

THE VALUATION OF EARLY-STAGE INVESTMENTS IN NEW ZEALAND



December 2012

Update Research Report

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INTRODUCTION

In June 2011, NZVIF released “The Valuation of Early Stage Investments in New Zealand” report. The report reflected on investment into 186 companies between early 2004 and December 2010. It highlighted the fledging state of the early stage investment market in New Zealand and recognised the significant progress made in the last 10 years.

The 2011 report showed that the median seed, start up and early expansion pre-money valuations were \$1.08m, \$2.4m and \$7.45m respectively with substantial variance across industry sectors. For example Software and Services had the lowest median pre-money at \$500,000 for seed stage investments, rising to \$1.85m at start up stage. Comparatively the Biotech, Capital Goods and Energy sectors had pre-money valuations of \$2.5m, \$3.9m and \$10.7m for seed, start up and early expansion stages respectively.

Four central observations were made in the original report:

1. We do not have an accurate picture of the relationships between initial early stage company valuations and the investment returns ultimately being achieved by investors on exit.
2. The amount of time it takes from investors to realise returns from investment is of critical importance to the calculation of their final investment return.
3. Generally, investee companies are raising funding frequently and in small amounts.
4. A portfolio approach to early stage investing is crucial in order to maximise the chances of generating appropriate investment returns.

These observations remain true 18 months later. The intention of the 2011 report was for it to be the first in a series to bridge a gap in valuation information for early stage company investment in New Zealand.

This 2012 report adds a further 57 companies across 68 rounds which were invested into between January 2011 and June 2012. Thirty nine of these companies are entirely new to the dataset. With these additions the entire dataset from 2004 – 2012 represents 225 companies across 325 funding rounds.

This report covers five main areas of interest:

1. Analysis of Pre-money valuation – by industry
2. Analysis of Pre-money valuation – by time
3. New and Follow-on Investment trends
4. Industry Investment Mix - 2004-2012
5. International data

ANALYSIS OF PRE-MONEY VALUATION

BY INDUSTRY & TIME – FULL DATA

Detailed in the table below are the median and average pre-money valuations of investments made by industry group and stage of investment. The data consists of 310 complete investment rounds made between 2004 and mid 2012. Fifteen rounds were in the expansion stage which, for the purpose of this report, has not been included in the analysis.

	Median Pre-Money Valuations						Average Pre-Money Valuation (NZD)		
	Seed \$	No. of Deals	Start Up \$	No. of Deals	Early Expansion	No. of Deals	Seed \$	Start Up \$	Early Expansion \$
Capital Goods	2,699,823	3	3,225,000	15	13,675,823	4	3,384,385	6,217,198	12,022,793
Commercial Services & Supplies	*	2	700,000	6	*	1	*	974,000	*
Consumer Durables & Apparel	*	1	4,769,481	6	-	-	*	6,873,160	-
Energy	-	-	*	1	-	-	-	8,146,442	-
Food, Beverage & Tobacco	*	2	2,500,000	4	3,682,756	4	*	3,290,000	3,656,074
Health Care Equipment & Services	1,200,980	3	2,107,165	8	21,035,057	4	1,230,327	3,746,166	26,862,858
Materials	609,436	5	*	2	-	-	788,775	*	-
Media	-	-	1,500,001	4	-	-	-	1,583,334	-
Pharma, Biotech & Life Sciences	2,543,750	25	4,058,792	36	10,738,882	17	3,231,312	8,304,748	18,196,752
Semiconductors & Equipment	-	-	*	2	-	-	-	*	-
Software & Services	500,000	21	1,771,913	76	7,200,000	25	564,700	2,457,594	15,622,776
Technology Hardware & Equipment	500,000	7	2,405,916	21	6,682,041	4	688,025	3,060,278	6,511,930
Telecommunication Services	-	-	*	1	-	-	-	*	-
All industries	\$874,000	69	\$2,265,401	182	\$7,528,758	59	\$1,698,488	\$4,207,319	\$15,188,035

The following observations can be made from the data:

- Median values tend to be lower than average values due to medians removing the effect of the outliers in the data set.
- The median seed, start-up and early expansion valuations were \$874k, \$2.265m and \$7.52m respectively however there remains substantial variance across the industry sectors.
- Seed stage Commercial Services and Supplies now have the lowest pre-money valuation however with a small data set Software and Services remains the most valid at \$500,000.
- Based on the numbers of investments reported the most relevant valuation data lies within the following sectors and stages:
 - Seed Stage - Pharmaceuticals, Biotech and Life Sciences (PBL) and Software and Services
 - Start-up Stage - Capital Goods, PBL, Software and Services and Technology Hardware and Equipment
 - Early Expansion - PBL and Software and Services

Analysis of Pre-money Valuation – by Industry - 2011/2012 Data Only

	Median Pre-Money Valuations		Average Pre-Money Valuations	
	Seed \$	Start Up \$	Seed \$	Start Up \$
Capital Goods	-	2,115,000	-	2,115,000
Commercial Services & Supplies	*	1,230,000	*	1,230,000
Consumer Durables & Apparel	*	9,268,000	*	9,268,000
Food, Beverage & Tobacco	*	6,100,000	*	6,100,000
Health Care Equipment & Services	-	2,000,000	-	2,000,000
Materials	900,000	*	933,333	*
Pharmaceuticals, Biotech & Life Sciences	3,725,000	5,163,300	3,968,333	4,644,403
Software & Services	666,500	1,400,000	633,375	2,235,180
Technology Hardware & Equipment	*	4,261,042	*	5,054,417
All Industries	\$500,000	\$2,115,000	\$1,146,061	\$3,517,269

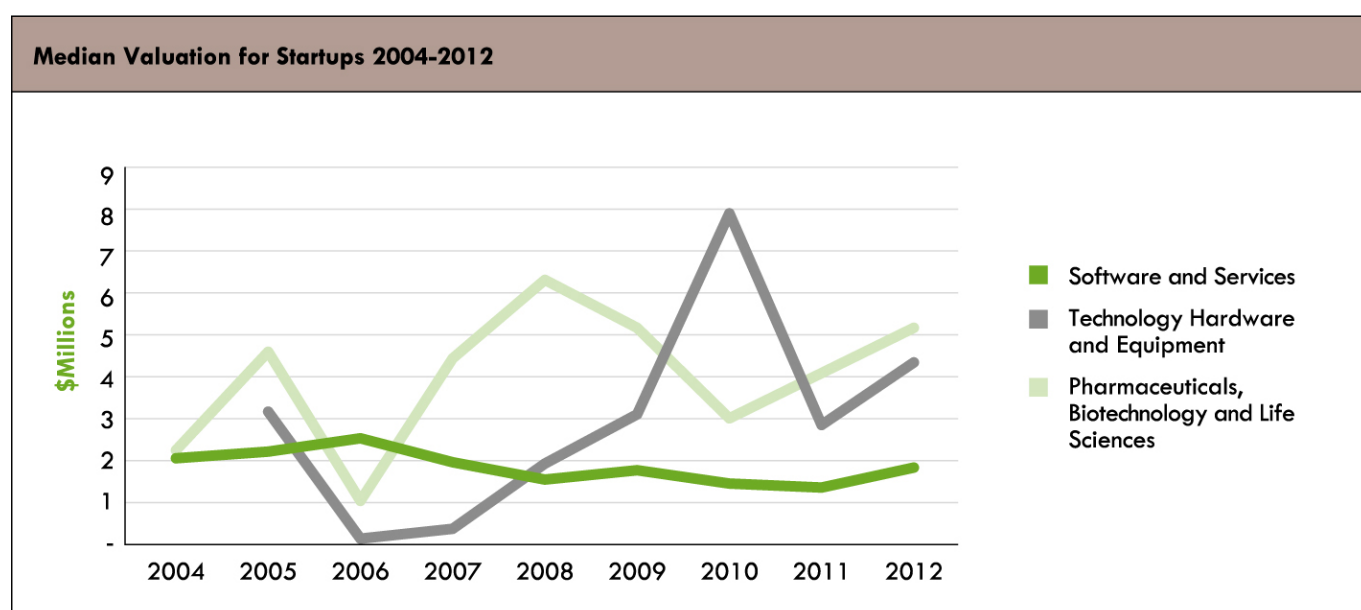
**Where data includes less than three companies for commercial sensitivities we have removed the median and average pre-money valuations.*

ANALYSIS OF PRE-MONEY VALUATION

BY TIME

Three sectors in this total dataset - Software and Services, Technology and Hardware and Pharmaceuticals, Biotechnology and Life Sciences - capture data that is significant enough across the time period that analysis of trends become useful information. Within those industries the most frequent investments are made in the start-up stage.

Stage	Start Up								
	Software & Services			Technology Hardware & Equipment			Pharmaceuticals, Biotech & Life Sciences		
Average of Pre Money Valuation (NZD)	Average \$	Median \$	No. of Co.s	Average \$	Median \$	No. of Co.s	Average \$	Median \$	No. of Co.s
2004	2,816,946	2,037,781	8	-	-	-	*	*	2
2005	2,351,575	2,199,778	3	*	*	1	20,946,725	4,646,390	3
2006	2,446,809	2,497,709	10	-	-	-	*	*	1
2007	2,969,117	2,012,298	8	688,778	427,556	4	8,031,876	4,545,455	9
2008	2,479,251	1,611,797	11	1,714,628	1,818,628	4	19,180,027	6,339,167	4
2009	2,738,315	1,724,131	6	2,819,559	3,140,232	6	6,301,408	5,171,957	4
2010	2,095,393	1,500,000	9	*	*	1	3,855,019	3,000,000	5
2011	2,255,568	1,375,000	15	5,252,761	2,755,521	4	4,471,438	4,025,000	6
H1 2012	2,184,210	1,838,500	6	*	*	1	*	*	2
Grand Total	\$2,457,594	\$1,771,912	76	\$3,060,278	\$2,405,916	21	\$8,304,748	\$4,058,792	36



Overall observations can be made that:

- Median values for Software and Services have reduced over time from above \$2 million between 2004 and 2007 to well under \$2 million from between 2008 - 2012.
- The median pre-money valuation for Software and Services over the last five years has averaged \$1.6m, even taking into account a large upswing in the first half of 2012 to \$1.84 million. The last five years represent 61% of the overall data in this industry and stage. These medians are based on all investment that falls within our start-up definitions and so include first and subsequent investment rounds. Further analysis splitting out medians for first and subsequent rounds is also included in Section 4 of this report.
- Technology and Pharmaceutical, Biotechnology and Life Science median values are volatile to say the least. Volatility in the data appears to result from individual deals in a single year. Realistically until a higher level of annual data is available it is hard to draw any firm conclusions, not least because of the diverse nature of the companies that are included as part of this sector.

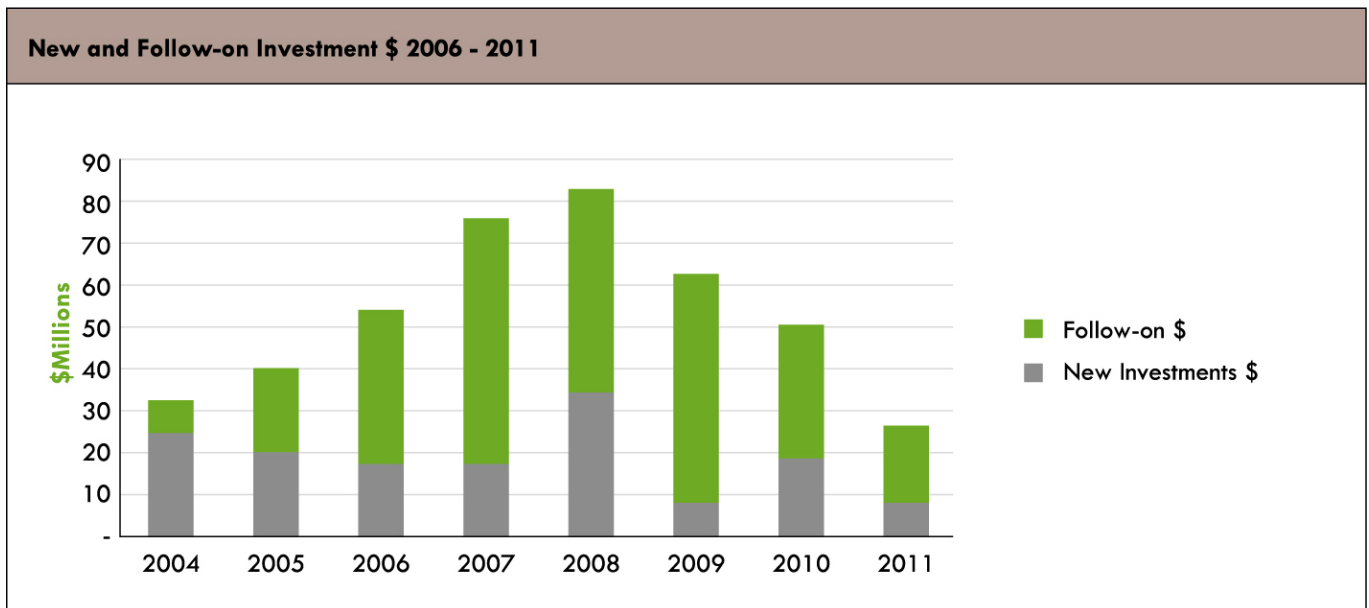
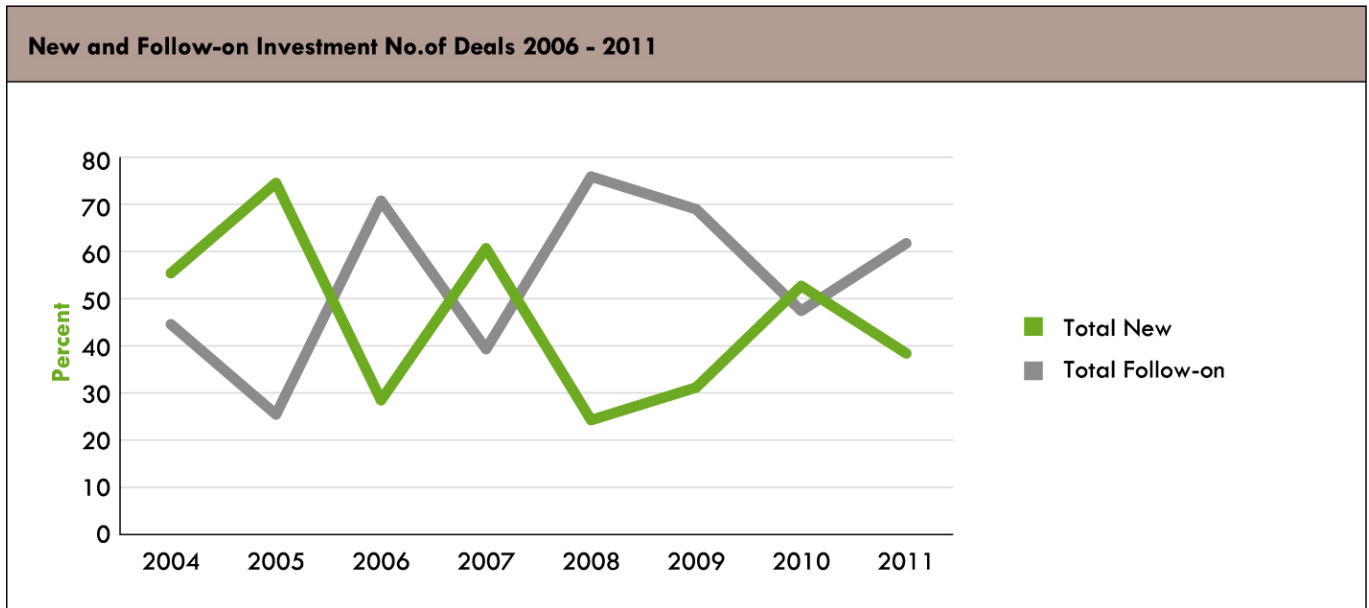
Analysis of Pre-money Valuation – by Time (excluding Pharmaceuticals, Biotech and Capital Goods)

Year	Median Pre-Money Value						Average Pre-Money Value		
	Seed \$	No. of Deals	Start Up \$	No. of Deals	Early Expansion	No. of Deals	Seed \$	Start Up \$	Early Expansion \$
2004	*	1	2,037,781	8	-	-	*	2,816,946	-
2005	-	0	2,199,718	5	4,200,000	3	-	2,214,201	12,139,121
2006	1,213,533	6	2,355,007	11	5,767,662	4	1,107,763	2,303,014	9,456,995
2007	930,000	3	1,321,084	16	10,159,142	4	814,443	2,258,445	19,024,665
2008	*	1	1,818,628	18	11,955,092	6	*	2,601,134	13,972,205
2009	500,000	5	2,425,826	13	5,649,278	11	503,864	3,103,862	17,605,283
2010	500,000	6	1,626,250	23	5,999,990	7	565,000	3,370,414	7,656,547
2011	450,000	13	2,000,000	26	*	1	541,236	3,351,560	*
H1 2012	525,000	6	2,150,000	10	-	-	575,000	3,186,630	-
Grand Total	\$500,000	41	\$1,999,998	130	\$7,528,758	36	\$640,481	\$2,897,302	\$14,147,840

The following observations can be made from the data:

- The median pre-money value in 2011 and 2012 has remained largely consistent with previous years, consolidating the view that valuations of around \$500,000 for Seed stage and \$2,000,000 for start up stage companies appear to be the market norm.
- After an initial fall in pre-money valuation for start-ups between 2007 and 2008, median valuations appear to be consolidating around the \$2 million range once again.

NEW AND FOLLOW-ON INVESTMENTS



The above charts show the mix between new and follow-on investments in the data set between 2004 and 2011. 2012 data has been removed as it only represents a six month period. The top chart shows the mix of new and follow-on deals by number of companies invested. The second chart shows the mix of deals by dollars invested.

As expected the amount of new investment as compared with follow-on was high in the early years of the industry of this data set. This period coincides with the early years of New Zealand’s formal angel investment market (including the establishment of NZVIF’s Seed Co-Investment Fund). Although the amount invested looks to buck this trend in 2008 this was largely due to a single, new investment into an early-

expansion company that distorted the figure. The overall trend currently is for follow-on investment to outweigh new investment.

Median Pre-money Valuations for 1st and Follow-on rounds – Start-up Companies Only

	1 st Round	No.	2 nd Round	No.	All follow-on rounds	No.
Software & Services	\$1,410,000	26	\$1,526,250	19	\$2,150,000	50
Pharmaceuticals, Biotechnology & Life Sciences	\$3,000,000	15	\$8,220,000	6	\$5,496,290	21

The above table investigates the difference in pre-money valuations for new rounds in Pharmaceuticals, Biotech and Life Sciences as well as Software and Services, compared to follow-on funding rounds. Follow-on rounds have been split further into second rounds and “All follow-on rounds” which include the second round. Software and Services shows a 1st round median pre-money valuation of \$1,410,000 and a second round pre-money valuation of \$1,526,250 compared to median for the full data set of \$1,771,913. The same data for Pharmaceuticals, Biotech and Life Sciences shows a 1st round median of \$3,000,000 and 2nd round of \$8,220,000 compared to an overall median of \$4,058,792. This data indicates that initial funding rounds attract lower pre-money valuations when compared to follow-on rounds.

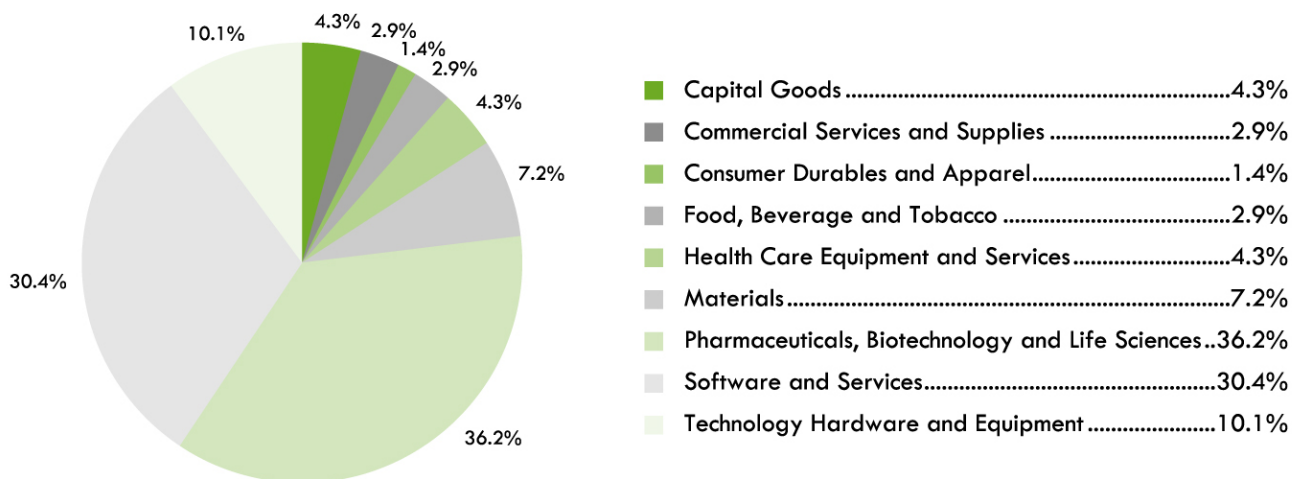
Median Pre-money Valuations by Investment Size – Start-up Companies Only

	\$0 - \$250k	No.	\$250 - \$500k	No.	\$500k - \$1m	No.	\$1m plus	No.
Software & Services	\$1,150,000	23	\$1,646,512	14	\$2,282,540	24	\$3,000,000	15
Pharmaceuticals, Biotech & Life Sciences	\$3,220,207	2	\$3,759,783	8	\$3,343,708	9	\$5,045,455	17

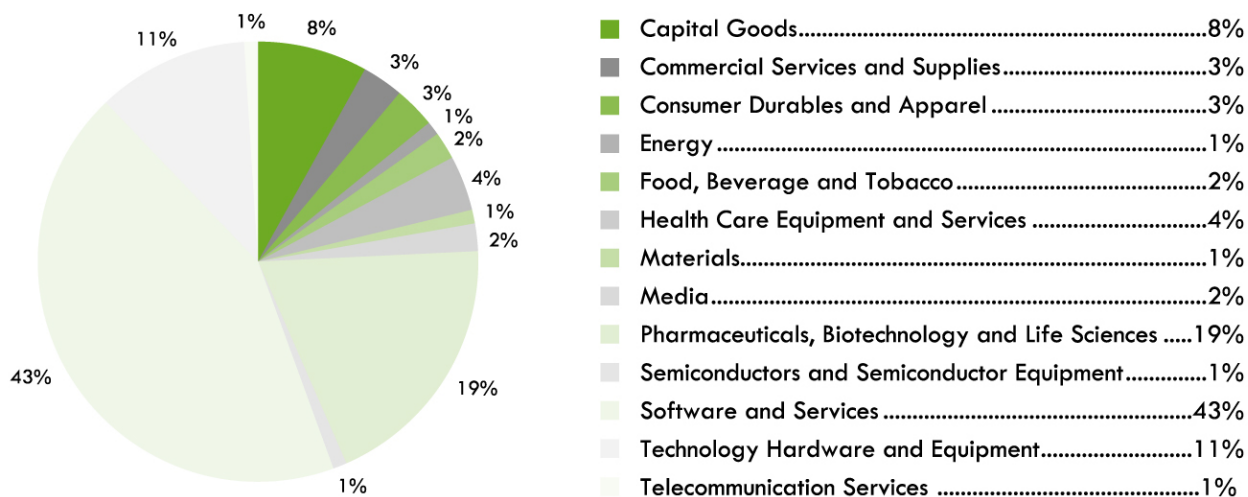
The table above shows an increasing valuation depending on the size of the investment round – the larger the deal size, the higher the valuation.

INDUSTRY INVESTMENT MIX – 2004–2012

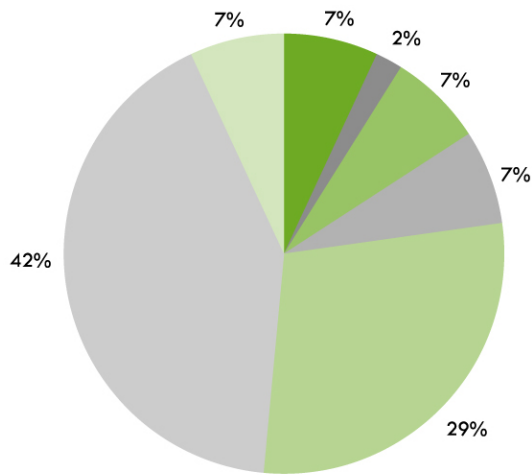
Seed No. of Deals 2006 - 2012



Start-up No. of Deals 2006 - 2012



Early Expansion No. of Deals 2006 - 2012



- Capital Goods.....7%
- Commercial Services and Supplies.....2%
- Food, Beverage and Tobacco.....7%
- Health Care Equipment and Services7%
- Pharmaceuticals, Biotechnology and Life Sciences29%
- Software and Services42%
- Technology Hardware and Equipment7%

INTERNATIONAL EARLY STAGE INVESTMENT DATA

US based business executive, entrepreneur and Angel investor, Bill Payne, recently conducted his third annual survey of pre-money valuations of seed and start-up companies funded by Angel groups across North America. This survey covered 30 Angel groups and gathered information relating to the median pre-money valuation for Life Sciences, Biotech & Medical Devices, Software and Energy & Clean Tech.

The overall result of the survey shows the following pre-money valuations:

2012 Valuation Survey	
Pre-money Valuation in USD	
Overall	\$2,750,000
Life Sciences	\$3,200,000
Software	\$2,500,000
Clean Tech	\$3,000,000

LINC Scotland carried out a survey in early 2012 of eight of its member groups and found that the average pre-money valuation for those companies seeking first round investments was £780,000. Nelson Gray, Special Projects Director at LINC Scotland, comments that the size of the round seems to have a significant influence on the pre-money valuations, with the larger valuations be associated with larger deal sizes.

SUMMARY AND CONCLUSION

Little has changed in the last 18 months in relation to pre-money valuations for the early stage investment market. If anything valuations have fallen slightly and are consolidating around the current levels. The amount invested on an annual basis has certainly reduced however the number of companies invested in to seems to have remained stable. This report, along with the results from NZVIF's New Zealand Young Company Finance report, published twice a year, indicates that the primary sources of investment funds for seed and start-up companies currently in New Zealand are Angel funds and Angel networks.

Software, Pharmaceutical, Biotech & Lifesciences and Technology Hardware & Equipment continue to provide the bulk of the investment focus in the New Zealand early stage company investment industry. The majority of investments, both by number and dollars invested, are being made into the start-up stage of a company's life cycle.

DEFINITIONS

Seed: An investee company is at the seed stage of its development if the investment will enable development, testing and preparation of a product or service to the point where it is feasible to start business operations. Most likely to be pre-revenue.

Start-up: An investee company is at the start-up stage of its development if the investment will enable actual business operations to get underway. This includes further development of the company's product(s) and initial production and marketing. May or may not be pre-revenue.

Early expansion: An investee company is at the early expansion stage of its development if the investment provides capital to initiate or expand commercial production and marketing but where the company is normally still cash flow negative.

Expansion: An investee company is at the expansion stage of its development if the investment provides capital for the growth and expansion of a company, which may or may not break even or trade profitably. Capital may be used to finance increased production capacity, market or product development, or provide additional working capital.

To view the 2011 "The Valuation of Early Stage Investments in New Zealand" please go to www.nzvif.co.nz

We welcome your feedback on this report, including suggestions on how it may be improved and what other analysis you would like to see us include over time and any comments on the data or observations presented in this report. Please contact Chris Twiss or Carl Jones (see contact details below) or email us at venture@nzvif.co.nz.

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