>** While there should be no difference in aggregate tax collections in any fiscal year, there will be a time-value of money cost.</p>	

13.4 MED's proposed performance measures for the Seed Co-Investment Fund

Intermediate Outcome: Competency of angel investors improves in terms of intermediating funds between investors and newer technology-based firms	
<i>Performance Indicators</i>	<p><i>The development of mentoring capacity that will assist firms to become investment ready by receiving guidance on what angel investors expect and how their firm's business plans need to be enhanced to interest angel investors.</i></p> <p>Seek a list of capabilities from partner angels that contribute to a firm's investment readiness. Test against firm responses.</p> <ul style="list-style-type: none"> • E.g. better understanding by entrepreneurs of the range of financial options available to them; the process of raising capital; and their value proposition in the market. • Do more firms report an increase in understanding/investment readiness? <p>Consider NZVIF Ltd criteria for co-investment partners.</p> <p>Contacts in market/networks.</p> <p>Experience of angel investors (operational, technical and investment).</p>
<i>Standard/Target</i>	The competency of angel investors improves.
<i>Indicator Definition</i>	Evidence of competency.
<i>Source</i>	<p>Surveys of angel investors.</p> <p>Surveys of investee companies.</p>

Intermediate Outcome: Competency of angel investors improves in terms of specialist skills in assessing and managing early-stage technology-based investment	
<i>Performance Indicators</i>	<p><i>Practices and experience of Seed Co-Investment Fund networks develop better practices amongst non Fund angels, i.e. leadership.</i></p> <ul style="list-style-type: none"> • Commonly accepted documentation and terms sheets. • Common understanding of pricing methodologies. • Variety of risk instrument types (e.g. preference shares,

	<p>ordinary equity, convertible notes).</p> <ul style="list-style-type: none"> Do the Seed Co-Investment Fund networks encourage members with specialist knowledge to come forward as active mentors? <p><i>Increased operational competencies (an indicator of professional development).</i></p> <ul style="list-style-type: none"> The deal process – finding, filtering, inviting, documenting and managing investments. Portfolio investment methods: documentation conventions, pricing, risk strategies and governance. <p><i>Increased investment competencies</i></p> <ul style="list-style-type: none"> The nature of the portfolio for each network (to demonstrate an improvement in the sophistication of the spread of deals across industries and/or specialisation within a sector). Past deal successes (i.e. number of deals considered and done). Relevant skills to assess investments (i.e. experience at developing a business, management experience, good communication and relationship skills).
<i>Standard/Target</i>	The competencies of angel investors improve.
<i>Indicator Definition</i>	Evidence of competency.
<i>Source</i>	Surveys of angels.

Intermediate Outcome: Increased scale in the market for angel investment	
<i>Performance Indicator</i>	<p><i>Increase the operational capacity of angel investment: the investment funnel.</i></p> <ul style="list-style-type: none"> Number of angels investors in the market. \$ available to invest. Number of deals viewed. Number of deals considered. Number of deals done. Number of deals exited.

	<ul style="list-style-type: none"> • Average cost per deal. • \$ value of deals done. • Median \$ deal size. • Contextual information to help interpret data (i.e., firm profiles, deals across sector).
<i>Standard/Target</i>	Refer Statement of Intent.
<i>Indicator Definition</i>	Increased scale = growing the market in terms of investment deals done and the number of investors in the market.
<i>Source</i>	Regular reporting.

Intermediate Outcome: Enhanced developed networks for early stage investment	
<i>Performance Indicator</i>	<p>Indicators may include:</p> <p><i>Aggregate partnership information: e.g.:</i></p> <ul style="list-style-type: none"> • Number of angel investment networks. • Regional distribution of these networks. • Number of angel investors per network. • Average investment by sector. • Average investment per network. • \$ value investment per network. • Origin of investment deals (i.e., incubators, deal brokers, small business advisors). • Follow on investment. • Network syndication. <p><i>Contextual information: e.g.:</i></p> <ul style="list-style-type: none"> • Number of angel investors establishing new networks. • How do networks engage? • Barriers observed. • Network structures observed.

	<ul style="list-style-type: none"> • What makes a good partnership?
<i>Standard/Target</i>	Targets as per Statement of Intent
<i>Indicator Definition</i>	Enhanced = increased scope and better quality Note: networking is not necessarily the end result, it is a way of distributing the knowledge of the marketplace, its participants and practice.
<i>Source</i>	Statement of Intent Regular reporting

High level outcome: Minimise fiscal risk and cover costs	
<i>Performance Indicators</i>	<p><i>Minimise fiscal risk:</i></p> <ul style="list-style-type: none"> • Adhering to legislative and constitutional requirements. Avoiding contingent liabilities. • Mitigating reputational risk. <p><i>Cover costs:</i></p> <ul style="list-style-type: none"> • Operation of the programme within budget.
<i>Source</i>	NZVIF Ltd administrative and financial records.

Programme Outputs	
<i>Performance Indicators</i>	<p><i>Governance and administration</i></p> <ul style="list-style-type: none"> • Adherence to the investment mandate. • Reporting on activity. • Good governance. <p><i>Selection and due diligence</i></p> <ul style="list-style-type: none"> • Transparent process for reviewing proposals. • Quality of due diligence and number of due diligence completed. <p><i>Contract negotiations</i></p> <ul style="list-style-type: none"> • Co-investment partner contract negotiations completed.

	<p><i>Investment activity</i></p> <ul style="list-style-type: none"> • Term sheets and Shareholder Agreements standardised and consistent with market best practice. • Investor governance, investment progress, mandate adherence, investment eligibility, fund manager reporting and relationship management. • Standardised investment processes and documentation. <p><i>Education and Market development</i></p> <ul style="list-style-type: none"> • Number and quality of educational and market development initiatives supported.
<i>Source</i>	NZVIF Ltd administrative and financial records.

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