



THE RISKS AND REQUIREMENTS OF NON-TRADITIONAL FUNDING SOURCES FOR R&D IN AUSTRALIA

“To seed new ventures, there is a need for informal investors, or “gardeners” with “green thumbs” as well as suitable environments to nourish these activities (“fertile fields”)” (Szerb et al 2007).



Word Count
5986

1. EXECUTIVE SUMMARY

Research and development (R&D) spending is crucial to Australia's global competitiveness. It enables innovation and transformation of companies as disruptive technology changes global business models. However, the lagging impact of the GFC-induced global downturn resulted in government and industry budget cuts in 2013-2014, which meant traditional R&D funding sources were frozen.

The purpose of this project is to understand the risks and requirements of non-traditional funding sources for R&D in Australia. This will enable Alternate Futures to develop an understanding of these investors' needs and processes in order for the organisation to provide a fully joined-up service in innovation-facilitation in Australia.

This case study research examined venture capital (VC), angel investors and crowd sourced equity funding (CSEF) as sources of finance for seed and start-up ventures (i.e. R&D), at the high risk-high reward end of the investment spectrum. Three stages of data collection and analysis were undertaken: (i) literature review; (ii) web-based survey of "homogeneous purposive population" of local investors (n=19; response rate=84%); and (iii) informal interviews with eight local investors.

The major finding of this project was that the survey and interviews correlated with the major findings from the literature review, which were:

- 1) **Life cycle stage:** VCs are focused on more mature lifecycle stage ventures (i.e. lower risk, higher value investments) while angels provide most funding for seed and start-up ventures (i.e. high risk- high return, lower value investments). As crowdfunding platforms mature, they will funnel more funds from a larger pool to R&D (seed - start-up) ventures, supplementing limited angel funds. These funding sources are complimentary to one another and a vital part of the overall Australian innovation ecosystem.
- 2) **Investment vetting processes and due diligence:** These processes are the same for all three funding sources, however VCs are the most stringent, followed by angels then

CSEF portals. Most investors prefer technology projects as they are low cost, scalable and provide fast exits.

- 3) **Term Sheets and Capitalisation Tables:** Due to multiple rounds of funding, early stage funders often co-exist with each other (and later also potentially with investment bankers). This can create complexity and diverging interests, so it is vital that the term sheet aligns all parties to a common goal. The risk for all early stage investors is that winners (i.e. “ten baggers”) are insufficient in regularity or value to cover the costs of the failures, which is why term sheet clauses protecting investor interests are necessary. Without this protection, investors will shy away from such a high risk area of investment. However, during negotiations VCs will aim to extract maximum value at the expense of early backers, so it is recommended entrepreneurs enlist specialist advisers.
- 4) **Value of Crowdfunding:** CSEF provides seed to start-up stage micro-funds while validating the market for the product. This can help build the business case for follow on angel and/or VC funding. However, too many early stage shareholders on the capitalisation table can be off-putting for follow-on funders!
- 5) **Licences:** VCs and crowdfunding portals need an Australian Financial Services Licence (i.e. AFSL) and angels do not, as the licence requirement is contingent upon whether they are investing other people’s money.

This case study report will benefit Alternate Futures in its efforts to match R&D projects with the most amenable sources of finance through newly established investor networks using processes based on learnings from this project.

Privacy Statement

The participants of this survey have been afforded complete anonymity unless a signed individual consent form has been received, in which case statements are quoted as personal communications. The sponsoring organisation, Alternate Futures Pty Ltd, has agreed to participate without limitation.

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2. INTRODUCTION

This case study research project focusses on a real life organizational problem, based on the recent lack of available funding for research and development (R&D) in Australia (see proposal in Appendix D). The author's workplace, at Alternate Futures, aims to facilitate solutions to problems by connecting industry to suitable researchers. Due to the paucity of traditional R&D funding sources in 2013-2014, Alternate Futures is now faced with the need to understand and access non-traditional funding sources (i.e. venture capital, angels and crowdfunding) to unlock the benefits of Australia's innovation ecosystem.

There is a plethora of research on the importance of R&D to gross domestic product (GDP) growth and a healthy economy (Section 3.1). There is limited published research on venture capital (VC), as they invest other people's money and are reasonably transparent. There is much less published research on angels, as they are private investors, and crowd sourced equity funding (CSEF), as it's emergent. This leaves a gap in the understanding of non-traditional R&D (seed to start-up) funding, which must be closed to re-invigorate R&D in Australia.

The purpose of this research is to answer the following key descriptive and evaluative questions:

- 1) What are the risks and requirements of the three non-traditional funding sources?;
- 2) What life cycle stage is best matched to which funding source?;
- 3) How is non-traditional funding facilitated and who are the key investor contacts in Perth?

This project assimilates information from many sources¹ (see Appendix F) to generate a summary of the strengths, weaknesses, opportunities and threats offered by each type of funding. These sources of funding do not exist in a vacuum. They often co-exist due to multiple rounds of funding, so the interrelationships, similarities and differences between these three finance sources are also explored. This section is followed by an orientation section outlining findings of the literature review. This is followed by a discussion of data collection & analysis, key findings, key implications and conclusions.

¹ Sources: Survey, stakeholder engagement (emails, phone calls, coffees & seminars), business and government reports, newspaper articles and EBSCO Host academic papers.

3. ORIENTATION - LITERATURE REVIEW

3.1. STATE OF PLAY OF INNOVATION IN AUSTRALIA

“Absent vibrant and risk-seeking VC markets, Australians will face a steady decline in their relative living standards in this century” (Ferris 2001, p. 46). Innovation is widely regarded as the key to economic growth and a driver for new job creation in the global economy which is why the ‘Industry Innovation and Competitiveness Agenda’ (IICA) was recently released by the Australian Government (2014). However, small to medium enterprises (SMEs) and start-ups have recently been constrained due to a lack of capital (Treasury 2014; ATSE 2014; Austmine METS 2013; Australian Government 2014; Business Council of Australia 2014; OECD 2013; Pertuze et al 2010; RIIT 2014; VCI 2014; APEC 2014).

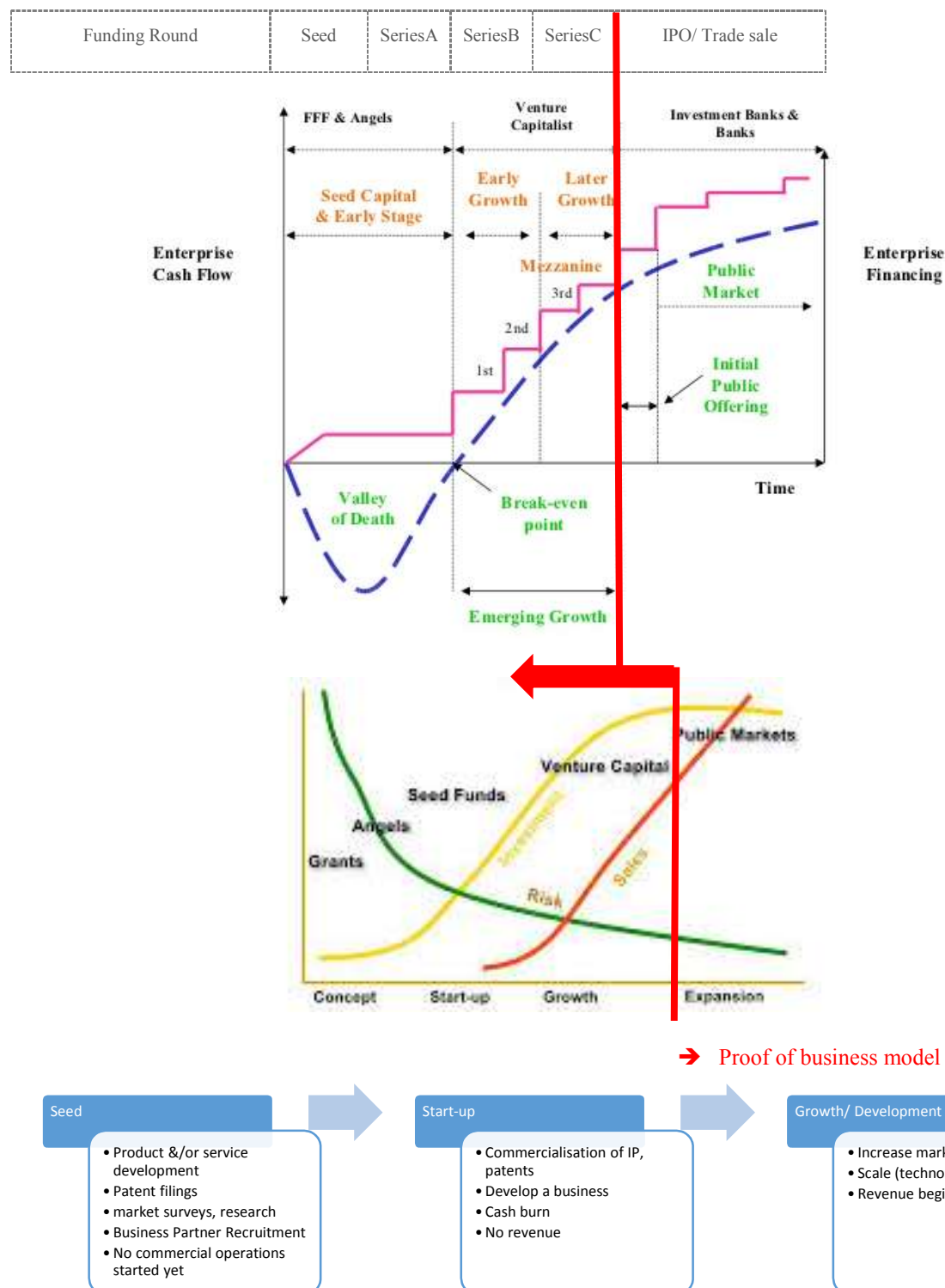
3.2. THE FUNDING DILEMMA FOR R&D/START-UPS

Fundable start-ups have the following four main attributes (Cohen & Kador 2013): capacity for growth (i.e. must be a company, not just a product); scalability (i.e. can leverage technology); profitability; and sustainability (i.e. manageable market risks, large customer base). Start-ups need outside funding to build their core team, develop their minimum viable product and find their first customers (Cohen & Kador 2013) but one of the most significant challenges for the creation, survival and growth of start-ups is access to capital due to their inherent risk, and lack of history and reputation (OECD 2009; Villamil 2010; Huyghebaert & Van de Grucht 2007; Lewis & Zalan 2012; Szerb, Terjesen & Rappai 2007). The Miller-Modigliani “equal-footedness” theorem is also violated for SME’s and start-ups due to information and enforcement cost asymmetry and asymmetric access to credit markets (Villamil 2010) such that credit to start-ups is rationed and the cost of capital is higher (Colombo & Grilli 2007).

At the pre-revenue stage, access to loan and share market capital is virtually impossible making non-traditional finance sources crucial to the innovation ecosystem’s existence. Figure 3.1 highlights the lack of funding options at the seed and start-up stage which draws mainly on government grants, funds from family, friends and fans (FF&F), angels, and now, crowdfunding. This highly risky, (pre-revenue/ cash-burning) R&D stage is known as “the valley of death”, with many start-ups failing at this point. As valuations are so low at this stage, whomever invests in a winner at this point should benefit considerably (as have founders of Facebook, LinkedIn, Google, Twitter, Microsoft and Apple – today’s Angels in the US). Once a product is in development, perhaps with paying customers (but not yet

breaking-even), this is perceived as less risky and VCs are more likely to invest. When the business model is proven, then trade sales or IPOs are the usual exit strategy for early stage investors (King & Fitzsimmons 2015).

Figure 3.1 Business life cycle & funding stages



(Source: Bernstein 2015; Manchanda & Muralidharan 2014; Kuratko 2014; Feld & Mendelson 2013; Cohen & Kador 2013; Koch & Hisrich 2010; Wikipedia 2015; pers. comm. Andrew Hector 2015).

3.3. 2008 GLOBAL FINANCIAL CRISIS (GFC)

Fallout from the 2008 GFC led to implementation of new capital adequacy regulations, such as Basel III, for all banks globally with the following consequences:

1. **A credit freeze** as bank liquidity reduced and new regulatory requirements made obtaining loans for SMEs and individuals difficult². The slump in lending in developed economies hit SME's hardest as bigger companies have been able to access the bond markets to fill the gap in funding (UHY 2014);
2. **Investors search for yield** as Quantitative Easing (QE) in many jurisdictions has driven down interest rates³ pushing investors towards alternative forms of income generation (OICU-IOSCO 2014);
3. **Democratization of capital** via social media, leading to crowdfunding (World Bank 2013).

3.4. TRADITIONAL R&D FUNDING SOURCES

Traditional sources of funds to established companies, such as bank loans and bonds, are mostly unavailable to start-ups primarily due to information asymmetry, agency and moral hazard and a high cost of capital due to their risky nature (Koch & Hisrich 2010; Szerb, Terjesen & Rappai 2007). This situation was exacerbated by the 2008 GFC (OECD 2009) and the need to access "old boy" networks for capital (Inci & Parker 2013).

In Australia, traditional R&D funding sources include: government grants; R&D tax incentives; start-up accelerators and/or incubators; CRCs and similar collaborative efforts between universities, industry and government; large established companies sponsoring R&D projects using free-cash flow (corporate venturing); and bank loans (which are rare as start-ups are high risk with no security/ collateral plus debt servicing costs are prohibitive). The main reason why investment banks and public equity are unable to fund the high risk, seed stage is due to regulations and operating practices aimed at consumer protection (Zider 1998).

Australia has developed a reputation for having no early stage funding (Shiffman 2014) and could find it's R&D talent moving offshore (Eyers 2015), to the detriment of the Australian economy (Ferris 2001). Funds must be found from other sources, prepared to invest in risky ventures.

² Average real terms growth in bank lending in 2013 in G7 countries was 0.1% (UHY 2014, p.4)

³ 10 year bond rate 2.48%, cash rate (overnight market) 2.5% (Source: Alan Kohler ABC 29/01/15)

3.5. NON-TRADITIONAL R&D FUNDING SOURCES

Innovative finance options for start-ups include: crowd-sourced equity funding (CSEF), peer-to-peer lending (P2P), angel investing and venture capital (Treasury 2014). Each non-traditional funding source has different features in terms of (Kuti & Madarasz 2014): available financing volume; conditions (i.e. term sheet); maturity (i.e. lifecycle stage); costs incurred by the entrepreneur; and contribution by the funder during the relationship.

3.6. VENTURE CAPITAL (VC)

VCs invest in the unlisted equity of emerging businesses (Hunt & Terry 2015) according to a “fund mandate”, matched to their investor’s risk appetite, which outlines which industry and/or stage of development they will invest in (pers. comm. Doug Verley 2015). VCs usually invest in Series B onwards. Australian VCs raise and pool money from multiple investors, including (Feld & Mendelson 2013; Hunt & Terry 2015; Fleming 2004; Zider 1998): Superannuation funds (40-50%); banks (20%); overseas capital (14%); insurance companies; high net worth individuals; government; large corporations; educational endowments; funds of funds and charities. VCs often manage their risks and diversify their portfolio through co-investing (Zider 1998).

VC funds total 0.02% of GDP (OECD, 2013) and contribute less than 10% of R&D funding (Zider 1998). They usually avoid the early stages, when technologies are uncertain and market needs are unknown, and the later stages, when competition is high, consolidation is inevitable and growth rates are slow. VCs are mostly active in the follow-on funding space for high growth potential projects at the development stage (Bains & Wooder 2014; Zider 1998). At this stage, about 80% of VC funds go into building critical infrastructure required to grow the business (i.e. manufacturing, marketing, sales, fixed assets and working capital) (Zider 1998).

By investing in high growth sectors with competent management, who are able to execute, risks are managed and exit opportunities are likely due to higher potential investment banker valuations at the Initial Public Offering (IPO) stage (Zider 1998). Australian VC exits are increasingly weighted towards trade sales to established large companies. These incumbents acquire start-ups for defensive reasons, growth purposes or “acqui-hires” (i.e. to acquire the start-ups’ talent) (King & Fitzsimmons 2015). Coupled with the fact that technology has reduced start-up costs from millions to thousands of dollars, this means VCs can now start

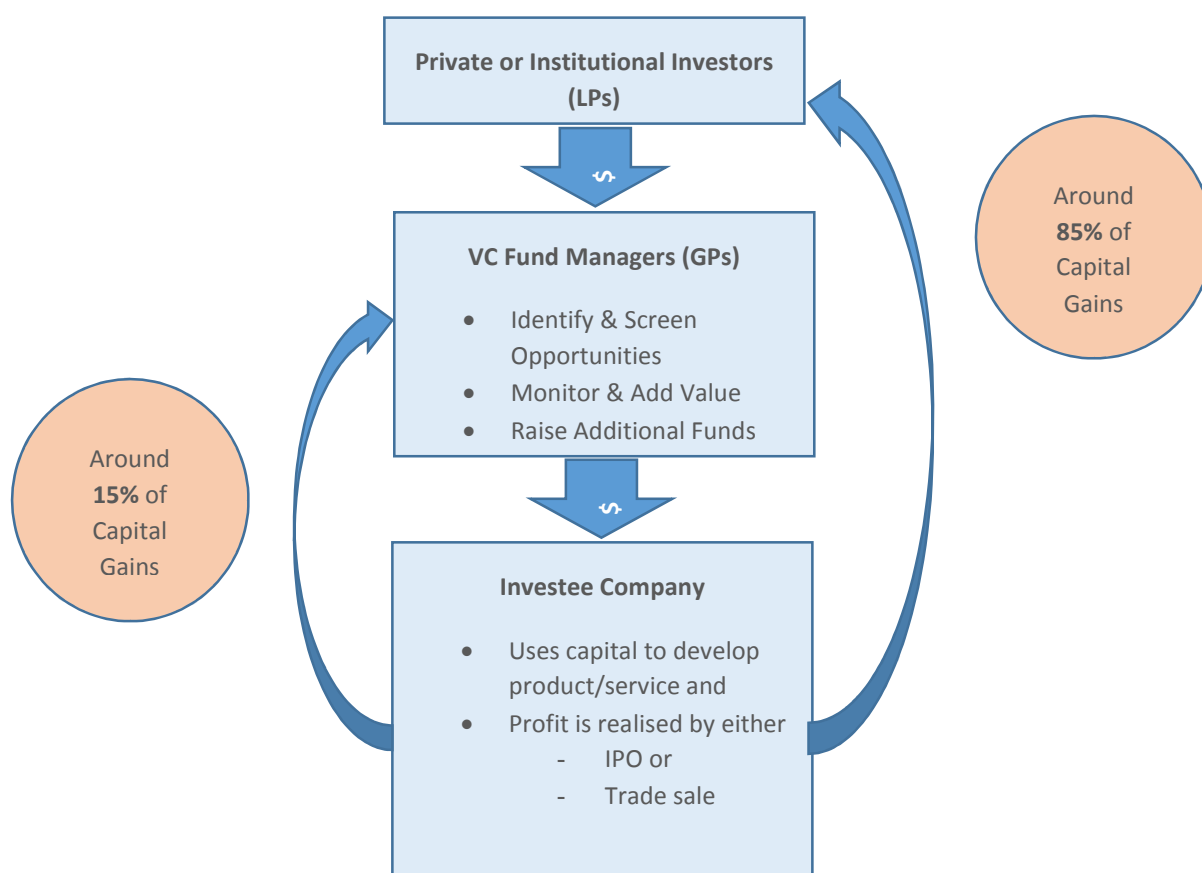
earlier (at lower cost) and exit earlier (at lower valuations) than they have historically, yet achieve similar returns (King & Fitzsimmons 2015).

Stock markets have outperformed VCs for over a decade, with most VC funds barely breaking even (Mulcahy 2013). This may pose a problem for the sustainability of VCs, which is a contracting finance source facing increasing competition from financial innovations such as crowdfunding (Metrick & Yasuda 2010).

Each time a VC wants to make an investment, it must ask the funds' investors, which is called a "capital call" (investors are legally obliged to provide the funds). Venture funds have an "investment term" (e.g. ten years with two one year extensions) and a "commitment period", which is the period of time when they can make new investments (usually 5 years). Established VC firms raise a new fund every three to four years. "Zombie VCs" are funds which have passed the commitment period and are unable to raise new funds. Average total fees over a ten year VC fund is 15% of committed capital plus "carry" (usually 20% of profit after returning capital to investors) (Feld & Mendelson 2013).

Stakeholder engagement with private equity firms led to the discovery that Yuuwa is the only "pure" VC operating out of Perth WA (see Appendix A for stakeholders). This firm stopped investing in 2014 when it reached its commitment period. There are several private equity firms who operate in the "VC" space in Perth, such as RCF Capital.

Figure 3.2 Flow of funds through a VC fund manager



(Source: Hunt & Terry 2015, p. 231)

3.1. ANGEL INVESTORS

Angels are usually high net worth, sophisticated investors (Feld & Mendelson 2013) who invest in emerging firms, taking an active part in the firm's management (Hunt & Terry 2015). They can be previously successful entrepreneurs or friends and family (F&F). Angel investors are a key source of early stage investment (Seed or Series A), funding sixteen times as many companies as VCs (Mulcahy 2013), with family angels being the largest source of start-up capital globally (Zachary & Misra 2013).

Angels may form syndicates, imposing discipline on the process and benefiting from economies of scale and diversification (Cohen & Kador 2013). The angel investment scene has matured since the late 1980s from an 'old boys' network to become more transparent, inclusive and rigorous with over 800 angel groups connected worldwide through www.Gust.com.

“The best angel investors are those who provide not just money but guidance, contacts and wisdom, all backed by personal experience” (Cohen & Kador 2013, p. viii). Most US angels invest between \$100,000 to \$1M, would like to at least double their money (2 x) and get the occasional big hit, but many rarely break even with over half of the funded ventures failing (Cohen & Kador 2013; Shiffman 2014).

The major difference between angel investors and VCs is the source of funds and the amount of money they invest. Angels invest their own money and VCs invest money raised from other investors. It’s not a good idea to mix angels and VCs in the seed round, mainly due to their differing exit strategies. VCs will block attempts for a company sale that is below their minimum required returns and substantially extend the exit time for angels and entrepreneurs. Also when VC’s don’t invest in future finance rounds it sends a bad “signal”, virtually “killing the round” (Cohen & Kador 2013).

3.2. CROWDFUNDING

Crowdfunding involves the use of small amounts of money obtained from a large number of individuals or organizations to fund a project, business, personal loan or charity through an online web based platform (OICU-IOSCO 2014). It *“is in it’s nascent stage and is considered illegal in most countries”* (Manchanda & Muralidharan 2014, p. 371) however it *“fills a void left between microfinance and professional/ institutional investors”* (World Bank 2013, p. 22).

Crowdfunding represents the socialization of capital. It is effective for raising seed funding for start-ups and circumventing traditional mechanisms for early stage financing, such as angel investing, VC and bank loans (Cohen & Kador 2013). It also overcomes issues with distance and gender bias (Kuti & Madarasz 2014).

Crowdfunding has grown from a \$1.5B industry in 2011, to \$2.7B in 2012 and \$5.1B in 2013 with over 800 platforms and thirteen global crowdfunding associations under the World Crowdfunding Federation (Maguire 2014; Jofre 2014). An explanation of the different types of crowdfunding, being for-cause or for-reward, is provided in Appendix K. This project focusses on crowd sourced equity funding (CSEF) as this is believed to be the most likely source of R&D funding via this mechanism.

3.2.1. AUSTRALIAN EQUITY CROWDFUNDING PORTALS (CSEF)

Equity Crowd Funding Portals “*bring investors and issuers together; perform due diligence on investors and issuers; and report to regulators of the jurisdiction*” (Jofre 2014, p.17).

Most CSEF platforms require (IOICU-IOSCU 2014):

- a) an intermediary financial services license;
- b) full product & platform disclosure;
- c) a need for due diligence; and
- d) monitoring of investments, with prospectuses to be lodged with the securities regulator (i.e. ASIC).

Two example operating CSEF portals are considered in this project: the Australian Small Scale Offerings Board (ASSOB) and FatHen (see Table 3.1).

Table 3.1 CSEF Portals – two examples operating in Australia

	ASSOB	FatHen
Established	2006	2014
Co. Structure	Proprietary Company (Pty Ltd)	Publicly Unlisted Company (Ltd)
Licence	AFSL	Uses AFSL of another entity as a Third Party
Enabling Legislation	Corporations Act s708 (20/12 Rule); ASIC Class Order 02/273 (<\$5M; allows advertising)	Acts as a venture capital firm using crowd sourced investors funds.
Investors allowed	Both “sophisticated ⁴ ” & “unsophisticated”	

(Source: Maguire 2014; ASSOB and FatHen websites)

Other equity crowdfunding (CSEF) portals active in Australia include:

- Kickstarter (US based);
- Indiegogo (US based);
- VentureCrowd (linked to Sydney Angels);
- OurCrowd (Israel based);
- Equitise (NZ based); and
- KlondikeStrike (resources sector focused).

⁴ See Table 6.4 definition

3.3. PROCESS TO OBTAIN FUNDING

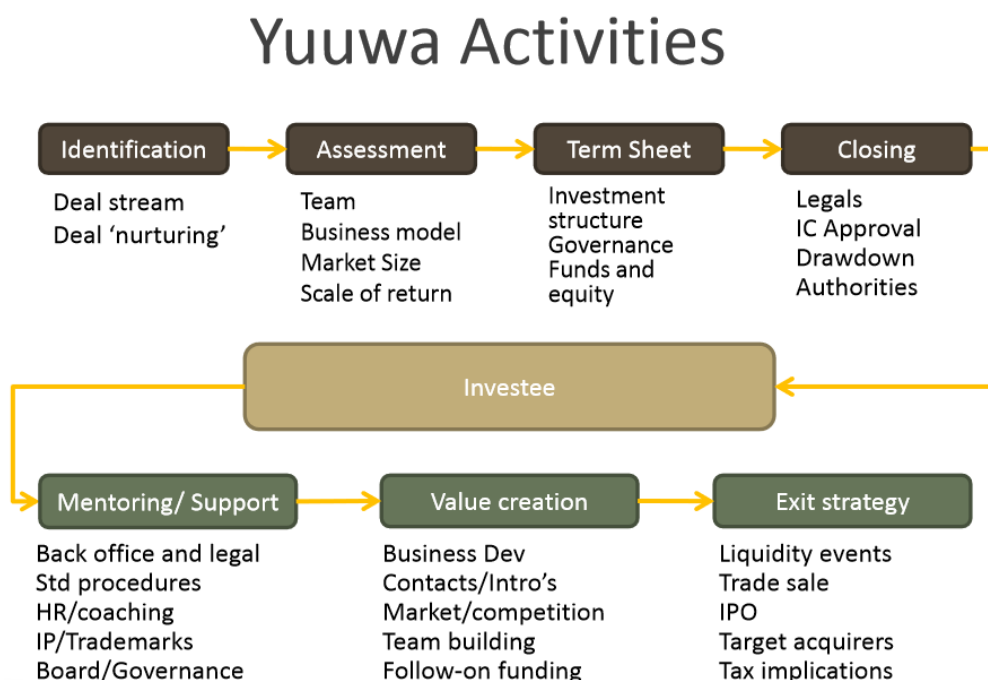
In all cases (VC, angels or crowdfunding portals) the process for entrepreneurs to get money is much like the one shown in Figure 3.3. A more generic process is shown in Figure 5.1. The process to the point of investment can be generically described as:

Networks → Introductions → Pitch → Follow up → Due Diligence → Negotiate Terms⁵ →
Sign Term Sheet → Sign Definitive Documents → Funds Handover

Before approaching investors, entrepreneurs must have their own draft term sheets, which help set expectations at the outset of negotiations, and they must know (Feld & Mendelson 2013):

- a) how much money they want (which dictates who you speak to);
- b) the length of time of the investment (i.e. time to the next meaningful milestone or exit);
- c) who they're dealing with and what their approach is; and
- d) information listed in the Due Diligence Checklist (Appendix B).

Figure 3.3 Investment Process for YUUWA VCs



(Source: Dr James Williams, YUUWA presented at Innovation Centre of WA information seminar, 19/2/2015)

⁵ Know your BATNA: Best Alternative To Negotiated Agreement

Depending on the stage of the venture and the stage of funding (pitch to formal approval), investors will want to see different levels of detail about the venture and the team behind it. Most investors look closely at the team (i.e. history, reputation, chemistry, etc) as their ability to execute the idea is key. After initial financing (i.e. Series Seed or Series A) further financings may follow (i.e. Series B, C and on) (Feld & Mendelson 2013).

Due diligence will follow a checklist like the one in Appendix B, but standards may be different for VCs, angels and crowdfunding portals in the following ways (pers. comm. Greg Riebe & Andrew Hector 2015):

- VC's will do stringent due diligence, with a fully auditable trail to protect themselves from lawsuits from investors (LP's);
- Angels (investing their own money) will do equivalent due diligence, but much less formally and will not necessarily retain an auditable trail (it could be in their heads);
- The intensity of scrutiny during due diligence by crowdfunding portals is yet to be determined. As they are in the nascent stage, it is expected their governance standards may be unsophisticated, but they need to be careful due to the increased propensity for shareholder class actions, which would be highly likely in the case of a start-up failure.

3.4. TERM SHEET & CAPITALISATION TABLE

The “term sheet” is the basic deal structure and blueprint for the future relationship with the investor. Term sheets are often non-binding, but most VCs will try to insert binding conditions precedent to financing, specifically that (Feld & Mendelson 2013, p. 78):

- a) legal fees get paid whether or not a deal happens (entrepreneurs should only pay their legal fees when the deal is completed);
- b) the entrepreneur can't “shop the deal” once the term sheet is signed; and/or
- c) the governing law is to be set to a specific jurisdiction.

Term sheet negotiations should aim to strike a deal that enables development of mutual trust and understanding to extract optimal value for each party (Malhotra 2013). Key concepts are (Feld & Mendleson 2013):

- a) economics (i.e. return for investors in a liquidity event); and
- b) control mechanisms (e.g. board seat).

Important economic terms in the term sheet include: price (or valuation), liquidation preference, pay to play, vesting, employee pool and anti-dilution (Feld & Mendelson 2013).

A template VC term sheet from the US is provided in Appendix C with accompanying explanatory notes on the implications of the various clauses. VC term sheets will be aimed at extracting maximum value for the venture funds' investors (i.e. preference shareholders), potentially at the expense of previous funders and the founders (i.e. common shareholders) (Zider 1998). Appendix C1 (attachment) shows an Australian Angels template term sheet (provided by Greg Riebe). This is much simpler than the US VC example term sheet, which is aimed at preserving the rights of early stage investors in follow-on funding rounds. Two schools of thought exist on term sheets (pers. comm. Greg Riebe & Allan Trench 2015):

- a. Litigious Term Sheet: explicitly guides the relationship thereafter (e.g. VCs) (see Appendix C);
- b. Minimalistic Term Sheet: the control will most likely occur at the board room level via day to day micro-management (e.g. Angels) (see Appendix C1).

Term sheets and capitalisation tables are only necessary between parties to agreements. ASSOBS don't use them as they merely act as a portal, matching founders with investors through licenced accountants (pers. comm. Greg Riebe). FatHen, which works as crowd-funded VC, has term sheets and capitalisation tables which look very much like VC term sheets.

The "capitalization table" always accompanies the term sheet. It is a spreadsheet that defines the economics of the deal, summarising who owns what part of the company before and after financing, and includes provisions for the employee share options plan (ESOP). An example capitalization table is shown in Table 3.2 where a VC offers a start-up a \$5M investment for 33.33 % of the company's equity, based on a \$15M post money valuation with provisions for a 20 % ESOP. This equates to \$3.50 per share (see calculations below).

Table 3.2 Example Capitalisation Structure/ Table

Class	Shares	Preferred Price	Valuation	%
Founder	2,000,000			A
ESOP	B			20%
VC	C	D	\$5M	33.33%
Total	E	D	\$15M	100%
<u>Calculations:</u> A = founder's ownership percentage = $100 - 33.33 - 20 = 46.67\%$ E = total shares outstanding = $2,000,000 / 0.4667 = 4,285,408$ B = shares in ESOP = $4,285,408 * 0.2 = 857,081$ C = shares for VC = $4,285,408 * 33.33 = 1,428,326$ D = price per share preferred stock = $5,000,000 / 1,428,326 = \text{\$3.50/share}$				

(Source: Feld & Mendelson, 2013, pp. 95-97).

Angel investors will either invest for equity or debt. There are pros and cons for both. Equity requires a valuation of the venture, which can be difficult at the pre-revenue stage.

Convertible Debt (CD) is used by many seed round angel investors as it is quicker, cheaper and avoids valuations. It is a loan that converts to equity (preferred stock) when another round is raised. Terms in a CD deal include: discount (usually 10-30%); valuation caps; interest rate (usually 6-12%); conversion mechanisms; conversion in sale of company; warrants and other terms (Feld & Mendelson 2013).

The major risk of CD is that it puts a liability on the balance sheet when there is no revenue, effectively making the company technically insolvent (i.e. liability > assets). This means the board owe a fiduciary duty to the company's creditors. Trading while insolvent imposes personal liabilities on the directors for the company's transactions and creditors hold a position of leverage, as they are able to force bankruptcy or involuntary liquidation (Feld & Mendelson 2013).

3.5. REGULATION/ LEGISLATION

See Appendix J for a summary of relevant legislation. As VC's and CSEF are investing other people's money they are regulated financial intermediaries, requiring an Australian Financial Services License (AFSL). Legislation currently applicable to many Australian VCs and CSEF

portals includes the following, but it will vary depending on the company structure and other factors:

- Section 708 of the Corporations Act, which facilitates small scale offerings for sophisticated investors (i.e. 20/12 rule);
- ASIC Class Order 02/273 ‘Business Introduction and Matching Services’, which permits raising <\$5M, with restrictions on advertising a small scale offer relaxed but the ceiling of 20 investors in any 12 month period remains. There are also exemptions for offers to sophisticated, experienced or professional investors.
- Corporate Regulations Reg.6D.2.03, s708(8)-(12) provides the definition of a sophisticated investor, who is an individual with net assets of >\$2.5M or with gross income for each of the last two years of >\$250k.

Normal business standards also apply in terms of the Corporations Act, Trade Practices Act, etc, with Directors and Officers being held personally liable for the actions of the company. As VC’s and CSEF portals place their people on the boards of funded companies, this can introduce conflicts of interest, as they owe concurrent fiduciary duties to: investors; fund managers and/or management company; and the funded companies’ boards (Feld & Mendelson 2013).

Angels invest their own money, so this funding source is the least regulated. However, normal business standards apply. Angels often pool their funds with other angel investors and co-invest through a special purpose vehicle, such as an Early Stage Venture Capital Limited Partnership (ESVCLP) enabling the angel’s income and capital gains to be exempt from taxation (PwC 2011).

Legislation for CSEF is currently in place in the US, NZ and Italy, with Australia, Canada, France and the UK considering legislation (Treasury 2014; CAMAC 2013⁶). In the US, the Jump Start Our Business Start-ups (JOBS) Act 2012 allows small businesses to raise <\$1M annually from investors pledging <10% of their annual income or assets (Cohen & Kador 2013). There is currently no jurisdictional harmonization of regulatory regimes, but this is needed due to the cross-border nature of the crowdfunding market (OICU-IOSCO 2014). At the moment, *“most platforms can offer equity crowdfunding capital raising to sophisticated*

⁶ Coalition abolished CAMAC in the May 2014 Budget (Anderson 2014)

investors only” requiring drawing up a prospectus in most jurisdictions (OICU-IOSCO 2014, p. 20). There is a push in Australia to follow NZ’s successful CSEF regulatory model (enacted April 2014), which has no limits on investors (Featherstone 2014).

The Abbott government’s ‘National Industry Investment and Competitiveness Agenda’ considers a crowd sourcing blueprint to limit capital raising to <\$2M annually & any individual to <\$2,500 annually per start-up for a total of \$10k annually (Anderson 2014). There is also a push for the federal government to extend exemptions in the well-established small scale offerings area, allowing companies to raise funds from one hundred sophisticated investors in twelve months rather than the current twenty (i.e. a **100/20 Rule**) (Featherstone 2013). CAMAC (2013) recommended specially created exempt public company status for ventures that use CSEF for which under Section 708 of the Corporations Act, a disclosure document is not required if <\$2M is raised in any twelve month period from under twenty investors (i.e. 20/12 Rule). The Propriety Company status has a ceiling of fifty (50) non-employee shareholders (Featherstone 2014).

3.6. CASE STUDY – ALTERNATE FUTURE’S R&D FACILITATION REQUIRES ACCESS TO FUNDS

The information acquired via the literature review is heavily weighted to the US experience and so required validation with Australian investors via a survey and informal interviews with a mostly WA sample (as Alternate Futures is Perth based). Information obtained from this process will enable Alternate Futures to develop the systems and knowledge required to facilitate a one-stop-shop for facilitation of R&D in Australia. This information will also be used by Alternate Futures’ consultants to inform researchers of their funding options and processes.

4. DATA COLLECTION AND ANALYSIS

4.1. PROJECT METHODOLOGY

This “pragmatic philosophy” case study research project was completed using an “inductive approach” and “grounded theory”, which equates to a “functionalist research paradigm”, focussed on objectivism and regulation (Saunders et al 2012, p. 141) (see Appendix F). This means the research is data driven, interpretive and practically oriented to provide rational explanations and develop recommendations. An inductive approach involves the use of multiple data collection methods. A contextual small sample size is appropriate with “theoretical sampling” of a “homogeneous purposive population” of four to twelve as a minimum being satisfactory for data representativeness, reliability & validity (Saunders et al 2012).

The following key descriptive and evaluative questions about non-traditional funding sources (VC, angels & CSEF) were posed in the proposal (Appendix D):

1. What are the risks and requirements of each funding source?
2. What project/ company stage is best matched to each funding source?
3. How is non-traditional funding facilitated and who are the key investor contacts in Perth?

To answer these questions, the project was broken into three stages, with stages two and three being aimed at validating or disproving information gathered in stage one:

1. literature review;
2. self-completed web based survey;
3. informal stakeholder engagement.

Secondary and tertiary information in the literature review included EBSCO Host articles, business and government reports, newspaper articles, websites and published books. A combination of open and closed (list & category) questions were posed to acquire categorical and numerical primary data. The ten questions were composed cognisant of the checklist in Saunders et al (2012, p. 425, 441 & 445) to ensure data validity, reliability and representativeness. Pilot testing of the draft survey questions was undertaken in the months preceding December 2014. The literature review and survey information were collated by 27 February 2015 (at which point the draft report was submitted) and then synthesized into key

themes to enable development and testing of theories and verification of conclusions through follow-up informal stakeholder meetings in March 2015. Those stakeholders interviewed and referenced herein have provided signed consent forms (Appendix E). Where signed consent forms could not be obtained, references are made only to information publically available on company websites or as anonymised, aggregated generalisations. To keep this report concise, references to statements made in investor interviews are interspersed throughout the literature review in Section 3.

4.2. STAKEHOLDER ENGAGEMENT

Major investor stakeholders for this project are listed in Table 4.1. All stakeholders are listed in Appendix A.

Table 4.1 Stakeholders engaged over and above the survey

Name	Organisation/ Role	Engagement
Denise Goldsworthy*	Founder of Alternate Futures	Approval to base on Alternate Futures
Greg Riebe*	President WAAI, Glacei Angels	Seminar speaker, meeting, email (survey pilot), phone call
Professor Allan Trench*	Angel	Meeting, email (survey pilot), phone call
Doug Verley*	MVP Capital (Private Equity)	Meeting, emails
Glen Rothlisberger & Jeff Broun	FatHen Crowdfunded VC portal	Seminar speaker, meeting, email (survey pilot)
Oscar Jofre	Crowdfunding Portal in Canada	Email (survey pilot)
Steve Lieblich	Angel	Email (survey pilot)
Dr James Williams & Andrew Hector*	YUUWA VCs	Seminar speaker, meeting
Marshall Allen	Viburnum Funds (Private Equity)	Meeting
Laura McKenzie	CEO, Scale Investors (Angels)	Phone call
Anthony Fortina	UWA Commercialisation	Meeting
The Innovation Centre of WA	Seminars for entrepreneurs	November 2014 to February 2015

*: Signed consent form

4.3. SURVEY RESULTS

Nineteen informed investors were invited to undertake a ten question self-completing web-based survey (see Appendix H) on SurveyMonkey™ between 19 January and 20 February 2015. The survey was emailed as a unique identifiable link to direct investor stakeholders in the Australian VC, angel and CSEF network and was posted on LinkedIn and Twitter, advertising the survey. A total of sixteen (out of nineteen) responses were received, which is

an 84% response rate. This was comprised of fourteen identifiable responses and two anonymous (generic link) responses. Email reminders and phone calls were required to ensure responses were received in the required timeframe. Results were exported from SurveyMonkey as .xls files (see Appendix G_Survey Data22 Feb 2015.xls) and this material was then collated and summarized in Appendix I.

Qualitative information supplied in the survey provided the following insights:

- a) VCs perform the most stringent due diligence, followed by angels then CSEF portals;
- b) The most important matters to all investors were: economics, control and exit strategy;
- c) There was a 50/50 split amongst respondents as to whom felt non-disclosure agreements (NDA's) and intellectual property (IP) were important, with many respondents stating management's ability to execute as most important;
- d) All investors were most keen on technological innovations;
- e) Respondents were cautious about CSEF, presumably due to their lack of knowledge.

An issue discovered post-survey closure was that the answers provided for return on investment were confusing because of insufficient clarity in the survey question's wording around the meaning of return (i.e. IRR%, ROI%, annual or compound, venture specific or portfolio based). Luckily most respondents provided multiples in their comments.

Conversations with the stakeholders post-survey data collation also helped with understanding the return requirements for each funding source.

Findings from all three stages of the project were incorporated into the comparison tables in Tables 5.4 and 5.5. The survey results triangulated well with the literature review findings and follow-up interviews, although there was some variability due to the small sample size.

5. KEY FINDINGS

5.1. COMPARISON OF NON-TRADITIONAL FUNDING SOURCES

The best way to compare and contrast the information gathered on the three funding sources is through:

- a) a SWOT analyses (see Tables 5.1 to 5.3);
- b) life cycle stage mapping (see Table 5.4); and
- c) a summary contrast table (see Table 5.5).

It can be seen from these tables that VCs are focused on more mature lifecycle stage ventures (lower risk) while angels and crowdfunding portals provide most funding for seed and start-up ventures (high risk- high return).

VCs, angels and crowdfunding portals have different requirements under Australian legislation with respect to which investors they can tap into (sophisticated or not); how many investors they can tap into; how much they can raise; and requirements for investment monitoring, auditability and disclosure (e.g. ASX reporting). VCs and crowdfunding portals need an Australian Financial Services License (i.e. AFSL) and angels don't. This licence requirement is a form of investor protection.

VCs, angels and crowdfunding portals are similar in their investment vetting processes, due diligence and term sheets, but degrees of due diligence scrutiny for VCs angels and crowdfunding portals are different in the following ways (pers. comm. Greg Riebe 2015):

- VC's (who invest other people's money) will do stringent due diligence, with a fully auditable trail to protect themselves from lawsuits from investors (LP's);
- Angels (who invest their own money) will do equivalent due diligence, but much less formally and will not necessarily retain an auditable trail (it could be in their heads);
- Crowdfunding Portals (who invest other people's money) will undertake the due diligence process but as they are in the nascent stage, governance standards may be unsophisticated. Potential investor lawsuits are a risk.

Term Sheets are only necessary between parties to agreements, so they will be used by VCs, angels and some crowdfunding portals (e.g. FatHen). Groups like ASSOBS don't use term

sheets as they merely act as an “off balance sheet” portal, providing matching and promotional services (Pers. Comm. Greg Riebe). Term Sheets will be more value-extracting when prepared by VCs, who are highly skilled and incentivised to maximise their investor’s returns. This could be at the expense of early backers if founders are not careful during negotiations with VCs.

5.1. SWOT ANALYSES

A SWOT analysis of the three forms of non-traditional funding is shown below.

Table 5.1 VC SWOT Analysis

Major strengths	Major weaknesses	INTERNAL
- Access to big money & follow on funding - Access to VC expertise & support	- Loss of control - Exit strategy may not match entrepreneurs’ and early stage investors - Risk averse (due to influence of super funds)	
Major opportunities	Major threats	EXTERNAL
- Increasingly large Australian super funds mean significant sums of money are available for the right projects	- CSEF developments (disintermediation of VC) - Poor VC performance for past decade (below or on par with securities) resulting in damaged reputation	

Table 5.2 Angels SWOT Analysis

Major strengths	Major weaknesses	INTERNAL
- 4Cs: capital, competence, contacts & commitment - Altruistic & philanthropic motivation	- Follow on funding may not be possible - Mixing with VC creates complexity - Angel may be a micro-manager	
Major opportunities	Major threats	EXTERNAL
- Tap into successful entrepreneurs to grow the potential for future entrepreneurs and their ventures	- CSEF developments (substitution of angels) - Poor angel performance (>50% start-ups fail; most angels lucky to breakeven; GFC impact on wealth)	

Table 5.3 Crowdfunding SWOT Analysis

Major strengths	Major weaknesses	INTERNAL
- Test marketability - Access capital - Benefits for communities (local & global) - Rights to keep company decisions in hands of entrepreneurs	- Administration & accounting challenges - Ideas potentially stolen - Weaker investor protection - Potential for fraud - Internet based: investors might lack advice - Turnoff for VC & angels (capitalisation table shows many shareholders)	
Major opportunities	Major threats	EXTERNAL
- Niche investment opportunity/ capital raising method - Positive effects on economy - Crowdsourcing synergy	- Risky nature of small business - Inevitable legal restrictions exist or arise (CSEF issues)	

5.2. LIFE CYCLE STAGES

Table 5.4 Non-traditional funding sources for seed/ R&D funding based on venture stage

Stage	% Start-ups that reach each stage	Amount invested \$	Source of funds (usually)	Type of investment
Seed (idea)	100%	\$0 - \$25k	Own pocket	Founder's equity
	25%	\$10 - \$50k	Angels	Convertible debt
		\$25k - \$150k	Friends & family	Common stock, convertible debt
		\$50 - \$250k	Early stage VC Funds	Preferred stock (rare to invest in seed)
		\$10k-\$50k	Australian CSEF	Common stock (nascent)
Start-up (commercialisation)	2.5%	\$10k-\$50k	Angels	Convertible debt
		\$100-\$1M	Early stage VC Funds	Preferred stock (rare to invest in start-up)
		\$10k-\$50k	Australian CSEF	Common stock (nascent)
Development	0.25%	\$10k - \$100k	Angels	Convertible debt
		\$1M - \$10M	Early stage VC Funds	Preferred stock
Expansion/ Pre IPO	0.025%	\$10M - \$20M+	Later Stage VC Funds	Preferred stock

(Source: Cohen & Kador 2013 p. 22-24; Jofre 2014; Maguire 2014; CAMAC 2013; this projects' survey results)

5.3. COMPARE & CONTRAST

Table 5.5 Comparison of three types of non-traditional funding sources for R&D

	Venture Capitalists (VC)	Angels	CSEF Portal
Association	Australian Venture Capital Association (AVCAL)	Australian Association of Angel Investors Ltd (AAAI)	Crowdfunding Institute of Australia (CFIA)
Lifecycle Stage	- Series B, C, D... pre-IPO funding rounds - Development (commercialization) to Expansionary (upscale for larger market)	- Seed and/or Series A funding round - Seed (idea), Start-up (product development & commercialization)	- Seed funding round
Venture Types	- Fund “mandate”/ strategy (sector & stage): Tech, Biotech, Resources, Prop/Infrastructure - Tangible med CAPEX & intangible low OPEX investments.	- Investment strategy based on personal strengths. Resources, Tech, - Tangible low to med CAPEX & intangible low OPEX investments.	- Emotionally appealing, social value-add projects. - Tech, Resources - Mainly intangible low CAPEX- low OPEX IT/App investments.
ROI (%)	- Development: 4-5x; Early stage 10 x - Actual: mean IRR 36.4% SD 153%⁷ - Actual Australian PE & VC: 27%⁸ - E.g. Accel Partners 630x return on their \$12.2M investment in Facebook⁹ - Expect a return of 25% - 35% pa¹⁰	- Want Seed: 10-20x; Start-up: 5-10x - Actual: Ave. 2.6x investment in 3.5 years with approx. 27% IRR. >50% fail. 7% of exits returned >10x.¹¹ (Most breakeven)	Want: >=30% ROI per annum Actual: n/a (emergent)
Timing (yrs)	Mostly 6-8 years, can be up to 10+ years	Mostly 3-6 years	Mostly 3-6 years (>8 years in Canada)
Amount (AUD\$)	- \$50k-\$250k for start-ups (but very rare) - \$1M-\$10M+ for more developed ventures	- \$10k-\$100k for start-ups (can be up to \$1M)	- Total: \$10k-\$1M for start-ups - Depends on public interest

⁷ Fleming 2004, p. 34.

⁸ <http://www.avcal.com.au/avcalnews/blog-pevc-performance-a-look-behind-the-numbers> (data for period ending 30 Sept 2014)

⁹ Shapiro 2015

¹⁰ Zider 1998, p. 133.

¹¹ Zachary & Mishra 2013, p. 164.

The risks and requirements of non-traditional funding sources for R&D in Australia

	VC	Angels	CSEF Portal
Fees	- Average total fee over 10 year period is 15%¹² of committed capital; includes management fees of 1.5-2% and rest is “carried interest” (profit after returning money to investors). - Legal fees paid	- Legal fees paid	- About 5-8%¹³ of total raise paid to platform (campaign hosting)
Exit Strategy (Bake in from start)	Typical exit strategies are ¹⁴ : - IPOs (most common for US VC) - Trade sales (most common for BA, Australian VC) - Secondary sales (to another financial sponsor) or buybacks by company management - Write-off/ Liquidation (worst case)		Exit with VCs &/or angels (long term; no secondary market) or VCs may buy out early stage equity holders.
Major Legislation	- Some limited to s708 Corp Act (20/12 Rule, sophisticated investors) - Must have AFSL (other’s money)	- Sophisticated investors - Does not need a AFSL (own money) - May need MIS if co-invest in syndicate	- New CSEF legislation due end 2015 (allowing unsophisticated investors) - AFSL (other’s money). - FatHen: public unlisted company (third party AFSL) - ASSOB: Corp Act s708 20/12 Rule & ASIC Class Order 02/273 (<\$5M, advertise); AFSL
Type of Stake	Equity (Preferred Stock)	Equity (Pref. stock) or Convertible Note (Debt)	- Equity (CSEF) or Debt (P2P) - Promoters’ class of equity may have voting, dividend &/or other rights which are not available to the class of equity held by CSEF investors.
Term Sheet	Term Sheet Template similar for VC, Angels and Crowdfunding Portals, but the ‘devil’s in the detail’ (see Appendix C). Venture & jurisdiction specific.		
Due Diligence	Template due diligence checklist similar for VC, Angels and Crowdfunding Portals (see Appendix B). Crowdfunders appear least stringent & VCs most stringent.		

¹² Feld & Mendelson 2013, p. 118-120

¹³ Temes 2013, p.58

¹⁴ Fleming 2004, p.24

The risks and requirements of non-traditional funding sources for R&D in Australia

	VC	Angels	CSEF Portal
Major Risks for Fundees	- Performance dependent on VC managers - VC's very experienced, with tricks to sneak in lower valuations (pre-money or post-money, dilution by large ESOP) & complexity (warrants) - Loss of control (VC on Board) - VCs protect their share of company in future funding rounds (more VC's) &/or IPO's with clauses regarding anti-dilution, warranties, etc. Beware the fine print (entrepreneur needs a good lawyer experienced in VC term sheets to prevent losing economic benefits and control). - Many companies end up with multiple VCs who invest in the company at different points in time resulting in different ownership percentages, varying rights and diverging motivations.	- Degree of control depends on angel (due diligence is important) - If use convertible notes instead of equity, have liabilities on balance sheet, so Directors have a liability (trading while insolvent) & owe fiduciary duties to creditors - possible may not get follow-on funding	- Portal representative on Board - control. - Unlikely to get follow-on funding - Limited capacity for raising money (<A\$2M) - No mentoring component with industry knowledge, relationship & status (thus start-up at greater risk of failure) - Onerous investor management¹⁵ - Follow-on funding (VCs & angels), concern about large number of investors in the cap table (admin burden, shareholder activism risks) - Follow on funding rounds, angels, including friends and family, might not be able to continue to contribute. - Exposes company to competitors, customers and could risk loss of confidentiality/IP (must ensure ready to go to market quickly) - Time & effort for campaign and promos - Half crowdfunding campaigns fail - need a plan B, reputational risk if fail to raise required money - So successful can't keep up with demand (always plan to scale up or down and keep communicating with supporters) - D&O's must "review all information they will share with investors with legal counsel to understand liabilities associated with the disclosures and dissemination of the information. Must know ASX Listing Rules.

- ¹⁵ CSEF creates onerous burdens related to the number of shareholders on the shareholder register for a small capital raising (e.g. reporting, fielding questions and achieving consensus). If the start-up raises a further "Series A" round, these crowdfunders may not be able to "follow on" their investment, thus removing one of the key advantages of good seed investors (Shiffman 2014)

The risks and requirements of non-traditional funding sources for R&D in Australia

	VC	Angels	CSEF Portal
Major Risks for Funders	- Illiquidity, volatile returns, information asymmetry risk (adverse selection & moral hazard)¹⁶ thus inability to execute & add value - Competition from other VCs, angels and CSEF - VCs owe concurrent fiduciary duties to their investors, VC fund managers, the VC management company & to the companies on which they have a board seat, which can create a conflict of interest.	- Illiquidity, volatile returns, information asymmetry risk (adverse selection & moral hazard)¹⁷ - Inability to execute & add value - Competition from other angels, VCs and Crowdfunding Portals	- Information asymmetry & minimal power to prevent dilution (future funding); - Contract law confusion for cross-border platforms, particularly during insolvency of a platform - Default (equity crowdfunding defaults are about 50% in the first five years of a start-up's life; P2P defaults are now down to <7%)¹⁸ - Subsequent funding failure. If small companies seeking further capital (additional rounds) cannot raise additional capital, this will negatively impact the going concern of a company. If the company fails or downsizes this reduces the value of the initial investment; - Limited exit options; - Platform closure/ failure; fraud and cyber attack; business failure; lack of issuer experience - Illiquidity (secondary market: none for CSEF, limited for P2P)¹⁹ - Poor investor protection due to a lack of transparency and disclosure of risks; threat of money laundering, - Excessive capital allocation to sectors preferred by CSEF, - Regulatory-compliance risk.²⁰

¹⁶ Proimos & Wright 2005, p.272

¹⁷ Proimos & Wright 2005, p.272

¹⁸ OICU-IOSCO 2014, p. 5, 23-24

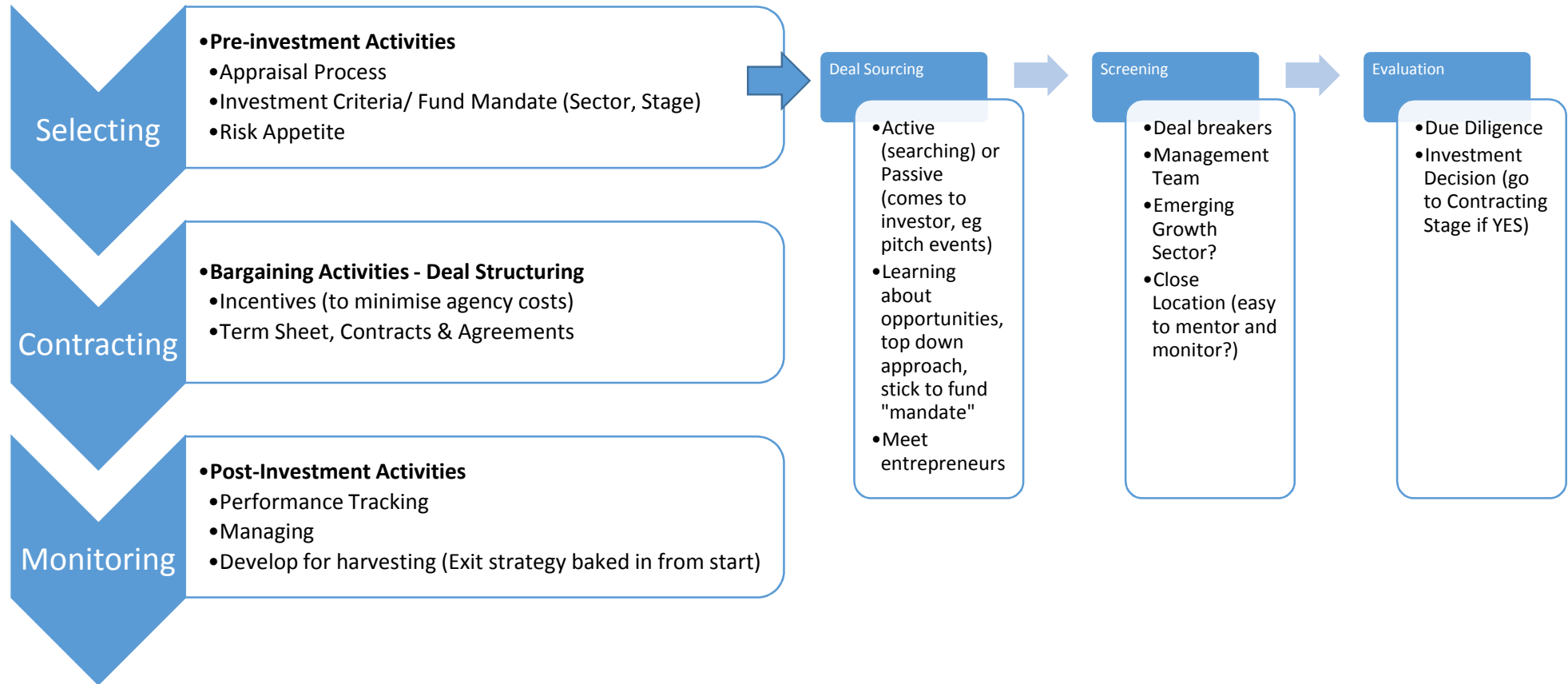
¹⁹ A small volume of securitization of P2P unsecured loans exists in the US as asset-backed securities valued at US\$53M in 2013 (OICU-IOSCO 2014, p. 5-6, 37)

²⁰ World Bank 2013, p. 359

The risks and requirements of non-traditional funding sources for R&D in Australia

	VC	Angels	CSEF Portal
Major Benefits for Fundees	- Most likely to get follow on funding - Mentoring component adds value to the venture (expertise, networks, experience) - VCs advice about opportunities & threats in the external environment - VCs promote collaboration, matching co-operation partners - Most likely to make it to an IPO with VC backing in the US. In Australia will most likely exit by trade sale but IPOs possible.	- Mentoring component adds value to the venture (expertise, networks, experience) - Angels advice about opportunities & threats in the external environment - Angels promote collaboration, matching co-operation partners	- VC and seed capital hard to access in current economic environment so CSEF is a realistic option for attracting investment. - Validation of creator's business idea & gives projection of target markets - Marketing tool - Proof of marketability for future funding rounds from angels & VCs - Creator communicates with supporters developing a connection for feedback - Entrepreneurs can raise capital affordably - Lower cost of capital
Major Benefits for Funders	- Prospects for a "10 Bagger" (returns > 10x) - VCs keep up with latest R&D, technology - Route for corporate venturing (incubate seed projects for multinational corporation R&D) - Technology is making start-ups cheaper to establish - Tough economic conditions are pushing valuations down. - Diversification	- Prospects for a "home run" - Angels keep up with latest R&D/ technology - Mentor promising entrepreneur(s) - Start-ups are getting cheaper to establish	- Spreads risk, diversification - High risk-high return option - Personal contribution to important projects - Share in dividends & value of company when shares sold.
Geography	Home state bias (local projects)	Home state bias (local projects)	Global to local projects
Due Diligence Evaluation Duration	3-6 months	1-3 months	1-3 months
(Sources: Temes 2013; Proimos & Wright 2005; Hsu 2006; Riebe 2014; Feld & Mendleson 2013; Cohen & Kador 2013; Kuti & Madarasz 2014; Manchanda & Muralidharan 2014; Lewis & Zalan 2012; Project SurveyMonkey Results 20/02/15; Cumming & Johan 2009; Zachary & Misra 2013; World Bank 2013; Fleming 2004; Temes 2013; Shapiro 2015; Maguire 2014; OICU-IOSCO 2014; Jofre 2014; CAMAC 2013; Shiffman 2014; Valanciene & Jegeleviciute 2013; Zider 1998; Malhouth 2013; Mulcahy 2013; Metrick & Yasuda 2010).			

Figure 5.1 Investment Appraisal Process (similar for VCs, Angels & Crowdfunding Portals)



(Source: Feld & Mendleson 2013; Cohen & Kador 2013; Proimos & Wright 2005, p. 274; Certhoux & Perrin 2013, p.16, 71; pers. comm. Doug Verley & Andrew Hector 2015.)

6. KEY IMPLICATIONS

The major findings regarding the three principal questions posed for this research project, (see section 4.1) are summarised in Table 6.1, with details in Tables 5.1 to 5.5 and Figure 5.1.

Table 6.1 VC, Angels & Crowdfunding (CSEF): main characteristics

	VC	Angels	CSEF Portal
Funding Round	Series B, C, etc	Seed/ Series A	Seed
Lifecycle Stage	Development to Expansionary	Seed to start-up	Seed to start-up
Venture Types	Fund “mandate” (strategic life cycle stage and sector)	Match angel’s personal strengths & networks	Emotionally appealing to the masses
Seed ROI (mult)	10 – 20 x (rare to invest)	10 – 20 x	>= 30% ROI per annum
Start-up ROI (mult)	5 – 10 x (rare to invest)	5 – 10 x (mostly)	
Develop ROI (mult)	4 – 5 x (mostly)	4 – 5 x	
Actual Mean IRR²¹	27 - 36.4 %	27 % (2.6 x investment)	n/a
Exit Timing (years)	Mostly 6 - 8, < 10+	3 - 6	3 - 6
Amount Invested (AUD\$)	\$50 k - \$250 k (start-ups - rare) \$1 M - \$10 M++ (development)	\$10 k – \$100k (start-ups) < \$1 M+ (development)	\$10 k - \$1 M
Comments	Rarely invest in seed & start-ups. Invest more in development, for longer. Becoming more risk averse.	Main seed & start-up investor. Invest small amounts, quick turnaround.	Nascent stage. May compete with angels and VCs when established.

6.1. RESEARCH DATA VERSUS LITERATURE REVIEW

The survey answers were in general alignment with the literature review findings but the answers were quite variable, due to the small sample size. Follow-up, informal discussions with stakeholders provided valuable insight into the workings of VC, angels and CSEF portals and helped synthesise the voluminous material collated over many months. Overall, these three sources of information triangulated well to provide a clear understanding of early stage investor requirements.

6.2. MAJOR LEARNINGS

This study of non-traditional R&D funding sources has elucidated a field of finance which will have positive practical implications at Alternate Futures, which aims to facilitate

²¹ Note: > 50% start-ups fail

innovation in Australia. By drawing upon multiple sources, this study provides the following major learnings which Alternate Futures can take away and apply:

- 1) **Life cycle stage:** VCs are focused on more mature lifecycle stage ventures (i.e. lower risk, higher value investments) while angels provide most funding for seed and start-up ventures (i.e. high risk - high return, low value investments). As crowdfunding platforms mature, they will funnel more funds from a larger pool to R&D (seed to start-up) ventures, supplementing limited angel funds.
- 2) **Investment vetting processes and due diligence:** These processes are the same for all three funding sources, however VCs are the most stringent, followed by angels then CSEF portals. Most investors prefer technology projects as they are low cost, scalable and provide fast exits.
- 3) **Term Sheets and Capitalisation Tables:** Due to multiple rounds of funding, early stage funders often co-exist with each other (and later also potentially with investment bankers). This can create complexity and diverging interests, so the term sheet should be designed to align all parties to a common goal. The risk for all early stage investors is that winners (i.e. “ten baggers”) are insufficient in regularity or value to cover the costs of the failures, which is why term sheet clauses protecting investor interests are necessary. Without this protection, investors will shy away from such a high risk area of investment. However, during negotiations VCs will aim to extract maximum value at the expense of early backers, so it is recommended entrepreneurs enlist specialist advisers.
- 4) **Value of Crowdfunding:** CSEF provides seed to start-up stage micro-funds while validating the market for the product, which can help build the business case for follow on angel and/or VC funding. However, too many early stage shareholders on the capitalisation table can be off-putting for follow-on funders!
- 5) **Licences:** VCs and crowdfunding portals need an Australian Financial Services Licence (i.e. AFSL) and angels do not, as the licence requirement is contingent upon whether they are investing other people’s money.
- 6) **Contacts** in the investment community are shown in Appendix A.

7. CONCLUSION

A thriving innovation ecosystem is vital to maintain Australia's high standard of living. Funding sources, be they traditional (i.e. banks, government grants, R&D tax incentives or corporate venturing) or non-traditional (i.e. VC, angels or CSEF), are a key component to what is essentially a "high risk- high reward" investment.

The innovation facilitation work of Alternate Futures has been constrained by a lack of client access to capital, resulting from a credit/spending freeze, due mainly to the repercussions of the 2008 GFC. A strategic decision was made to provide a service to link clients with investors, thus providing a fully joined up service. It was soon realised there was a gap in public knowledge about the risks and requirements of non-traditional funding sources (VC, angels and CSEF), requiring a research effort to fill the knowledge gap.

The findings from this report will be used at Alternate Futures to improve our corporate knowledge, processes and networks. This corporate knowledge about traditional and non-traditional funding sources for R&D (seed to start-up) will be a crucial capability at Alternate Futures for facilitating innovation in Australia.

In conclusion, by answering the questions posed in section 4.1, this project has provided valuable information which will be used at Alternate Futures to help our R&D clients understand potential investor requirements and/or preferences for:

- a) vetting processes, due diligence and risks;
- b) lifecycle stage, funding amount, return on investment, control mechanisms, exit strategy and timing; and
- c) how to identify and approach them.

With knowledge about the needs of the other party (i.e. investors), Alternate Future's client researchers will be well placed to effectively negotiate mutually beneficial terms and thus help maintain a thriving innovation ecosystem in Australia.

8. REFERENCES

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Appendix A Stakeholder Investors (Respondents)

*** PRIVATE & CONFIDENTIAL ***

Appendix B Example Due Diligence Checklist

Deal Lead: _____

Target Completion
Date: _____

		Entrepreneur		Review by Lead Investors		
Item		Due Date	Status	Responsibility	Due Date	Status
Corporate Governance	Capitalisation Structure/Table (including ESOP)					
	Board of Directors (Biographies)					
	Corporate Documents (Certificate of Incorporation, etc)					
	Board Meeting Minutes					
	Historical Financing Terms					
	Future Financing Strategy: How far will the money go?					
	Stage Gated Approvals/ Incremental Funding: next funding milestone (e.g. proof of concept, next round or becoming cash flow positive)					
	Project Management & Reporting					
	Conflict Resolution Process					
Management/ Board of Advisors	Personal knowledge of people involved (reputation, past experience, track record, connections)					
	Police Checks & Bankruptcy Checks on Founders					
	Reference Checks (Provide names)					
	Management Resumes, Team chemistry, leadership and management experience, Domain expertise					
	Organisational Plan					
	Risk Management Plan					
Business Model	Execution Plan (realistic, risks managed)					
	Business Plan (schedule, milestones, roles & responsibilities, investment summary)					
	Scalable Business Model/ Growth Plan					
	Size of Market (growth, distribution, size, promotion, pricing)					
	Product - Prototype/ Proof of concept (sales by customer)					
	Target customer, vendors, market sustainability, key differentiators, significant barriers to entry					
	Competitive comparison/ analysis					
	Go to market strategy: sales and marketing plan (if start-up)					
	Commercialisation plan (Contracts, Strategic alliances/ affiliations)					
	Customer reference checks (Provide Customer Names) (also ask non-customers why they aren't customers)					
	Sales Presentation (to customer)					
	Revenue streams					
	Elevator Pitch, Permission to believe (awards, licences, patents, customers, analyst/ journalist review)					

The risks and requirements of non-traditional funding sources for R&D in Australia

Financial	Financial Model (DCF Model, NPV, IRR) (investors' independent review of model)					
	Cash Flow Statement					
	Balance Sheet					
	Operating Expense details					
	3 to 5 Year Projections					
	Income statement					
	Cash Burn Rate (per month)					
	Gross Margin (by product)					
	Payback Period (time to breakeven)					
	Skin in the game (founders equity)					
Product/ Service	Marketing Research (size of potential market, "target beach head" market, competitive comparison)					
	Value Proposition (Customer's perspective)					
	Samples/ Access					
	Technology Description					
	Technical due diligence (validation of product)					
Operations	List of Business Partners, Supply Chain Support					
	How the money will be spent (on value-adding strategies which drive new development, new customer acquisition and new product design. NOT on sunk costs)					
	Technical Issues					
	SWOT					
Legal	IP/ Patents					
	Trademarks					
	Copyrights					
	Regulatory					
	Litigation					
	Proof of ownership of collateral					
Post Due Diligence Negotiations						
Deal Terms	Valuation (Premoney &/or Postmoney)	Investor control				
	Share Price					
	Aggregate Investment					
	Exit Strategy and Multiples (Years, ROI, Method)					
	Term Sheet (including Capitalisation Structure/ Table)					
	Definitive Agreements, Shareholder Agreements, CEO Contract, Employment Agreements					
	Use of Funds/Milestones					

(Sources: Cohen & Kador 2013; Feld & Mendelson 2013; Jofre 2014; pers. comm. Greg Riebe & Andrew Hector 2015)

Notes:

- VC's will do stringent due diligence, with a fully auditable trail to protect themselves from lawsuits from investors (LP's).
- Angels (investing their own money) will do the same level of due diligence, but much less formally and will not necessarily retain an auditable trail (it could be in their heads).
- Crowdfunding Portals will undertake the due diligence process but as they are in the nascent stage, governance standards will be less sophisticated compared to VCs. But they also need to be careful due to potential investor lawsuits.

Appendix C Example Term Sheets & Deep Dive into Clauses

(also see separate attachment C1 for Australian Angels version)

FOUNDRY VENTURE CAPITAL 2011, L.P.

**Terms for Proposed Private Placement of
of Series A Preferred Stock of [_____]**

_____, 2011

(Valid for acceptance until 5:00 pm _____, 2011)

Issuer: _____, a [Delaware] corporation (the “*Company*”)

Amount of Financing: \$__ million, [(including \$__ from the conversion of bridge notes)] representing a __% post-closing ownership stake on a fully diluted basis, including shares reserved and unissued for the employee option pool (the “*Employee Pool*”). The Employee Pool shall be equal to __% of the post-closing fully-diluted capitalization.

Investor[s]:ⁱ Foundry Venture Capital 2011, L.P. (“*Foundry*”) \$ _____
Other investor \$ _____

[Note: If there is to be a second closing, differentiate the investors and amounts by each closing.]

Total (all investors together, the “*Investors*”): \$ _____

Closing: Sale of the Series A Preferred (the “*Closing*”) is anticipated to take place _____, 2011. [Subsequent sales to strategic/other investors mutually reasonably acceptable to the Company and Foundry may occur within [60] days (the “*Second Closing*”).]

Price; Valuation: \$_____ per share (the “*Purchase Price*”). The Purchase Price represents a fully-diluted pre-money valuation of \$__ million and a fully-diluted post-money valuation of \$__ million.

Type of Security: Series A Preferred Stock (the “*Series A Preferred*”).

Founders: _____, _____

Board of Directors:

The size of the Company's Board of Directors shall be set at Closing at [] persons. The Board shall initially be comprised of _____, as the Foundry representative[s] _____, _____, and _____. The holders of Series A Preferred shall be entitled to elect [one] member[s] of the Company's Board of Directors, which director shall be designated by Foundry (the "*Series A Director[s]*"), the holders of Common Stock shall be entitled to elect [one] member[s] [who] [one of whom] shall be the person serving as Chief Executive Officer and the remaining directors will be [Option 1 (if Foundry to control more than 50% of the capital stock): mutually agreed upon by the Common and Preferred, voting together as a single class.] [or Option 2 (if Foundry controls less than 50%): chosen by the mutual consent of the Board of Directors].

Except for the provisions contained below entitled "Right to Conduct Activities", "Legal Fees and Expenses", "No Shop Agreement", "Confidentiality" and "Governing Law" which are explicitly agreed by the Investors and the Company to be binding upon execution of this term sheet, this summary of terms, including the accompanying terms and conditions, is not intended as a legally binding commitment by the Investors, and any obligation on the part of the Investors is subject to the following conditions precedent: completion of legal documentation satisfactory to the prospective Investors, satisfactory completion of due diligence by the prospective Investors, and delivery of all closing deliverables described in the definitive agreements.

Foundry Venture Capital 2011, L.P.**[COMPANY]**

By: _____

By: _____

Print Name/Title: _____

Print Name/Title: _____

TERMS AND CONDITIONS OF SERIES A PREFERRED STOCK

Capitalization: A capitalization table showing the Company's capital structure immediately following the Closing is attached. In the event the capital structure immediately following the Closing is not as set forth as attached, the Purchase Price shall be appropriately adjusted based upon the valuation set forth herein and the actual capital structure. For purposes of the above calculation and any other reference to "fully-diluted" in this term sheet, "fully-diluted" assumes the conversion of all outstanding preferred stock of the Company, the exercise of all authorized and currently existing stock options and warrants of the Company, and any increases to the Company's existing option pool prior to the Closing.

Dividends: 8% non-cumulative dividend preference, when and as declared by the Board of Directors; pro rata participation in any Common Stock dividends.

Liquidation Preference: In the event of any liquidation or winding up of the Company, the holders of the Series A Preferred shall be entitled to receive in preference to the holders of the Common Stock a per share amount equal to the Purchase Price plus any declared but unpaid dividends (the "**Liquidation Preference**").

[Choose one of the following three options:]

[Option 1: Add this paragraph if you want fully participating preferred: After the payment of the Liquidation Preference to the holders of the Series A Preferred, the remaining assets shall be distributed ratably to the holders of the Common Stock and the Series A Preferred on a common equivalent basis.]

[Option 2: Add this paragraph if you want participating preferred with a cap: After the payment of the Liquidation Preference to the holders of the Series A Preferred, the remaining assets shall be distributed ratably to the holders of the Common Stock and the Series A Preferred on a common equivalent basis; provided that the holders of Series A Preferred will stop participating once they have received a total liquidation amount per share equal to [two - five] times the Purchase Price, plus any declared but unpaid dividends. Thereafter, the remaining assets shall be distributed ratably to the holders of the Common Stock. Upon any liquidation or deemed liquidation, holder of the Series A Preferred shall be entitled to receive the greater of (i) the amount they would have received pursuant to the prior sentence, or (ii) the amount they would have received in the event of conversion of the Series A Preferred to Common Stock.]

[Option 3: Add this paragraph if you want non-participating preferred: After the payment of the Liquidation Preference to the holders of the Series A Preferred, the remaining assets shall be distributed ratably to the holders of the Common Stock.]

A merger, acquisition, sale of voting control in which the shareholders of the Company do not own a majority of the outstanding shares of the surviving corporation or sale of all or substantially all of the assets of the Company shall be deemed to be a liquidation. Any acquisition agreement that provides for escrowed or other contingent consideration will provide that the allocation of such contingent amounts properly accounts for the liquidation preference of the Preferred Stock.

Preferred Stock Conversion: Convertible into shares of Common Stock at any time at the election of each holder. The initial conversion rate shall be 1:1, subject to adjustment as provided below

Automatic Conversion: All of the Series A Preferred shall automatically convert into Common Stock upon the closing of a firmly underwritten public offering of shares of Common Stock of the Company at a per share price not less than four times the Purchase

Price (as adjusted for stock splits, dividends and the like) per share and for a total offering of not less than \$30 million (before deduction of underwriters commissions and expenses) (*a “Qualified IPO”*). Any or all of the Series A Preferred shall convert into Common Stock upon the election of holders of at least [a majority] of the outstanding Series A Preferred (*the “Required Percentage”*).

Antidilution Provisions:

The conversion price of the Series A Preferred will be subject to a weighted-average adjustment to reduce dilution in the event that the Company issues additional equity securities, other than (i) shares or options to purchase shares issued to employees, consultants or directors as approved by the Board, (ii) shares issued for consideration other than cash pursuant to a merger, consolidation, acquisition, or similar business combination approved by the Board; (iii) shares issued pursuant to any equipment loan or leasing arrangement, real property leasing arrangement or debt financing from a bank or similar financial institution approved by the Board; and (iv) other issuances approved by the Required Percentage of the outstanding Series A Preferred from time to time (collectively, *“Excluded Issuances”*). Approval by the Board for any Excluded Issuance must include approval by [the] Series A Director. The conversion price will also be subject to proportional adjustment for stock splits, stock dividends, combinations, recapitalizations and the like.

Voting Rights:

The Series A Preferred will vote together with the Common Stock on as-converted basis, and not as a separate class except as specifically provided herein or as otherwise required by law. The Common Stock may be increased or decreased by the vote of holders of a majority of the Common Stock and Series A Preferred voting together on an as-if-converted basis, and without a separate class vote.

Board Observer; Expenses:

Foundry shall have the right to appoint a representative to observe all meetings of the Board of Directors and committees thereof in a non-voting capacity. The Company shall reimburse expenses of the Series A Preferred directors, observers and advisors for costs incurred in attending meetings of the Board of Directors and other meetings or events attended on behalf of the Company.

Protective Provisions:

For so long as any shares of Series A Preferred remain outstanding, consent of the Required Percentage of the Series A Preferred shall be required for any action, whether directly or through any merger, recapitalization or similar event, that (i) alters or changes the rights, preferences or privileges of the Series A Preferred, (ii) increases or decreases the authorized number of shares of Common or Preferred Stock, (iii) creates (by reclassification or otherwise) any new class or series of shares having rights, preferences or privileges senior to or on a parity with the Series A Preferred, (iv) results in the redemption or repurchase of any shares of Common Stock (other than pursuant to equity incentive agreements with service providers giving the Company the right to repurchase shares upon the termination of services), (v) results in any merger, other corporate reorganization, sale of control, or any transaction in which all or substantially all of the assets of the Company are sold, (vi) amends or waives any provision of the Company’s Certificate of Incorporation or Bylaws, (vii) increases or decreases the authorized size of the Company’s Board of Directors, (viii) results in the payment or declaration of any dividend on any shares of Common Preferred Stock, (ix) issues debt in excess of \$100,000, (x) makes any voluntary petition for bankruptcy or assignment for the benefit of creditors, or (xi) enters into any exclusive license, lease, sale, distribution or other disposition of its products or intellectual property.

Information Rights:	The Company shall deliver customary audited annual, unaudited quarterly and monthly financial statements and budgets to each Investor who purchases at least _____ shares of Series A Preferred (a “ Major Investor ”). Each Investor shall also be entitled to standard inspection and visitation rights.
Registration Rights:	<u>Registration Rights</u> : Two demand registrations, starting the earlier of three years after the Closing or 180 days after the Company’s initial public offering, so long as the anticipated aggregate offering price to the public is not less than \$15,000,000, and unlimited piggy-back and S-3 registration rights with reasonable and customary terms, including cutback rights to no less than 30% (other than in a Qualified IPO), payment of selling stockholder counsel fees up to \$35,000, and no limitations on transfers of registration rights to affiliates and other Major Investors.
<u>Lock-Up Provision</u> :	Investors will be subject to a customary post-IPO lockup provided that all officers, directors, and other 1% shareholders are similarly bound; provided further that any discretionary waiver or termination of lock-up provisions shall also apply pro rata to the Investors.
<u>Other Provisions</u> :	No shareholder of the Company shall be granted registration rights which would reduce the number of shares includable by the holders of the Registrable Securities in a registration without the consent of the holders of at least a majority of the Registrable Securities. The Company shall not require the opinion of Investor’s counsel before authorizing the transfer of stock or the removal of Rule 144 legends for routine sales under Rule 144 or for distribution to partners or members of Investors.
Right of First Refusal:	Prior to a Qualified IPO, Major Investors shall have the right to purchase their pro rata portions (calculated on a fully diluted basis) of any future issuances of equity securities by the Company (with over-allotment rights in the event a Major Investor does not purchase its full allocation), other than Excluded Issuances.

EMPLOYEE MATTERS

Employee Pool:	Prior to the Closing, the Company will reserve as the Employee Pool shares of its Common Stock so that the percentage set forth on page one of the Summary of Terms of its fully-diluted capital stock following the issuance of its Series A Preferred is available for future issuances to directors, officers, employees and consultants.
Stock Vesting:	All stock and stock equivalents issued after the Closing to employees, directors, consultants and other service providers will be subject to vesting provisions below unless different vesting is approved by the Board of Directors (including [the] Series A Director) (the “Required Approval”): 25% to vest at the end of the first year following such issuance, with the remaining 75% to vest monthly over the next three years. The repurchase option shall provide that upon termination of the employment of the stockholder, with or without cause, the Company or its assignee (to the extent permissible under applicable securities law qualification) retains the option to repurchase at the lower of cost or the current fair market value any unvested shares held by such stockholder. The outstanding Common Stock currently held by the Founders will be subject to similar vesting terms [provided that the Founders shall be credited with <i>[one year]</i> of vesting as of the Closing, with their remaining unvested shares to vest monthly over the three years following Closing.] In the event of a merger, consolidation, sale of assets or other change of control of the Company and should a Founder or other executive officer be terminated without cause or constructively terminated within one year after such event, such

person shall be entitled to **[one year]** of additional vesting. Other than the foregoing, there shall be no accelerated vesting except with the Required Approval.

Restrictions on Sales:

The Company's Bylaws shall contain a right of first refusal on all transfers of Common Stock, subject to normal exceptions. If the Company elects not to exercise its right, the Company shall assign its right to the Major Investors. [The Company's Bylaws shall also contain a provision providing that no shares of capital stock other than those held by Major Investors may be transferred except as approved by the Board in its discretion, which shall include, without limitation, refusal to allow any transfer to the extent such transfer would increase the number of stockholders of the Company or require it to register, or register any class of equity securities, with the Securities and Exchange Commission.]

Proprietary Information
and Inventions Agreement

Each current and former officer, employee and consultant of the Company shall enter into an acceptable proprietary information and inventions agreement.

Co-Sale Agreement:

The shares of the Company's securities held by the Founders shall be made subject to a co-sale agreement (with certain reasonable exceptions) with the Investors such that the Founders may not sell, transfer or exchange their stock unless each Investor has an opportunity to participate in the sale on a pro-rata basis.

Voting Agreement:

The Investors, the Founders and each current and future holder of stock or options to purchase 1% or more of the vesting shares shall enter a Voting Agreement to elect members of the Board of Directors as provided above. Additionally, the Voting Agreement shall provide that when a Founder leaves the Company, such Founder shall agree to vote his Common Stock or Series A Preferred (or Common Stock acquired on conversion of Series A or Former Series A Preferred) in the same proportion as all other shares are voted in any vote.

Founders Activities:

Each of the Founders and executive officers shall devote 100% of his professional time to the Company. Any other professional activities will require the approval of the Board of Directors.

OTHER MATTERS

Closing Deliverables:

The Company shall provide prior to the Closing: (i) an updated, post-closing capitalization chart, (ii) a list of corporate officers with both business and personal contact information, (iii) a customary management rights letter to Foundry, (iv) opinion of counsel for the Company, and (v) a detailed budget for the twelve months following closing, acceptable to Investors.

Agreements:

The sale of the Series A Preferred Stock shall be pursuant to a purchase agreement with customary representations and warranties. The purchase agreement, investor rights agreement, co-sale agreement and voting agreement may be amended with the consent of the Company and Investors holding the Required Percentage of the Series A Preferred, with the co-sale agreement and voting agreement requiring the consent of a majority of the Founders then providing services to the Company for any change adversely affecting such Founders.

Assignment:

Each of the Investors shall be entitled to transfer all or part of its shares of Series A Preferred purchased by it to one or more affiliated partnerships or funds managed by it or any or their respective directors, officers or partners, provided such transferee agrees in writing to be subject to the terms of the Stock Purchase Agreement and related agreements as if it were a purchaser thereunder.

Finders:	The Company and the Investors shall each indemnify the other for any broker's or finder's fees for which either is responsible.
Right to Conduct Activities:	The Company and each Investor hereby acknowledge that Foundry is a professional investment fund, and as such invest in numerous portfolio companies, some of which may be competitive with the Company's business. Neither Foundry nor any other Investor shall be liable to the Company or to any other Investor for any claim arising out of, or based upon, (i) the investment by Investor in any entity competitive to the Company, or (ii) actions taken by any partner, officer or other representative of such Investor to assist any such competitive company, whether or not such action was taken as a board member of such competitive company, or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however that nothing herein shall relieve any Investor or any party from liability associated with misuse of the Company's confidential information. The Company's certificate of incorporation shall contain a limited waiver of the corporate opportunity doctrine with respect to matters or transactions presented to the Series A director other than solely in his capacity as a director of the Company.
Legal Fees and Expenses:	The Company shall bear its own fees and expenses and shall pay at the closing (or in the event the transaction is not consummated, upon notice by Foundry that it is terminating negotiations with respect to the consummated transactions) the reasonable fees (not to exceed \$30,000) and expenses of Foundry counsel regardless if any transactions contemplated by this term sheet are actually consummated.
No Shop Agreement:	The Company agrees to work in good faith expeditiously towards a closing. The Company and the Founders agree that until the 60th day from the date first set forth above they will not, directly or indirectly, (i) take any action to solicit, initiate, encourage or assist the submission of any proposal, negotiation or offer from any person or entity other than the Investors relating to the sale or issuance, of any of the capital stock of the Company or the acquisition, sale, lease, license or other disposition of the Company or any material part of the stock or assets of the Company, or (ii) enter into any discussions, negotiations or execute any agreement related to any of the foregoing, and shall notify the Investors promptly of any inquiries by any third parties in regards to the foregoing. Should both parties agree that definitive documents shall not be executed pursuant to this term sheet, then the Company shall have no further obligations under this section.
Confidentiality:	This term sheet and any related discussions and correspondence are to be held in strict confidence by the Company and may not to be disclosed by the Company to any party (other than counsel to, and the accountants of, the parties to the extent reasonably necessary for such persons to render advice in connection with the proposed transaction and other than to existing stockholders of the Company) without the prior written approval of Foundry.
Governing Law:	This summary of terms shall be governed in all respects by the laws of the State of Delaware.
Foundry Counsel:	Cooley LLP

DEEP DIVE INTO TERM SHEET CLAUSES

ECONOMIC TERMS OF THE TERM SHEET

Valuation/Price

Either \$/share of original purchase price based on a fully diluted pre-money²² valuation of \$XM, fully diluted post-money valuation of \$YM. Fully diluted meaning conversion of all outstanding preferred stock (stock options & warrants). Or \$XM aggregate financing representing X% ownership on a fully diluted basis, including shares for ESOP.

Valuation terminology can be a trap so VC's can sneak in lower valuations by the following:

- a) Pre-money and post money valuations – ambiguity during initial negotiations
- b) Dilution by ESOP upfront, excessive ESOP provisions
- c) Warrants (impacts allocation of provisions during liquidity event)

VCs value companies based on:

- a) Stage of company (early stage has low price point)
- b) Competition with other funding sources
- c) Experience of entrepreneur and leadership team
- d) VC's natural entry point (e.g. price range, strategy)
- e) Numbers (e.g. cash burn, EBITD, market)
- f) Current economic climate (lower valuations during bear market)

Liquidation Preference

Liquidation impacts how proceeds are shared in a liquidity event (e.g. mergers, acquisitions, changed control of a company/ company sale) and is most important when sale proceeds are less than the amount invested. It is made up of two parts:

- a) Actual preference:
 - A multiple of the original investment/share returned to the investor before common stock receives any consideration (normally x1).
- b) Participation:
 - a. Full participation stock receives participation amount then a share of liquidation proceeds on an “as-converted basis” (converted to common stock based on a conversion ratio).
 - b. Capped participating stock receives liquidation proceeds on an “as-converted basis” until a certain multiple return is reached
 - c. No participation stock receives liquidation preference or stocks convert into shares on an “as-converted basis”.

The participation feature has more impact at low outcomes and matters more as more money is raised (Series B & C). It is recommended early stage financings have simple liquidation preference and no participation. As founders

²² Pre-money = before investment valuation; Post-money = Pre-money valuation + Investment (Feld & Mendelson, p.36)

usually have common stock and VCs have preferred stock, the greater the liquidation preference, the lower the potential value of the management or employee equity.

Pay to Play

Relevant in down-round financing, pay to play ensures VC investors keep participating pro-ratably in future financings in order not to have their preferred stock converted to common stock. NB: This is not always possible for angels and CSEF. Need to avoid pay to play scenario where VC has right to force recapitalization of company (financing at \$0 pre-money valuation) if fellow investors don't play into a new round. This is bad for less sophisticated angel investors (F&F) if they don't have the understanding or resources to back up their initial investment with follow on investments.

Vesting

Typically stock and options vest after 4 years, forcing management/ staff to stick around for 4 years to own all of their stock/options. Vesting is seen as a way for VCs to control entrepreneurs. Industry standard vesting for early stage companies is a 1 year cliff with monthly vesting thereafter for a total of 4 years (i.e. 25% after 1 year, 37.5% after 18 months, etc.). Vesting provisions align the founder-employees and investor. Unvested founders stock simply vanishes and unvested employee stock returns to the ESOP. There are two vesting schedules upon mergers:

- a) Single trigger acceleration (vesting upon merger)
- b) Double trigger acceleration (vesting upon being acquired and fired) (most common)

Time to exit has a huge impact on vesting's relevance. Most start-ups reach an exit point at 5-7 years, so vesting must be 100% by then.

Employee Share Option Pool (ESOP)

An ESOP reserves shares for future issuance to employees. The ESOP affects the capital structure of the company. VCs often sneak in additional economics for themselves by increasing the amount of the ESOP on a pre-money basis:

Anti-Dilution

Used to protect investors in the event a company issues equity at a lower valuation than in previous financing rounds.

CONTROL TERMS OF THE TERM SHEET

Board of Directors

Term sheet will state process for electing directors, size of the board, members (who they will represent). An early stage board will typically be comprised of 5 members (founder, CEO, VC, second VC and an independent NED). Mature boards are more likely to have 7-9 members with more NEDs. It is for the Board members to be paid cash but usually compensated with stock options and invited to invest in the company.

Protective Provisions

These are veto rights of the investors on certain actions by the company. Consent of investors is required to: change terms of stock owned by VC; authorize creation of more stock; issue stock senior or equal to VCs; buy

back any common stock; sell the company; change the Certificate of Incorporation or Bye-Laws; change the size of the board of directors; pay or declare a dividend; or to borrow money.

In future financial rounds it is preferred to keep the same protective provisions for Series B investors so they vote alongside the original investors as a single class (i.e. keep investors aligned). Protective provisions prevent ambiguity in roles, control and rules of engagement. These provisions can be a useful lever to obtain a higher price for the company (i.e. need VC consent).

Drag Along Agreement

This clause gives a subset of the investors the ability to force all other investors and founders to sell the company. Acquisition doesn't need unanimous consent of shareholders, but these rules vary by jurisdiction.

Conversion

Preferred shareholders have the right, at any time, to convert their shares to common stock. In an IPO of a venture-backed company, the investment bankers will almost always want to see everyone convert to common stock at the time of the IPO.

OTHER TERMS OF THE TERM SHEET

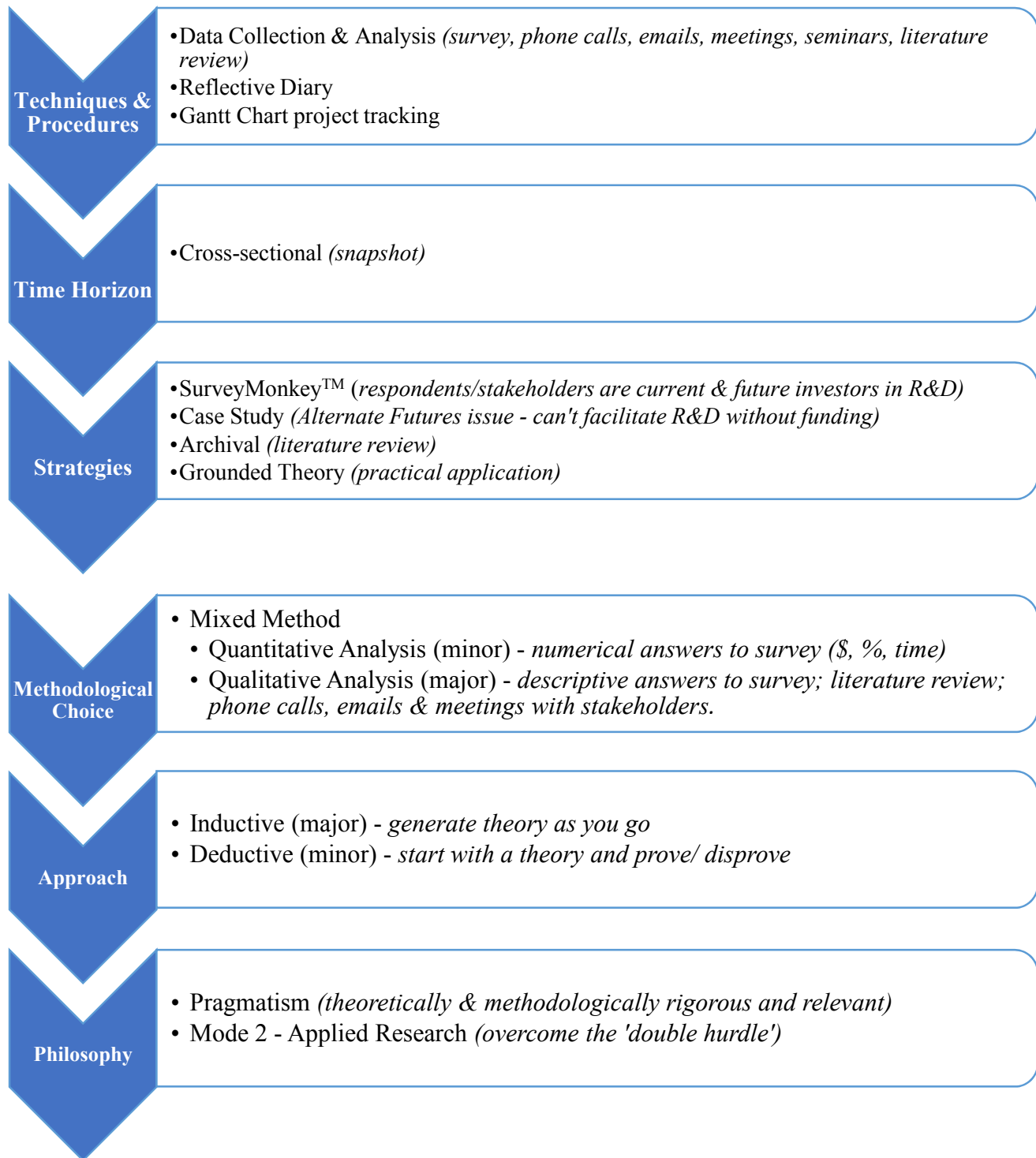
Other terms are not as important as economics and control clauses but they include:

- a) Dividends (paid as shares will cause dilution);
- b) Redemption rights (guaranteed investor exit path by creating a liability on the balance sheet as need cash to pay out redemption rights);
- c) Conditions precedent to financing (term sheets are often non-binding but some terms will be binding);
- d) Information rights (outlines information VC has rights to and timeframe to supply it, requires confidentiality clause);
- e) Registration rights (investors rights in IPO);
- f) Right of first refusal (investors rights in future financing);
- g) Voting rights (define how common and preferred stock related to each other);
- h) Restriction on sales (parameters associated with selling shares in private company);
- i) Propriety information (investors check that company owns IP);
- j) Inventions agreement (investors check that company owns IP);
- k) Co-sale agreement (if founder sells shares so can investors);
- l) Founders activities (100% professional time to company);
- m) IPO shares purchase (investor ensuring right to purchase shares in IPO, investment bankers push back on this clause);
- n) No-shop agreement (cannot shop the deal after term sheet signed, should be time-based 45-60 days to VC moves quickly);
- o) Indemnification (D&O insurance);
- p) Assignment (VC share transfer to affiliated partnerships/funds).

Appendix D Approved Project Proposal (separate attachment)

Appendix E Signed Consent Forms (separate attachments)

Appendix F The Project ‘Research Onion’



(Concept Source: Saunders, Lewis & Thornhill 2012, p. 128).

Appendix G SurveyMonkey Raw Data (19/1/15-20/2/15)

Spreadsheet <Appendix G_Survey Data22 Feb 2015.xls>

Survey Results (Closed 20 Feb) (n=16)

Survey unique links sent to 24 stakeholders. Realised 5 were not "informed" (email communication)

Invited Informed Respondents = 19; Received Responses = 16 (13 unique links + 3 generic links)

Response Rate = $16/19 = 84.2\%$

Appendix H Survey Questions (SurveyMonkey™)

1. Please select the type of investor you identify as (you may select more than one):

- ☐ Please select the type of investor you identify as (you may select more than one): Angel investor
- ☐ Venture capitalist
- ☐ Crowdfunding portal

2. What sector do you predominantly invest in?

- ☐ What sector do you predominantly invest in? Resources
- ☐ Property and/or Infrastructure
- ☐ Health
- ☐ Technology
- ☐ Arts and/or Entertainment

[illegible]

Please explain why:

3. What kind/stage of projects do you invest in most often?

What kind/stage of projects do you invest in most often? Seed

Start-Up

Development

Expansion

Late Stage/Turnaround (i.e. fix ailing companies then sell)

Other (please specify)

4. What returns do you expect on your investment?

[illegible]

Please specify required returns if greater than 200%.

*

5. How much do you usually invest (in each project)?

	\$0 - \$50,000	\$50,001 - \$100,000	\$100,001 - \$250,000	\$250,001 - \$1,000,000	>\$1,000,001 (please state how much)
Seed	☐	☐	☐	☐	☐
Start-up		☐	☐	☐	☐
Development	☐	☐	☐	☐	☐
Specific value					

*

6. How long are you willing to invest for a particular project?

	0-1 years	1.1-3 years	3.1-6 years	6.1-8 years	> 8.1 years
Seed	☐	☐	☐	☐	☐
Start-up		☐	☐	☐	☐
Development	☐	☐	☐	☐	☐

7. What are your additional investment requirements?

- ☐ What are your additional investment requirements? Rights to intellectual property/patents/licences
- ☐ Collateral/security from funded party
- ☐ Exclusive use (of the product/service created)/first use of new products
- ☐ Equity (preferred stock)/share of profits
- ☐ Clear exit strategy/Exit plan (payout policy)/planning for liquidity event (IPO or sale)
- ☐ Board seat/control

Please add comments about negotiable areas and deal-breakers. Please also add comments on the level of detail required at the pitch, follow up and due diligence stages.

The following questions relate to discovery/due diligence prior to an investment decision.
Please select which items you must verify for each stage or type of investment.

8. Due Diligence:

	Angel	Venture capitalist	Crowdfunder
Execution plan (realistic, risks managed)	☐	☐	☐
Business plan (schedule, milestones, roles and responsibilities, investment summary)	☐	☐	☐
Financial plan (DCF model, Balance sheet, NPV, IRR, Market valuation, Monthly burn rate, Time to break even, 3-5 year projections, Share price, Historical financing, Future financing strategy)	☐	☐	☐

Please add comments here:

Will you enter into a Non Disclosure Agreement? Yes
No

Please comment:

Strongly agree (1) 2 3 4 Strongly disagree (5)

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Crowdfunding success hinges on social-media presence

Please comment:

Strongly agree (1)234Strongly disagree (5)

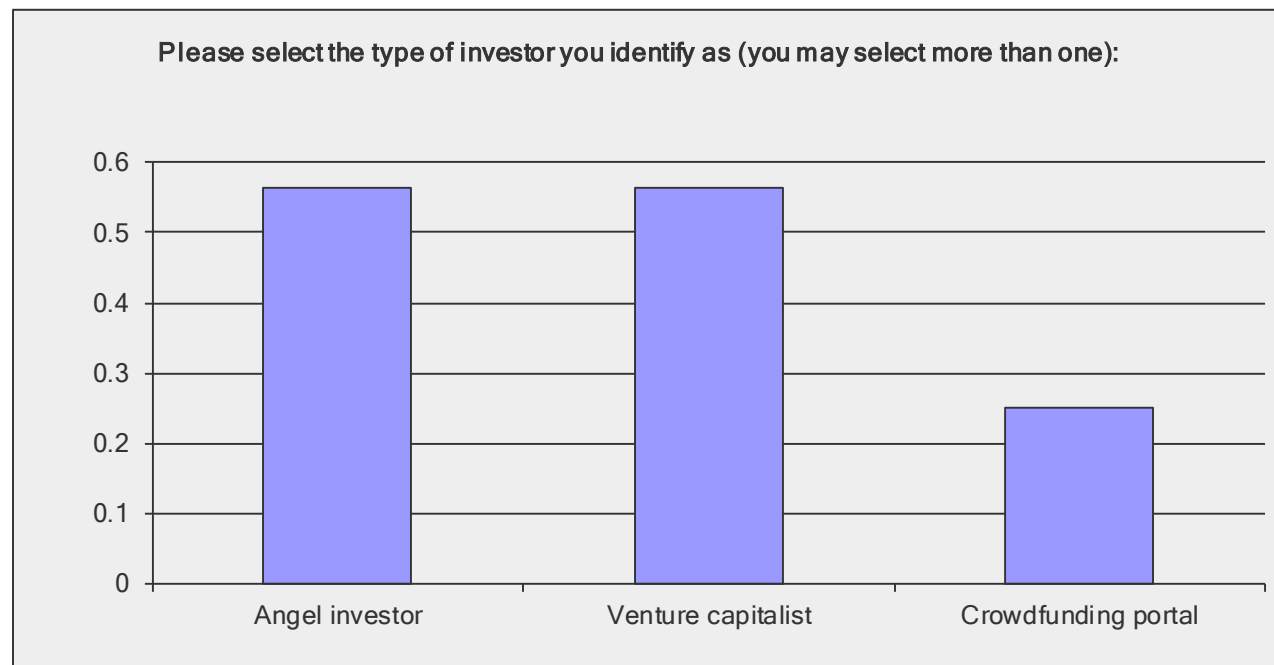
Done

Powered by **SurveyMonkey**

Appendix I Survey Collated Results

Q1: Please select the type of investor you identify as (you may select more than one):

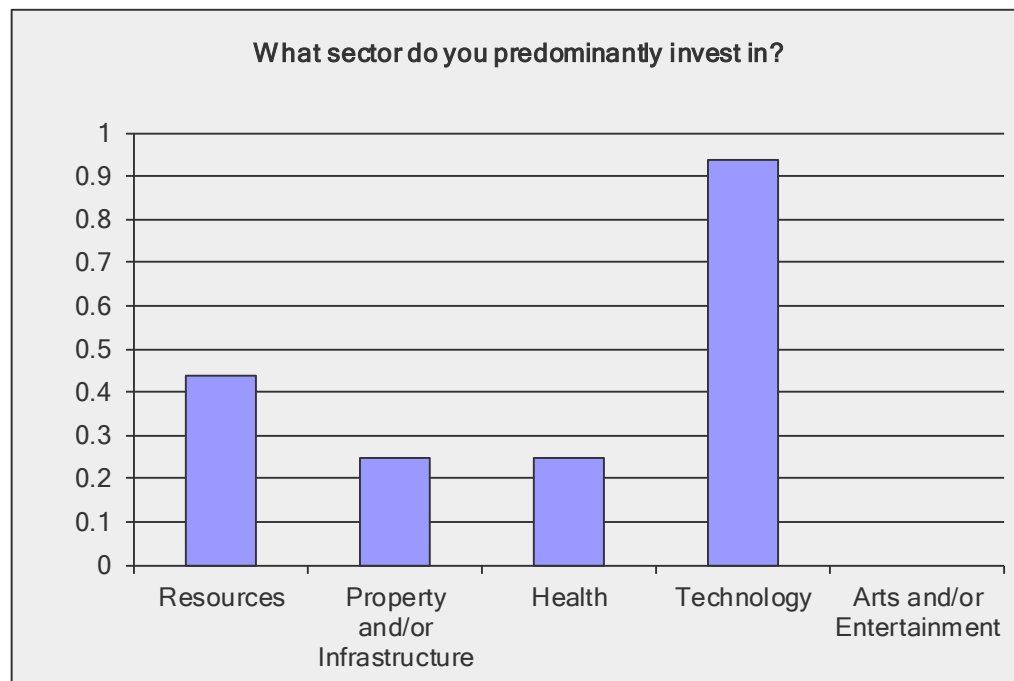
Answer Options	Response Percent	Response Count
Angel investor	56.3%	9
Venture capitalist	56.3%	9
Crowdfunding portal	25.0%	4
<i>answered question</i>		16
<i>skipped question</i>		0



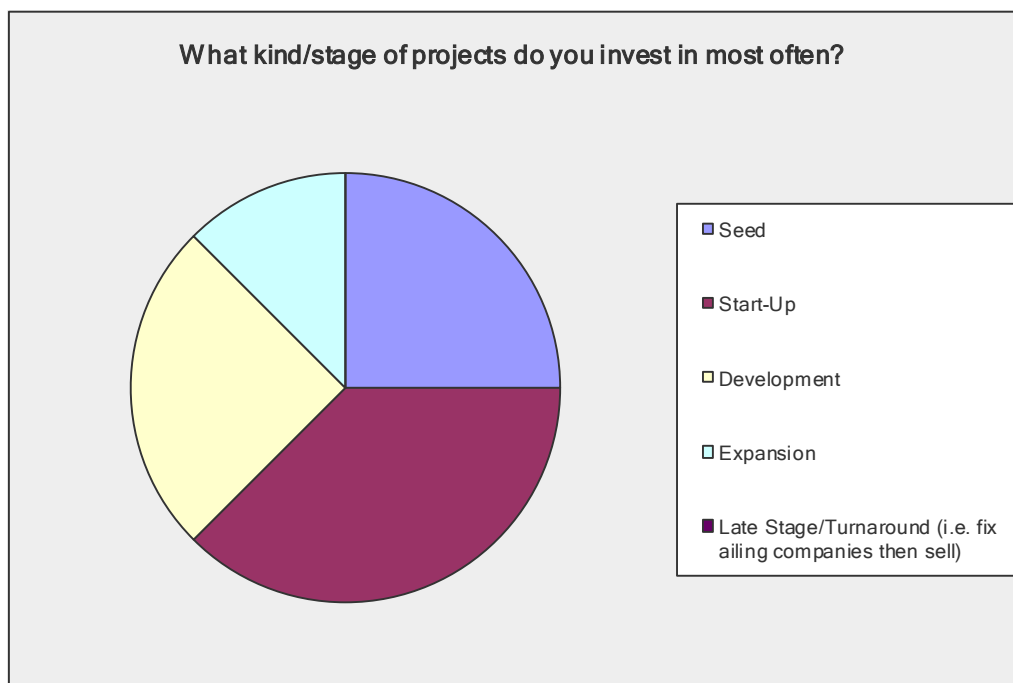
The risks and requirements of non-traditional funding sources for R&D in Australia

Q2: What sector do you predominantly invest in?

Answer Options	Response Percent	Response Count	VC BA CF	Comments
Resources	43.8%	7		Perth is resources sector hub
Property and/or Infrastructure	25.0%	4		No angels in property/infrastructure
Health	25.0%	4		Biotech (expensive, long term) so VCs best
Technology	93.8%	15		Tech is scalable/ high growth (global market)
Arts and/or Entertainment	0.0%	0		
Please explain why:		11		
		answered question	16	
		skipped question	0	



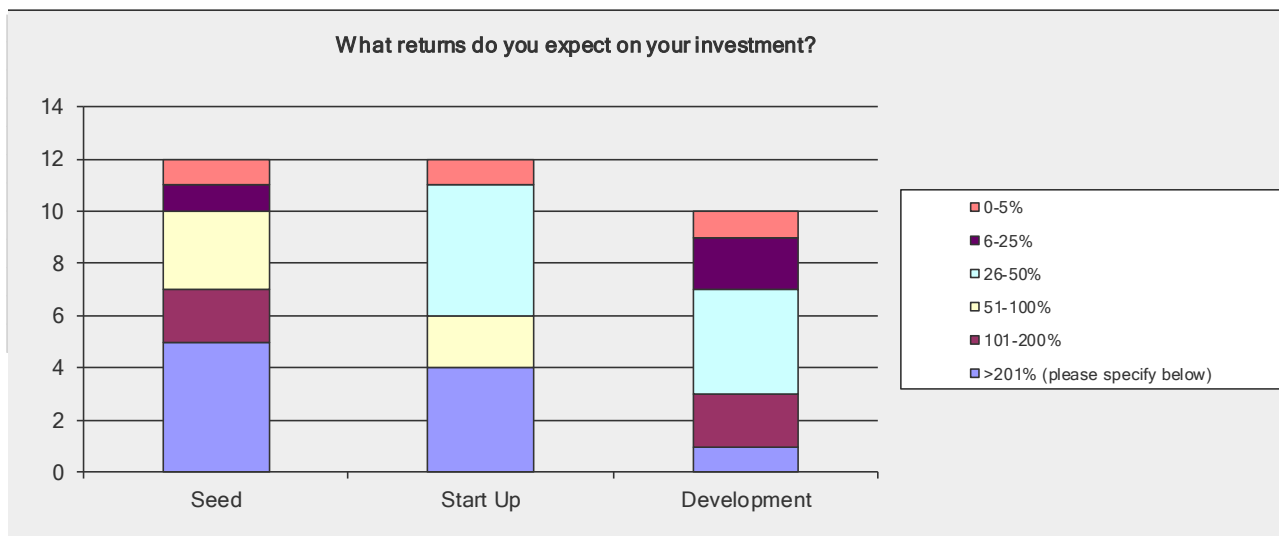
Q3: What kind/stage of projects do you invest in most often?					
Answer Options	Response Percent	Response Count	VC	BA	CF
Seed	25.0%	4	63%	100%	100%
Start-Up	37.5%	6	88%	60%	100%
Development	25.0%	4	63%	60%	67%
Expansion	12.5%	2			
Late Stage/Turnaround (i.e. fix ailing companies then	0.0%	0			
Other (please specify)		3			
answered question		16			
skipped question		0			



The risks and requirements of non-traditional funding sources for R&D in Australia

Q4: What returns do you expect on your investment?

VC							Comments
	0-5%	6-25%	26-50%	51-100%	101-200%	>201%	
Seed				2	1	2	Venture capital expects highest returns because: - most bargaining power & control - large amounts, long time invested - information asymmetry in VC favour (finance & legal expertise)
Start Up			4	1		2	
Development		2	1		1		
BA							
	0-5%	6-25%	26-50%	51-100%	101-200%	>201%	
Seed		1			1	3	Angels expect high-medium returns because: - similar to VC - trade sale exit value < IPO value (less than VC exit value)
Start Up				1		2	
Development			1		1	1	
CF							
	0-5%	6-25%	26-50%	51-100%	101-200%	>201%	
Seed	1			1			Crowdfunding expects lower returns because: - less bargaining power & control (e.g. dilution) - less information on risks when buy-in - Crowdfunders: >=30% ROI per annum
Start Up	1		1				
Development	1		1				



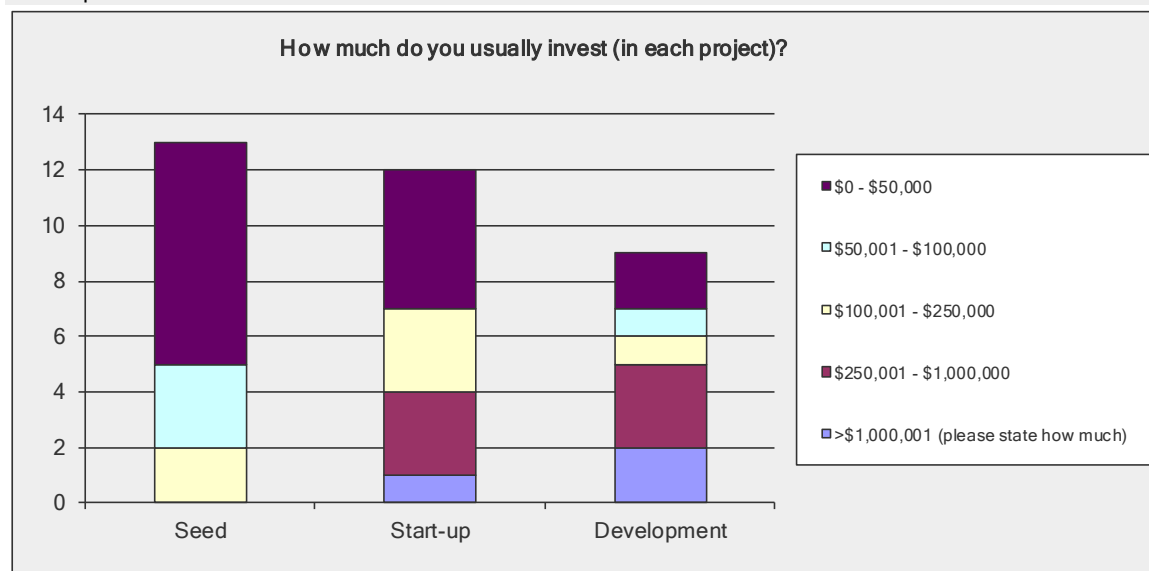
Comments

- seed: highest risk, highest return
- start-up: next highest risk, next highest return
- decreasing expected return with increased maturity (lower risk)
- the bigger the VC fund, the bigger the expected return (3-5 x)
- the bigger the VC fund, the larger the amount invested
- Angels and VCs have similar multiples expected from the different stages
 - Seed: 10-20x (Mostly angels & CF)
 - Startup: 5-10x (Angels, VC and CF)
 - Development: 4-5x (mostly VC)

The risks and requirements of non-traditional funding sources for R&D in Australia

Q5: How much do you usually invest (in each project)?

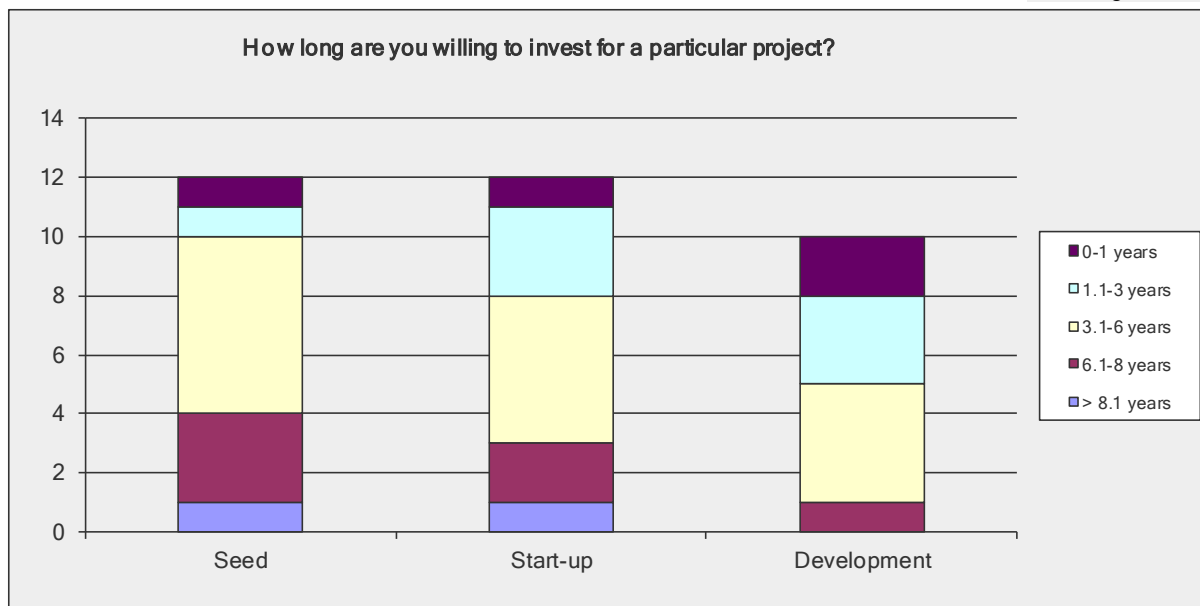
	VC					Comments
	\$0 - \$50,000	\$50,001 - \$100,000	\$100,001 - \$250,000	\$250,001 - \$1,000,000	>\$1,000,001	Venture capital
Seed	1	3	1			- Amount invested increases as stage develops (less risk, prototypes)
Start Up	1		3	2	1	- VCs invest >2 x angels & in more mature ventures
Development				3	2	- YUUWA: \$3-20M
	BA					Angels
	\$0 - \$50,000	\$50,001 - \$100,000	\$100,001 - \$250,000	\$250,001 - \$1,000,000	>\$1,000,001	
Seed	5					- Angels focussed more on seed
Start Up	2					-
Development	1	1				-
	CF					Crowdfunding
	\$0 - \$50,000	\$50,001 - \$100,000	\$100,001 - \$250,000	\$250,001 - \$1,000,000	>\$1,000,001	
Seed	2		1			- Canadian crowdfunders are more mature than Australian ones
Start Up	2			1		- Canadian crowdfunders invest larger sums for longer
Development	1		1			- Austequity crowdfunders (ASSOB, FatHen) are small scale



The risks and requirements of non-traditional funding sources for R&D in Australia

Q6: How long are you willing to invest for a particular project?

VC						Comments
	0-1 years	1.1-3 years	3.1-6 years	6.1-8 years	> 8.1 years	Venture capital
Seed	1		1	3		- YUUWA invests in startups 6-8 yrs
Start Up	1	2	2	2		- Scale invests 3-6 yrs
Development	1	1	2	1		- Anonomous VCs <1 yr
BA						Angels
	0-1 years	1.1-3 years	3.1-6 years	6.1-8 years	> 8.1 years	
Seed		1	4			- Shorter times when more developed ventures
Start Up		1	2			- Average around 3-6 yrs for seed to startup
Development	1	2				-
CF						Crowdfunding
	0-1 years	1.1-3 years	3.1-6 years	6.1-8 years	> 8.1 years	
Seed			1		1	- Canadian crowdfunders invest for longer timeframe than Aust
Start Up			1		1	- short termist crowd - exit issues if no 2ndy market!
Development			2			- Angels & VCs won't buyout CF shareholders as "sunk costs"
						- CF long term focus on seeds/startup fills a gap

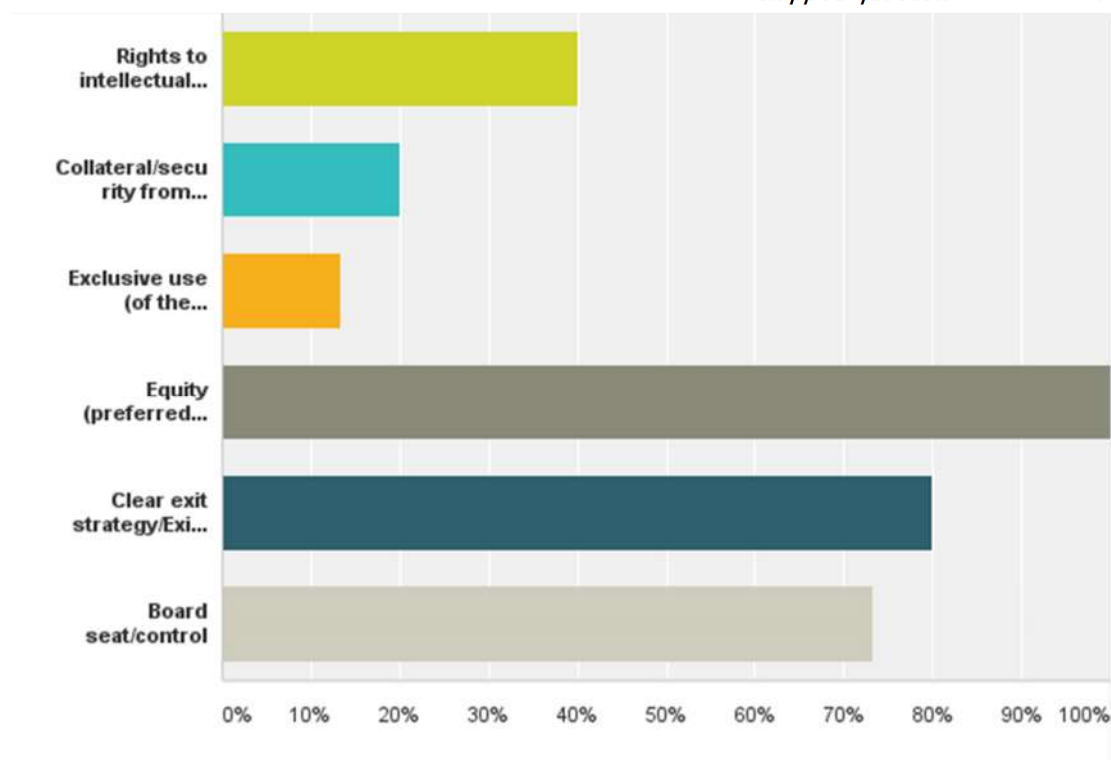


The risks and requirements of non-traditional funding sources for R&D in Australia

Q7: What are your additional investment requirements?

Answer Options	Response Percent	Response Count	Comments
Rights to intellectual property/patents/licences	40.0%	6	- All investors value control, an exit strategy and reward/ payout
Collateral/security from funded party	20.0%	3	- Half value IP. Comments made by VCs about "ability to execute" as the value creator
Exclusive use (of the product/service created)/first use of new products	13.3%	2	- Exclusive use of product & collateral not seen as highly important
Equity (preferred stock)/share of profits	100.0%	15	
Clear exit strategy/Exit plan (payout policy)/planning for liquidity event (IPO or sale)	80.0%	12	
Board seat/control	73.3%	11	

answered question 15
skipped question 1



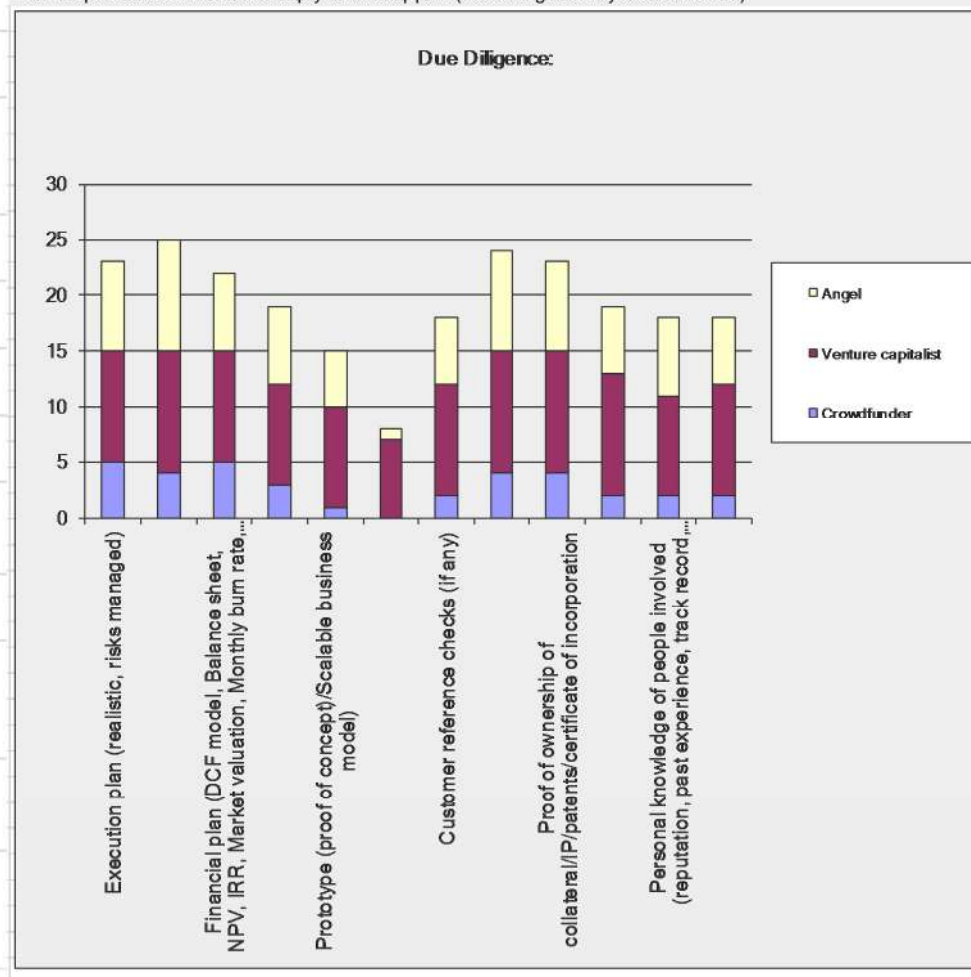
The risks and requirements of non-traditional funding sources for R&D in Australia

Q8: Due Diligence:

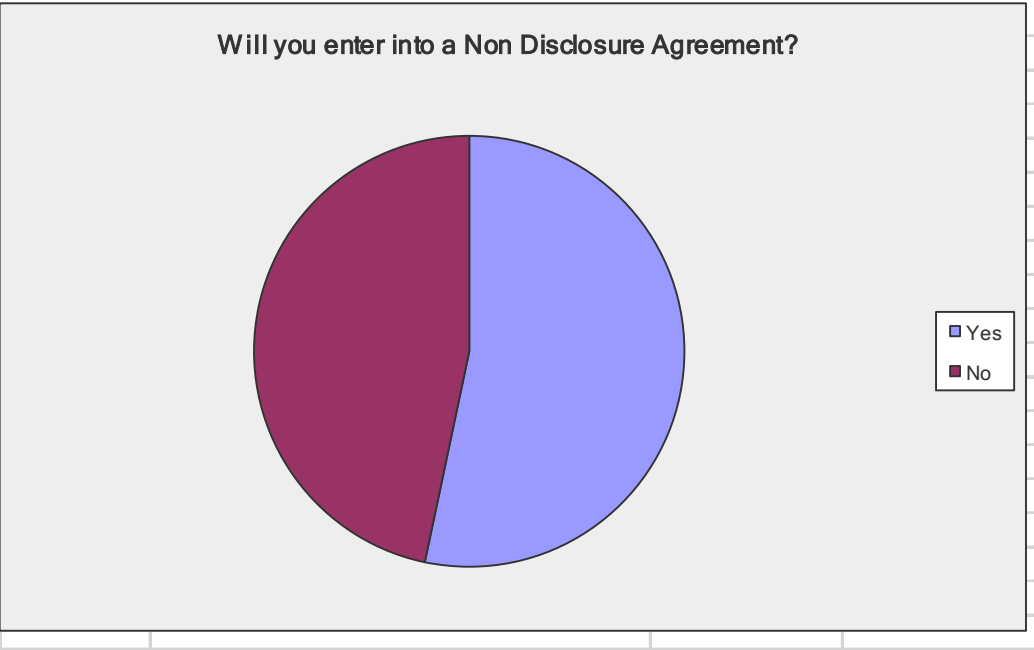
	Angel	Venture capitalist	Crowdfunder	Total Respondents
Execution plan (realistic, risks managed)	57.14% 8	71.43% 10	35.71% 5	14
Business plan (schedule, milestones, roles and responsibilities, investment summary)	66.67% 10	73.33% 11	26.67% 4	15
Financial plan (DCF model, Balance sheet, NPV, IRR, Market valuation, Monthly burn rate, Time to break even, 3-5 year projections, Share price, Historical financing, Future financing strategy)	50.00% 7	71.43% 10	35.71% 5	14
Commercialisation plan (contracts, strategic alliances/affiliations)	50.00% 7	64.29% 9	21.43% 3	14
Prototype (proof of concept)/Scalable business model)	45.45% 5	81.82% 9	9.09% 1	11
Supply chain support	14.29% 1	100.00% 7	0.00% 0	7
Customer reference checks (if any)	46.15% 6	76.92% 10	15.38% 2	13
Term sheet, Capitalisation table, Definitive agreements, Pre-money and post-money valuation	60.00% 9	73.33% 11	26.67% 4	15
Proof of ownership of collateral/IP/patents/certificate of incorporation	57.14% 8	78.57% 11	28.57% 4	14
Marketing research (size of potential market/"target beach-head market"/competitive comparison) and value proposition (from customer perspective)	42.86% 6	78.57% 11	14.29% 2	14
Personal knowledge of people involved (reputation, past experience, track record, connections, referrals)	53.85% 7	69.23% 9	15.38% 2	13
Governance (Board membership, project management, reporting, stage-gated approvals/incremental funding, conflict resolution process)	50.00% 6	83.33% 10	16.67% 2	12

Comments

- DD Scrutiny highest stringency for VC's (75% of items listed). Use external advice (legal, accountant, others)
- DD Scrutiny medium stringency for Angels (50% of items listed)
- DD Scrutiny lowest stringency for Crowdfunding poertals (25% of items listed)
- CF requires no evidence of supply chain support (VC & Angels may seek this info)



Q9: Will you enter into a Non Disclosure Agreement?			
Answer Options	Response Percent	Response Count	Comments
Yes	53.3%	8	- NDA's are not legally binding, no teeth
No	46.7%	7	- YUUWA & Scale VCs state "execution is important" (not just the idea)
Please comment:		8	
		<i>answered question</i>	15
		<i>skipped question</i>	1

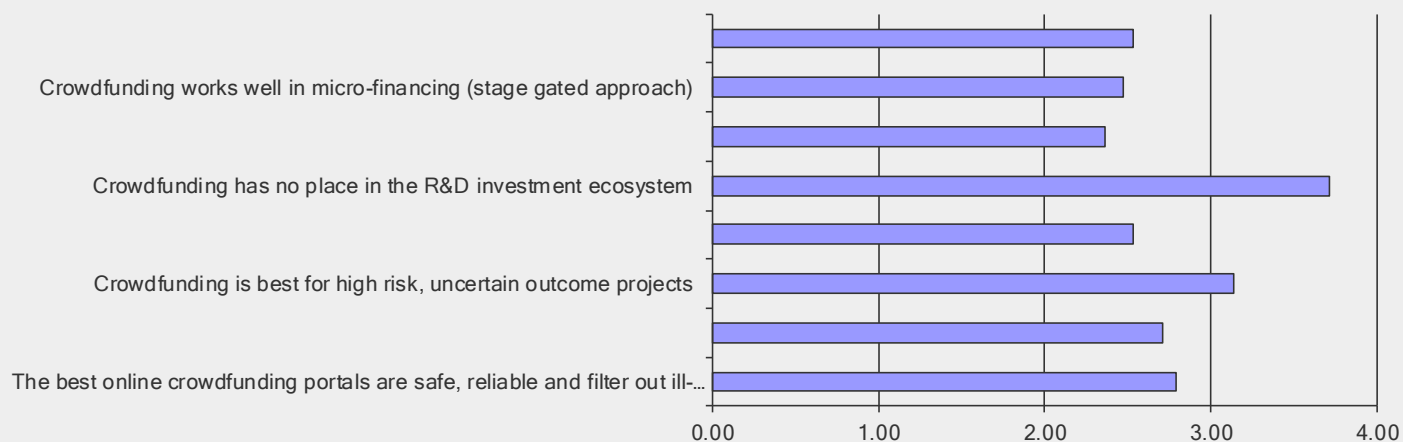


The risks and requirements of non-traditional funding sources for R&D in Australia

Q10: Please select the statements that best describe your perception of Equity Crowdfunding:

Answer Options	Strongly agree (1)	2	3	4	Strongly disagree (5)	Rating Average	Response Count	Comments
1 The best online crowdfunding portals are safe, reliable and filter out ill-prepared start ups	3	1	7	2	1	2.79	14	- Canadian Crowdfunder respondent agreed
2 Crowdfunders' rights will be adequately protected once Australian legislation is enacted	2	2	8	2	0	2.71	14	- with all statements, except Statement (5) (mature)
3 Crowdfunding is best for high risk, uncertain outcome projects	2	3	3	3	3	3.14	14	- Remainder of respondents neutral on average
4 Crowdfunders have no rights (i.e. it's a donation or a reward with no recourse)	3	5	4	2	1	2.53	15	- which reflects immaturity/ emergence of CSEF
5 Crowdfunding has no place in the R&D investment ecosystem	0	3	2	5	4	3.71	14	- in Australia (little public/ general knowledge)
6 Crowdfunding has the potential to supplement Angel and Venture Capital	6	3	1	2	2	2.36	14	- Some VC's sceptical of CSEF. Fearful of competition
7 Crowdfunding works well in micro-financing (stage gated approach)	4	6	2	0	3	2.47	15	-
8 Crowdfunding success hinges on social-media presence	3	6	3	1	2	2.53	15	-
							4	-
answered question							15	
skipped question							1	

Please select the statements that best describe your perception of Equity Crowdfunding:



Appendix J Legislation

Australian Legislation	VC	Angels	CSEF
Organizations subject to Australian laws: Corporations Act, ASIC Act, Trade Practices Act, etc.			
Sophisticated Investor: Sophisticated Investors are high net worth individuals. Unsophisticated are Retail Investors. A sophisticated investor is an individual with net assets of >\$2.5M or with gross income for each of the last two years of >\$250k (Corporate Regulations Reg.6D.2.03, s708(8)-(12)).	VC clients	Angels use own money	Both sophisticated and unsophisticated for ASSOBS & FatHen. Generally not yet legal to offer CSEF to unsophisticated investors.
Australian CSEF legislation (due to be enacted late 2015): Likely to limit capital raising to <\$2Mpa & any individual to <\$2,500pa/start-up for total of \$10kpa. Requires signature of risk acknowledgement statements prior to investment and cooling off and other withdrawal rights.	n/a	n/a	
Proprietary companies: 1) Shareholder cap: <50 non-employee shareholders 2) Prohibitions on proprietary companies making public offers of equity in Corporations Act 2001, s113(3) subject to exceptions for offers to existing shareholders and employees of the company or subsidiary. 3) Exemption from prohibition on public offers via the Small Scale Personal Offers Exemption (i.e. no more than \$2M can be raised in any 12 month period from no more than 20 investors (Section 708(1)-(7) Corporations Act, 20/12 Rule)). ASIC Class Order 02/273 ‘Business Introduction and Matching Services’ permits raising <\$5M, with restrictions on advertising a small scale offer relaxed but the ceiling of 20 investors in any 12 month period remains. There are also exemptions for offers to sophisticated, experienced or professional investors. A sophisticated investor is an individual with net assets of >\$2.5M or with gross income for each of the last two years of >\$250k (Corporate Regulations Reg.6D.2.03, s708(8)-(12)).			ASSOB model
Exempt unlisted public company status: A Public Company structure, eligibility outlined in Corporations Act Section 601BC , is subject to disclosure requirements (prospectus/ offer information statement (OIS)); compliance requirements (corporate governance, financial reporting); civil/criminal liability if prospectus/OIS contains materially misleading statements/omissions. Due diligence is a defense. The company’s Constitution must define how and to what extent member’s liability is limited.			FatHen model
Intermediary License Requirements: The need to hold an AFSL (defined in Corporations Act 2001, s761A to mean providing a financial service. Provision of a financial service is defined in s766A) and comply with AFSL licensing obligations if they meet the definition of carrying on a financial services business, or to hold an Australian Market Licence (AML) and comply with AML licensing obligations if they fall within the definition of conducting a financial market (defined in Corporations Act 2001, s767A. Under s911A(2)(d), an intermediary that is the holder of an AML is not required to also hold an AFSL). A CSEF platform needs one of the following licenses and is subject to consumer protection provisions in Part 2 Division 2 of ASIC Act : 1) Australian Financial Services License (AFSL) issued by ASIC s911A ; or 2) Australian Market License (AML) issued by the Minister on advice by ASIC s791A .	AFSL/ AML YUUWA has an AFSL		FatHen does not have its own AFSL but uses another entity’s AFSL as a Third Party. ASSOB has an AFSL
Managed Investment Scheme (MIS) Used to facilitate online equity offers. Intermediary would need to comply with MIS requirements in Corporations Act 2001, Chapter 5C , including having a responsible entity that is a public company with an AFSL, disclosure and compliance obligations. Must be a member of an external dispute resolution scheme, undertake limited due diligence and provide risk warnings to investors, provisions to prevent certain conflicts of interest, prohibitions on offering investment advice and on lending to CSEF investors. It must have available adequate financial, human and technical services, adequate risk management systems, an internal dispute resolution process, be a member of an external dispute resolution scheme and have professional indemnity insurance	AML most suited to stock brokers.	May apply to some angel co-investment funds.	
Section 700(4) of the Corporations Act Applies to offers of securities that are received in this jurisdiction, regardless of where any resulting issue, sale or transfer occurs			
Part 2F.2 of the Corporations Act (regarding CSEF) The “ <i>class of equity held by the promoter may have voting, dividend and/or other rights which are not available to the class of equity held by CSEF investors</i> ”. Compare this to ASX Listing Rule 6.9 for public, listed companies where one share equals one vote (potentially lucrative arrangement for portals/founders). When seeking capital from angels or VCs they will “ <i>demand preferential share rights as a condition of providing funds</i> ”			
(Sources: Anderson 2014; CAMAC 2013; Maguire 2014; OICU-IOSCO 2014; Treasury 2014; ASSOBS and FatHen websites 2015)			

Appendix K Crowdfunding Models

General crowd funding models are listed below.

Table K.1 Crowdfunding Models

Model	Description
All or Nothing	Target level must be reached or no money changes hands
Keep All/ Flexible	Set target level but keep funds even if target not reached
Tipping Point	Point at which project ‘tips’ such that enough money is raised to provide backers with rewards.

(Source: Maguire 2014)

CROWDFUNDING PORTAL TYPES

Funds are raised via secure online platforms for various purposes, grouped depending on whether it is for-cause (community) or for-profit (financial return).

1. COMMUNITY CROWDFUNDING

Community crowdfunding models are listed in the table below. These are outside project scope.

Table K.2 Community Crowdfunding Models

Model	Description
Reward/ Prepayment	Receive a reward in exchange for support.
Donation	Relies on moral/ interest/ ethical motivations with no rewards for contribution.
Royalty	Offers royalty or part of profits of company.
Subscription	Supporters pledge weekly/monthly /quarterly/ annual subscription until “opting out”.

(Source: Maguire 2014; CAMAC 2013; Jofre 2014)

2. FINANCIAL RETURN CROWDFUNDING

Financial Return Crowd Funding (FRCF) started in the UK in 2006, spread to the US in 2007 and China in 2009 as a source of funds for SMEs. It has increased rapidly over the last five years, reaching in excess of US\$6.4B globally due mainly to technological innovation and the 2008 GFC. FRCF can arguably be classified as securities and is within the securities market regulators’ jurisdiction (OICU-IOSCO 2014). A meaningful secondary market does not currently exist (Treasury 2014).

A. PEER TO PEER (P2P) LENDING

Peer to peer lending (includes micro-finance) sites expect repayment of a loan with maturity averaging three years (Maguire 2014). In Australia, P2P platforms need to be registered and have a license specifically for financial services (OICU-IOSCO 2014). There are two P2P models (Jofre 2014, p. 19):

- 1) Client segregated account model (platform originated loan);
- 2) Notary model (bank originated loan).

Peer-to-peer (P2P) lending has become established in several countries, including the US and UK, and a small number of P2P platforms have commenced operations in Australia. P2P lending is outside this project scope as CSEF is anticipated to be most relevant to funding of Australian R&D, supplementing angels and VCs.

B. CROWD SOURCED EQUITY FUNDING (CSEF)

Australia’s Corporations and Markets Advisory Committee (CAMAC 2013) definition of CSEF is “*to raise early-stage funding through offering equity interests in the business to investors online, typically through a crowdfunding platform website which serves as an intermediary between investors and the business*”. Financial returns come in the form of dividends and/or capital growth (IOICU-IOSCU 2014).

By formalizing and extending the “friends, family and fans” (FF&F) investor base, CSEF could allow budding entrepreneurs to raise funds from investors globally and obtain real-time validation of the product market ensuring they would have a stronger base to approach angel investors or venture capitalists in subsequent funding rounds (Featherstone 2014). However, CSEF investments are “*largely illiquid, reducing the ability of investors to exit their investment and may be at greater risk of dilution from later capital raisings*” (Treasury 2014, p.5
