NZVIF Portfolio Investment Snapshots

July 2015

Introduction

Early stage investing is enjoying a period of marked growth. Angel investing is at record levels, equity crowdfunding platforms are now underway, and there is a growing number of young technology companies listed on stock exchanges. In addition the NZX has just established its new NXT platform specifically targeting young companies wishing to raise capital for growth.

The New Zealand Venture Investment Fund (NZVIF) has been investing into early stage companies since 2002. It now has a portfolio of 187 technology companies, mainly young and high growth. It invests through two funds – the $260 million Venture Investment Fund (VIF) and the $40 million Seed Co-Investment Fund (SCIF). VIF invests into start-ups and young growth companies via privately managed venture capital funds. SCIF invests directly into companies, providing seed and start-up funding alongside partnering angel investors. Through both funds, it is private investors – venture capitalists and angel investors – who select which companies to invest into, not NZVIF.

NZVIF is nevertheless very active. It selects experienced private sector investment partners and ensures good governance arrangements are established for the portfolio companies. It also monitors the companies' performance closely. Through this monitoring, a rich data set has been collated from a large portfolio. While the data is from NZVIF's portfolio, the analysis provides a broad reflection of the experiences of angel and venture capital investors active in the New Zealand market.

KEY SNAPSHOTS

- Many companies have low revenues but are fast growing, particularly software.
- Pre-money valuations are relatively low, reflecting the high risk.
- For every $1 of initial investment, 2 to 4 times is needed for follow-on investment.
- 20% of exits have earned back the level of investment or better.
- Average hold times for investments are 3 years for SCIF and under 5½ years for VIF.
- $1 of public investment leverages $9 of private capital.

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With growing interest in investing into early-stage technology companies in New Zealand, this report provides insights into some of the characteristics of investment into a large portfolio of young technology companies over multiple years, industries, sectors and regions. For those considering entering this investment market, it highlights the high risk nature of early stage investment – at least four in 10 companies fail – and that it takes time and considerable follow-on investment and effort to develop the few companies which do succeed.

NZVIF's role

NZVIF's role since its establishment has been to catalyse the growth of New Zealand's venture capital and angel investment market, and improve access to capital for young technology companies. In this context:

- NZVIF is often investing alongside first time or relatively inexperienced fund managers and angel investors.
- The investment partners are providing seed and start-up investment to young technology companies, many of which are still at the pre-commercialisation/pre-revenue stage. Nearly all will require significant capital for growth if they are to compete internationally.
- The capital provided by NZVIF and its private investor partners is often the first truly third party capital provided on commercial terms (NZVIF invests on exactly the same terms as its private sector partners).

While there is no specific investment return objective set for NZVIF, it is recognised that investment success is critical for the long term growth, sustainability and success of both NZVIF and the early stage investment market.

High risk and early stage

NZVIF invests in very high risk, predominantly very early stage companies. There is a high investment failure rate with at least 50% of companies not expected to return investors' capital, 30% returning some capital and possibly more, and 10-20% of companies generating most of the returns. For a significant majority of investments, the success of companies and resulting investment returns only become evident after a significant period of time – often 6 to 10 years or more. Given the survival and success rate, the

intention is to invest in a large number of companies, in order to create a viable pipeline of companies which go on to become successful.

There are some key features of early stage investment which new investors should be aware of:

1. The amount of follow-on capital required for these investments.
2. The time it takes to successfully exit.
3. Experienced VCs and angels invest in only 5-10% of the opportunities which they look at. There is considerable vetting of a company before an investment is made.
4. Angel investors and VCs do not just invest capital. They also invest considerable time in assisting companies to grow as advisors, mentors, network 'connectors' and as board directors.

Even seasoned investors underestimate the capital required for follow-on investments and how long it takes to get a return on the total investment. For every initial investment, between double and four times that amount is likely to be required for follow-on. So for an investor putting $20,000 into a start-up company, they should be prepared for further investments taking their capital in that company to between $40,000 to $80,000.

Earning a quick return is the rare exception, not the rule. The misperception is driven by the high level of media focus on a handful of companies which achieve meteoric growth – so called 'unicorn' investments. Rising markets, supported by low interest rates and higher levels of investor exuberance, can add to the impression that high returns can be achieved over a relatively short period of time.

The reality is that investors need to carefully consider which companies to back. They then need to be prepared to invest for the long haul and through periods of less benign market conditions, when valuations can be down and liquidity can be close to non-existent. Considerable ongoing non-financial support of the companies is also an important aspect. Early stage investing is best suited to investors with the financial capacity to absorb losses and continue to invest while waiting for the reward of success. Some of those investors must also have the personal capacity and experience to provide much needed non-financial assistance – again, often for the long haul. Ultimately, most value will live in the 10-20% of investments which can "prove" their value proposition and have the capital required to support them to reach that point.

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Notes about the data

1. NZVIF has invested into 187 companies. The SCIF portfolio has 131 and VIF's portfolio has 66 companies – with 10 companies sitting in both portfolios.
2. Not all companies have reported in every category – i.e. the SCIF revenue data is from 99 of the 131 companies. But there is sufficient quantity of reporting companies to make assumptions for the entire portfolio.
3. Different datasets have different timeframes due to the frequency of reporting from partners and companies. NZVIF has used the most up-to-date data available in each category.
4. This report does not provide overall portfolio performance on returns and holding values. For the most recent NZVIF Investment Report, see http://www.nzvif.co.nz/assets/publications/InvestmentReport-Nov14.pdf.

New vs follow-on (SCIF only)

Investors need to be prepared to at least double their initial investment in later rounds.

- For every dollar invested by SCIF in initial investments into young companies, more than double that has been required for follow-on investments.
- As the angel market has developed, investors have tended to prefer smaller initial investments, so that their capital is available for follow-on investments into companies which show progress and meet milestones.
- In the 2012 cohort, the new to follow-on ratio is 1:4.1. In 2013, the ratio is already 1:2 and is likely to increase further over the next few years as companies require capital to fund future growth.
- To grow into a sizeable business beyond angel rounds, the capital required can be 5-50 times (or even more) during a company's expansion stage.

Table 1: SCIF new vs follow-on

	No. of Deals	New Investment	Follow-on Investment	Multiple
2006	1	$1,023,998	$1,652,393	1.6
2007	13	$8,553,181	$28,995,399	3.4
2008	7	$8,931,708	$21,461,801	2.4
2009	14	$7,607,436	$20,763,637	2.7
2010	20	$14,453,456	$29,405,844	2.0
2011	15	$5,423,736	$10,190,123	1.9
2012	17	$4,349,941	$17,804,761	4.1
2013	22	$8,763,600	$17,240,619	2.0
Cumulative	**109**	**$59,107,055**	**$147,514,577**	**2.5**

Note: 2014 and 2015 is not included as many of those investments are too young to yet require follow-on.

Revenue

Many investments are into companies with no or very low revenues.

- The very early stage of angel investing is shown in that 17% of the current SCIF portfolio companies (17 of 99) are pre revenue, and 57% are generating revenues of $500,000 or less. 16% of the portfolio are reporting annual revenues of over $1 million.
- In the VIF portfolio of companies, annual revenues are higher with 38 companies (59% of the portfolio) earning over $1 million, and 15 companies (23% of the portfolio) are earning over $10 million. Two companies – Xero and Orion Health - are earning annual revenues of over $100 million.

Table 2: Revenues

	Revenues of NZVIF companies at last reporting date (includes exits)	
	SCIF	VIF
$0	17 (17%)	6 (9%)
$1 - $500,000	56 (57%)	16 (23%)
$501,000 - $1,000,000	10 (10%)	6 (9%)
$1,000,001 - $2,000,000	8 (8%)	7 (11%)
$2,000,001 - $5,000,000	6 (6%)	11 (17%)
$5,000,001 - $10,000,000	2 (2%)	5 (8%)
$10,000,001 - $20,000,000	0	6 (9%)
$20,000,001 - $50,000,000	0	4 (6%)
$50,000,001 - $100,000,000	0	3 (5%)
$100,000,001 +	0	2 (3%)

As of 31 March Dec 2015 – Note: 32 SCIF companies have not recently reported revenue data.

Revenue growth

Young technology companies are high growth, particularly software.

- NZVIF's investee companies are exhibiting high revenue growth, with SCIF companies averaging 55.7% annual revenue growth and VIF companies 37.4%. (This contrasts with more established technology companies in the TIN100 Index, which have seen average annual growth rates of 6-7%).
- Across NZVIF's two portfolios, software companies are performing ahead of the overall portfolio in terms of revenue growth. In SCIF, software company annual revenue growth was 73% and in VIF it was 42%.

Table 3: Revenue growth

	SCIF	VIF
Weighted Average – all sectors	**55.7%**	**37.4%**
Average – all sectors	39.4%	34.7%
Median – all sectors	29.6%	19.7%
Weighted Average – software sectors	**72.9%**	**42.0%**
Average – Software sectors	48.4%	31. 8%
Median – Software sectors	32.2%	22.1%

As of 31 March 2015

Pre-money valuation

Valuations reflect the high risk profile of this investment type.

- Across the SCIF portfolio, angel investors have historically been more likely to invest in companies valued under $1 million (57% of the portfolio), with a considerable level of investment in companies valued under $500,000 (27% of the portfolio). Nine percent of SCIF investments have been valued at over $2.5 million at the time of first investment.
- Across the VIF portfolio, 17% of the portfolio was invested in companies valued under $1 million, with 43% of investment in companies valued at over $5 million at the time of first investment.
- While high valuations for technology companies in the United States is giving that market some concern, New Zealand's angel and VC investors have not seen the same extent of valuation growth.

Table 4: Pre-money valuation at time of first investment

	SCIF	VIF
$0 - $250,000	11	3
$250,001 - $500,000	22	0
$500,001 - $1,000,000	38	7
$1,000,001 - $2,500,000	42	11
$2,500,001 - $5,000,000	10	13
$5,000,001 - $10,000,000	1	11
$10,000,001+	0	15

As of 31 March 2015 – data available from 124 SCIF companies and 60 VIF companies

Valuations and exits

A fifth of exits have earned back the level of investment or better.

- Of the exits to date, 21% (13 of 62) have been earned back the amount invested or better. Four exits have been greater than three times the amount invested.
- Across the NZVIF portfolio, 79 companies (40% of the portfolio) have been written off or are valued at less than the amount invested. This is in line with early stage investment expectations.
- 84% of the active SCIF portfolio companies and 63% of the current VIF companies are valued at either the same or better than the amount of NZVIF's investment or better (based on conservative fair value).
- Two companies in the current VIF portfolio are valued at over three times the amount invested (one company is between five and ten times).

Table 5: Valuation Multiple

	Exited valuation multiples		Current valuation multiples for companies still in the NZVIF portfolio	
	SCIF	**VIF**	**SCIF**	**VIF**
0 – 0.99	31	18	15	15
1.00 – 1.99	3	5	77	19
2.00 – 3.00	0	1	3	4
3.01 plus	2	2	0	2
Total	**36**	**26**	**95**	**40**

As of 31 May 2015 – 10 companies are in both VIF and SCIF portfolios.

Note: NZVIF follows international accounting guidelines and values its companies very conservatively. Some companies which have been written-off are still operating and could return more than the current zero valuation. The holding value, therefore, does not reflect potential future returns NZVIF could receive over time.

Investment timeframes

- The average hold time for investments across the portfolio is three years for SCIF companies and five-and-a-half years for VIF companies. This is low compared to market comparators. As the SCIF portfolio matures we would expect the average investment period to increase.

Table 6: Timeframes

	SCIF	VIF
Average investment period (Total portfolio)	3.01 years	5.61 years
Average investment period (Active portfolio)	3.19 years	5.41 years
Average investment period (Positive exits)	2.62 years	5.90 years

As of 30 April 2015

Capital raising - public/private sector leverage

Public investment catalyses private.

- For every dollar invested by NZVIF, there must be at least 1:1 matching investment from private investors. In fact, the public/private sector investment leverage for both the VIF and SCIF programmes runs significantly above that. Across both funds, NZVIF has invested $147 million as part of total investment in the 187 companies of $1.47 billion, producing an overall public/private fund leverage effect of 9.0 times.
- For every dollar invested by SCIF, $2 is being invested by the angel investor partners. Alongside that, other investors are also being attracted to the companies, taking the leverage effect to $4.60 of private investment for every dollar invested by SCIF.
- For every dollar invested by VIF, $2.42 is being invested by private venture capital fund investors. Alongside that, other investors are also being attracted to the companies, taking the leverage effect to $10.61 of private investment for every dollar invested by VIF.
- While the initial investment is likely to be on a 1:1 or 1:2 ratio of NZVIF to private capital, the trend is for the more successful companies to attract much greater levels of private capital as they grow (and, therefore, the leverage effect of NZVIF's investment grows over time). After NZVIF and its partners provide the initial co-investments at the very early stages (the point of highest risk), the private sector then leads the ongoing process of selection and further investment into the best prospects.

Table 7: Capital raised

	SCIF	VIF
NZVIF investment	$37,817,758	$109,123,521
NZVIF Partner investment	$75,465,176	$264,506,292
Other investment	$98,529,817	$893,016,278
Total investment	**$211,812,751**	**$1,266,646,091**
RATIOS:		
NZVIF Partner/NZVIF	2.00	2.42
All private investment/NZVIF	4.60	10.61

As of 31 May 2015

Final thoughts

- 27% of NZVIF's portfolio originate from universities and Crown Research Institutes, which is positive for the publicly funded innovation system.
- New Zealand's technology investment markets are growing in depth and capability. This has been reinforced both by the rapid growth in technology investment globally, as well as the growth and success of a handful of New Zealand based technology companies. Nevertheless, building scale and resilience remains a long term exercise.