



# **New Zealand Venture Investment Fund INVESTMENT REPORT**

November 2014

## INTRODUCTION

The New Zealand Venture Investment Fund has partnered with 10 venture capital funds and 14 angel investment funds or networks. It operates two funds – the \$260 million<sup>1</sup> Venture Capital Fund and the \$40 million Seed Co-Investment Fund. Alongside its partners through these two funds, NZVIF has invested into 167 technology companies, some of which are among New Zealand's most promising growth companies.

This report outlines the investment performance of the Venture Capital Fund and the Seed Co-Investment Fund from establishment through to 30 June 2014. Performance is reported at the portfolio level, rather than for specific funds, angel groups, or companies.

NZVIF was established by the Government to 'catalyse' private sector investment into young companies and to assist in developing early stage capital markets, rather than to achieve a specific return target. Nonetheless NZVIF recognises that success in developing early stage capital markets will ultimately be driven by investment success. In that context, NZVIF has deliberately focused on partnering with venture capital fund managers with the potential to achieve investment success, and angel funds and networks with a long term commitment to developing a presence and expertise in our angel investment market.

In reporting on the Venture Capital Fund performance, two investment measures have been included – overall portfolio performance and buy-out<sup>2</sup>adjusted performance. When NZVIF reports to the Crown on the Venture Capital Fund investment performance, the buy-out option needs to be factored in. However, the underlying Venture Capital Fund performance and the investment result achieved are more relevant for private investors.

## VENTURE CAPITAL FUNDS

Individual VC fund performance is measured by the amount of capital returned to investors relative to the amount of capital invested (cash on cash). As the ultimate performance of a VC fund is not known until the last investment is realised, the interim performance is measured by taking into account capital returned to investors, along with the current holding value of the unrealised investments. The interim performance tends to understate the expected final performance as unrealised investments are typically valued conservatively<sup>3</sup>. Furthermore, as the majority of investments are in privately held companies, there are not readily available market prices upon which to base value.

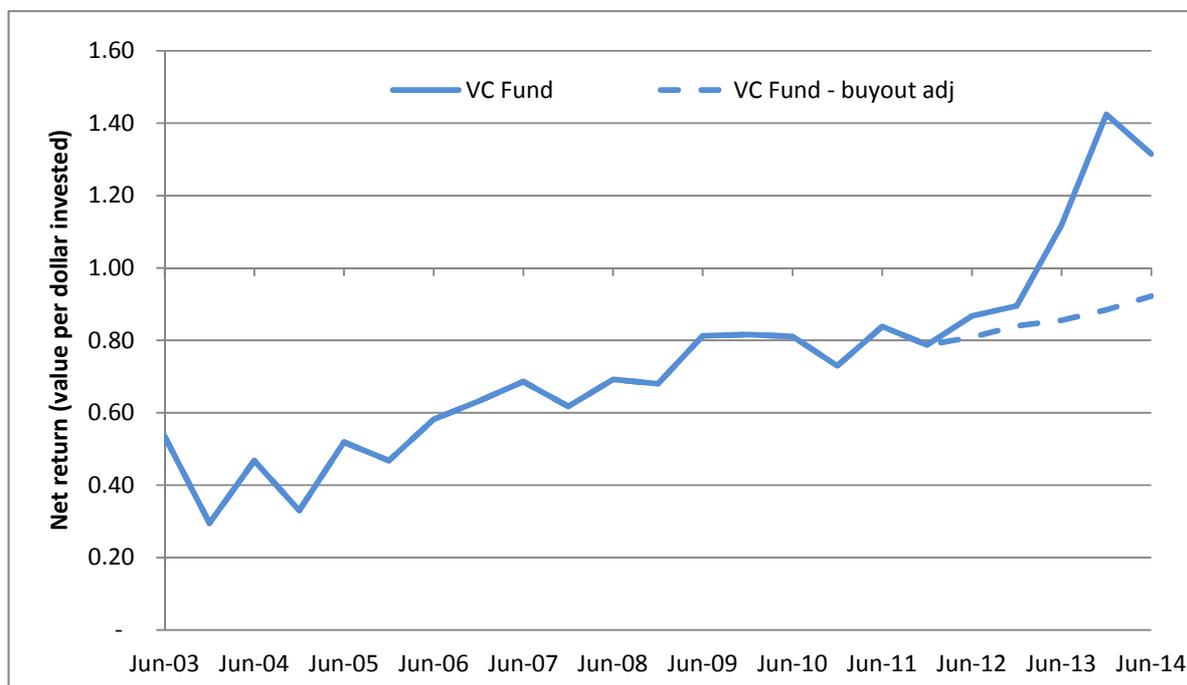
NZVIF reports its performance based on the aggregated performance of the underlying VC funds. This performance is expressed as a value per dollar invested (NAV).

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<sup>1</sup> Includes \$100 million underwrite facility.

<sup>2</sup> NZVIF's Venture Capital Fund was designed with a 'buy-out' clause. This was a deliberate policy design to attract private investors to invest into high risk venture capital investment opportunities, in line with NZVIF's core role of stimulating market activity. Under this arrangement, private investors have the option to exercise the buy-out in the first five years of the fund life, at a price which returns NZVIF its capital invested plus a rate of return on that capital equal to the yield on the five year Government bond rate.

<sup>3</sup> Investments are valued using industry standard practice and comply with NZ IFRS.

**Graph1: VC Fund performance**

As can be seen in Graph 1, the performance of the NZVIF VC Fund investments has, since 2003, followed the expected 'J-curve' profile for funds of this type.

Over the initial years of the VC Fund the value of NZVIF investment was lower than the capital invested, due to the impact of VC fund management fees and VC fund managers culling underperforming investments. Since 2012, there has been a steady increase in the value of the underlying portfolio corresponding with strong revenue growth across the portfolio (20% p.a. over past three years).

As at 30 June 2014, the return on investment in the VC Fund was \$1.33 for every dollar invested. Of the \$1.33, 21 cents is cash returned with the remaining unrealised portfolio amounting to \$1.12.

Factoring in the impact of the buy-out option, NZVIF's return on the Crown's investment to date is \$0.93 for every dollar invested. Of the \$0.93, 21 cents is cash returned with the remaining unrealised portfolio valued at \$0.72. It should be noted that 40% of the unrealised portfolio companies by value are either listed on a public exchange or have begun a formal listing process. These companies include Xero, SLI Systems, Orion Health, Ike GPS, Rex Bionics and Martin Aircraft.

**Table 1: VC Fund portfolio value as at 30 June 2014**

	VC Fund	Buy-out adjusted
Capital drawn from Crown for VC Fund	\$100m	\$100m
Total VC Fund portfolio value <sup>4</sup>	\$133m	\$93.2m
NAV (net cash multiple)	1.33	0.93
Net IRR (p.a.)	5.6%	-1.8%
Total invested into Funds	\$120m	\$120m
Cash returned to NZVIF	\$25m	\$25m
Number of portfolio companies	66	66
Number of exited (includes write offs)	23	23

## Vintage Analysis and Impact of the GFC

VC funds typically have a 10 year life, with the first years being the 'build' or 'active investment' phase and the second five years being the divestment/selling stage. To achieve a credible investment track record, VC fund managers need to demonstrate that they have been successful over two to three separate funds. This can take some time depending on market conditions.

By 2006 NZVIF's first cohort of VC funds (established 2003–2005), were tracking as expected. While raising capital was slow, and it was often challenging to raise substantial follow-on capital, nevertheless there were a number of portfolio companies showing good growth. As the GFC took hold, not only did the interest in VC funds collapse worldwide, but also the opportunities for technology companies to raise follow-on capital, be acquired, or IPO, virtually disappeared. Many of the companies in NZVIF's original VC funds were either sold at a loss or simply wound-up. Not surprisingly, the impact of the GFC on those VC funds' performance was significant.

This impact can be seen in the VC Fund J-curve (Graph 1 above). Prior to 2009, the VC Fund performance is trending upwards, following the classic J-curve shape. From 2009-2011 during the height of the GFC this trends flattens and the portfolio value is stalled at around 80 cents in the dollar. Since 2012 the upward trend has resumed.

In 2011-2012, post GFC, the VC market worldwide started to pick up and there was renewed interest in New Zealand from private equity and technology investors looking for investment opportunities. As a result, NZVIF VC investment has experienced a restart. Also for companies that had received investment from 2007 onwards, by 2012-2013 the exit/IPO market opened up again, providing attractive exit opportunities for investors.

<sup>4</sup>Includes \$7m cash held on NZVIF balance sheet from distributions.

### NZVIF VC Funds 2003-2005 Vintage

There are five funds in the 2003-2005 cohort, representing \$65 million of invested capital. A total of \$17 million has been returned to NZVIF with \$26 million of unrealised value still held in the portfolio. This represents a return to investors of -7.0% p.a. and a multiple of \$0.65 for every dollar invested. As the buy-out option expired without being exercised, NZVIF has achieved the same result as private investors in these funds.

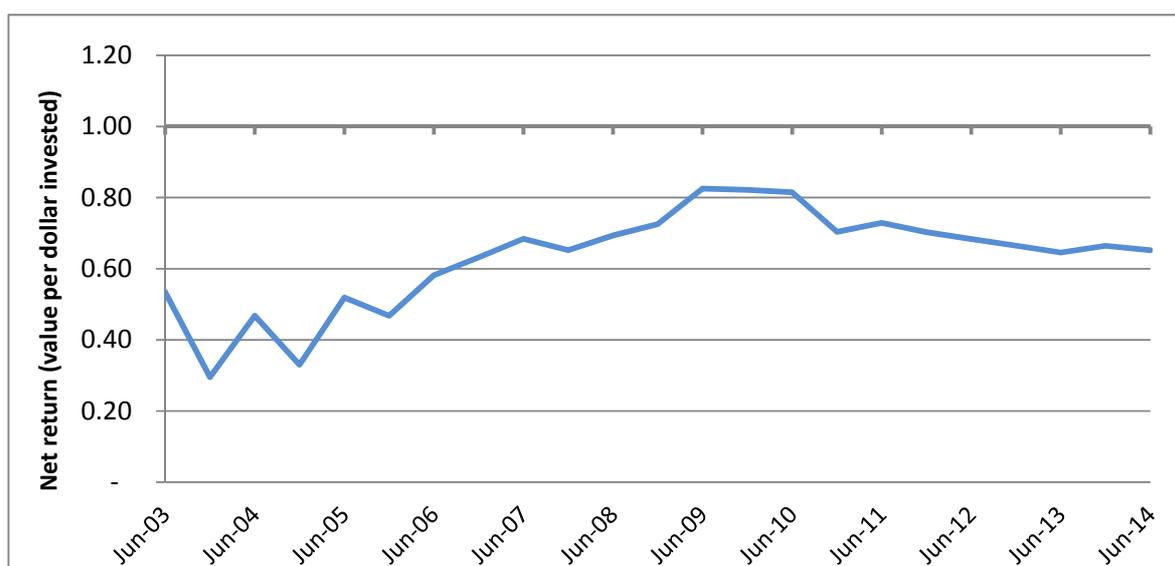
**Table 2: VC Fund performance 2003-2005**

	IRR(%)	Multiple(x)	Returned Capital	Unrealised Value
<b>VC Funds '03-'05 (net)</b>	-7.0%	0.65	0.26	0.39

Globally, the 2003-2005 vintages have performed poorly. As at 30 June 2014, the global VC benchmark median return for the 2003-2005 vintages are 1.1%, 3.3% and 0.1%<sup>5</sup> respectively.

As well as the intrinsic challenges faced by the 2003-2005 cohort of local VC fund managers managing small early stage funds, the GFC undoubtedly impacted on overall investment performance. The impact of the GFC on the performance of this cohort since 2009 is seen in the flattening then declining performance. The dilution suffered by fund managers during this period means that even when economic activity picked up the financial returns from these investments has been muted.

**Graph 2: VC Fund 2003-2005 fund performance**



<sup>5</sup>Preqin Market Benchmarks – Global Early Stage VC 2003 - 2005

### NZVIF VC Funds 2007-2012 Vintage

There are five funds in the 2007-2012 cohort, representing \$55 million of invested capital. Three of these funds are still able to make new investments. To date, a total of \$8.2 million has been returned to NZVIF with \$60.5 million of unrealised value.

As at 30 June 2014, the return on investment in the VC Fund was \$2.11 for every dollar invested. Of the \$2.11, 15 cents is cash returned with the remaining unrealised portfolio amounting to \$1.96.

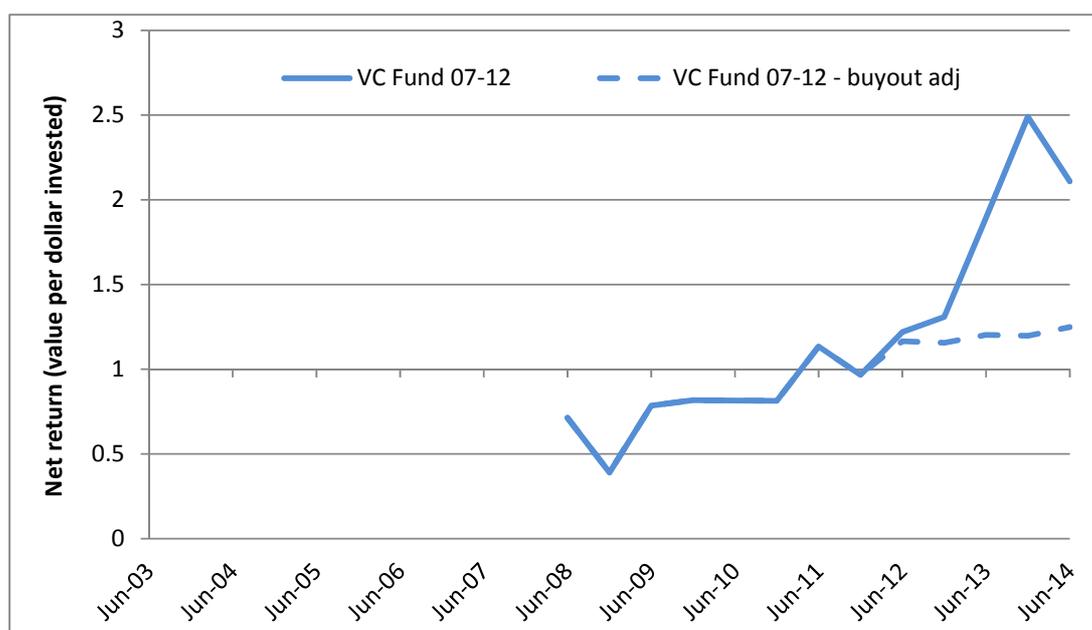
Factoring in the impact of the buy-out option, NZVIF's return to date is \$1.25 for every dollar invested. Of the \$1.25, 15 cents is cash returned with the remaining unrealised portfolio valued at \$1.10.

**Table 3: VC Fund performance 2007 onwards**

	IRR (%)	Multiple (x)	Returned Capital	Unrealised Value
<b>VC Funds '07-12'</b>	26.0%	2.11	0.15	1.96
<b>VC Funds '07-12' (buy-out adjusted)</b>	8.0%	1.25	0.15	1.10

Overall, the underlying companies within this portfolio have experienced strong revenue growth and have been able to raise follow on capital at improved valuations. It should be noted, however, that this portfolio is still largely unrealised. NZVIF anticipates that the returns from this cohort of funds will meet investors' expectations.

**Graph 3: VC Fund 2007 fund performance**



## SEED CO-INVESTMENT FUND

Since 2007, SCIF has entered into 15 new angel investment partnerships and made equity investments into 113 companies. Over that same period the formal angel investment sector has grown steadily, with 15 known angel investment networks and funds investing an average of \$42 million a year over the last five years. These investments are typically at a very early stage of development – this is often the first round of third party capital to enable validation of a commercial opportunity – and are recognised as being very high risk investments. SCIF invests alongside angel investors on the same terms.

**Table 4: Seed Co-investment Fund investment activity as at 30 June 2014**

Number of Angel Partnerships entered into	15
Number of active Angel Partnerships (invested in past year)	12
SCIF Investment in Companies	\$29.7m
Total Amount Invested (SCIF+private)	\$61.5m
Number of Companies Funded	113
Average SCIF Investment per Company	\$262,000

## Investment Performance

For the year ended 30 June 2014, SCIF's combined portfolio value (i.e. holding value plus capital returned to date) exceeds the amount invested by the fund. Valuation of the SCIF portfolio, like the VC Fund, is approached conservatively<sup>6</sup>. As at 30 June 2014, 28 of the 113 companies in the portfolio had their holding values written down to zero. Of those, only 14 companies have formally been liquidated or entirely ceased to operate. The other 14 companies are still trading or materially operating in some way. SCIF's approach is to write the holding value down to zero based on a prudent assessment of the challenges and issues that these companies currently face.

SCIF's modelling of future investment performance shows that the return on investment across the full SCIF portfolio could be in the range of 0.80x–1.5x capital invested by 2026. These values are inherently conservative, reflecting the high risk profile of pre-seed and seed stage investments. As would be expected, these returns are also highly sensitive to one-off positive outlier returns (such as those generated by Xero and Orion Health in the VC portfolio).

<sup>6</sup> Investments are valued using industry standard practice and comply with NZ IFRS.

Angel investment of the type done by SCIF and its partners (i.e. providing the earliest rounds of pre-seed and seed stage equity to start-up companies) is not an internationally recognised investment class or product in its own right. Furthermore, internationally, angel investors are hugely diverse in their investment approach and preferences, and intrinsically private. This makes it difficult to find relevant international comparators against which the SCIF portfolio can be benchmarked. In this regard, the NZVIF data set is somewhat unique in terms of the collection and analysis of angel investment fund data.

Angel investing studies by Robert Wiltbank<sup>7</sup> in the US have shown that in any one investment, an angel investor is more likely than not to lose money, i.e. to earn less than a 1x return. However, once investors had a portfolio of at least six investments, their median return exceeded 1x. Monte Carlo model simulation has been undertaken with this data as well, finding that making near 50 investments approximates the overall return at the 95<sup>th</sup> percentile. In addition, Wiltbank's studies have demonstrated that cash returns in an angel investment portfolio are highly concentrated in winners; 90 percent of all the cash returns are produced by 10 percent of the exits.

In this context, SCIF is well positioned. It is now the largest and most diversified angel investor in New Zealand, investing actively across multiple sectors, partners, regions and years/vintages. This portfolio diversification significantly increases the probability of SCIF generating positive investment returns over time. It is also likely that the maxim that 90% of returns will be produced by 10% of exits will hold true for the SCIF portfolio over time.

**Table 5: SCIF portfolio performance as at 30 June 2014**

	SCIF
Total no. of investments	113
Amount invested	\$29.7m
Holding value of investments in portfolio companies	\$26.1m
Cash held	\$4.1m
Total portfolio value (holding value plus capital returned)	\$30.2m
Investment multiple	1.01
Portfolio IRR since inception	0.43%
Median age of investment	36 months
No. of exits	4 (3.5% of portfolio)
Amount received from exits	\$4.1m (13.5% of invested capital)
No. of write-offs	28 (24.8% of portfolio)

<sup>7</sup> Robert Wiltbank & Warren Boeker, "Returns to Angel Investors in Groups", 2007.

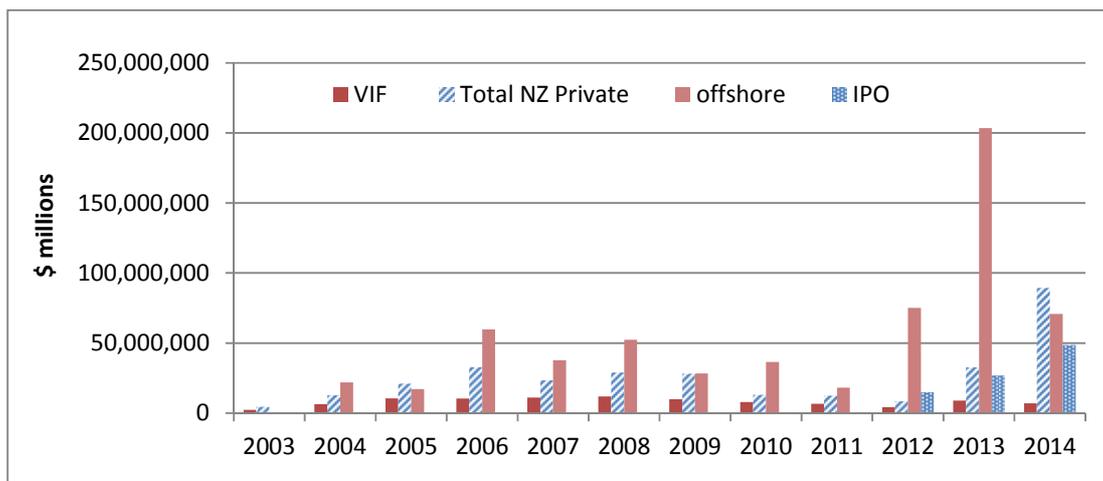
## CATALYST EFFECT

As noted in the introduction, NZVIF’s primary mission is to catalyse private sector investment into young innovation and technology companies in New Zealand.

For every dollar invested by NZVIF, there must be at least 1:1 matching investment from private investors, although the public/private sector investment leverage for both programmes runs significantly above that. NZVIF’s investment support alongside the private sector is particularly important in enabling companies to build operations to the point where they can attract significant additional capital, often from offshore, for growth. The capital provided by private investors and NZVIF is often the first truly third party capital provided on commercial terms. This capital enables the company to bring additional expertise on board, start building its commercial operations and enter international markets.

To date, a total of \$1.132 billion has been raised for NZVIF VC funded companies. The composition of capital raised is summarized in Graph 4 below.

**Graph 4: Total capital raised by NZVIF VC funded companies**



In addition, a total of \$170 million has been raised for 113 angel funded companies - \$30 million of this has come directly from SCIF, with the remainder coming from SCIF angel investor partners and other private sector investors. As at 30 June 2014, private sector is matching SCIF investment across the SCIF portfolio at a ratio of greater than 4:1.

## CONCLUSION

NZVIF's VC Fund and SCIF investment portfolios are both showing encouraging results. The performance of the post-GFC VC Fund investments (2007-2012) is particularly pleasing, with strong signs that this portfolio will generate good returns for private investors. It is early days for SCIF and it is likely that its investment performance will be volatile for some time yet, however, the scale and diversity of its portfolio allows NZVIF optimism for its future performance.

NZVIF now holds what is likely to be the largest portfolio of equity holdings in early stage technology companies in New Zealand, with 113 direct equity investments through SCIF and 66 held through our VC Fund investments. NZVIF is of the view that the upside potential of VC Fund and SCIF portfolios is positive, both in respect of market development and investment performance.

Building a vibrant early stage investment ecosystem is not an insignificant goal, and one that many countries have tried and failed to achieve. There are exceptions, however, including countries like Israel, Finland and Singapore, where Government support has been instrumental in catalysing the creation of such an ecosystem. New Zealand has also made significant progress over the last 12 years, and there is now a small but growing cadre of experienced VC fund managers and angel investors operating in the early stage end of the capital market.