Equity Capital Raising by Small Technology-Based Firms in Australia from Venture Capital and Angel Investor Sources

Submitted in part satisfaction of the Requirements for the degree of Doctor of Business Administration at Charles Sturt University

July 2011

Robert George Sauer BA LLB, (Syd); M Com (NSW).
Certificate of Authorship

I ROBERT GEORGE SAUER hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Charles Sturt University or any other educational institution, except where due acknowledgement is made in the thesis. Any contribution made to the research by colleagues with whom I have worked at Charles Sturt University or elsewhere during my candidature is fully acknowledged.

I agree that this thesis be accessible for the purpose of study and research in accordance with the normal conditions established by the Executive Director, Library Services or nominee, for the care, loan or reproduction of theses, subject to confidentiality provisions as approved by the University.

....................................................

Date...........................................

JULY 21 2011
Abstract

Small technology-based firms are important contributors to economic growth and employment in Australia and other developed countries. A critical task facing such enterprises is the acquisition and management of the resources needed to start and develop such firms, especially financial resources. Because of the risky nature of such ventures, debt finance from banks is limited or unavailable. When the high-growth rate of these firms has exhausted the personal funds of the founders and their friends and family, there is a need to raise “outside” capital, in the form of equity. Such firms are typically faced with the need to source investment from either venture capital funds, or from angel investors. This thesis seeks to understand how small technology based companies go about raising equity capital from venture capital or angel investors.

The literature has a focus on the process from the perspective of the investors rather than the small technology based firm which constitutes the demand side of the transaction. Further while acknowledging that the respective categories of investor may exhibit different decision criteria and motivations, both academic literature and practical handbooks treat the process as substantially similar. That is, they exhibit similar search, similar information flows and similar negotiation and contract formation activities. The theoretical perspectives underlying this approach fall principally within the rational domain, in particular agency theory and transaction cost economics, with more recent contributions from a more “socialised” approach encompassing socio-economics, network theory and cognitive components, “socialised” being a term adopted from Starr and MacMillan (1990), Cable and Shane (1997) and Shane and Cable (2002). Based on this literature and consistent with the modified analytical induction methodology adopted, a series of tentative propositions emerged and formed the basis for the collection, presentation and analysis of data.

Data were collected from six case studies within Australia’s high-technology sector, both by convergent interviewing of 18 participants in those companies being either a
member of the entrepreneurial team or an investor. The interview data were coded for themes and patterns using NVIVO software and combined with documentary evidence provided responses to the tentative propositions. From these responses the variables relevant to a three-stage process of fundraising were identified. These variables were then located within the framework of the literature. Finally, models illustrating the process from the perspective of the small technology-based firm were developed and explained.

As a result of this investigation four contributions are made. First, the models provide a tool to assist in the generation of insights which can be applied by small technology-based firms to increase their understanding of the fundraising process which may potentially contribute to more successful outcomes. The second contribution is that from the small technology-based firm perspective the process of raising funds from angel investors is sufficiently different from that of raising funds from venture capital investors that two separate and distinct models are needed. Third, the differences between the processes of interaction with different investors imply that while the agency theory and transaction cost economics approaches may continue to have explanatory power for venture capital fundraisings, it is necessary to turn to the more “socialised” literature streams to understand properly the process of raising funds from angel investors. Fourth, in the formation of the relationship between an angel investor and members of entrepreneurial team comprising the small technology-based firm, a key element is the emergence of rapidly formed trust which differs from traditional versions of trust formation. While it is a form of emotional as distinct from rational trust, it appears not to depend on repeated interactions nor on the role of an intermediary or co-ordinator.

The insights from this research will be helpful to small technology-based firms to improve their chances of raising funds and to policy makers in enhancing the environment for fundraising through relevant education and training initiatives and, corporate law regulatory constraints and angel networks.
Table of Contents

Equity Capital Raising by Small Technology-Based Firms in Australia from Venture Capital and Angel Investor Sources

Certificate of Authorship 2

Abstract 3

Table of Contents 5

List of Figures 13

List of Tables 14

Acknowledgements 15

Chapter 1

1.1: Introduction 17

1.2: Significance of Small Technology-based Firms 20

1.3: Private Equity in the Context of Australian Capital Markets 22

1.3.1: Australian Capital Markets 22

Venture Capital 24

Angel Investment 26

STBFs and Capital Raising 27

1.3.3: The So-Called “Equity Gap” 29

1.3.4: Differences between Venture Capital and Angel Investors 31

1.4: Research Design 33
1.5 Summary of the Research 35

1.6 Chapter Integration 37

Chapter 2: Literature Review 38

2.1: Introduction 38

2.2 Entrepreneurship Research 39

2.2.1: History of Entrepreneurship Theory 40

2.2.2 Overview of Present Entrepreneurship Research 44

2.3: “Rational Choice” Dimension 45

2.3.1: Agency and TCE theories 45

2.3.2: Explanation of Agency Theory 48

2.3.3: Explanation of Transaction Cost Economics 51

2.3.4: Application of Agency Theory and TCE 52

Agency Theory - Incentives 54
TCE and Governance Structures 54

2.3.5: Limitations of Agency Theory and TCE 57

Agency Theory 57
Transaction Cost Economics 60

2.3.6: Socio-Economics – Social exchange theory 62

2.4: Affective/Normative Dimension: Traits, Cognitive Psychology, Social Networks and Ethics 64

2.4.1: Entrepreneurs’ Traits 64

2.4.2: Cognitive Psychology 67

2.4.3: Social Networks 70

2.4.4: Trust and Reputation 74

2.5: Negotiation 77

2.5.1: Distributive Models and Bargaining power 80
2.6: Entrepreneurial Team

2.7: Empirical Research into STBF’s Search for Capital.

Bruno and Tyebjee (1985) .......................................................... 83
Hustedde and Pulver (1992) ......................................................... 83
Smith (1999) .......................................................... 85

2.8: Model of Process of Exchange Relationship Formation

2.9: Chapter Integration

Chapter 3: Research Design and Methods ......................................... 96

3.1: Introduction

3.2: Research Paradigms

3.2.1: Overview .......................................................... 98
3.2.2: Positivism .......................................................... 99
3.2.3: Critical Theory ......................................................... 101
3.2.4: Constructivism ......................................................... 101
3.2.5: Realism .......................................................... 102

3.3: Methodology

3.3.1: Overview .......................................................... 104
3.3.2: Research Design-Analytical Inductive Approach using Multiple Case
Studies .......................................................... 106
   Analytical Induction ......................................................... 106
   Case Study .......................................................... 107
   Experimental Design ......................................................... 110
3.3.3: Criteria for case selection .................................................... 111

3.4: Case study research procedures

3.4.1: The number and selection of the cases: Sampling logic ................. 112
   Selection of Firms (n=6) ......................................................... 114
Selection of Venture Capitalists (n=4): ____________________________ 115

Selection of Angel Investors (n=5) ________________________________ 115

3.4.2: Data Collection __________________________________________ 115

3.4.3: Case Study Interviews ______________________________________ 116

3.4.3: Pilot Case Studies __________________________________________ 118

3.4.5: Data Analysis _____________________________________________ 118

3.5: Methodological Soundness 121

3.5.1: Overview ________________________________________________ 121

3.5.2: Construct Validity __________________________________________ 122

3.5.3: Internal Validity ___________________________________________ 123

3.5.4: External Validity ___________________________________________ 123

3.5.5: Reliability ________________________________________________ 124

3.6: Ethics 125

3.7: Chapter Integration 127

Chapter 4: Presentation of the Case Studies. ________________________ 128

4.1: Introduction 128

4.2: Case Studies Summary 128

4.2.1: Case Study One: ReadCo_________________________________ 130

ReadCo: History of Capital Raising ________________________________ 131

ReadCo: Search Stage. __________________________________________ 131

ReadCo: Negotiation Stage ________________________________________ 132

ReadCo: Commitment Stage ________________________________________ 132

4.2.2: Case Study Two: PowerCo _________________________________ 133

PowerCo: History of Capital Raising _______________________________ 134

PowerCo: Search Stage ___________________________________________ 134

PowerCo: Negotiation Stage _________________________________________ 135
Chapter 4: Case Studies in Capital Raising

4.2.3: Case Study Three: FishCo

FishCo: History of Capital Raising
FishCo: Search Stage
FishCo: Negotiation Stage
FishCo: Commitment Stage

4.2.4: Case Study Four: CapCo

CapCo: History of Capital Raising
CapCo: Search Stage
CapCo: Negotiation Stage
CapCo: Commitment Stage

4.2.5: Case Study Five: FinCo

FinCo: History of Fundraising
FinCo: Search Stage
FinCo: Negotiation Stage
FinCo: Commitment Stage

4.2.6: Case Study Six: PhoneCo

PhoneCo: History of Capital Raising
PhoneCo: Search Stage
PhoneCo: Negotiation Stage
PhoneCo: Commitment Phase

4.3: Contractual Terms in Case Studies

4.4: Conclusion

Chapter 5: Data Presentation

5.1: Introduction

5.2: Outline of Findings

5.2.1: Incentive Based Deal Structure

Angel Investors
5.2.2: Imposed Structural and Procedural Safeguards

Venture Capitalists

Angel Investors

Structural and Procedural Safeguards and Complementarity

5.2.3: Opportunism of Entrepreneurs

Entrepreneurs’ Perspective

Angel Investors’ Perspective

Venture Capitalists

Impact of Opportunism Concerns on Deal Terms

5.2.4: Opportunism of Investors

STBF’s Perception of Angels

Venture Capital Investors

5.2.5: Non-Financial Motivations

5.2.6: Determination of Deal Structure or Terms

Contractual Provisions

Venture Capital

Angel Investors

Reasons For Different Approach

5.2.7: Social Contracting Strategies

Angel Investors

Venture capitalists

5.2.8: Information Sources

Angel Investors

5.2.9: Network Content

Angel Investors

5.2.9: Cognitive Mechanisms

Venture Capital

Angel Investors

5.2.11: Trust

Venture Capitalists

Angel Investors

5.2.12: Reputation
5.2.13: Sources of Bargaining Power and Bargaining Scope 220

Barriers to the Negotiation of Agreements 222

STBF’s Sources of Negotiating Power 223

Venture Capital Contracts: What Matters have Limited Negotiability 226

Conclusion 227

5.2.14: Use of Bargaining Power 228

5.2.15: Entrepreneurial Team Leader 231

5.2.16: Prior Experience of Fundraising 236

5.2.17: Summary of Findings in Section 5.2 240

5.3: Chapter Integration 246

Chapter 6: Presentation of Findings 247

6.1: Introduction 247

6.2: Narrative Discussion and Table locating Findings concerning STBF/VC Variables in relation to Literature Streams 250

6.3: Presentation of Variables- Angel Investors 253

6.4: Fundraising from the STBF Perspective-A Three Stage Process 255

6.4.1: Conceptual Modelling of the Stages. 259

6.4.2: STBF and Venture Capital Investors Conceptual Model 260

Search Stage 260

Engagement Stage 263

Commitment Stage 264

6.4.3: STBF and Angel Investors Conceptual Model 265

Search Stage 265

Engagement Stage 267

Commitment Stage 267

6.5: Chapter Integration 268
Chapter Seven: Conclusions and Implications 270

7.1: Introduction and Review 270

7.2: Key Findings and Extensions to Existing Literature 273

7.2.1 Finding 1: Empirical Models of Fundraising Process from STBF Perspective 273

7.2.2: Finding 2: Inappropriateness of a Common Process Approach 274

7.2.3: Finding 3: Explanatory Power of Rational vs Normative/Affective Dimensions in the Literature 276

7.2.4: Finding 4: Rapidly Formed Trust in the case of Angel Investment 279

7.2.5: Finding 5: Alternative Suggestions for the Basis for Relationship Formation 280

7.3: Implications for Managerial Practice 281

7.4: Implications for Policy 283

7.4.1: Public Support for Angel Networks 283

7.4.2: Education 283

7.4.3: Corporations Act Fundraising Limitations 284

7.5: Limitations of Research and Future Research 285

7.6 Summary 286

Bibliography 288

Attachment A: Interview Protocol 320

Attachment B: Ethics Consent 324
**List of Figures**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Disciplinary Relationships Map</td>
<td>47</td>
</tr>
<tr>
<td>2.2</td>
<td>Characteristics Attributed to Entrepreneurs</td>
<td>65</td>
</tr>
<tr>
<td>2.4</td>
<td>Process Flow for Venture Capital Investment</td>
<td>90</td>
</tr>
<tr>
<td>2.5</td>
<td>Process Flow for Angel Investment</td>
<td>91</td>
</tr>
<tr>
<td>2.6</td>
<td>Process Flow Diagram</td>
<td>92</td>
</tr>
<tr>
<td>6.1</td>
<td>Flow Chart for Presentation of Findings</td>
<td>249</td>
</tr>
<tr>
<td>6.2</td>
<td>Variables - STBF-VC</td>
<td>251</td>
</tr>
<tr>
<td>6.3</td>
<td>Variables - Angel Investors</td>
<td>254</td>
</tr>
<tr>
<td>6.4</td>
<td>Conceptual Model: STBF and Venture Capital</td>
<td>262</td>
</tr>
<tr>
<td>6.5</td>
<td>Conceptual Model: STBF and Angel Investors</td>
<td>266</td>
</tr>
</tbody>
</table>
List of Tables

Table 1.1: Source of Funds of VC Investment Vehicles 25
Table 2.3: Comparison of Empirical Research 86
Table 2.7: Summary of Tentative Propositions 92
Table 2.8: Map of Variables 96
Table 3.1: Summary of alternative paradigms 99
Table 3.2: Case Study Strategies for Four Design Tests 122
Table 4.1: Geographic Spread-Industry Sector and Success/Failure of Funding Attempts 130
Table 4.2: Case Study One Summary 131
Table 4.3: Case Study Two Summary 134
Table 4.4: Case Study Three Summary 137
Table 4.5: Case Study Four Summary 140
Table 4.6: Case Study Five Summary 144
Table 4.7: Case Study Six Summary 147
Table 4.8: Summary of Key Contractual Safeguards in Investment Agreements 150
Table 4.9: Summary of Key Contractual Safeguards in Cases Studied 152
Table 5.1: Summary of Tentative Propositions 156
Table 5.2: Summary of Findings in Section 5.2 241
Acknowledgements

I would firstly like to give the most sincere thanks to my supervisors Professor Greg Walker, Professor Mark Morrison and Dr Branka Krivokapic-Skoko. Collectively you have managed to be motivational, critical and tolerant at the same time. If a thesis is a journey rather than a destination, then you have kept me on the path, made the hills easier to climb, tolerated my frequent diversions and encouraged me when the distance to the goal seemed to grow rather than diminish. Individually, Branka, your knowledge of qualitative methodologies has been invaluable. Greg, you have been so generous with your time despite all your commitments as Head of School. Mark, special thanks for all your encouragement and responsiveness: you may be a “quant” guy, but your contribution has been superlative.

I would also like to acknowledge all the other people at Charles Sturt University who have helped me in the course of this thesis. Associate Professor Grant O’Neill has ensured that the School of Marketing and Management always managed to provide practical support during my time in Bathurst.

I recognise that I am perhaps unusual in having enjoyed enormous support from my law firm, DibbsBarker. The assistance of my secretaries over these years has been invaluable, as I tried to explore mysteries within Word that I never thought I would need. To Kim Doughan (at the departure) and Patricia Cummings (at the arrival), and especially to Sue Phillips (everything in between) who carried on this task after she left our firm, my most profound appreciation. To my partners at DibbsBarker, your indulgence in allowing me the freedom to pursue a personal goal reflects a firm culture that has been and will remain an important element in your ongoing success.

Finally to my family: Andrew and Fiona, my objective of completing before either of you graduated failed, but I like to think that having a father also engaged in academic pursuits at the same time as you may have contributed in some subtle way to your own
success. To my wife Kate, your support, encouragement and above all, tolerance were beyond expectation: thank you from the bottom of my heart.
Chapter 1

1.1: Introduction

“Technology”, said Dr Peter Farrell, “is the turbocharger of the future” (Farrell, 2005). However without the efforts of entrepreneurs to introduce them into the market, even the most promising technical ideas risk gathering dust on the shelves or in the laboratories of the world. The intersection of technology and entrepreneurship has, not surprisingly, attracted considerable attention from governments and from scholars in recent times.

It has become clear that technology entrepreneurship plays a vital role in increasing productivity, stimulating national economic growth, and improving a country’s relative competitive position (McLelland, 1961; Porter, 1990). As competition intensifies between the knowledge-based economies, investment in new generations of entrepreneurial technology start-ups has become a national priority in virtually all OECD member countries (OECD 2002).

The cardinal rule for early stage technology firms and indeed for small and medium-sized enterprises generally due to their exposure to liquidity challenges (Drever, 2007) is not to run out of money (Gompers and Sahlman, 2002; Dorf and Byers, 2005). However, small technology-based firms operate in turbulent, high-risk environments and assets of an intangible nature which make raising funds from traditional capital market sources difficult (Ben Ari and Vonortas, 2007). Understandably, banks and other debt providers have exhibited considerable reticence in providing funding to such firms and therefore capital has principally originated from sources that include the personal assets of the founder, friends and family finance, private investors or angels, venture capital, governments, strategic partners, and corporations (Prowse, 1998). When the resources available to the firms from the founders and their family and friends (in recognition of the risks associated with such investment, the latter are often referred to as Three F’s—“family, friends and fools”) have been exhausted, the next sources of external finance are likely to be equity investors, in the form of angel
investors or venture capital funds (Van Osnabrugge and Robinson, 1999; Mason, 2009). Equity capital by its nature is a more patient form of capital with returns linked directly to the earnings outcome of the firm (Ben-Ari and Vonortas, 2007).

The literature in the field has for some time emphasised that the successful development of an entrepreneurial venture can be critically impacted by the interaction of the firm’s management team and the equity investors Timmons (1999). The research on equity financing of such new ventures has principally focussed on the investor’s perspective. It is somewhat surprising to find that “there is little work on the demand side of the market” (Wright and Robbie, 1998) and that “the entrepreneur’s selection process and criteria have largely been ignored in the venture capital literature” (Smith, 1999).

Technology entrepreneurs repeatedly complain about the amount of time, energy and resources expended in a frequently futile attempt to attract the attention of the providers of capital and the low rate of acceptance of proposals. The providers of capital complain about the lack of good quality “deals” available in the market. These parallel complaints have been noted both by industry bodies (AVCAL 2004) and in reports to government (Marsden Associates 1995). How can these opposite apparently contradictory views co-exist?

The goal of this research is to respond to the gap referred to above by examining this apparent paradox from the perspective of the small technology-based firm and to understand the factors which impact the firm’s search for capital from the two primary sources of external equity capital, namely venture capital firms and angel investors. Australia’s emerging high technology sector serves as the empirical context within which these issues are examined.

This thesis draws on the literature that seeks to explain aspects of the process of obtaining financial resources by a technology-intense early-stage firm, referred to as a small technology-based firm and as appropriate, by the acronym STBF. The traditional approach prevailing in the literature underlying this research suggests a quite distinctive model of human behaviour: a “deceitful” entrepreneur, in possession of information about the venture and their abilities and drive which are deliberately
withheld or inadequately communicated. The result, according to that literature, is that investors are forced to seek refuge in expensive contracting options such as complex incentive structures and monitoring, all at the cost of the firm in terms of time and money.

The STBF sector in Australia provides a rich empirical context in which to test these ideas. Over recent years Australia has emerged as fertile ground in the global innovation and entrepreneurship context. For example, in respect of 2003 (the final year in which such data were collected), research published in the Global Entrepreneurship Monitor (GEM, 2004) found that in its absolute level of entrepreneurial activity Australia placed eighth among the countries studied (behind the US, Canada, Israel, Singapore, Denmark, Finland and UK).

The market for capital faced by Australian technology-based firms has received only modest attention from the research community. This research represents a systematic attempt to understand how this market operates from the perspective of the demand side. The results of the research however may have implications that transcend the Australian context and that can potentially contribute to a more general understanding of how technology-based firms interact with the sources of equity capital in other geographic markets.

This chapter proceeds as follows. Section 1.2 introduces the technology-based firm landscape which serves as the empirical context for this research. The importance of this sector in Australia and elsewhere is explained, and a justification for the research question is presented. Section 1.3 places the investors and firms in the context of the broader capital markets. Section 1.4 presents the research design which draws on multiple theoretical perspectives, looks at the phenomena at multiple levels, and relies on multiple methods of data collection and analysis. Section 1.5 foreshadows the findings of the research and Section 1.6 summarises the chapter and sets out how the subsequent chapters of this thesis are organised.
1.2: Significance of Small Technology-based Firms

Small and medium enterprises generally provide a key source of employment, economic growth, innovation and productivity improvement both in developed as well as developing economies (OECD, 2006). However not all small enterprises have the chance to grow into large businesses. This research concentrates on that subset of small and medium sized firms which are “technology-intense”, in the sense that the application of science or technology is the principal competitive differentiator of the business (Freear and Wetzel, 1990). These firms are also referred to as new knowledge based enterprises (Ben-Ari and Vonortas, 2007). This focus arises from the critical role that firms in this sub-set have in the process of generating economic activity and employment.

In the United States, for example, between 1975 and 1995, more than 75% of net jobs created came from that group of small entrepreneurial firms which grow at a rate of above 20% per annum, and which by number comprise just 8% of all small firms (Wetzel, 1996). Those firms, Van Osnabrugge and Robinson (2000) found, are heavily concentrated in the technology sector, being the sector most capable of sustaining growth at these rates. On the other hand, Frear, Sohl and Wetzel (1995) found that between 1979 and 1993, large firms (defined as firms with over 500 employees) decreased their number of employees by 25% and medium-sized firms (100 to 500 employees) decreased their number by 5%. Wetzel (1982, p 73) concluded that:

“relative to their larger established counterparts, small technology-based firms are more effective contributors to the generation of new jobs, innovative technology, productivity, price stability and favourable international trade balances”.

Sohl (1999) categorised new firms into three general types: lifestyle, middle-market and high-potential, distinguished by their growth potential. The first do not seek growth but survival and a reasonable living for the founders. Sohl (1999) found that this group comprised over 90% of the total number of new firms. The second category had revenue growth targets above 20% per annum. The third had revenue
growth targets above 50% per annum and accounted for just one percent of all start-ups. It is these two latter categories which gave rise to Wetzel’s (1996) claim for over 75% of all net jobs created in the United States. The United States of America National Venture Capital Association suggested that the venture capital industry, whose investments have been heavily concentrated in the technology sector (Bygrave and Timmons 1992), invested US$273 billion between 1970 and 2000 in firms which accounted for around 1% of total capital investment activity but which collectively generated 13.1% of total US gross domestic product (National Venture Capital Association, 2001).

A similar position is evident in the United Kingdom where Storey (1994) found that approximately 4% of start-ups, being those with the highest growth rates and concentrated in the technology space, account for over 50% of the total employment of all new firms which survive ten years.

While the Australian data are not as complete, the critical role of small high-growth firms in the creation of employment and economic growth would appear to parallel that in the USA and the UK. Parker (2000) found, using Australian Bureau of Statistics data, that a numerically small number of small and medium sized enterprises (SME’s) made a significant contribution to net job creation, although did not identify the characteristics of those firms. McMahon (2000) examined data from the Business Longitudinal Survey to develop a taxonomy of manufacturing industry SME’s. He identified three relatively consistent development pathways, which echo the findings of Wetzel (1996) in the USA: low-growth or traditional firms, moderate-growth (which he calls “capped-growth”) SME’s, and high-growth or entrepreneurial SME’s. The last category accounted for between 4.4 and 7.0% of firms during the five years of the study. McMahon found that this category of firms dominate the provision of employment growth, having an employment growth rate seven times that of the low-growth, and twice that of “capped growth”, firms in the sample.

In relation to GDP growth, and recognising that correlation is not the same as causation, Global Entrepreneurship Monitor (2003, p18) concluded that “there has
been a consistent and significant relationship between TEA (total entrepreneurial activity) and the rate of GDP growth (observed or projected) for the following three years”.

This research aims to respond to the research question: how do STBFs search for, select, negotiate with and complete equity funding transactions with venture capital firms and angel investors. It seeks to understand and explain how the individual entrepreneurs and the entrepreneurial teams within those STBFs seeking private equity capital:

- search for information;
- interact with venture capital firms and angel investors;
- negotiate with venture capital firms and angel investors; and
- complete the formation of the contractual commitments which will embody their relationship with the investors.

However, before the specific issues can be addressed, a more general overview is required of the macroeconomic context within which these activities occur, and of the scale of the “supply” side of the market faced by entrepreneurial technology firms whose need for equity capital forms the “demand” side. The chapter therefore continues with a brief account of the place in the broader capital markets occupied by the market for private equity for technology ventures.

1.3: Private Equity in the Context of Australian Capital Markets

1.3.1: Australian Capital Markets

The market for private equity in the form of venture capital and angel investment in Australia operates in the context of a broader financial market. In this section the place of venture and angel capital within that market is examined.

A number of studies of the Australian financial markets have found that there is a lack of capital available for small and medium-sized enterprises generally. The Final Report of the Financial System Inquiry (1997) (also known as the Wallis Committee
Report) cites the contention (by the Allen Consulting Group) that the equity market in Australia remains deep only for mid-size and large companies but is quite thin for the smallest. Both the Report of the Committee of Inquiry into the Financial System (known as the Campbell Committee Report) (1981) and the Industry Commission (1991) came to a similar conclusion. In the words of the Industry Commission:

“most of the perceived difficulties (for small firms seeking to obtain capital) simply reflect the economic fact of the higher cost of investing in small amounts and the higher risk of investing in small businesses compounded by a reluctance of existing proprietors of small businesses to dilute their effective control of the enterprise” (p 197).

The Industry Commission (1991) came to a rather pessimistic conclusion:

“The experience of the MIC (Managed Investment Companies) Scheme and the Second Boards suggests that it is difficult to overcome the inherent problems of smaller companies in attracting and providing a competitive return on equity finance” (p 198).

However, none of these studies have found an aggregate shortage of capital in or accessible by Australia. Overseas capital inflow has compensated the domestic savings deficit. The aggregate flow of savings including net foreign capital in-flow is around 20% of GDP. The Wallis Committee Report (1997) indicates that superannuation and life insurance products are, and are projected to continue to be, the fastest growing components of household wealth. Despite the turmoil in financial markets during 2008 and 2009, the share of Australian household sector assets held in equities has been growing strongly with the result that an increased share of wealth is being invested by households in long-term savings rather than cash and deposits. As most superannuation goes into managed investments an increasing proportion of household wealth is in market-linked investments (Davis 2011). The estimated volume of funds in superannuation has grown and is expected to continue to grow rapidly, largely as a result of the Superannuation Guarantee Contributions legislation. Notwithstanding these trends, the Wallis Committee Report concluded in 1997 that “at present, there is relatively little superannuation investment in SME’s either directly or
through specialist managers” (p 513), and this has not changed substantially since that time (Bateman and Kingston 2010).

These conclusions of the Wallis Committee and the Industry Commission are consistent findings from other OECD countries (OECD, 2006) concerning the existence of a “finance gap” for small and medium enterprises generally, reflected and confirmed by similar findings in Australia (Watson, 2006; Drever and Hutchinson, 2007).

**Venture Capital**

In the context of the overall capital market in Australia, venture capital forms a relatively modest part. In 2001 the Australian Bureau of Statistics collected and published data on the venture capital sector for the first time. The first survey covered the 1999-2000 reference period and data has been collected annually since then. The population of investment managers in Australia responded to what is, in effect, a census of the Australian-resident venture capital and later stage private equity investment managers. The most recent annual ABS venture capital survey (ABS 2009) found 183 active investment managers who managed 286 investment vehicles with total commitments (i.e. invested or remaining to be drawn down) as at June 30 2008 of $17.1 billion (ABS 2009, p7). Table 1.1 shows the sources of these funds. Of these funds some 36% were invested in managed and leveraged buy-outs, and the balance in the various stages of venture capital from pre-seed through to later stage expansion capital. Domestic superannuation funds provided 55% of funds drawn down and this source exceeds the next largest source (all non-residents-11%) by a factor of five. Funds or venture capital are overwhelmingly sourced domestically, with 89% of commitments coming from Australian investors (ABS 2009, p4).
Table 1.1: Source of Funds of VC Investment Vehicles: 2009-2010

<table>
<thead>
<tr>
<th>Source</th>
<th>Drawdown from investors Value $m</th>
<th>Uncalled commitments Value $m</th>
<th>Total Value $m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superannuation Funds</td>
<td>7358</td>
<td>3072</td>
<td>10429</td>
</tr>
<tr>
<td>Governments</td>
<td>712</td>
<td>292</td>
<td>1004</td>
</tr>
<tr>
<td>Trading Enterprises</td>
<td>1132</td>
<td>284</td>
<td>1416</td>
</tr>
<tr>
<td>Other Residents</td>
<td>862</td>
<td>526</td>
<td>1388</td>
</tr>
<tr>
<td>Life insurance offices</td>
<td>331</td>
<td>10</td>
<td>341</td>
</tr>
<tr>
<td>Trusts</td>
<td>914</td>
<td>339</td>
<td>1252</td>
</tr>
<tr>
<td>Non residents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pension funds</td>
<td>(np)</td>
<td>(np)</td>
<td>68</td>
</tr>
<tr>
<td>Other</td>
<td>663</td>
<td>500</td>
<td>1163</td>
</tr>
<tr>
<td>Total</td>
<td>12221</td>
<td>5045</td>
<td>17266</td>
</tr>
</tbody>
</table>

(Source: Australian Bureau of Statistics, 2011, p13)

From these data it can be deduced that:

- The most significant source of funds for venture capital in Australia is Australian domestic institutions.
- Superannuation funds provide over 60% of all venture capital in Australia and are by far the most significant single source.
- Local sources of capital provide over 90% of all venture capital, with the balance from non-residents.
An alternative data set for venture capital in Australia is available through the Australian Venture Capital Association Limited (AVCAL). It is collected from an annual survey of the 63 members of AVCAL. The most recent (AVCAL 2009, p4) showed that as at June 30 2009, total funds under management at current valuation of investments exceeded $24.5 billion.

**Angel Investment**

While institutional investors principally control the long-term investment component of household wealth, some private individuals, typically the wealthier, control their own investments. However the actual size of the sector in Australia and elsewhere is difficult to determine due to the desire of most angel investors for anonymity (Mason and Harrison, 2008; Mason, 2009).

At one end of the estimation spectrum, the Wallis Committee (1997, p513), citing an unpublished Productivity Commission report, estimated that angel investment amounts annually to a figure equivalent to approximately 25% of the funds invested by the professional venture capital sector. At the other end of the spectrum, the Global Entrepreneurship Monitor (GEM) 2002 (Hindle and Rushworth, 2002) survey of two thousand randomly selected adults found that the 51 who had identified themselves as angel investors had invested $2.3 million over the previous three years. The average investment per angel was found to be approximately $60,000, with a range of $500 to $500,000. Extrapolated over the entire population of Australia this would amount to $13 billion over those three years, or an average of over $4 billion per year, making angel investment roughly ten times greater than the amount of venture capital finance estimated by the report’s authors over the same three year period ($1.25b). By a similar methodology, the same authors determined a multiple of “almost twelve times” in the following (and final) 2003 GEM Report (Hindle and Rushworth, 2003, p17). As those authors concede, their extrapolation is suggestive rather than statistically valid.

Others have expressly declined any attempt to estimate the size of the sector in Australia (Hindle and Wenban, 2002; Vitale, 2007) citing the difficulties of data collection resulting from the desire of angel investors to maintain their anonymity.
Bygrave (2003) distinguished between total informal investment (aggregating both angel investment and “friends, family and fools”- 3Fs) on the one hand and professional venture capital on the other. Based on the GEM 2002 data referred to above (Hindle and Rushworth, 2002), Bygrave (2003) estimated the total amount of informal investment in Australia to be US$2.55 billion and the amount of professional venture capital in 2002 to be US$353 million, i.e. he estimated the former to be seven times the latter.

Accordingly there is as yet no rigorous academic research or other systematically compiled data on the size of the business angel sector in Australia (Vitale 2007). This is, at least in part, because of the difficulties in data collection referred to above. Further, as the Productivity Commission “project” referred to above is unpublished, it is not possible to assess the Commission’s work.

However by way of comparison, in the United States investments by angels have been found to be greater than that of the formal venture capital sector by a factor of between two (Berger and Udell, 1998) and five (Freear, Sohl and Wetzel, 1995). Another estimate (Acs et al, 2003) suggested a factor of four.

**STBFs and Capital Raising**

As described in Section 1.3.1, the focus of this research is on only those entrepreneurial technology firms likely to be capable of high-growth, comprising around 4-7% of all SME’s (Storey, 1994; Wetzel, 1996). Even within that category there will be some which have neither the need nor the willingness to raise outside equity, often for fear by the founders of a loss of control (Marsden Jacobs, 1995). Further, of those which might otherwise seek equity funding, many are not in a state suitable for an external investor. For example, the accounts may not have been audited, the personal assets and affairs of the founders may be intermingled with those of the enterprise or the business form may be inappropriate (e.g., a partnership). The remainder comprise a sub-set of all small technology-based firms being those which are ready, willing and capable of entering the process of attracting equity capital to provide finance for their growth with some prospect of success. These are the entities which have the potential to make a significant contribution to growth in employment.
and gross domestic product, across both up and down commodity cycles for the Australian economy. How these firms seek and obtain capital is therefore likely to be significant for the nation to be able to grow and to provide jobs on a sustainable basis through the various commodity cycles.

This is the context in which small technology-based firms seek the resources to finance their growth. Such firms typically go through a number of stages of business development: seed, at which there is a concept that is yet to be developed or proven; start-up, where the business has been formed and is completing product development and initial marketing; early stage, where the firm is producing and delivering its product or service but may not yet be profitable; and later or expansion stage, where the firm although it may be still expanding, is mature and profitable (Sohl, 1999).

Van Osnabrugge and Robinson (2000, pp 36-37) suggest that there are seven stages of financial growth for such firms:

1. The founder, family and friends and internally generated funds, together known as “bootstrapping”;  
2. The equity gap (a stage said to be “void of finance”);  
3. Business angels;  
4. Venture capitalists;  
5. Banks;  
6. Non-financial corporations; and  
7. IPO and the public equity markets.

According to these authors, the first five items in the list are stated in ascending order of funding amount sought, but in descending order of probability of a successful raising. The longer the small technology-based firm can rely on “internal” sources comprised in the “bootstrapping” stage, the better. But rapid growth may outstrip this capacity and if so the firm is faced with the need to seek “external” funds.
1.3.3: The So-Called “Equity Gap”

Once the firm has exhausted the “bootstrapping” sources, it is necessary to look outside that circle for external funds. A number of authors in a range of countries have found an “equity gap” (Wetzel, 1986; Wetzel and Freear, 1994; Mason and Harrison, 1996) in the US below US$500,000 and the UK below £250,000-400,000, and this gap may be expected to become more severe as a result of the financial crisis which commenced in 2008 in North America and Europe (Block and Sandner, 2009). Mason (1996, p4) defined this equity gap as:

“the absence of small amounts of risk capital from institutional sources for companies at the seed, start-up and early-growth stages which arises because the fixed costs of investment appraisal and monitoring make it uneconomic…”.

In Australia, MarsdenJacobs (1995) found that because transaction costs were largely fixed, venture capital funds typically preferred minimum investments of “about $1 to $2 million” and that almost one half of those comprising the (then) Australian Development Capital Directory had a minimum investment restriction of $1 million. They suggested that other than through a small number of syndicates of angel investors, angel investment occurred below $500,000. Accordingly they concluded that Australia exhibits “a major gap in the equity capital market in the $0.5 to $2 million range” (MarsdenJacobs, 1995, p32).

Based on his review of the Australian Venture Capital Association data for the six year period 1996-7 to 2001-2, Bivell (2003) found that there was only modest variation in the average venture capital deal size between the seed ($1.0 million), start-up ($1.7 million) and early expansion ($1.7 million) stages in Australia and accordingly any lack of capital at the level below $2 million covered a range of enterprises from seed through to expansion. Importantly, with venture capital available at an average level of $1.0 - $1.7 million per transaction for all stages up to early expansion it is clear that a substantial number of transactions must be occurring at around $1 million or below. Based on these data Hindle and Rushworth (2003) concluded that there exists an “equity gap” for businesses seeking funding in the range of $200,000 to $1 million in which funding remained difficult.
As a result of the reforms introduced by the Corporations Act 2001 (Commonwealth), the fundraising provisions were substantially relaxed so that there is no legal requirement to provide any form of Disclosure Statement (i.e. prospectus), and hence incur the associated legal, accounting and other costs, for raisings from any persons (i.e. whether exempt “sophisticated” investors, institutional investors or not) where the amount raised does not exceed $2 million (see s 708, Corporations Act 2001). The present research concerning selection of funding source between venture capital and angel investment seeks to conduct its exploration precisely in the so-called “equity gap”. In the Australian context this “gap” may from the perspective of the STBF be more usefully thought of as an “equity overlap” zone in which the upper end of the range for angel investors, alone or in syndicate, corresponds with the lower end of the range for venture capital in Australia; a zone which Holden and Rushworth (2003, p 23) describe as “a major problem”. Based on all the above data this implies a lower boundary for the zone in which both venture capital funds and angel investors participate of $50,000-$200,000 and an upper boundary of $2 million per transaction. The availability (albeit limited) of both venture and angel capital between those figures is supported by the recent findings of the Department of Industry Tourism and Resources study into angel investors (Vitale, 2007, p22) which found an average minimum investment of $54,000, and an average maximum of $644,000, with an overall average of $350,000. Most angel investments, the study found, invested in the range between $20,000 and $1 million.

However, STBFs will tend to perceive the existence of a “gap” in the sense of an insufficiency of available funding while ever there are individual proposals that fail to attract the funds sought. The available Australian data concerning the ranges of amounts of angel funding, and seed and early-stage venture capital, would indicate that it is not so much a matter of a stage being “void of finance” as suggested by Van Osnabrugge and Robinson (2000) or even the “equity gap” referred to by Marsden Jacobs (1995) but rather a market in which funds may be available but which is characterised by major inefficiencies.

Efficient markets are those in which both buyers and sellers are fully informed as to their respective alternatives, incur minimal search costs to find each other, and when
they do so can effect their exchange at minimal transaction cost. For the reasons referred to earlier in the Wallis Committee Report (1997) and the Industry Commission (1991) the market faced by STBFs would appear to lack these characteristics to a significant degree. Accordingly the research seeks to explore the operation of this market from the perspective of the STBF including information flows, impediments to the search and negotiation process, and the completion of the transaction which constitutes the exchange.

1.3.4: Differences between Venture Capital and Angel Investors

There are a number of key factors which differentiate business angels from professional venture capital funds. Firstly, they value their anonymity, and hence do not like to have their existence or propensity to invest published. Business angels are notoriously difficult to identify (and as a consequence, difficult to research as well). Secondly, business angels do not cost their time in the same way as venture capital fund executives. So while they are subject to fixed cost constraints in evaluating investment proposals, these tend not to be as severe when evaluating financial investment at the lower end of the range as are venture capital firms (Vitale, 2007; Wright, 2009). Thirdly, they are able to draw upon their own entrepreneurial and industry experience when undertaking their investment appraisal (they do not normally need or choose to pay for independent due diligence research) (Wetzel, 1997; McDonald 2011). Fourthly, business angels have been found to be less likely than venture capitalists to involve accountants, patent attorneys and lawyers to assist in due diligence and negotiation (Mason and Harrison, 1996). These features reflect the fact that business angels are investing their own money and so are not answerable to anyone else (Benjamin and Margulis, 1996).

In terms of their background and training, business angels are “hands-on” investors, pro-actively contributing their skills, expertise, knowledge and contacts accumulated through their own prior or present entrepreneurial endeavours in a variety of informal and formal roles in their investee businesses (Harrison and Mason, 1992; Ehrlich, De Noble, Moore and Weaver, 1994; Mason and Harrison, 1996; Vitale, 2007). These
include contributions to formulating strategy, monitoring operating and financial performance, networking and acting as a sounding board. They have typically built (and often sold) one or more entrepreneurial businesses of their own. In Australia this applies to some 83% of all angels (Vitale, 2007). They are mostly male in all countries, with an average age between the late 40’s (Australia, USA and UK) and early 50’s (Europe) (Hindle and Wenban, 1996).

By contrast, venture capital firms actively seek publicity in order to maximise their “deal flow”. Their names and contact details appear in directories and on their websites. The personnel of venture capital funds tend to be accountants, bankers or others trained in finance, and lawyers, with little “hands-on” entrepreneurial or line-management experience (Sapienza, Manigart and Vermeir, 1996). They are often recruited straight from university business schools and usually trained as financial investors rather than as start-up or small business managers (Bygrave and Timmons, 1986: USA; Van Osnbbrugge and Robinson, 2000: UK and Europe). On average, they are in their early 40’s (Gorman and Sahlman, 1989). They do extensive due diligence and incur substantial costs in doing so (Sahlman, 1992), and enter highly exhaustive and complex contracting forms with a substantial degree of standardisation (Kaplan and Stromberg, 2003). ABS (2009) found that during 2008-9, venture capital and private equity firms in Australia reviewed 5,670 potential investments, conducted further analysis on 469, and made 126 new commitments, a completion rate of around 2%.

For both types of investor significant effort is required to find the potential investment, evaluate the merits of entering the transaction, and negotiate the terms on which the exchange will be conducted: all these are indicators of market inefficiency arising from significant search and transaction costs.

The search for and obtaining of financial resources within the above market is only one within a broader set of physical, technical and human resources to be assembled by STBFs. The academic field which deals with the process of acquisition of resources by new firms is entrepreneurship, and Chapter 2 will review the literature within that field as it pertains to the research question.
1.4: Research Design

This section identifies the methodology that was applied in conducting this research. The research paradigm adopted is described and justified and the methodological issues are examined.

Before methodologies could be selected and applied an appropriate research paradigm was chosen. At the fundamental level, the research paradigm reflects basic beliefs about the world, and provides a guide to researchers when conducting research. Of the four paradigms described by Guba & Lincoln (1994), namely positivism, constructivism, critical theory and realism, the latter was selected as the most suitable for this research. Realism involves a “real world” (Denzin and Lincoln, 1994) that is capable of being discovered and known by building a picture of reality which can then be triangulated with the pictures of that reality emerging through perception from other data points. The nature of the research question, involving contemporary issues in a field of study in which the constructs and principles are not already well-established and accepted, rendered realism the appropriate paradigm.

This research aims to examine how STBFs search for, select, negotiate with and complete equity funding transactions with venture capital firms and angel investors. It seeks to understand and explain how individual entrepreneurs or entrepreneurial teams within those STBFs seeking private equity capital:

- search for information;
- interact with venture capital firms and angel investors;
- negotiate the arrangements with potential venture capital or angel investors including an examination of the factors that impact those negotiations; and
- complete the process of formation of the contractual commitments which will embody their relationship with the investors.

The objectives are:

- to identify and describe the activities engaged in by small technology-based firms in its search process;
• to identify an accurate and comprehensive taxonomy of the constructs and variables involved;

• to understand the relationships between these constructs and variables; and

• to synthesise these relationships into a conceptual framework.

A case study methodology will be adopted. Case study has been defined as “an empirical enquiry that investigates a contemporary phenomenon within its real life context.” and is particularly appropriate “when the boundaries between the phenomenon and context are not clearly evident”: (Yin 1994, p13). Case study method will be used in the research first because the phenomenon is a contemporary issue in the context of both the public policy debate and the capital market focus on innovation and commercialisation of technology in Australia. Secondly, the boundaries between the phenomena studied and the context are not clearly in evidence. There is a blurred borderline between the phenomena studied and developments in the broader capital markets, in approaches to entrepreneurship and in government policy settings. Thirdly, the competitive market forces of supply and demand within the market for private equity capital in which STBFs form the demand side and angel investors and venture capital funds constitute the supply side, as well as the social networks of individual entrepreneurs, are difficult to isolate from the phenomena. Finally the raising of capital, and the related issue of resource acquisition in general, is intermingled in practice with market, personnel, technical and a range of other challenges for the small technology-based firm which all compete for attention and must be addressed simultaneously (Timmons, 1999). The case study method is therefore considered best able to capture the richness of the fast moving and high-risk context of the decision-making processes of small technology-based firms. An analytical inductive approach to theory building is adopted, in which the existing literature forms an orienting theoretical perspective for the framing of the research question in terms of tentative propositions which are then sequentially compared to the data and then modified in the light of those emergent data. From these propositions a conceptual framework will be presented which seeks to synthesise the constructs and variables in a manner which will assist in placing the findings in a form which will assist participants in the market
to understand the fundraising process and at the same time contribute to the existing literature.

1.5 Summary of the Research

This thesis seeks to understand the process of how small technology-based companies go about raising equity capital from venture capital or angel investors.

The existing literature has a focus on the process from the perspective of the investors or supply-side rather than the small technology-based firm which constitutes the demand side of the market. Further while acknowledging that the respective categories of investor may to some extent exhibit different decision criteria and motivations, both academic literature (Van Osnabrugge, 1998b; McDonald 2011) and practical handbooks (Benjamin and Margulis, 1995 and 2006; McKaskill, 2009) treat the process as substantially similar: similar search, similar information flows and similar negotiation and contract formation activities. The theoretical perspectives underlying this approach fall principally within the rational domain, in particular agency theory and transaction cost economics (TCE), with more recent contributions from a more “socialised” approach encompassing socio-economics, network theory and cognitive components. Arising out of an examination of this literature and consistent with the modified analytical induction methodology adopted, a series of tentative propositions emerged and these formed an orienting theoretical perspective for the collection, presentation and analysis of data.

Data were collected from six case studies within Australia’s high-technology sector, both by convergent interviewing of 18 participants in those companies being either a member of the entrepreneurial team or an investor so as to capture both demand and supply side perspectives, and a detailed examination of transaction and other relevant documents and records.

The interview data were coded for themes and patterns and combined with documentary evidence they provided responses to the tentative propositions. From
these responses the variables relevant to a three-stage process of fundraising were identified. These variables were then located within the framework of the literature. Finally, conceptual models illustrating the process from the perspective of the small technology-based firm were developed, presented and explained.

As a result of this investigation five significant contributions are made. First, the models provide a tool to assist in the generation of insights which can be applied by small technology-based firms to increase their understanding of the fundraising process which may potentially contribute to more successful outcomes. The second finding is that from the small technology-based firm perspective the process of raising funds from angel investors is sufficiently different from that of raising funds from venture capital investors that two separate and distinct models are needed. Third, the differences between these processes with different investors imply that the while the agency theory and TCE approaches may continue to have explanatory power for venture capital fundraisings, it is necessary to turn to the more “socialised” literature streams to understand the process of raising funds from angel investors. Fourth, in the formation of the relationship between an angel investor and members of entrepreneurial team comprising the small technology-based firm, a key element is the emergence of rapidly formed trust which differs from traditional versions of trust formation. While it is a form of emotional as distinct from rational trust, it appears not to depend on repeated interactions nor on the role of an intermediary of co-ordinator as suggested by existing theory. Finally this study advances our understanding of the content of the relationship that facilitates the process of obtaining financial resources for early stage technology ventures from angel investors. By describing an alternative conceptualisation of capital raising from angel investors the study makes a contribution to existing research exploring the role of social relationships on economic action. It also suggests potential new avenues for examining the processes behind the formation of relationships in the context of the entrepreneurship which has suffered from the negative implications of opportunism and “shirking” behaviour attributed to entrepreneurs by the assumptions underlying the pervasive theories of agency and TCE.
The insights from this research will be helpful for small technology-based firms to improve their chances of raising funds and to policy makers to enhance the environment for fundraising through relevant education and training initiatives and corporate law regulatory constraints and encouragement of angel networks.

1.6 Chapter Integration

This chapter has introduced the research question and outlined the small technology-based firm landscape which serves as the empirical context for this research, explained the importance of this sector in Australia and elsewhere, presented a justification for the research question was presented and placed both the investors and firms in the context of the broader capital markets. It concluded with a summary of the research design and presented an outline of the findings and contributions of the research.

The thesis proceeds in Chapter 2 with a review of the major streams of literature within the field of entrepreneurship, leading to an orienting conceptual framework presented in the form of tentative propositions and a map of constructs and variables to inform the data collection and analysis. Chapter 3 describes the methodology used in the research, and provides justification for the approach adopted. The cases are described in Chapter 4. The data collected is presented and analysed in Chapters 5 and 6, which also aim to find and identify the key themes and patterns in those data and apply the findings in the form of a conceptual model. Chapter 7 draws conclusions from the findings and discusses the contributions to theory and for government policy and for practice. It also discusses the limitations of the research and outlines recommendations for further research.
Chapter 2: Literature Review

2.1: Introduction

This chapter identifies and reviews the literature relating to the process by which entrepreneurial technology firms seek, negotiate with and decide upon their sources of equity capital.

The chapter is presented in the form of a narrative review. The purpose is to provide a descriptive and critical assessment of the literature. By considering both theoretical and empirical literature within the entrepreneurship field, this chapter provides an overview of the economic, behavioural and social perspectives relevant to the research issues.

In Sections 2.2 and 2.3 the research is anchored in the relevant streams of theoretical literature. Two major theoretical perspectives with potential for providing useful lenses are outlined. The first is rooted in the tradition of rational choice, and comprises agency theory, TCE and social exchange theory. The second emerges from the fields of sociology, cognitive psychology, networks and ethics and adopts a more “socialised” approach.

Agency theory and TCE arise from the discipline of economics and social exchange theory arises from the more recent field of socio-economics. They provide the background and constitute parent or antecedent discipline areas for the research. Together with the sub-streams of decision theory and the literature related to the theory of negotiation (which will be addressed in Section 2.4), they have formed the theoretical underpinnings for much of the extant research in the field. They all rest upon an underlying assumption about human behaviour that conceives of economic actors as motivated primarily by a desire to maximise their personal wealth by
entering exchange transactions with other economic actors. They are examined in Section 2.2.

In contrast, the cognitive psychology, social networks and ethics streams of literature provide a perspective on the process by which STBFs acquire the financial resources for their ventures. These streams are more closely aligned with sociology and psychology literature which are discussed in Section 2.3. The focus of these streams is on understanding the influence of constructs such as inter-personal and inter-organisational relationships and networks, trust and ethics, as well as an examination of individual traits of individual entrepreneurs and their cognitive processes. Other relevant areas of research which are encompassed within this literature include team interactions and leadership (Section 2.5).

Section 2.6 examines the limited prior research on the information search, decision and contract formation processes of entrepreneurial technology firms raising equity capital from venture capital and angel sources. Both the methodology and the findings of this prior empirical research are reviewed and a critique offered. This critique identifies gaps in the existing body of research for this study address.

Throughout this chapter the theoretical foundations provided by the parent disciplines point to constructs and variables emerging from prior research in the area. These are used to develop and present tentative explanations or propositions concerning the process of search, negotiation and decision by entrepreneurial technology firms seeking equity capital to which an analytical inductive approach is applied in answering the research questions.

Finally Section 2.7 integrates the tentative propositions with the respective literature streams. A tentative conceptual framework is then drawn from these propositions. In subsequent chapters these propositions are explored and refined in the light of the data emerging from the research.

2.2 Entrepreneurship Research
Since the research is concerned with how small technology-based firms seek and obtain equity capital, the field of entrepreneurship falls within the discipline area and key focus of the research. Shane and Venkataraman (2000) defined the field of entrepreneurship as:

“the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited. Consequently, the field involves the study of sources of opportunities; the processes of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate, and exploit them” (p 218).

In order to permit better appreciation of the relationship between the different streams of literature within the field a brief outline of the historical development of the discipline follows.

2.2.1: History of Entrepreneurship Theory

“Entrepreneur” is a French word. The concept first appeared in 1437 in the French dictionary Dictionnaire de la Langue Française. Three definitions were given, with the most general meaning denoting a person who is active and gets things done. Entrepreneurship first appeared in the literature of economics in the work of the Irish-born banker Richard Cantillon (1680-1734). His work Essai Sur la Nature du Commerce en Général in French was published in 1755 after his death. It gave the concept economic meaning and accorded a role in economic development to entrepreneurs. The essential feature of Cantillon’s analysis was the emphasis on risk taking. An entrepreneur was a person who bought products at a known price, had them packaged and transported to market, and sold them at a price which was unpredictable and uncertain at the time of purchase.

In the century and a half that followed Cantillon’s work, the ideas of Adam Smith prevailed and these formed the basis of classical market economics. According to Smith, the capitalist was paramount and the entrepreneur had, at the most, a secondary or supporting role in economic thought. Landstrom (1999) concludes that by the year
1900, it could not be said that there was even enough common ground between economic thinkers to speak of a “theory” of entrepreneurship.

The next major contribution came from Joseph A. Schumpeter (1883-1950). Schumpeter started from the premise that equilibrium is the predominant state of the economic system. The entrepreneur fractures this equilibrium by introducing innovations including novel goods or services, new methods of production or different organisation of firms. According to Schumpeter (1934) the entrepreneur is the critical element in technological growth and economic development. For Schumpeter, however, innovations were fundamentally different from inventions:

“…as long as they are not carried into practice, inventions are economically irrelevant and to carry any improvements into effect is a task entirely different from the inventing of it, and a task, moreover, requiring entirely different aptitudes” (p 88).

Therefore while invention is the creation of a new idea or combination of ideas, innovation is the commercialisation of that invention. Commercialisation requires that the invention be applied to make a saleable good or service, which in turn is used to create a new business firm and that firm is then grown successfully. This process is associated with Schumpeter’s rejection of general equilibrium theory in economics through his concept of “the gales of creative destruction”, meaning that the increased buyer satisfaction provided by the entrepreneur poses a competitive threat to existing oligopolies and this in turn leads to their destruction. Entrepreneurs, through the creation of new enterprises, are therefore the true source of competition in the market and not the forces of supply and demand.

More recently, Israel Kirzner (1973) viewed entrepreneurs as economic actors who are alert to the identification and pursuit of opportunities to make profits. The entrepreneurial function involves coordination of information, and arises from identifying gaps between supply and demand: that is, searching for imbalances present in the system. Whereas Schumpeter saw the entrepreneur as a creator of imperfections in the market by generating innovations, by contrast Kirzner saw the entrepreneur as a seeker of imbalances and the entrepreneur’s activities as designed to remove these imperfections (Landstrom, 1999). Whether he or she causes the economic system to
move from equilibrium to disequilibrium, as Schumpeter (1934) proposed, or from disequilibrium to equilibrium, as Kirzner (1979) suggested, the role of the entrepreneur is to act as a catalyst for change in the economy.

During the last half of the 20th century, economic science was principally focused on neo-classical equilibrium models which constituted the dominant paradigm in the field at that time, a field in which Grebel, Pyka and Hanusch (2003) concluded: “there is no space for an entrepreneur in neo-classical theory” (p 496). The problem according to Barreto (1989) resides in the assumptions underlying neoclassical economics, in particular the perfect rationality assumption which requires perfect foresight and perfect information. This assumption excludes “real” choice by consumers and therefore excludes the exploitation of “true” opportunity which is at the heart of entrepreneurship according to the “disequilibrium economics” of Schumpeter (Grebel, Pyka and Hanusch 2003).

Growing out of the same neo-classical economic tradition, mainstream corporate finance theory potentially has similar limitations. When applied to the study of entrepreneurs and their relationship to sources of capital, exponents of corporate finance theory have sought to examine the inherent conflicts of interest, and consequential informational asymmetries and agency costs, between shareholders and managers, including ownership and control issues, using a rationalist perspective (Jensen and Meckling 1976). This theoretical stream, which has had the predominant influence on the study of financial decision-making in the venture capital and angel investor contexts, will be examined in detail in Section 2.2.2 below.

As the limitations of the perspectives of economists and corporate finance theorists started to emerge, other disciplines entered the field to respond to the need to address more process-related and behavioural questions of “how” and “why” (Mitchell et al. 2002). In recent times behavioural science researchers, rather than economists and finance theorists, have increasingly undertaken roles in theoretical development within the domain of entrepreneurship (Landstrom, 1999). McClelland (1961) was the first to conduct empirical studies in the field of entrepreneurship that were based in
behavioural science. He addressed the question of why the economies of certain societies develop more dynamically than others. He found that countries that are economically better developed are characterised by a reduced focus on institutional norms and an increased focus on openness towards other people and their values, as well as on communication between people. He concluded that it is the entrepreneurs who provide the impetus behind the development of a country’s economy.

Following his work, for two decades (the 1970’s and 1980’s) characteristics or trait-based research was widely conducted seeking to describe in demographic or psychological terms the particular characteristics of an entrepreneur, and to answer the question of what distinguishes an entrepreneur from a non-entrepreneur. This stream is examined in more detail in Section 2.3.1 below.

However, while the trait-based approach led to important insights, its inability to conclusively demonstrate empirically the direct effect of traits on entrepreneurial actions (Gartner, 1985) has seen the research focus shift away from the study of individual trait differences to the examination of the cognitive and decision-making processes of entrepreneurs (Busenitz and Barney, 1997; Chen, Greene and Crick, 1998; Baron, 1999; and Mitchell et al., 2000). This stream and its implications for the research is examined in Section 2.3.2 below.

As a further reaction to what they considered as a “undersocialisation” of the economics and finance theory approaches, organisation theory scholars sought to place entrepreneurial activities within the social context of the entrepreneur, including an examination of the effect of the social network of which the entrepreneur or entrepreneurial firm forms part (Starr and MacMillan, 1990). The study of relationships and networks then led on to considerations of ethics and trust. Larson (1997) went as far as to describe these issues as the critical explanatory factors for entrepreneurship in general:

‘… the embeddedness of entrepreneurial firms in supporting network structures explains a great deal about their formation, growth and innovative capabilities, and this framing of the issues in network relationship has ethical dimensions as its core
(trust, relationship, etc.)... ethical issues are not just part of the entrepreneurial story, but in fact, to a significant degree, explain the economic phenomenon of dynamic entrepreneurial innovation’ (pp 251-252).

These streams of research, variously referred to as socio-economics and social exchange in the rational choice dimension, and social network theory in the normative/affective, are further examined below in Sections 2.3.3 and 2.4.5 respectively.

Accordingly the evolution of entrepreneurship research has followed a number of different pathways. Mitchell et al., (2002) described it as having had a multi-disciplinary tradition. In the following section the results of that multi-disciplinary tradition as it has impacted research into the firm’s acquisition of financial resources are examined.

2.2.2 Overview of Present Entrepreneurship Research

With reference to research into the entrepreneurial firm’s acquisition of financial resources, two streams of thought have predominated. The first stream encompasses agency theory and TCE based in economics, which views the entrepreneurial firm’s acquisition of financial resources as an economic exchange. The other stream focuses on the social exchange elements of the acquisition, and includes the theoretical work concerning “social contracting” and “social assets” (Starr and MacMillan, 1990), which is known as “socio-economics”. Both of these streams are firmly rooted in the rational choice tradition and the underlying assumptions do not readily accommodate transcendence by interpersonal relationships, trust, ethics and similar affective/normative constructs. The former stream focuses on economic actors as individuals or “atoms”. The latter stream views those atoms as a collective within their social context (Dunham and Venkataraman, 2002).

Yet other streams examine the psychologists’ insights into entrepreneurs’ personalities and behaviour in organisational contexts. These are drawn primarily from the field of cognitive psychology, and team or small-group interactions and social networks based in sociology. The literature examining the role of ethical norms, trust and development of interpersonal relationships falls into the collective end of this affective/normative dimension.
The multi-disciplinary nature of present-day entrepreneurship research would therefore appear to favour an integration of the analysis of economists with the management and organisational theorists’ perspectives on the business and social networks of entrepreneurial firms as well as the cognitive psychologists’ insights into entrepreneurs’ personalities and behaviours.

The relationships between the parent and immediate disciplines, located on the individual/collective (vertical) and rational/affective (horizontal) dimensions are set out diagrammatically in Figure 2.1. Each quadrant is examined in the following Sections.

2.3: “Rational Choice” Dimension

Rational choice has formed the basis of models of human action in a number of fields of social sciences including economics. This section examines the influence of the agency and TCE theoretical streams which have contributed significantly to the existing theoretical perspectives relevant to the research issue and which share the common assumption of rational choice. This forms the top left-hand quadrant of Figure 2.1.

2.3.1: Agency and TCE theories

Agency theory (Jensen and Meckling, 1976) and (Williamson, 1975; 1985) from the field of finance theory within the broader discipline of economics are two potentially useful theoretical lenses that can be applied to the market for capital faced by the small technology-intense firm. They are the most widely applied theoretical approaches to the study of the relationship between venture capital and angel investors on the one hand and small technology-based firms on the other across a large body of scholarship (Wright and Robbie, 1998; Arthurs and Busenitz, 2003). They are considered together as they both utilise the rational choice model of decision-making and because they share a number of important assumptions about human behaviour.
However, these theories were originally developed to explain behaviour of firms which are not characterised by highly specialised assets and whose shares are traded in competitive and “anonymous” highly liquid public capital markets. So there are also reasons to believe that these perspectives may have significant limitations when applied to private (that is, not publicly listed) firms with small numbers of shareholders for which relationships including the element of trust and ethical behaviour between the contracting parties may potentially be an important element (Ghoshal and Moran, 1996).
In addition, private equity transactions involve business assets with high degrees of specialisation that typically cannot readily be reapplied elsewhere (Cable and Shane, 1997). Therefore the search for capital from venture capital and angel sources appears
to be somewhat different from the contexts in which both agency theory and transaction cost economics were originally developed. This research examines the extent to which either or both of them has the potential to offer useful insights into the research question concerning the search for equity capital by small technology-based firms.

2.3.2: Explanation of Agency Theory

Agency is a relationship in which one individual (the principal) engages another individual (the agent) to perform a service on the principal’s behalf. In so doing, it is implicit that a certain level of decision-making authority is delegated from principal to agent. Agency theory attempts to explain and provide solutions to the problems arising when parties to an economic exchange have divergent goals, particularly in situations where the knowledge or skills of the agent are specialised and where the location of a comparable replacement for him or her is difficult or costly (Jensen and Meckling, 1976). Agency theory is also concerned with the negative effects that lack of goal-convergence between the parties can have on the decisions that are taken (Oviatt, 1988).

Agency theory is concerned with the terms of the agreement between the principal (in this instance, the venture capitalist or angel investor) and the agent (the small technology-based firm). Both principals and agents are assumed to be rational economic maximising individuals that act in accordance with their self-interest. Opportunism is a primary concern for agency theorists who work from the assumption that agents, in general, are better informed than principals as to their true level of skills and abilities. This results in a tendency to “oversell” the virtues of the firm, project or technology (the “adverse selection” problem; Akerlof, 1970) and the level of effort that agents are prepared to expend on a given task on behalf of, and for the benefit of, the principal (the “moral hazard” problem; Arrow, 1971). In the face of this asserted information asymmetry, it is assumed by the principal that the agent requires incentive to work in the interest of the principal, otherwise the agent, who is assumed to be a utility-maximiser, will act according to his or her own self-interest, which may result in shirking and other “dysfunctional” behaviour. Agency theory is often applied to
explain and predict the actions of managers (as agents) and the extent to which they accord with, or diverge from, the objectives of owners (as principals).

The principal issue raised by agency theory is opportunism i.e. the risk that the agent will take decisions that are not in the best interests of the principal. Goal divergence between principal and agent is said to constitute a potential problem in any situation characterised by both high levels of uncertainty and asymmetric distribution of information in favour of the agent. The theory assumes that individuals have a propensity to act in their own self-interest and that human beings are “boundedly rational” (Simon, 1961). This term describes the cognitive limitations operating during human-beings decision-making processes. According to Simon:

“The capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behaviour in the real world—or even for a reasonable approximation to such objective rationality” (Simon 1982, p 204).

While he considered that individuals decision-making was always “intendedly rational” (Augier, 2001), especially in the context of decision-making within organisations, Simon (1961) thought the “objective rationality” of mainstream economics should be replaced by the concept of “procedural rationality”, in which there is an intention and desire to act rationally, but where there may be failures to achieve this due to computational inadequacies. Hence both pursuit of self-interest and cognitive limitations may cause agents to make decisions and take actions that are not in the interests of the principal.

The major problems highlighted by agency theory are those of establishing and maintaining mutually satisfactory behaviour on the part of potentially conflicting and self-interested stakeholders when information about the agents, and the tasks, is costly, uncertain, incomplete and asymmetrically distributed among the parties. The use of monitoring or incentive schemes may not be fully effective. It may not be possible for the principal to observe the behaviour of the agent on a continuous basis except by incurring substantial monitoring costs or to establish the linkage between
behaviour and outcome with certainty. Because of these practical constraints on monitoring, principals sometimes will impose risk on the agents by contracting, in whole or in part, on the basis of outcomes. So the principal will seek to transfer risk to the agent without distinction as to whether outcomes are in fact attributable to the agent’s effort (or lack thereof) or to environmental influences over which the agent may in fact have little control (Levinthal, 1988).

Accordingly, on the assumption that agents are motivated by self-interest, principals respond to this agency risk by building in contractual safeguards, which include the implementation of incentive schemes to influence agent behaviour in a manner consistent with the goals of the principal, and the establishment of monitoring systems. The effectiveness of such measures will be dependent on the principal’s ability to observe the agent’s behaviour and to discern accurately the underlying cause-effect relationship between the agent’s efforts and the outcomes. This emphasis on monitoring systems and safeguards is also consistent with the transaction cost perspective below. Agency theory also relies on incentives to incorporate the necessary degree of flexibility into the economic relationship to solve the problem of responding to unanticipated changes (Kelly and Hay, 2003).

With the aim of bringing the interests of principal and agent into closer alignment, agency theorists argue that the parties to the contract incur costs. These costs include: the expenses associated with the negotiation and drafting of contracts which specify the rights and obligations of parties to the exchange; monitoring costs incurred by the principal in trying to influence or control the behaviour of the agent; so-called “bonding” costs which are incurred by the agent in efforts to demonstrate compliance with the objectives of the principal; and the losses which result from sub-optimal decision making by the agent (Jensen and Meckling, 1976). Agents have an incentive to minimise these agency costs as principals factor them into the price they are prepared to pay for a given equity stake in the firm (Jensen and Meckling, 1976).
2.3.3: Explanation of Transaction Cost Economics

Focusing on the “transaction” (i.e. on the economic exchange between parties), this theory examines how contextual factors, both environmental and human, shape the choices that are made as to how transactions are structured. Within this perspective, “markets” and “hierarchies” (which for this purpose, refers to individual firms) are viewed as alternative governance structures. Hudson and McArthur (1994) defined a contractual governance structure as:

“(the) basic terms specifying who are the contracting parties, what property rights are being exchanged, when and where the exchange will take place, and how the exchange will occur. These terms allocate risk and responsibilities among the contracting partners.” (p 47).

The transaction cost theory seeks to address the issue of how to: “…assign transactions (which differ in their attributes) to governance structures (the adaptive capacities and associated costs of which differ) in a discriminating way” (Williamson, 1985, p 18).

The same fundamental assumption about human behaviour that underlies agency theory also underlies TCE and that is the assumption of opportunism. This implies that some individuals who are party to an exchange will pursue their self-interest to an extreme point of misrepresenting their situation to the other party to the exchange. Williamson defined opportunism as “…lack of candour or honesty in transactions, to include self-interest seeking with guile” (1975, p 9). Williamson did not assume that all human beings behave opportunistically all of the time, but rather that some individuals behave opportunistically some of the time.

Williamson (1975; 1979; 1985) sought to explain why and how parties to an economic exchange establish governance structures through contracts. At the firm level, Williamson developed the transaction cost framework specifically to understand the choices firms face between relying on outside parties by engaging in spot exchanges (“markets”) versus conducting activities within the firm (“hierarchies”). More broadly the choice by the firm between one form of governance structure and another is based
strictly on the criterion of economic efficiency: parties choose the structure which minimises their transaction costs (Williamson, 1975; 1979; 1985; Oviatt, 1988). Within the chosen governance structure, safeguards can be included as part of the contract to protect the parties to the agreement from the effects of either unintended events or undesirable behaviours. Ring and Van de Ven (1992) distinguished between two types of safeguards that can be written into such agreements. The first type comprises structural safeguards that include board membership, contingent value setting mechanisms such as ratchets, or explicit performance standards. The second type consists of procedural safeguards that included auditing or monitoring rights and dispute resolution mechanisms.

Further, Williamson (1985) contended that to deal with the inherent governance challenges associated with incomplete contracts and potentially opportunistic behaviour by one or both of the contracting parties, the parties to an economic exchange should structure their relationship in a manner that promoted and protected the interests of each with as much precision as practical while at the same time incorporating a measure of flexibility to adapt to change over time. Although the parties should aim to set out in detail their respective rights and obligations, it would simply not be possible for parties to a contract to foresee all potential areas of dispute that might arise. Therefore, flexibility needed to be built into contracts to adapt to changed circumstances, for example by agreeing in advance to a dispute resolution mechanism.

2.3.4: Application of Agency Theory and TCE

Agency theory has attracted scholars in this field not only because of the recognition that the “agency problem” has been around for a long time but also because the perspective itself is thought to be widely generalisable. Jensen and Meckling (1976) stated:

“The problem of inducing an “agent” to behave as if he were maximizing the “principal’s” welfare is quite general. It exists in all organizations and in all cooperative efforts….” (p.309) (emphasis added).
To agency theorists, the “agency problem” is solved when the interests of principal and agent are aligned through the use of the incentive system, the establishment of contractual safeguards, and by monitoring the behaviour of the agent.

There are a number of reasons why agency theory has been thought to be useful in the present context (Kelly, 2000). The first is that the market for capital faced by the entrepreneurial technology firm appears to be what Eisenhardt (1989) referred to as a “theory relevant” context for agency theory. She suggested that agency problems are most likely to arise where there is potential for significant goal conflict between principal and agent; where there is a degree of uncertainty as to outcomes; and where the nature of the task to be undertaken is undefinable, that is to say it is difficult for the principal to specify in advance and with precision how the agent should undertake the task (Eisenhardt, 1989). The market for capital for entrepreneurial technology ventures would appear to meet all of these tests.

The second reason is that the provision of capital to technology ventures may be viewed as associated with significant information asymmetries (Shane and Cable, 2002). Agency theorists would consider that technology firms enjoy a variety of informational advantages over the potential investors. These include:

- even after making due allowance for the effects of personality characteristics such as confidence/over-confidence (Busenitz and Barney, 1997; Baron, 1998), individual technology entrepreneurs could be expected to possess a more accurate knowledge of their “true” skills and abilities, information which (on agency theory assumptions) they may either deliberately not make available, or at least may choose to communicate imperfectly, to investors (Shane and Cable, 2002). The implication is that they practice “deceit with guile” (Ring and Van de Ven, 1994).

- investors cannot oversee all of the activities of the entrepreneur all of the time. Entrepreneurs know more about their true effort level than do the investors, even though investors normally insist upon being provided with information on a regular basis by the entrepreneur to monitor the efforts of the agent (Kelly, 2000).
- investors may have more limited knowledge of either the technology or the industry in which the venture competes, particularly in the case of angel investors (Van Osnabrugge, 1999).

**Agency Theory - Incentives**

The distinctive element of agency theory is the use of incentives: the exploration of the mechanisms by which the decisions and the exertions of the agent (technology-based firm) can be brought into closer alignment with the best interests of the principal (venture capitalist or angel investor). The focus on incentives has appeal in the context of capital-raising by technology ventures as both parties continue to hold equity interests in the firm. The parties therefore have a *common interest* in structuring their relationship in a manner that encourages value creation that will benefit them both. Because there are no efficient external mechanisms of control, such as effective replacement markets for entrepreneurial talent or liquidity for the shares held by the investor, then following agency theory the parties mutually choosing to put in place the right incentive structure could be viewed as a necessary condition for the capital raising. So the tentative proposition suggested by agency theory is that *the small technology-based firm seeking to raise capital is faced with an incentive-based deal structure from both angel and venture capital investors.*

**TCE and Governance Structures**

The underlying logic of TCE may also potentially have application to economic exchanges between small technology firms and investors (Kelly, 2000). The transacting parties to the contract are unable to predict future outcomes with accuracy. Investors also have limited ability to determine in advance the competence and the integrity of the individuals within the firm in whose efforts they place capital at risk. When this is true, in the parlance of TCE one would expect investors to put in place a governance structure at the time the investment is made in order to protect their interests. As with agency theory, the contractual agreements between investors and the technology firm would appear to be, again using the words of Eisenhardt (1989), a “theory relevant” area for the application of TCE’ key proposition about the
association between governance choices and the context in which these choices are made.

Hence within the context of provision of finance to small technology-based ventures, a number of features are apparent (Benjamin and Margulis, 2005). First, the investment is highly asset specific: the entrepreneur, the team and the technology may be virtually irreplaceable. Second, technology ventures typically have no previous sales revenue, and often do not even have an existing product or service. Third, they are typically led by individual(s) with limited experience in building new ventures. Fourth, they compete in industries where the investor may have little or no direct previous experience.

Under these conditions of uncertainty and asymmetric information, TCE would suggest the likelihood of opportunistic behaviour by the firm and by individual members of an entrepreneurial team (again, “deceit with guile”) and that therefore the establishment of a comprehensive governance structure would be called for (Williamson, 1985). So in addition to conducting lengthy and costly due diligence, investors would be expected to spell out in detail what behaviour they expect from the firm; to take steps to establish mechanisms for the active monitoring of the firm and to agree upon a mechanism for resolving future disputes between the parties. This elaborate governance structure would seek to insert safeguards in favour of the investors to curb opportunism while at the same time allowing the flexibility for the parties to respond to changed circumstances.

Adopting Ring and Van de Ven’s (1992) dichotomy of structural and procedural safeguards referred to above, TCE suggests the tentative proposition that the small technology-based firm seeking to raise capital is faced with an insistence upon structural and procedural safeguards by both angel and venture capital investors.

to protect themselves from agency risk (in particular, the right to remove under-performing, incompetent members of the entrepreneurial team) and are therefore more concerned with market risk, angel investors are more concerned with managing and minimising agency risk. Accordingly they suggested that angel investors insist on previous knowledge of the individuals in the firm, and make decisions based not on business plans and internal rate of return (IRR) calculations but on their own “gut-feel”. The key and common assumption underlying both agency theory and TCE is opportunism. Accordingly, the research sought to explore the role of opportunism on the part of the members of the entrepreneurial team (which underlies both agency theory and TCE) by seeking to explore the presence or absence in the process of capital raising of consideration of the elements of opportunism including acting in bad faith, pursuing conflicting objectives, the deliberate or “reckless” overstatement of skills, abilities or returns, and “shirking” or other behaviours on the part of the small firm against the investor’s interest. The tentative proposition associated with opportunism is that the entrepreneurial team has a tendency to act with “deceit with guile” rather than ethically, resulting in the imposition of incentives, structural and procedural safeguards or governance mechanisms.

The inherently negative assumption about human beings, upon which the agency theory perspective is based, namely that agents will display a tendency to misrepresent their true abilities (adverse selection) and to engage in shirking and other opportunistic behaviour (moral hazard), implies that there is little room for ethical behaviour, trust or positive social relationships to be in evidence at the time the relationship is entered into between the principal and agent. Indeed, agency theory can be described as characterised by an assumption of mistrust, and operating in the absence of any pre-existing or ongoing relationship.

Relying on the so-called Prisoner’s Dilemma example of game theory, Cable and Shane (1997) sought to construct an alternative framework that emphasised the need for the two parties to establish “bases of cooperation” which are then set out with precision in contractual form. However, this approach has the potential to create “disincentive effects” as investors seek above all to protect themselves from agency
risk. Whether such comprehensive and elaborate governance mechanisms are viewed in terms of TCE or the Prisoner’s Dilemma scenario, although designed to bring the interests of principal and agent into closer alignment they may in fact have the opposite effect. The agent might reasonably interpret them as a signal of distrust. As Sapienza and Gupta (1994, p 1269) noted that "above a certain level of ownership, there is little or no reason to expect incentive-related shirking or opportunism’.

In the event that opportunism does not emerge as playing an underlying role, the utility of these rational choice approaches to the research question may have important limitations. These potential limitations are explored more generally in Section 2.2.4 below.

2.3.5: Limitations of Agency Theory and TCE

Agency Theory

While agency theory has the possibility of being useful in understanding the formation and structuring of the economic relationship between the technology firm and potential investors, researchers have questioned its applicability in this context (e.g. Landstrom, 1992), while others have suggested that its application should be limited temporally, to the pre-contract stage (Arthurs and Busenitz, 2003) or to venture capital investment cases but not angel investment cases (Van Osnabrugge, 1999).

Landstrom’s (1992) concerns are based on several grounds: first, the lack of empirical studies to date which have found empirical evidence to support the agency theory framework in this context; and second the limiting and essentially negative nature of the assumptions upon which agency theory is based. The empirical research that has relied on agency theory has focused primarily on issues related to separation of ownership and control in large listed public companies with widely dispersed shareholdings. Third, the key assumptions upon which agency theory is based may not hold in the present context. The empirical testing of the elements of opportunism has already been referred to previously. Fourth, the implied assumption that the respective roles of “principal” and “agent” are fixed may not be appropriate in the present
context. It may not be that only the investor is at risk from “deceit with guile” from the other party to the exchange. Sapienza (1989) found that:

“...the significant ownership share of some entrepreneurs and their dependence on sustained capital infusions lend to them many of the concerns of principals as described in agency theory” (p. 306).

Cable and Shane (1997) found that the relationship between venture capital investors and technology entrepreneurs is *not* hierarchical in nature and that there is scope for *each* to indulge in opportunistic behaviour which can cause difficulties for the other. Gompers (1996) cited examples of opportunistic behaviour on the part of venture capital investors such as “grandstanding” or forcing companies to be sold or listed on the stock exchange prematurely in order to achieve “runs-on-the-board” so that the venture capitalists could more readily raise a new fund.

On the other hand, unlike most venture capitalists (who come predominantly from a finance sector background: Bygrave and Timmons, 1992), angel investors bring a wealth of practical experience building and running businesses themselves, frequently in the relevant industry sector (Mason and Harrison, 2002). While this experience can be useful in helping them form an opinion about the attractiveness of a given opportunity and the quality and integrity of the people pursuing it, the possibility for better informed and more experienced angel investors also behaving in an opportunistic manner vis-à-vis the firm seeking capital is a potential concern (Sapienza and Gupta, 1994). The tentative proposition is that the small technology-based firm needs to be concerned at the search stage about opportunistic behaviour by angel and venture capital investors respectively, in order the minimise exposure to “reverse-agency” risk.

Further, agency theory assumes principals and agents are motivated principally by economic self-interest or personal wealth maximisation. While wealth maximisation is important for both, there is ample evidence from existing research that individual members of the entrepreneurial team (Vesper, 1980; Timmons, 1990) are motivated by issues other than simply maximising their own wealth and that this may also be true of
angel investors but not of venture capital investors (Wetzel, 1981; Landstrom, 1992; Duxbury, Haines and Riding, 1994; Mason and Harrison, 1994). These other motivations include the fun and satisfaction from being involved in an entrepreneurial firm, interest in new technology for its own sake, the stimulation of employment and economic growth and similar altruistic motivations. Relevant to the research question is the potential for this range of non-financial motivations to play a role in the process of selection of and negotiation with prospective investors undertaken by the technology firm in its search for capital. The tentative proposition is that the technology firm may be able to identify, and make use of, non-financial motivations of angel investors (but not venture capital firms) in the design and execution of a fundraising strategy.

Implicit in the agency theory perspective is that the “incentives” to address the goal conflict issue and provisions for mandatory information transfer, are requirements that the investor imposes upon the technology firm in order to minimise the propensity for inappropriate behaviour by the firm. A number of theoretical models of the investment process, consistent with agency theory, have assumed that entrepreneurs hand over to the investors the determination of the basic structure of the deal and in particular the elements most closely aligned with the creation of “incentive”, namely the staging of commitments and the use of convertible financial instruments containing equity “ratchets” (see for example, Amit et al., 1990; Chan et al., 1990). Empirical studies (for example Landstrom et al., 1998) have also assumed that this structure and content are unilaterally imposed by the investor, based on the observation that the majority of contract provisions in cases studied appear to be for the protection of the investors’ interests. While a number of authors (Fiet, 1995a; Fiet, 1995b; Van Osnabrugge, 1998; Harrison and Mason, 2002) found that contracts between firms and angel investors tend to be simpler and less formal than those with venture capital firms whose contracts tend to be highly standardised (Kaplan and Stromberg, 2003). The appropriateness of these assumptions has not been considered in the literature from the perspective of the STBF. The tentative proposition from the literature is that the small technology-based firm does not take the lead in determining the basic deal structure or terms, but instead cedes that role to the investor.
**Transaction Cost Economics**

Transaction cost economics as a theoretical lens also appears to have limitations when extended to the field of angel and venture capital (Ghoshal and Moran, 1996). Many of these are shared with agency theory and arise from the shared underlying assumptions and the contexts for which they were developed. First, the nature of the decisions which the transaction cost perspective was conceived to explain, namely when does it make sense to purchase in a market, produce in-house, or arrange transactions in some other manner such as a strategic alliance or joint venture, implies a focus on issues faced by older, larger often publicly-traded firms. Potentially there are major differences between small, newly established unlisted firms and the type of firm towards which the transaction cost perspective is orientated.

Second, as with agency theory, TCE leaves little room for personal relationships or trust to develop between the parties or for ethics to play a role. The tone is negative and defensive. While attention to contractual detail does help to clarify and make transparent the respective rights and responsibilities of the parties, there is no room in TCE for examination of the effect such an approach may have upon the attitudes of the parties. To small technology-based firms, the presence of a vast array of perceived, if not real, constraints on their behaviour has the potential to act as a disincentive, as suggested by Ghoshal and Moran (1996) in their general critique of the transaction cost perspective. They concluded that:

“…even though sanctions can undoubtedly promote certain specific behaviours and deter others, elements of governance mechanisms such as surveillance and fiat have consistently been shown to have negative effects on individual attitudes toward the specific behaviour that is targeted” (p. 20).

Beyond a certain point, the authors suggest, efforts by investors to identify and insert contractual control mechanisms to cover all potential sources of governance challenge may do more harm than good. This issue is similar to that raised above in relation to elaborate control mechanisms suggested by Cable and Shane (1996).
Third, as with agency theory, empirical research supports the view that neither investors nor entrepreneurs are driven solely by economic self-interest as TCE implies (Sullivan, 1994).

Fourth, the threat of opportunism on the part of entrepreneurs, which is common to both agency theory and TCE, may in the context of the search, negotiation and decision process of small technology-based firms, be overstated. Wiltbank and Sarasvathy (2002) suggested that the issue of unpredictability at the level of the entrepreneur is completely ignored. Agency theory and TCE both share the assumption that distributions of future returns are somehow exogenously determined, and while unknown at the time the investment decision is made, are knowable (at least in theory) if only complete information on all relevant determinants were available \textit{ex ante}. However in the context of the research question, it can be argued that \textit{neither} the entrepreneur \textit{nor} the investor can predict the outcome of the venture at any realistic level of accuracy. According to Wiltbank and Sarasvathy (2002), a more useful framework may be that of Knightian uncertainty (Knight, 1921) under which the uncertainties that characterise future outcomes are not just unknown but are \textit{unknowable} and simply cannot be predicted at the moment of decision no matter how complete is the knowledge the decision maker possesses as to the then extant state of affairs. It is the decisions that the entrepreneurs and the investors \textit{subsequently} take \textit{jointly}, in their “partnership” or effectuation (Sarasvathy, 2001) that will create the probability distributions for the returns which they are both seeking. In other words the future is not so much “out there to be predicted and harvested” (Wiltbank and Sarasvathy 2002, p.13) but is at least in part \textit{created} by the actions of the parties. On this view the search, negotiation and contract commitment efforts of the members of the entrepreneurial team which precede the effectuation may have more in common with the formation and maintenance of relationships as described by Ring and Van de Ven (1994), than with the inherently adversarial combination of opportunism by the firm, and as a response the imposition of aligned incentives and monitoring by investors. This theme will be further examined in section 2.2.5 below.
Arthurs and Busenitz (2003, p 155-8) reviewed the applicability of agency theory to the venture capitalist and entrepreneur relationship in general. They concluded that although it remains the dominant theory in explaining the relationship in existing research, it “tends to provide an incomplete and to some extent inaccurate picture of the entrepreneur and to a lesser extent the VC”. They suggested that the failure to acknowledge the central role of the individual entrepreneur and the entrepreneurial team is counter-productive to the development of good theory for entrepreneurship research. They commended researchers to focus attention on the dynamics inside the entrepreneurial firm and on the individual entrepreneur and the unique resources that he or she brings and on understanding how entrepreneurs think and make strategic decisions. These comments point the way to a potential contribution to the literature in exploring the constructs of agency theory and TCE as viewed from the demand side of the fundraising equation, that is, from the perspective of the STBF. After completing consideration of the social exchange component of the rational dimension in Section 2.3.6, below, an examination of these thematic pathways to which Arthurs and Busenetz (2003) point is pursued in Section 2.4 below.

2.3.6: Socio-Economics – Social exchange theory

Still within the rational choice dimension, the theory of social exchange shares many of the same assumptions about human behaviour which underlie classical economics. It is contained within the lower left hand quadrant of Figure 2.1. Social exchange theory has its central premise that individuals choose to engage in social exchanges, conferring benefits upon others, in the hope of receiving future benefits and rewards for themselves (Dunham, 2010). A social exchange is similar to an economic exchange but it differs from it on a number of bases (Blau, 1964). First, while social exchanges may include benefits of an economic nature, such as information, usually they focus on benefits carrying a more “intrinsic” value, such as social support or social status. Second, in contrast to economic exchanges, social exchanges are rarely the subject of an explicit contract or agreement; they operate by leaving the parties with an implicit sense of obligation (Dunham, 2010). Despite these differences, however, social exchange theory falls within the domain of rational choice because it holds to the
assumptions of self-interest, utility maximisation and bounded rationality. Its roots in the language and theory of neo-classical economics emerge clearly from the words of Homans (1958, p606):

‘Social behaviour is an exchange of goods, material goods but also non material ones, such as symbols of approval and prestige … This process of influence tends to work out at equilibrium to a balance in the exchanges. For a person engaged in exchange, what he gives may be a cost to him, just as what he gets may be a reward, and his behaviour changes less as profit, that is, reward less cost, tends to a maximum. Not only does he seek a maximum for himself, but he tries to see to it that no one in his group makes more profit than he does” (p. 606).

This theoretical perspective has formed the basis of studies in the field of entrepreneurship concerning social relationships. In their leading article on the role of social contracting in the resource acquisition strategies of new ventures, Starr and MacMillan (1990) refer to social exchange theory in explaining how entrepreneurs “exploit certain ‘social assets’ they possess” (p. 85) in order to obtain the resources needed to establish their ventures:

‘In such social (emphasis in original) contracts the goods and services the venture manager needs are implicitly ‘traded’ for social commitments; favours are extracted or obligations built (Homans, 1958; 1961; Blau, 1964). While the mental records may be ambiguous, each party knows that at some time in the future, on a completely different and totally unspecified transaction, the initial provider of the resource may ask a favour, recalling his ‘loan’ or ‘cashing in’ the obligation” (p. 85).

Starr and MacMillan (1990, p 85-6) describe the kinds of social assets which could be subject to entrepreneurial exploitation. They speak of social “debts” being incurred and the “cost” of “maintaining” the social assets. They include friendship, liking, trust, gratitude or obligation. The authors define some “strategies” or “tactics” by which entrepreneurs could “build an inventory” of such assets, such as providing useful information to another without charge or other return. On this view the social nature of entrepreneurship can be thought of as a series of transactions between self-interested and utility maximising actors, each viewing the other as subordinate to their individual goals but willing to engage in reciprocal favours in order to achieve those goals (Dunham, 2010). Other social network theorists focusing on entrepreneurship in
general also link the conscious use of networking to the securing of tangible resources required to launch the venture, including finance (e.g. Vesper, 1980; Birley, 1985; Aldrich et al., 1987).

Such approaches suggest that the entrepreneurial firm’s strategy should be to select and to “exploit” the contacts with, and of, those members of the firm’s network who can assist in the process of securing financial resources for the firm. The elements of such strategies include the entering of repeated transactions at the instance of the small technology-based firm, smaller at first and then increasing, so that over time a slow build-up of trust can occur and from which a benefit can be extracted in the form of a financial investment in the firm by the investor. Accordingly the research will examine whether such social contracting strategies are used by technology firms in the search for capital from either or both angel investors and venture capitalists. The tentative proposition is that technology firms do use such social contracting strategies in relation both to angel investors and venture capitalists.

2.4: Affective/Normative Dimension: Traits, Cognitive Psychology, Social Networks and Ethics

The following three sections commence the examination of the literature falling within the affective/normative dimension. Within the top right-hand quadrant of Figure 2.1 are the items within this domain concerning individuals, the first of which concerns the research into entrepreneurial traits (Section 2.3.1) and the second arises out of the field of cognitive psychology (Section 2.3.2).

2.4.1: Entrepreneurs’ Traits

The stream of research concerning entrepreneurial traits dates back to the 1960’s and follows the pioneering work of McClelland (1961). Characteristics or trait-based research was widely conducted seeking to describe in demographic or psychological terms the particular characteristics of an entrepreneur and to answer the question of what distinguishes an entrepreneur from a non-entrepreneur. Entrepreneurs have been
found to be people who have a high need for achievement, strong self-confidence, independent problem-solving skills, and who prefer situations that are characterised by moderate risk, who follow-up results and seek feedback, and are inclined to take individual responsibility. Landstrom (1999) summarised the results of a body of studies concerning these traits as follows:

**Figure 2.2: Characteristics Attributed to Entrepreneurs**

<table>
<thead>
<tr>
<th>Innovators</th>
<th>Tenacious</th>
<th>Need for Achievement</th>
<th>Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaders</td>
<td>Original</td>
<td>Self-awareness</td>
<td>Use of resources</td>
</tr>
<tr>
<td>Moderate Risk Takers</td>
<td>Optimistic</td>
<td>Self-confidence</td>
<td>Sensitivity to others</td>
</tr>
<tr>
<td>Independent</td>
<td>Results-oriented</td>
<td>Long term involvement</td>
<td>Aggressive</td>
</tr>
<tr>
<td>Creators</td>
<td>Flexible</td>
<td>Tolerance of ambiguity</td>
<td>Tendency to trust people</td>
</tr>
<tr>
<td>Energetic</td>
<td>Resourceful</td>
<td>Initiative</td>
<td>Money as a measure</td>
</tr>
</tbody>
</table>

*Source: Landstrom, 1999, p16.*

Entrepreneurial behaviour is transitory (Carroll and Mosakowski, 1987). Estimates of the number of people who engage in entrepreneurial behaviour in Australia in a given year range as high as 15% (Hindle and Rushworth, 2002). Furthermore, entrepreneurship can be undertaken either by a single individual or by a group of people who undertake the steps of the process collectively (the role of the entrepreneurial team is addressed in more detail in Section 2.5 below). Since such a large and diverse group of people engage in the transitory process of entrepreneurship, it is unlikely that entrepreneurship can be explained *solely* by reference to a set of characteristics possessed by certain people independent of the situations in which they find themselves (Shane, 2007).

Consequently, as one might expect, researchers have had difficulty identifying and empirically verifying a single set of psychological or demographic characteristics that
are common to all entrepreneurs, or a unique set of personality traits that characterise entrepreneurs and distinguish them from non-entrepreneurs across all contexts (Gartner, 1985; Brockhaus and Horowitz, 1986; Sexton and Bowman-Upton, 1991). More recently Shaver (1995) has distinguished between entrepreneurial traits, an approach which she concluded has “proven elusive” (p. 21) as a method of distinguishing entrepreneurs from non-entrepreneurs, from other psychological variables (which are not strictly traits because they can be acquired by experience or by practice) that may influence entrepreneurial actions. She identified interpersonal skills including presentation and negotiation skills, processes of social cognition and persistence in the face of rejection or failure as variables which may be relevant (Shaver, 1995, p21). The potential role of these psychological variables in the task of raising capital in a related context (corporate venturing) has been the subject of study, and this theme is considered further in Section 2.3.2 below.

Several of the traits identified by Landstrom (1999) above have the apparent potential to contribute to the research insofar as they may impact upon the STBFs search for capital, namely those which appear to be associated with the variables found by Shaver (1995). Those that appear to have potential relevance to the context of search, negotiation and commitment in raising capital are:

- Self-confidence (or over-confidence)
- Optimism
- Tenacity

Previous research points to entrepreneurs being more susceptible to certain cognitive biases than are non-entrepreneur managers (Busenitz, 1992). One bias for which this has been shown to be true is the overconfidence bias (Busenitz and Barney, 1997). The overconfidence bias refers to the tendency of people to overestimate the correctness of their initial estimates in answering moderate to difficult questions. In other words, tests that reveal the existence of this bias provide a measure of the degree to which people do not know what they do not know (Forbes, 2005). A sub-set of this bias is the overconfidence in assessing the reliability of one’s own judgment rather
than that of others, optimism about the outcomes of the exercise of that judgment, and
tenacity in the face of rejection or resistance.

It is not clear why entrepreneurs exhibit more tenacity, optimism and overconfidence
than non-entrepreneurs. Two possible explanations have been advanced (Busenitz and
Barney, 1997). The first suggests that entrepreneurship attracts a certain kind of
person, those who are less formal and rational in their thinking and more inclined to
favor instinct and spontaneous insight—to go with their “gut-feel”. The second
explanation holds that entrepreneurs resort to cognitive biases as a response to certain
conditions inherently associated with the task of entrepreneurship, such as excess of
information, high uncertainty and time pressure. Research has not yet provided an
answer as to which of these explanations is correct (Forbes, 2005). Either explanation
is consistent with an over-hasty decision based on less than optimal information and
consistent with reliance on the personal assessment of the team members rather than
the opinions of independent sources (such as other entrepreneurs, venture capitalists or
experienced angel investors).

2.4.2: Cognitive Psychology

Disillusionment with the trait approach in the discipline of entrepreneurship as
described in the previous section began in the 1980’s at around the same time as
cognitive psychology was emerging to help explain the mental processes that occur
within individuals as they interact with other people and the environment around them
(Fiske and Taylor 1984). The entrepreneurial cognitions approach seeks to explain
how entrepreneurs think and why they do the things they do (Bird 1992; Busenitz and
Lau 1996). Entrepreneurial cognitions are the knowledge structures that people use to
make the judgments or decisions involved in opportunity recognition, new venture
creation and in assembling the financial, human and other resources required for the
firm. In other words,

“research in entrepreneurial cognition is about understanding how entrepreneurs use
simplifying mental models to piece together previously unconnected information that
helps them to identify and invent new products or services, and to assemble the
necessary resources to start and grow businesses.” (Mitchell et al., 2002, p 974).
The early research in entrepreneurial cognitions was conducted in the areas of cognitive biases and heuristics in relation to strategic decision-making (Busenitz, 1992). The term biases and heuristics refers to simplifying strategies, decision rules and pre-conceived ideas that people apply in making decisions in uncertain and complex environments (Maxwell et al., 2009). A cognitive bias occurs when the decision maker applies a rule of thumb that systematically violates the laws of probability (Hogarth, 1980). Biases and heuristics are not necessarily bad: often they yield prompt, effective and efficient solutions to problems (Tversky and Kahneman, 1974; Hogarth, 1987; Baron, 1998). However while such rules can increase the speed of decision-making, they may also result in severe and systematic errors (Tversky and Kahneman, 1974). Cognitive biases can cause individuals to overestimate the reliability and validity of information, to draw incorrect conclusions, or to give too much or too little weight to particular sources or types of information (Zacharakis and Shepherd, 2001). Wright et al., (2000), Alvarez and Busenitz (2001) and Levie and Gimmon (2008) use cognitive models to explain how the heuristic-based logic that appears to be stronger in entrepreneurs than in non-entrepreneurs helps to explain how entrepreneurs think and make strategic financial decisions. No single factor ensures unbiased processing but there are certain conditions that make specific biases more probable (Zacharakis and Shepherd, 2001). Therefore it is important to identify such factors which have the potential to result in specific biases in members of an entrepreneurial team.

Simon and Houghton (2002) suggest that entrepreneurial firms making different types of decisions and having different characteristics exhibit different types of biases and that each specific bias may lead to different types of specific misperceptions. They encourage further research to examine biases in relation to specific decision contexts.

One such context comprises firm characteristics, for example, age and organisational size (Daft and Weick, 1984). Galbraith (1977) finds that the age of a firm affected decision-making. Furthermore, as a firm hires more employees, both decentralisation and formalisation of decision-making increase (Aldrich and Auster, 1986). It would be
expected that these factors would influence the information search and decision processes of firms. For the same reasons it would also be expected that the small technology-based firms the subject of the research, being both small and young, may be particularly prone to suffer from biases.

One heuristic commonly associated with entrepreneurs is the application of simple analogies to guide decision-making (Schwenk, 1984). In seeking to understand unfamiliar situations, people commonly compare the situation to a more familiar one, a process known as “reasoning by analogy” (Duhaime and Schwenk, 1985). The use of information from personal communications may lead entrepreneurial firms to reason by analogy. Personal communications result in individuals receiving more vivid and detailed information about a given subject (Daft and Lengel, 1986), which is easily recalled and applied—even though it may not be directly relevant (Haley and Stumpf, 1989). Relative to broadly based statistics, personal sources are relatively inefficient at conveying information about populations (Daft and Lengel, 1986). However, for many people statistical data lack the vividness and impact of specific information and anecdotes, and accordingly tend to receive relatively less weight. For example, by contrast with reading a sheet of statistical data covering dozens of constructs over thousands of companies, an individual spending time communicating with another person is likely to hear a more detailed and colourful description about a small number of investors and companies. This suggests that people tend to remember information received from personal sources and tend to give this information relatively greater weight (Hogarth, 1980). This bias is referred to by Busenitz and Barney (1997) as the “belief in the law of small numbers” bias.

Based on these general information processing concepts, the small technology-based firm’s information search process can be characterised by two main sources of information: personal sources and impersonal. In the search for information and the decision process for STBFs seeking capital, a tentative proposition can be asserted that personal and direct sources of information are more likely to be relied on as opposed to impersonal sources such as published materials and statistics.
At the empirical level, Koen et al., (2001) have specifically examined the link between various cognitive mechanisms and success in obtaining start-up funding, not in the context of small independent technology-based firms as is the case with this research, but in the context of corporate entrepreneurship: that is, teams within large corporations seeking funding from that corporation to pursue new product ideas. They examined four cognitive mechanisms that the authors believed might be associated with success in obtaining funding. These were: self-efficacy (i.e. the belief that one can successfully pursue certain actions); persuasion (i.e. the ability to sway the actions of others); social perceptiveness (i.e. the ability to “read” and to understand other people, especially their motives and intentions); and emotional intelligence (the ability to recognise and manage one’s own emotions, and to handle interpersonal relationships in an effective manner [Goleman, 1995]). These are in substance similar to the “psychological variables” found by Shaver (2001) to be superior indicators of entrepreneurial personality than the trait-based approach. In the specific context of raising funds from internal corporate sources the authors found that self-efficacy and persuasion were strongly correlated with the amount of funding obtained by teams, but that neither social perceptiveness nor emotional intelligence was significant.

This leads to the following tentative proposition, in the context of seeking capital from venture capitalist and angel investors: **self-efficacy and persuasive ability are important factors contributing to successful capital raisings from venture capital firms and angel investors, but social perceptiveness and emotional intelligence are not.**

**2.4.3: Social Networks**

The following Sections examine the collective or interpersonal elements falling within the affective/normative domain of the literature and comprise the lower right-hand part of the quadrant in Figure 2.2 concerning social networks (Section 2.4.3), trust and reputation (Section 2.4.4) and teams/leadership (Section 2.6). Together with the Section on Negotiation (Section 2.5) they complete the theoretical streams of literature relevant to the research question.
In contrast to the economic perspectives of agency theory and TCE, which for this purpose can be considered asocial, organisational theorists suggest that both investors and firms use social ties through social networks to respond to the issue of information asymmetry in the venture and angel capital context (Venkataraman, 1997). Applying Granovetter’s (1985) concept of “embeddedness”, they argue that social obligations between connected parties and information transfer through social relationships influence decision-making (e.g. Shane, 2002).

Organisation theory explanations in the venture capitalist and angel investor context are based principally upon mechanisms of social obligation, and have been applied to explain how social relationships influence the process of capital raising by the small technology-based firm. Uzzi and Gillespie (1999) suggest that social ties create mutual expectations of trust and a sense of reciprocity, which then result in cooperation between the parties to an exchange. By this means, there exists the potential for the application of “win-win” negotiating strategies, which is further addressed in Section 2.5 below.

Shane and Cable (2002) propose that social ties influence the provision of finance to entrepreneurial firms through mechanisms of information transfer. They distinguish between direct and indirect social ties: a direct tie is defined as a personal relationship between a decision maker and the party about whom the decision is being made (Larson, 1992) and an indirect tie as a relationship between two individuals who are not directly connected but through whom a connection can be made through the social network of each party’s direct ties (Burt, 1987). They examine the effect of direct and indirect ties in investor-entrepreneur dyads at the time of seed-stage investment decision by both venture capitalists and angel investors in the United States. Direct social ties, they suggest, transfer expectations about people’s behaviour from a previous social setting to the new business transaction (Uzzi, 1996). By “embedding” (Granovetter, 1985) a transaction in an enduring social relationship, direct ties motivate both parties to maintain the relationship in a fair and trusting manner and also create a sense of obligation between the parties which causes the parties to behave generously.
towards each other. However Shane and Cable (2002) focus exclusively on the effects of social ties upon the decision-making of the investor component of the dyad, that is, the venture capitalist and angel investor. The present research seeks to complete the dyad by examining the impact of social ties on the strategies and actions of the demand side, adopting as the unit of analysis the small technology-based firm.

Indirect ties are also capable of transferring expectations about people’s behaviour from a relationship with one person to a relationship with another (Uzzi, 1996). With indirect ties, an intermediary can “transfer” expectations of behaviour from the existing relationship to the new one (Uzzi, 1996). Shane and Cable (2002) suggest with respect to the role of intermediaries in the process of capital raising (such as lawyers, bankers and accountants) that the intermediary may be able to exploit a debt of reciprocity owed to him or her by an investor, and “transfer” the “credit” to another person, in this case an entrepreneur or a firm.

As well as creating social obligations, indirect ties can enhance the ability to obtain additional and different information, and at a lower cost. A network of social ties allows people to obtain information about others with whom they do not have a direct contact, by providing access to more information than they could obtain by themselves (Burt, 1997). Indirect ties also improve the efficiency of obtaining information in that: “social relations, often established for other purposes, constitute information channels that reduce the amount of time and investment required to gather information”: (Nahapiet and Ghoshal, 1998, p. 252). Information from indirect ties can assist in forming opinions on matters which by their nature require more intimate prior observation and knowledge about an individual or firm, or that is hard to obtain, such as business or technical competence.

The size and nature of the ties in a social network may also affect information flows. Unlike fully arm’s-length transactions, which he concedes are governed by norms of self-interest, Granovetter (1985) contends that social relationships are governed by norms of fairness and equity. He argues that strong ties (such as the relationship ties between family and close friends) tend to be the source of redundant information. The
“strength of weak ties”, to adopt the title of Granovetter’s (1973) earlier work which examined relationship ties to a wider circle of acquaintances beyond family and close friends, is that they can potentially bridge information gaps between individuals who have little other interaction. By linking very different groups of people, weak ties tend to provide new information, which would not necessarily be accessible by other means. Paradoxically, by this means, weak ties, more than strong ties, are capable of conferring substantial informational benefits (Burt, 1992).

Social network theorists have attempted to apply these theories by showing the association between features of entrepreneurial firms’ networks and business outcomes. Following the work of both Granovetter (1973 and 1985) and Burt (1992), social network theorists have examined links between network size, diversity and the number of weak ties to business outcomes including the acquisition of financial and other necessary resources. The underlying assumption is that larger, more diverse networks that have more weak ties provide entrepreneurs and their firms with access to superior information and to a wider range of other necessary resources including capital. O’Donnell et al. (2001) review these studies and find that a large and diverse network does not seem to result in positive outcomes, but that successful firms might also have dense and/or small networks. In the terminology of social networks, successful entrepreneurial firms are just as likely to rely upon a small number of strong ties.

In contrast to the economic perspectives, the social network perspective admits a role for socially-based ties between entrepreneurial firms and their stakeholders. These may operate either through enhancing the range and quality of information exchanged as well as the efficiency of that exchange by reducing the cash and time cost of obtaining that information, or through the mechanism of reciprocal obligations or favours-owed. Empirical studies show that the recurrence of exchanges between partners facilitates the development of trust between them (Kollock, 1994). Molm et al., (2000, p 424) assert that as well as the frequency of exchanges, the form of the interaction is important. They distinguish between reciprocal and negotiated exchange. Reciprocal exchange occurs when one party initiates the exchange unilaterally without knowing if
the other will reciprocate. Negotiated exchange occurs when neither party takes any action until the terms of the exchange have been negotiated. They conclude that reciprocal exchanges produce both higher levels of trust and stronger feelings of attachment to the partner than negotiated exchanges.

In his study of the early stage capital-raising activities of entrepreneurs from venture capital firms in the particular environment of Silicon Valley California (which he argues is unique in the world), Ferraro (2003) finds that experienced entrepreneurs identify the avenues to obtain funding from professional venture capitalists and then build and maintain those networks in a “holding pattern” to be activated when subsequently needed to obtain financial resources. Success in accessing resources for the firm may therefore depend less on the structural aspects of the network than on the existence and content of the relationships comprising the network. This suggests the need to explore the content of the relationships between members of the network, rather than the structural aspects (such as size and diversity) in order to gain insight into how the interaction and collaboration between network members affects the financial resource acquisition processes. Accordingly the tentative proposition is that the content of the entrepreneurial team’s network of relationships affects the search for information and decision process for STBFs in obtaining capital, rather than the size and diversity of that network.

2.4.4: Trust and Reputation

The models of the search, decision and negotiation process in economics and socioeconomics addressed in Sections 2.2.2 and 2.2.5 above assumed participants acted as “atoms” in a boundedly rational manner, maximising their utility. Under those assumptions the investor and the STBF each conducts a form of unilateral search amongst a range of opportunities and counterparties until each finds one that that meets certain pre-set requirements. The exchange is then pursued through a process of negotiating a contract, each party’s objective being, as far as possible, to increase that party’s own return while moving risk over to the other.
However other researchers (Sarasvathy, 2001; Hannafey, 2003) have viewed the process of resource acquisition by the small technology firm as more characterised by mutual attraction, based in trust, and in which the contractual arrangements play a subordinate role to that of interpersonal trust. The empirical studies adopting this view approach the issue from the perspective of the investor, whether venture capitalist (Sapienza and Timmons 1989; Cable and Shane 1997), or angel investor (Harrison, Dibben and Mason 1997). These studies pose the question: to what extent does trust in the entrepreneur or firm (or lack thereof) on the part of the investor influence the investor’s decision as to whether or not to invest? However, the perspective from the other side of the dyad remains unexplored: the extent to which trust in the investor (or lack thereof) influences the entrepreneur or firm’s decision as between angel investment and venture capital; or the extent to which the existence of mutual trust between the parties influences the process of search, negotiation and contracting for capital from the demand side. Rosenberger (2005) referred to the importance of this issue from the perspective of the entrepreneur in the parallel context of raising capital from corporate investors, but did not examine it empirically. This represents the antithesis of the agency and TCE theoretical approaches, rooted as they are in assumptions of mistrust. These aspects of the issue of trust have not been the subject of enquiry in the context of the entrepreneurial firm’s search for equity capital from angel and venture capital sources.

Trust in this context refers to “a means of speeding decision making and negotiations by reducing transaction costs between individuals in organisations under conditions of risk”: (Harrison, Dibben and Mason, 1997, p 64). Mayer et al. (1995) assert that in the context of organisations, trustworthiness is characterised by three elements: ability, integrity and benevolence. Ability covers talents, knowledge and skills to operate effectively in a particular environment. Benevolence refers to the degree to which one party is perceived as wanting to do good to the other, including beyond the context of the specific transaction. Integrity is attributed to a party when the other party believes that the first will adhere to a set of principles acceptable to that other party. It is akin to the notion of ethical behaviour (Hannafy, 2003).
The sources of trust appear in part to lie in the characteristics of the parties, and in part are a function of the environment. Individuals tend to react more positively to people who share similar attitudes and values (Johnson, 1989). Several authors find that sharing of similar values is likely to promote productive working relationships and cooperation between entrepreneurial firms and investors, at least in the post-contract phase (Sapienza and Gupta, 1989; Cable and Shane 1997). This finding is consistent with the literature on homophily (summarised by MacPherson, Smith-Lovin and Cook, 2001) to the effect that exchanges are more likely to occur between individuals who share similar socio-economic characteristics. When combined with evidence examining the higher levels of entrepreneurship in certain ethnic communities (Aldrich and Waldinger, 1990; Portes and Zhou, 1992), Ferraro (2003) contends that reciprocity is a key mechanism that entrepreneurs can use to obtain resources from their networks, and that highly cohesive networks are more conducive to the emergence of trust, and thereby the achievement of reputation. Research of ethnic entrepreneurship has long emphasised the role of community norms and patterns in the building of network. Paradoxically it appears that researchers assume that the importance of such community is critical only to ethnic entrepreneurship (Ferraro, 2003).

Accordingly, it is tentatively proposed that **the emergence of trust (defined to comprise ability, integrity and benevolence), both mutual trust between the parties and trust by the STBF of the investors, impacts the process of obtaining capital by the small technology-based firm**.

Similarly, reputation appears to be an issue for both the supply and the demand side of the dyad. Reputation is defined as information about an individual or a firm’s past performance (Podolny, 1994). Reputation appears to be important to venture capitalists because it is in the nature of their business to enter repeated transactions with firms and their business could be damaged by a bad reputation, in that they might fail to attract investment proposals from high quality firms (Nahata, 2008). On the other hand, entrepreneurs and their firms also have reputational concerns, in that they do not want to be associated with a failed enterprise or their personal qualities judged inadequate of worse. In the case of the angel investor, reputational issues would not appear to have
the same importance. One aspect of this general issue has been the subject of prior research, namely the effect of the professional venture capital firm’s reputation on the search and selection process of the entrepreneur (Smith 1999; also referred to in Section 2.6.3 below) and the effect on pricing of the investment (in which it is estimated that a doubling of the venture capital investor’s reputation lowered its investment cost by between 14-20% (Hsu, 2004). No previous research has been identified which addresses reputational issues in the context of the angel investor and firm dyad or which examines reputational concerns of the individuals in the entrepreneurial team on the small technology-based firm’s relations with venture capital firms. Accordingly it is tentatively proposed that concern for the reputation of the individuals in the entrepreneurial team of the small technology firm impacts upon the process of search, negotiation and commitment with both angel investors and venture capital, but that the reputation of angel investors does not.

2.5: Negotiation

Having found a potential investor, the entrepreneurial firm seeking capital needs to negotiate the terms of the deal with that investor. In the present context “negotiation” is used in a broad sense to refer to all actions that affect the relationship between the firm and the providers of capital, whether “across the table” in face-to-face negotiation or “away from the table” in preparation of information and materials for the investors, and in the search for “value-creating” solutions to meet the needs of both sides. Negotiation theory has received considerable attention from scholars, and falls within the rational choice dimension of the disciplinary map above.

Negotiation involves a series of alternating decisions between parties. Negotiation as defined by the pioneering scholars in this field, Walton and McKersie (1965, p3), means “… the deliberate interaction of two or more complex social units which are attempting to define or redefine the terms of their interdependence”. The process of negotiation is to be distinguished from bargaining: it is both wider and more complex than ‘bargaining’, which Gulliver (1979, p71) suggests refers only to ‘the presentation
and exchange or more or less specific proposals for the terms of agreement on particular issues’.

Walton and McKersie (1965) propose a theory of negotiation which has come to constitute the dominant paradigm in the field. Their theory arises from a managerial perspective, based upon a number of research studies and practical examples drawn mostly from the context of union-management negotiations and formulated as a set of four ‘sub-processes’ rather than a single negotiation process. These four sub-processes were distributive bargaining, integrative bargaining, attitudinal structuring, and intra-organisational bargaining (Lewicki, 1992).

Distributive bargaining occurs when each party is seeking to maximise its share of fixed-sum. To the extent that one party wins, the other must lose. To describe negotiating behaviour in a distributive context, Walton and McKersie (1965) considered negotiators’ target points (preferred outcome goals) and resistance points (“bottom lines”) and the strategies which could be used to alter the counterparty’s perceptions of target and resistance points. In the context of negotiating with capital providers, the STBF is faced with a number of issues which are essentially and unavoidably distributive. These include the value of the firm, and its related issues such as price per share and equity percentage to be made available to the investor, amount be invested and the investor’s interest or dividend rate (Van Osnabrugge and Robinson, 2000).

For negotiating rights and responsibilities, Walton and McKersie (1965) propose integrative bargaining. This describes the process by which parties attempt to identify and explore separately possibilities to increase the size of the joint gain, while expressly leaving to one side the dividing-up of those gains between them. This category of negotiation follows a joint problem-solving format and seeks to benefit all parties. Parties must recognise and define the issue, search for potential solutions to it, evaluate them, and select the one that maximises the joint gain. The critical aspect of this process is a willingness to share information within a format of open communication (Lewicki, 1992). Echoing the agency theory approach to alignment of
incentives, there would appear to be ample opportunity for the investor and the STBF to explore co-operatively ways in which value can be created in the context of their ongoing relationship. These would include employment agreements for the key personnel, ongoing involvement and contribution by the investors at board level and in other ways, timing of investment and minimising negative tax consequences for all parties (Van Osnabrugge and Robinson, 2000).

Walton and McKersie's (1965) third sub-process, attitudinal structuring, comprises negotiators’ seeking to influence the quality and nature of their relationship. Attitudinal structuring can be viewed as an interpersonal process of a social and emotional character, by which parties attempt to change each other's perceptions, attitudes, and the ‘climate’ of the negotiations (Lewicki, 1992). In this sub-process the level of trust becomes central. The role of trust in the present context has been referred to in section 2.4.4 above and is examined in the research as a factor both in all stages of the fundraising process.

Finally, because organisations are complex social units, not single individuals as implied in all the above processes, Walton and McKersie (1965) suggest intra-organisational bargaining as a necessary addition. This fourth component recognises the potential for ‘internal’ conflict between the negotiator or negotiating team on the one hand and the rest of organisation they represent on the other. In their words, it refers to the “system of activities which brings the expectations of the principals into alignment with those of the chief negotiator” (p. 5). Intra-organisational bargaining rests for the most part on the degree of internal control exercised by the lead negotiator who is usually but not always the leader of the organisation. The issue of team interaction and the role of the leader as chief negotiator is further pursued in section 2.5.1 below.

In practice, these sub-processes of negotiation described by McKersie and Walton (1965) are likely to be commingled. The actual outcome will be influenced to a certain extent by the negotiating skill of the respective parties, but also by the relative bargaining power each possesses.
2.5.1: Distributive Models and Bargaining power.

Lax and Sebenius (1990, p77) argue that in practice negotiators engage in a mix of distributive and integrative bargaining which they term ‘mixed-motive’. Rather than existing as discrete forms of bargaining, they consider value-claiming and value-creating as elements within a single overall process of negotiation:

“Value creating and value claiming are linked parts of negotiation. Both processes are present. No matter how much creative problem-solving enlarges the pie, it still must be divided”.

When negotiations are mixed motive, negotiators confront what Lax and Sebenius (1990) refer to as the “negotiator’s dilemma”. Negotiators cannot bring the potential mutual gains into existence without understanding each other’s needs; however, sharing information in a frank and open manner might leave them vulnerable to exploitation. Value may be created, but the counterparty might grab the lion’s share of it (Watkins, 1999). So whether a particular element in the negotiation is inherently distributive, or is potentially integrative, the ability of one party to achieve terms which it considers to advantage it, raises the issue of bargaining.

Chamberlain and Kuhn (1965) defined bargaining power as the capacity of a party to produce an agreement on its own terms. In Section 2.3.1 above reference was made to the assumption in both theoretical and empirical studies that the general framework of the deal terms are unilaterally imposed by the investor on the small technology-based firm, because most terms in the relevant contracts appear to be for the benefit of the investor. For similar reasons, one might expect that the STBF might have little or no bargaining power when the time comes to negotiate the deal terms. The so-called “Golden Rule” is that “he-who-has-the-gold-makes-the-rule!” (Rogow, 2009). On the other hand Wasserman (1999), in a Harvard Business School case study of funding negotiations between firms and venture capitalists, posits that the technology firm’s sources of bargaining power might include the venture capitalists’ need to maintain its reputation, the quality of the entrepreneurial team, including its technical expertise in an attractive “market space”, and its previous track record.
However no empirical research was found which sought to address the relative bargaining power of STBFs where the entrepreneurs’ contribution to the venture, either in a technical or commercial sense, is very specific, perhaps unique, or at the least difficult to replace. This is notwithstanding the suggestion of Wright and Robbie (1998) that these factors may potentially provide a source of bargaining power. The question remains open concerning the extent to which on the one hand, entrepreneurs can exercise power over providers of capital based on their specific contribution to the firm and on the other hand the financial and contractual power the investors may have in being able to replace them if they deem it appropriate. No research testing these suggestions has been identified. The tentative proposition is that the small technology-based firm has certain sources of bargaining power both with venture capital and angel investors, that there is considerable scope to negotiate detailed terms and that this scope is greater in the case of angel investors than venture capital.

Negotiations take place under conditions of ambiguity and uncertainty. Negotiators usually are uncertain about their counterparts’ interests, bottom lines, and alternatives (Lax and Sebenius, 1986). Negotiators need to learn by doing the requisite pre-negotiation preparation; fully understanding all the essential features of their negotiating situations; always taking into account such practical limitations as time, access to expertise, data and documents, and the availability of other resources (Watkins, 1999). Wright and Robbie (1998) suggest that technology firms negotiating funding terms with professional venture capitalists are typically confronting an unfamiliar situation, typically for the first time in their lives, and may therefore tend to under-search for information and fail to access relevant expertise due to a lack of perception of the complexity of the issues involved in such negotiations. Expanding this to cover both sources of capital, the tentative proposition is that the small technology-based firm tends to underestimate the complexity of negotiations, under-search for information and fail to access relevant expertise, and thereby fails to take best advantage of its bargaining power.

2.6: Entrepreneurial Team
There is a substantial body of evidence that start-up firms generally are more often supported by a team of entrepreneurs than by a single individual (e.g. Gartner et al., 1994). There is also broad consensus that technology firms in particular are more often created by a team than by one lone entrepreneur (Roberts, 1991). Furthermore, team-started ventures comprise a disproportionately greater number of high-growth firms (Kamm et al., 1990). So it should not come as a surprise that investors of all types emphasise the quality of the management team more than any other single factor as they make investment decisions (Kamm et al., 1990; Cyr et al., 2000). Indeed the existence of the team itself comprises a major element of the intangible assets of the firm (Cooper and Daily, 1996). Although entrepreneurship research has not focussed on the role of teams, research in such fields as organisational behaviour, strategic management, and social psychology have examined team issues in detail (Birley and Stockley, 2001). These include questions concerning consensus-building, conflict-resolution, problem-solving, and decision-making within the team (Ancona, 1987).

While teams are important, a “leader” role has been found to be necessary for organisations to develop successfully new technologies (Howell and Higgins, 1990; Lawless and Price, 1992), and new businesses (Burgelman, 1983; Day, 1994). Leaders exhibit personality and behavioural characteristics which distinguish them from non-leaders (Shane, 1994). These include tactics designed to influence other team members (Howell and Higgins, 1990). One might therefore expect that an issue vital to the survival of the firm such as the raising of the necessary funds would be taken by the team leader. The tentative proposition is that the entrepreneurial team leader within a small technology-based firm influences the firm’s process of information search, negotiation and commitment for capital source.

2.7: Empirical Research into STBF’s Search for Capital.

So far this review has focused on identifying the factors that may influence the small technology firm’s search, negotiation and commitment processes when seeking financial resources. The following section will present the findings of three empirical studies that have specifically examined the search for capital by STBFs from the
perspective of the firm in order to describe the best examples of existing empirical literature to assist in identifying the gaps in the literature and to lay the groundwork for the later sections on contributions to theory and practice.

**Bruno and Tyebjee (1985)**

The first empirical study is found in one of the components of the Bruno and Tyebjee’s (1985) early (in terms of the development of the venture capital sector) study, entitled “The Entrepreneur’s Search for Capital”. The authors examined a population of high-technology start-ups from the Dun and Bradstreet credit reports for companies in Northern California, less than 5 years old and within SIC (“Standard Industry Codes”) classifications associated with high technology. To these were added companies from the membership list of the Electronics Association of California and Rich’s Complete Guide (a published guide to the so-called “Second Silicon Valley”).

The authors found that most high-technology firms successfully raising capital are founded by multiple founders, and that the team requires a mix of technical and commercial skills as well as prior venture experience. The process took longer than planned, and the length of time was further extended in the case of first-time raisings by the relevant founders. They found that of the firms denied venture capital, over two thirds continued to exist, and of these, 60% raised outside capital elsewhere. These findings are consistent with later research concerning teams (see Section 2.3.4 above) and with the notion that there may be overlap between the various sources of funding at certain investment levels, as discussed above in relation to the supposed “equity gap”: see Section 1.3.3

**Hustedde and Pulver (1992)**

The second study is that of Hustedde and Pulver (1992) who conducted a research project into funding of start-up and early stage high-risk, high-growth-potential businesses.

The authors adopted a survey methodology. They compiled a list of firms in the US states of Minnesota and Wisconsin that had been actively seeking equity capital in excess of US$100,000. The sample was identified for the researchers by investment
companies, public agencies and other financial intermediaries with whom the researchers were in contact.

The authors formulated a series of hypotheses seeking to measure the relationship between success in acquiring equity capital and a range of factors. The factors selected were grouped by the authors into four categories: characteristics of the individual entrepreneur (such as age, education, family business background and experience in business); characteristics of the enterprise (stage, industry sector, metropolitan or rural location); and characteristics of the request or application (amount sought, contents of business plan and location of equity provider relative to the firm i.e. in-state or out-of-state) and finally the source of advice or introduction (consultants, public agencies, bankers, university related organisations, accountants and lawyers).

Hustedde and Pulver (1992) drew conclusions at odds with many other studies, and arguably in some cases with common sense. The authors concluded that:

- “enterprises in the early stages of development in high-technology industries are most likely to be successful in acquiring funding” (p 371).
- “years of experience in business is not critical to acquisition” (of equity finance) (p 371).
- “less experienced entrepreneurs who are aggressive in seeking financing (i.e. make more applications) and who are willing to surrender higher percentages of their business to equity providers are most successful” (p 371).
- “older entrepreneurs with more business experience are apt to have difficulty acquiring funding” (p 373).
- “business education and experience …(does not)…make capital more easily accessible” (p 373).
- “entrepreneurs pay a penalty for not seeking technical assistance….attorneys appear to be useful sources of advice...(but)...advice offered by accountants and bankers, on the whole, appears to offer little success, …(and)… public agencies and universities seem to do no better” (p 373).

This study provides empirical evidence on the role of intermediaries both as sources of advice and of networking and other assistance. It provides useful evidence concerning
the process of introduction and relationship-formation as seen from the entrepreneur’s (i.e. demand) side. These relationships are examined in this study relating to use of intermediaries and the effect of networks.

**Smith (1999)**

The available literature contains only one study specifically addressing the process and criteria used by small technology-based firms in the evaluation and selection of venture capitalists even though this is self-evidently a matter of crucial importance to the entrepreneur and the firm. That study is by Smith (1999), which proclaims itself as “the first attempt to study the process and criteria used by entrepreneurs in evaluating venture capitalists” (p. 1). The sample comprised 415 companies in the United States listed in the PricewaterhouseCoopers National Survey of Venture Capital as having been involved in the “start-up/seed” or “early-stage” level of development and having received venture funding during the period March 1997 to March 1998, often colloquially referred to as the internet bubble period.

The study sought to answer four questions:

- How many venture capitalists do entrepreneurs consider?
- Where do entrepreneurs obtain information regarding venture capitalists?
- How much time do they devote to the search?
- What are the selection criteria used by entrepreneurs to evaluate an offer to invest from a venture capitalist?

Of the total respondents, 97 (71.3%) said they had more than one offer of investment to consider and 73 (53.7%) had received three or more offers. While there is likely to be bias in that multiple-offer firms would be more likely to reply to a survey on selection of a venture capitalist, nevertheless these numbers are significant. The generalisability of these findings, and in particular, their applicability to Australia, may be problematic as the survey was conducted during the lead-up to the internet “bubble” and during that short period in which venture capital supply had expanded rapidly, in a market which Gompers (1998) described as “overheated”.
The study concluded that those firms with the greatest prior experience dealing with the venture capital process had significantly higher satisfaction levels than those without such experience, and had the lowest amount of hours devoted to the search. Experienced entrepreneurs tended to focus on the reputation factors of the venture capitalist, and had less interest in the prior experience of the venture capitalist or his fund size, or in value-added services. Conversely less experienced entrepreneurs had more interest in these latter items, spent more assessment time on them, but had the lowest satisfaction level. The study highlights the role of experience in the fundraising process which is pursued in the present research, and leads to the tentative proposition that prior experience in fundraising affects the process of search for information, negotiation and commitment for small technology firms in obtaining capital.

The following Table 2.3 summarises the key features of these studies:

**Table 2.3: Comparison of Empirical Research**

<table>
<thead>
<tr>
<th></th>
<th>Bruno Tyebjee</th>
<th>Hofstede and Pulver</th>
<th>Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dated:</strong></td>
<td>1984 and 1985</td>
<td>1992</td>
<td>1999</td>
</tr>
<tr>
<td><strong>Data Collection:</strong></td>
<td>1981-1982</td>
<td>1987</td>
<td>1998</td>
</tr>
<tr>
<td><strong>Geographic Spread:</strong></td>
<td>US State of California</td>
<td>US States of Wisconsin and Minnesota</td>
<td>Across USA</td>
</tr>
<tr>
<td><strong>Data Collection Methods:</strong></td>
<td>Structured Interviews + Marked Questionnaire</td>
<td>Questionnaire</td>
<td>Questionnaire</td>
</tr>
<tr>
<td>(sample size/respondents)</td>
<td>Study 3 = 193 Study 4 = 195</td>
<td>318</td>
<td>136</td>
</tr>
<tr>
<td><strong>Entrepreneur / Firm</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristics:</td>
<td>Bruno Tyebjee</td>
<td>Hofstede and Pulver</td>
<td>Smith</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------</td>
<td>---------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Age:</td>
<td>Average=39.7</td>
<td>25 – 72</td>
<td>Born →1949 = 32</td>
</tr>
<tr>
<td></td>
<td>52.6% between 43 and 42 years</td>
<td>Median = 45,</td>
<td>1950-59 = 61</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SD= 10 years</td>
<td>1960 → = 45</td>
</tr>
<tr>
<td>Gender:</td>
<td>NR</td>
<td>Male 94%</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female 6%</td>
<td></td>
</tr>
<tr>
<td>Prior Experience:</td>
<td>Average 17 years work experience</td>
<td>30% less than 5</td>
<td>Nil prior = 56</td>
</tr>
<tr>
<td>Business / Entrepreneurial:</td>
<td>62%&lt;10 years, 6% zero average 10.1 years management exp.</td>
<td>years experience</td>
<td>Business = 37</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Business and Entrepreneurial = 50</td>
</tr>
<tr>
<td>Education Level:</td>
<td>NR</td>
<td>78% university</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>graduate or higher degree</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>22% vocational</td>
<td></td>
</tr>
<tr>
<td>Firm (industry sector):</td>
<td>IT/Communications, other SIC “high Technology”</td>
<td>IT/Electronics/ Communications, Food, Health/Medical, Manufacturing, Services</td>
<td>Biotech, IT/Communications Retail, Health, Software.</td>
</tr>
<tr>
<td>Firm Age/Stage:</td>
<td>Between 4-7 years</td>
<td>Seed = 29%</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start-up = 65%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expansion= 38%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bridge/Other = 32%</td>
<td></td>
</tr>
<tr>
<td>Process of search and Negotiation:</td>
<td>Median=4-5 months</td>
<td>NR</td>
<td>Median = 40 hours</td>
</tr>
<tr>
<td>Information Search Length / Time:</td>
<td>20%&lt;2 months</td>
<td>28% &gt;100 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20%&gt;8 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Sources:</td>
<td>NR</td>
<td>58% did not use</td>
<td>Accountants,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>outside assistance</td>
<td>Lawyers,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Consultants,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other Entrepreneurs,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>News Media, Other VCs</td>
</tr>
<tr>
<td>Use of Intermediaries:</td>
<td>NR</td>
<td>Lawyers, Bankers</td>
<td>Accountants,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lawyers,</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Bruno Tyebjee</th>
<th>Hofstede and Pulver</th>
<th>Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountants</td>
<td>Consultants, Bankers</td>
<td></td>
</tr>
</tbody>
</table>

**Number of Approaches:**
- NR
- 41% sought equity from more than 20 firms
- NR

**Selection Criteria:**
- NR
- NR
- Value added

**Success Rate:**
- NR
- 59%
- 100% by sample selection

**Equity Relinquished:**
- Average 35.8%
- Median 40.1%
- Average 45%
- 42% ceded 51% or more of firm equity
- NR

NR=Not Reported. *Source: Prepared for this research*

### 2.8: Model of Process of Exchange Relationship Formation

Several previous studies have sought to provide a research-based model of the investment process, both for the venture capital market and the angel market. The studies in the venture capital market are those of Tyebjee and Bruno (1984) and Fried and Hisrich (1994). It should be noted both examine the process from a supply-side perspective, that is from an examination of the activities undertaken by the investors. They reach broadly similar conclusions, namely that the process consists of a series of more-or-less orderly steps, and that the steps are undertaken sequentially, as illustrated by the models for the process flow of VC investment set out below in Figure 2.4:
Figure 2.4: Process Flow for Venture Capital Investment:

Tyebjee and Bruno

Origination

Screening

Evaluation

Structuring

Post Investment Activities

Fried and Hisrich

Origination

VC Firm-Specific Screen

Generic Screen

First-Phase Evaluation

Second-Phase Evaluation

Closing

Source: Tyebjee and Bruno, 1984; Freid and Hisrich, 1994; Figure reproduced from Paul, Wittham and Wyper, 2007
In relation to the informal or angel investment sector of the market, both Mason (2006) and Paul, Wittham and Wyper (2007) found similar stages of the process, again in each case with a supply side perspective. Both studies examine the activities of angel investors, the Mason (2006) study comprising a meta-analysis of earlier research, and Paul et al (2007) a qualitative study of Scottish angel investors decision-making. They reach similar conclusions:

**Figure 2.5: Process Flow for Angel Investment**

![Process Flow for Angel Investment](image)

*Prepared by the researcher based on Mason (2006) and Paul, Wittham and Wyper (2007).*

Ring and Van de Ven (1994) argue that while both the economic (agency and TCE) and socio-economic perspectives permit a static analysis of inputs, incentives and transaction structures for an exchange relationship (such as a financial investment), they do not enhance the understanding of the process of relationship development. They propose a generic multi-stage model of the development of an exchange relationship, which they describe as *negotiation* (encompassing the recognition of the selection criteria that each applies to the other, and the mutual “sense-making” activities of the parties), *commitment* (comprising mutual recognition of their
respective expected contributions and rewards, and resulting in informal or formal “contracts” which may or may not include incentives and governance mechanisms) and execution (being the stage in which the commitments and contracts are carried into effect). The starting point for the Ring and Van de Ven (1994) model is an assumption that parties have already found each other and wish to enter a cooperative relationship. The present research is concerned with an exchange relationship development process, but also encompasses the preceding search phase. Adapted for that element, the three-stage model below has the potential to offer a useful framework of the stages to support this research’s exploration of the process by which STBFs obtain financial resources, while at the same time enhancing parsimony:

**Figure 2.6: Process Flow Diagram**

![Process Flow Diagram](image)

Adapted by the researcher from Ring and Van de Ven, 1994

### 2.9: Chapter Integration

This chapter commenced with a review of the history of research into the field of entrepreneurship being the broad domain into which the research question falls. Following an outline of the various parent disciplines, the chapter examined a range of relevant theoretical research based on the one hand upon assumptions in the rational decision-making tradition, and on the other based upon normative or affective perspectives in which social obligations, trust and reputations play a key role. In the course of the review a number of tentative propositions were identified and these are summarised in Table 2.7 below, and to each is assigned a keyword or words for each of reference.

**Table 2.7: Summary of Tentative Propositions**
<table>
<thead>
<tr>
<th>P #</th>
<th>Stage</th>
<th>Proposition</th>
<th>Keyword(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2, 3</td>
<td>The small technology-based firm seeking to raise capital is faced with an incentive-based deal structure from both angel and venture capital investors.</td>
<td>Incentive-based deal structure</td>
</tr>
<tr>
<td>2</td>
<td>2, 3</td>
<td>The small technology-based firm seeking to raise capital is faced with an insistence upon structural and procedural safeguards by both angel and venture capital investors.</td>
<td>Structural and procedural safeguards</td>
</tr>
<tr>
<td>3</td>
<td>2, 3</td>
<td>The entrepreneurial team has a tendency to act with “deceit with guile” rather than ethically. This results in the imposition of incentives, structural and procedural safeguards or governance mechanisms.</td>
<td>Opportunism of entrepreneurs</td>
</tr>
<tr>
<td>4</td>
<td>2, 3</td>
<td>The small technology-based firm needs to be concerned at the search stage about later opportunistic behaviour on the part of angel and venture capital investors in order to minimise exposure to “reverse-agency” risk.</td>
<td>Opportunism of Investors</td>
</tr>
<tr>
<td>5</td>
<td>1,2,3</td>
<td>The technology firm may be able to identify and use non-financial motivations of angel investors (but not venture capital firms) in the design and execution of a fundraising strategy.</td>
<td>Investor non-financial motivations</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>The small technology-based firm does not take the lead in determining the basic deal structure or terms. Instead it cedes that role to both categories of investor</td>
<td>Determination of basic deal structure</td>
</tr>
<tr>
<td>7</td>
<td>1,3</td>
<td>Small technology-based firms do use social</td>
<td>Social</td>
</tr>
<tr>
<td></td>
<td></td>
<td>contracting strategies in relation both to angel investors and venture capital firms.</td>
<td>contracting strategies</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>-----------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>Personal and direct sources of information are more likely to be relied on by the entrepreneurial team as opposed to impersonal sources such as published materials</td>
<td>Information sources</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>It is the content of the lead entrepreneur's and entrepreneurial team’s network of relationships which impacts the fundraising process, rather than the size and diversity of that network.</td>
<td>Network content</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>Self-efficacy and persuasive ability by members of the entrepreneurial team are important factors contributing to successful capital raisings from venture capital firms and angel investors. Social perceptiveness and emotional intelligence are not.</td>
<td>Cognitive mechanisms</td>
</tr>
<tr>
<td>11</td>
<td>1, 2, 3</td>
<td>The emergence of mutual trust (defined to comprise ability, integrity and benevolence) between the investor and the STBF impacts the process of raising capital.</td>
<td>Trust</td>
</tr>
<tr>
<td>12</td>
<td>1, 2</td>
<td>The reputational concerns of VC firms, and of individuals in the entrepreneurial team of the STBF impact the process of raising capital, but the reputation of angel investors does not.</td>
<td>Reputation</td>
</tr>
<tr>
<td>13</td>
<td>2, 3</td>
<td>STBFs have certain sources of bargaining power both with venture capital and angel investors providing them considerable scope to negotiate more favourable investment terms. This scope is greater in the case of angel investor deals than venture capital</td>
<td>Sources of bargaining power</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>14</td>
<td>2, 3</td>
<td>STBFs tend to underestimate the complexity of negotiations, under-search for information and fail to access relevant expertise resulting in a failure to take best advantage of their bargaining power</td>
<td><strong>Failure to use bargaining power</strong></td>
</tr>
<tr>
<td>15</td>
<td>1, 2, 3</td>
<td>The entrepreneurial team leader within an STBF influences the firm’s process of raising capital</td>
<td><strong>Entrepreneurial team leader</strong></td>
</tr>
<tr>
<td>16</td>
<td>1, 2, 3</td>
<td>Prior experience in fundraising influences the process of seeking capital</td>
<td><strong>Prior experience of fundraising</strong></td>
</tr>
</tbody>
</table>

Each proposition, summarised by its key word or phrase, is mapped against the stages of the process and is further segmented on the vertical access in relation to the theoretical stream from which it arose. This map appears in Table 2.8 below. The purpose of this map is to assist in understanding the how the variables emerging from the tentative propositions identified in this review of the literature relate to the respective stages in the process of fundraising, at the same time as associating them with the different streams of literature.
TABLE 2.8 - MAP OF VARIABLES

PRIOR EXPERIENCE
ENTREPRENEUR OPPORTUNISM
- Misinformation
- Shirking/Personal Goals INVESTOR

SOCIAL CONTRACT-ING STRATEGY
SEARCH

NEGOTIATION
ENTREPRENEUR/TEAM
PREPARATION
NEGOTIATING POWER REPLACABILITY
SOCIAL CONTRACTING STRATEGY

TEAM LEADERSHIP ROLE

TEAM LEADERSHIP ROLE

CONTENT OF RELATIONSHIPS
- Trust - 2 Way
- Reputation ETHICS OF INVESTOR

TEAM LEADERSHIP ROLE

CONTENT OF RELATIONSHIPS
- Trust - 2 Way
- Reputation ETHICS OF INVESTOR

TEAM LEADERSHIP ROLE

TRUST - 2 WAY TRUST

RESTRICTIONS ON ENTREPRENEUR
STRUCTURAL SAFEGUARDS
PROCEDURAL SAFEGUARDS
NON-FINANCIAL SITUATIONS
GOVERNANCE MECHANISM
BASIC DEAL STRUCTURE

RESTRICTIONS ON ENTREPRENEUR
BASIC DEAL STRUCTURE
PRIOR EXPERIENCE

TRAITS
- Overconfidence
- Self-efficacy
PERSONAL/DIRECT INFORMATION SOURCES
ENTREPRENEURS PERSONAL ASSESSMENT

TRAITS
- Overconfidence
- Self-efficacy
PERSONAL/DIRECT INFORMATION SOURCES
ENTREPRENEURS PERSONAL ASSESSMENT

TRAITS
- Overconfidence
- Self-efficacy
Chapter 3: Research Design and Methods

3.1: Introduction

Chapter 2 provided a review of the context and theoretical underpinning for the research. The purpose of this chapter is to explain and justify the research methodology used.

As discussed in Chapter 2, the research question addresses a process that involves decision-making and negotiation by individuals (entrepreneurs) and groups (the entrepreneurial team), embedded within the organisation structure of a firm, and operating in a social and commercial environment. This is a research locus for which qualitative enquiry is particularly useful. The ability of qualitative enquiry to capture the complexities of the context, and to do so in a manner and language that the participants in those activities would readily respond to, will enhance the likelihood that the research will be intelligible to and usable by practitioners. Consistent with the management research approach which advocates research aimed at utility in the practice domain, mature theoretical frameworks limited to a single particular field are eschewed in favour of a multi-disciplinary approach. Accordingly, the research draws on multiple streams of theory within the general field of entrepreneurship.

Entrepreneurship research has been described as “very much a boundary activity, where new ways of theorizing, new methods and new questions can emerge” (Steyaert, 1997 at p 22). Steyaert (1997) concludes that the field of entrepreneurship has no dominant conceptual perspective. Less sympathetically, Shane and Venkataraman (2000, p217) have described it as “a broad label under which a hodgepodge of research is housed”, and which exhibits “a lack of a conceptual framework”. Indeed, Hisrich (1988, p3) suggests that the field may be incapable of achieving a dominant paradigm and contends that:

“by its very nature success in the field of entrepreneurship reflects changing internal and external environments. It is doubtful, therefore, that a formal predictive scientific theory of entrepreneurship will ever emerge”.
The research must be theory-informed rather than theory-constrained, in the sense that the existing streams of theory within the field of entrepreneurship research should be used to provide insights into the issues to be addressed in responding to the research question but should not limit or constrain the use of other theoretical approaches if they are have useful application.

As discussed in Chapter 2, entrepreneurship research has a multi-disciplinary tradition (Mitchell et al., 2002). Relevant to the entrepreneurial firm’s acquisition of financial resources, one stream has encompassed agency theory and TCE based in economics, which view the entrepreneurial firm’s acquisition of financial resources as an economic exchange. Another stream focuses on the social exchange elements of the acquisition, and includes the theoretical work concerning “social contracting” and “social assets” (Starr and MacMillan, 1990) which is known as “socio-economics”. Yet others examine the behaviour of human beings in the course of decision-making and negotiation, and these are drawn primarily from the field of cognitive psychology, and team or small-group interactions and social networks based in sociology. The need to accommodate the multidisciplinary nature of entrepreneurship research and to integrate: the analysis of economists, the psychologists’ insights into entrepreneurs’ personalities and behaviour, and the management and organisational theorists’ perspectives on their business and social networks, while at the same time maintaining the necessary rigour required to meet validity tests, would on its face indicate the need to consider a number of different potential research paradigms and methodologies.

This chapter is divided into four principal sections. Section 3.2 describes the various paradigms available, and presents a justification for the scientific realism paradigm used in the research. Section 3.3 explains and justifies the methodology of the research. Section 3.4 addresses the ethical considerations for this research, and finally Section 3.5 concludes the chapter by integrating the research approaches and methods in summary form.
3.2: Research Paradigms

3.2.1: Overview

The guiding principle of research design is that there must be compatibility between the research questions, the methods and the data: "the choice of the research method ought to be determined by the nature of the research problem" (Heyink and Tymstra, 1993, p.292). The goal of this section is to anchor the proposed research in the appropriate research paradigm. A “paradigm” in this sense is “the basic belief system or world view that guides the investigator” (Guba and Lincoln, 1994, p.105).

Guba and Lincoln (1994) distilled the prior literature into four research paradigms which they called positivism, critical theory, constructivism and realism. Each of these research paradigms can be classified in terms of their ontology, epistemology and methodology. Ontology refers to the “fundamental assumptions being made about the primitive elements of reality, specifying what exists’ (Parkhe 1993, p.235). Epistemology refers to the origin, nature, and limits of human knowledge, in particular, the relationship between the researcher and the phenomenon that is being investigated. Finally, methodology refers to how the phenomenon at issue is investigated, or “how the inquirer goes about finding out what he or she can know about reality” (Guba and Lincoln 1994, p. 108). In Sections 3.2.2 to 3.2.5 the defining characteristics of each of these paradigms in terms of their ontology, epistemology and methodology are now described. A summary of the four paradigms, adapted from Easterby-Smith, Thorpe and Lowe (1991), Andersen (1995) and Lincoln and Guba (2004, p165) is provided in Table 3.1.

Table 3.1: Summary of alternative paradigms

<table>
<thead>
<tr>
<th>Item</th>
<th>Positivism</th>
<th>Realism</th>
<th>Critical Theory</th>
<th>Constructivism</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ontology</strong></td>
<td>Naïve Realism</td>
<td>Critical/Scientific Reality</td>
<td>Historical Realism</td>
<td>Relativism</td>
</tr>
<tr>
<td></td>
<td>An apprehensible reality exists, driven by</td>
<td>Reality is imperfectly apprehensible,</td>
<td>“Reality” is shaped by political, cultural, social, economic, ethnic</td>
<td>People construct reality and therefore there is no ‘truth’.</td>
</tr>
</tbody>
</table>
unchanging natural mechanisms. The investigator and reality are independent. because of human limitations and the complexity of the world, and our beliefs/expectations affect our perceptions. and gender values; research should emancipate the cognition of researchers and participants.

<table>
<thead>
<tr>
<th>Epistemology</th>
<th>Objectivist</th>
<th>Modified Objectivist</th>
<th>Subjectivist</th>
<th>Subjectivist</th>
</tr>
</thead>
<tbody>
<tr>
<td>The researcher observes through a ‘one-way-mirror’ and has no impact on the environment.</td>
<td>Findings observed with some level of participation as dualism is not possible to maintain but some objectivity is sought.</td>
<td>Value-mediated findings.</td>
<td>The researcher is a ‘passionate participant’.</td>
<td></td>
</tr>
</tbody>
</table>

| Common Methodologies | Verification of hypotheses; mainly quantitative methods, surveys and experiments. | Interviews; mainly qualitative methods; case studies. | Action research; focus groups. | In-depth unstructured interviews. |

Source: Adapted from Easterby-Smith et al. (1991) and Guba and Lincoln, (1994).

3.2.2: Positivism

Positivists assume that both natural and social sciences measure independent facts about a single reality composed of discrete elements whose nature can be known and categorised (Tsoukas, 1989). In terms of ontology, the objectives of positivist research are measurement and analysis of causal relationships between variables, which relationships are consistent across time and across context (Deshpande, 1983; Easterby-Smith, Thorpe and Lowe, 1991). In terms of epistemology, the enquiry takes place as if it were through a ‘one way mirror’ and the investigator and the phenomenon are assumed to be independent of each other. Thus, this approach aspires to prevent the
values and biases of an individual from influencing the outcomes (Guba and Lincoln, 1994). The researcher can by this means ‘discover truths of an absolute nature’ (Andersen 1995, p. 29). In terms of methodology, positivists use hypothetico-deductive methods in which hypotheses are first deduced from already accepted principles and are thereafter subjected to empirical testing. Positivists believe that the use of a research design structured in this way allows them to achieve ‘statistical generalisation’, and determine that therefore, ‘replicable findings are in fact true’ (Andersen 1995, p. 33). Data collection is typically by way of experiments or surveys, with the primary mode of enquiry being theory testing or deduction.

A positivist approach to the research question, and in particular those elements concerning the processes of decision-making and negotiation by technology entrepreneurs is not considered to be ideal for several reasons. First, the phenomena of interest are man-made and have no independent natural existence outside of the context under study. They are not ‘objective’ in the physical sense, nor in the economic sense understood by positivists (Chiles and McMackin 1996) and so the research question is not rooted in a purely objective, positivist ‘reality’. Further there is considerable complexity in the interrelationships inherent in decision-making and negotiation that quantitative models are unlikely to be capable of fully describing or explaining. As a research paradigm therefore, positivism is considered to be inappropriate for research that focuses on decision making and negotiation involving individuals or groups of individuals interacting in real-life (Patton, 1986). The treatment of humans as independent objects ignores their ability to reflect on problem solutions and act upon them (Robson, 1993), elements which are essential parts of the subject matter of the research questions. Positivism focuses on outcomes, not on process.

Secondly, the assumptions that lie beneath this paradigm make it unsuitable for this research. Under the positivism paradigm, there is no need to understand meanings and purposes for action because the research is concerned with objects that can be observed explicitly (Perry et al., 1997). Unlike objects, human behaviour is influenced by hidden meanings and purposes, and these meanings and purposes cannot be understood merely from observing the external manifestations of the relevant behaviour (Guba and
While a positivist can observe how people behave and how they react, this is insufficient to enable understanding of the underlying motives which drive that behaviour and those reactions.

Thirdly, this research is not attempting to demonstrate causality, as would be the case if a positivist approach were used. Instead it seeks to examine the research question within its real-life context. It seeks to discover, probe, form, understand and revise the meanings from the lived experiences within small technology-based firms faced with the task of capital raising and to explore the research issue from their perspective. Therefore, it would be impossible for this research to maintain an entirely value free, ‘one-way mirror’ form of epistemological relationship between the researcher and the phenomena. Accordingly, the positivist paradigm is not appropriate.

3.2.3: Critical Theory

The second research paradigm to be examined for its possible adoption in this is research is critical theory. Critical theory aims at critiquing and transforming social, political, cultural, economic, ethnic and gender values (Healy and Perry, 2000). The interaction between the researcher and the participants involves the researcher attempting to change the environment in which the participants live by making them more informed (Perry, Alizadeh and Reige 1997). However this research paradigm is not appropriate for this research as it does not aim to transform perceived realities of social groups. Instead the purpose of this research is to understand and explain the actions of the information-seeking, decision-making and deal-negotiating entrepreneurs in small technology-based firms.

3.2.4: Constructivism

The third research paradigm to be considered is the constructivist paradigm. Constructivism utilises a relativist ontology. Truth is a construction which refers to a particular belief system held in a particular context (Perry et al., 1999). In this paradigm there are multiple realities, and “meaning” has more importance than measurement because perception is itself the most important reality. The researcher must interact with the subject to research this “created” knowledge, or in the words of
Guba and Lincoln, (1994), be a “passionate participant”. The paradigm is subjective insofar as it acknowledges that knowledge is created through the process of interaction between the researcher and the subject. While the researcher will necessarily interact with the subjects to the extent required to complete the interviews and conduct other fieldwork, he does not seek “passionate participation”. The views of the interviewees are not being studied to seek the various “realities” that they respectively have in their minds for the sake of recording and describing each perceived reality, but rather they are studied so that, in aggregate, upon analysis they may act as a “window on to a reality beyond those perceptions” (Healy and Perry, 2000, p 119). The paradigm is most appropriate when examining human experiences such as love, hate, prejudice or jealousy. Where the phenomena under investigation have an objective existence in an economic and social context, the paradigm is not appropriate.

Healy and Perry (2000, p 120) suggest that “the grounded theory methodology is clearly constructivist, because no ‘outside’ reality is meant to intrude into the research. For example, grounded theory researchers are urged not to read reports of similar research done before”. This “pure” form of grounded theory is described by Eisenhardt (1989) as an “ideal”. However this reason alone is not considered sufficient to require the adoption of the constructivist paradigm for the application of this methodology.

3.2.5: Realism

The final paradigm examined for application to the research is realism, and its sub-streams, critical realism and scientific realism. Critical realism contends that the way we perceive the world is affected by our beliefs and expectations and hence has little to distinguish it from constructivism (Bunge, 1993). Scientific realism is also referred to as “postpositivism” by Guba and Lincoln (1994). The ontological position of this paradigm holds that there is a “real” world to discover even though it is only imperfectly apprehensible (Guba and Lincoln, 1994). In epistemological terms, the perception for realism is a window to reality through which a picture of reality can be triangulated with other perceptions. Thus it relies on multiple perceptions about a single reality. This contingent context of realism allows an emphasis on theory building.
The three main characteristics of scientific realism were summarised by Hunt (1990, p.9) as follows:

“(1) The world exists independently of its being perceived … (2) the job of science is to develop genuine knowledge about the world, even though such knowledge will never be known with certainty… and (3) all knowledge claims must be critically evaluated and tested to determine the extent to which they do, or do not, truly represent or correspond to that world”.

According to Hunt (1990) scientific realism distinguishes three domains of reality:

1. the real domain, in which there exist processes that, given the presence of certain conditions, cause observable events;

2. the actual domain, in which patterns of events occur whether or not they are observed by the researcher, that is to say, the events are observable even if the researcher did not actually observe or experience them; and

3. the empirical domain, in which the researcher actually notices and experiences the events.

In describing themselves as continuing to subscribe to this view, Miles and Huberman (1994, p4) take the position that social phenomena exist not only in the mind of the researcher but also exist in the objective world. Structures, practices and conventions may be invisible but are nonetheless real:

“Social phenomena such as language, decisions, conflicts and hierarchies exist objectively in the world and exert strong influences over human activities. … Things that are believed become real and can be inquired into”.

Realism is selected as the most appropriate paradigm for this research because of the nature of the question being addressed. Three factors contributed to this selection. Firstly, the realism paradigm is appropriate for fields of research that do not have a wide and deep body of existing theoretical or empirical studies. Perry (1998) suggested that realism is more appropriate for questions which are both contemporary and lack well established theoretical constructs and principles. There appear to be few studies
into the process by which small technology-based firms search for, decide upon and negotiate with their sources of equity capital. Those few which do examine components of the process are based on constructs “borrowed” from research into the process as viewed from the perspective of the investor and assumed to be applicable. Secondly, for related reasons, realism is an appropriate paradigm where the purpose is to investigate complex issues in a contemporary context (Parkhe, 1993), seeking to “account for events” by capturing “a causal description” (Miles and Huberman, 1994) or explanation as is the case in this research. Thirdly, while it can include some elements of empirical testing, scientific realism expressly accommodates theory generation (Sayer, 1992). Accordingly realism is adopted as the most appropriate paradigm for the research.

3.3: Methodology
3.3.1: Overview

In the previous section, justification was given for adoption of the realism paradigm. In the following section a justification for the selection of a qualitative case study methodology for the research design is advanced. Nachmias and Nachmias (1992) describe a research design as a plan that guides the investigator in the process of collecting, analysing, and interpreting observations. The different elements of the research design is described and justified.

Qualitative research methods are most appropriate for this research for several reasons. First, qualitative methods are appropriate for fields of research that are highly complex and where substantial theoretical frameworks have not been developed in prior research (Bonoma, 1985). Where there is a lack of accepted theoretical framework, as noted by Deshpande (1983), qualitative research is the primary tool for its generation and construction. This is in contrast to quantitative research, which Deshpande (1983) views as appropriate for theory verifying and testing.

Secondly, qualitative researchers study things in their everyday natural setting, and seek to interpret phenomena from the point of view of those involved (Patton, 1986; Falconer and Mackay, 1999). Qualitative research was therefore deemed suitable for
this research as its goal is to understand the processes of search, decision and then negotiation by technology entrepreneurs and their firms in the course of selection of sources of private equity capital, from their point of view. It seeks to describe and to draw generalisations from the “lived-experience” of the technology entrepreneur and entrepreneurial team within the firm faced with a need to raise capital.

Thirdly, a number of researchers have called for greater adoption of qualitative methodologies in entrepreneurship research (Stewart, 1991; Murray, 1996; Gartner and Birley, 2002) and specifically in relation to the process of resource acquisition by entrepreneurs (Steyaert, 1997). Despite these calls, however, Chandler and Lyon (2001) in their meta-analysis of research designs in the leading journals of entrepreneurship over the decade 1989 to 1999 concluded that there had been no observable trend towards (or away from) qualitative methods during that decade.

Qualitative approaches however do have certain limitations. Some of the limitations arise from the nature of qualitative enquiry itself and others from the time and cost expended in carrying out the research, as well as issues associated with reliability and validity of the analysis and interpretation of the findings. Because qualitative researchers stress the socially constructed nature of reality and emphasise processes and meanings not experimentally examined or measured in terms of quantity or frequency, the approach is said to be “value laden”. In contrast, quantitative methods emphasising the measurement of causal relationships between variables, are argued to be value free, leading to a “truth” which transcends opinion and personal bias (Denzin and Lincoln, 2000). However, as Gartner and Birley (2002, p388) observed, there should not be a debate about whether qualitative research in the field of entrepreneurship is more “truthful” than quantitative: rather, it is a question of “there is something missing here. Some questions simply do not get asked, or cannot be asked, when undertaking quantitative studies”.

In addition limitations associated with time and cost have been addressed by way of planning as far as possible for the research activities to integrate with the researcher’s other day-to-day activities. Finally a number of steps have been taken to enhance validity and reliability and these are addressed in Section 3.5 below.
3.3.2: Research Design-Analytical Inductive Approach using Multiple Case Studies

The research design employs a combination of the iterative analytical induction process described by Denzin (1978), in combination with data collection and analysis by the multiple or collective case study method as described in Eisenhardt (1989). The approach in essence involves a process of developing theory from multiple case studies using the research method of Eisenhardt (1989) but the sequential and iterative steps associated with analytical induction. The aim is to discover the underlying mechanisms or processes that generate the phenomena being studied. It is described in more detail below.

**Analytical Induction**

The basic procedures of analytical induction were outlined by Denzin (1978). The process commences with the researcher formulating tentative models or preliminary hypotheses based upon a review of the literature or a combination of literature review and pilot study. The distinction from a grounded theory approach (Glaser and Strauss 1967; Strauss and Corbin 1990) is that it is unlikely any researcher is capable of distancing her or himself sufficiently from the body of received research as would be required for the application of grounded theory in its purest form as described by its originators. However, as propounded in its modern form (Locke 2001; Goulding 2003), the distance between Denzin’s analytic induction method and “new” grounded theory has narrowed. Locke (2001) and Golding (2003) both allow the researcher using grounded theory to embark upon the research task with “the general guidance provided by some sort of orienting theoretical perspective” (Locke, at p34). Whether one commences with an “orienting theoretical perspective” or tentative models and hypotheses may amount to a distinction which is more semantic than substantive with little difference in practical application.

As a second stage, the tentative models or preliminary hypotheses are then compared with the data from each of the cases until a case is found that does not conform with the models or hypotheses. These may then be modified to take account of this
“negative” case while still retaining their validity for all previous cases. The models or hypotheses are further tested against more cases, and again modified in the light of negative cases. Once the cases cease to provide data inconsistent with the models or hypotheses, there is “theoretical saturation” in the sense described by Strauss (1987), the models or hypotheses are considered tested and supported. It is substantially similar to the explanation-building approach to case analysis described by Yin (1993).

This methodology is consistent with the realist paradigm in that the hypotheses envisaged by that paradigm to be developed from an understanding of the literature and from formulation of the research questions are replaced by the development of initial tentative explanations for the phenomena to be studied in the form of propositions and then the sequential and iterative processes of analytical induction are applied to those propositions.

**Case Study**

A strict definition for a case study is not clearly evident in the literature. Eisenhardt (1989, p534) defines a case study as, “a research strategy which focuses on understanding the dynamics present in a single environment”. Robert Stake (2000, p436) refers to the study of “a specific, unique, bounded system”. Feagin, Orum and Sjoberg (1991, p2) define a case study as “an in-depth, multifaceted investigation, using qualitative research methods, of a single social phenomenon”. Yin (1994) approaches the issue by suggesting a number of elements that are typical of this method of research. He sees a case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, when the boundaries between a phenomenon and a context are not clearly evident. Hence the case study research strategy is best suited to research questions of the “how” or “why” type where the investigator has little or no control over actual behavioural events. As described by Eisenhardt (1989, p534-535) case study is not a uniform method, and case studies reflect a wide variety of approaches. Case studies typically combine data collection methods such as archives, interviews, questionnaires, and observations. The evidence can be qualitative (e.g., words), quantitative (e.g., numbers) or both. Case studies can be used to accomplish various aims, including to test or generate theory.
The words case study are used to refer to both the process of enquiry, and to the product or output of that enquiry. Stake (2000, p436) concludes that “the terms case and study defy full specification”. However, certain common elements emerge from the definitions: these are the single environment or bounded system, the contemporary phenomenon, the real-life context or natural surroundings and the use of multiple sources of data.

The “bounding” of the cases arises from the primary unit of analysis (the small technology-based firm, for which see further discussion below at Section 3.4.1), and the time frame commencing with the decision to seek private equity capital and ending either with the successful conclusion of that process by signing an agreement for funding, or the abandonment of the search as a result of failure to obtain such a commitment in the relevant time frame.

Case study method is used in the research first because the phenomenon is a contemporary issue in the context of both the public policy debate and the capital market focus on innovation and commercialisation in Australia. Venture capital and angel investment in technology in Australia can be considered to date from the mid 1980’s at the earliest, but it was not until the mid to late 1990’s that it appears to have entered a period of rapid growth. A historical study would be of relatively little value given the comparatively recent emergence of the industry.

Secondly, the boundaries between the phenomena studied and the context are not clearly in evidence. Taking context in its widest sense, that is the economy generally, there is a blurred borderline between the phenomena studied and developments in the general capital markets, in community attitudes to entrepreneurship and in government policy settings. Moving to a narrower context, the operation of the competitive forces of supply and demand within the market for private equity capital in which the technology entrepreneurs form the demand side and the investors constitute the supply side, market forces as well as the social network of the entrepreneur are difficult to isolate from the phenomena. In the narrowest context, namely within the entrepreneurial firm, the raising of capital, and its related issue of resource acquisition in general, is intermingled in practice with a vivid palette of marketing, personnel,
technological and other challenges which all compete for attention and must be addressed simultaneously (Timmons, 1999). The case study method is able to capture the richness and the fast moving and high-risk context of entrepreneurial firms’ decision-making processes.

Thirdly, a major strength of the case study method of data collection is the opportunity to use many different sources of evidence. The use of multiple sources of evidence in case studies allows the researcher to address a broad range of historical, attitudinal, and observational issues. It also provides the opportunity to triangulate by developing multiple lines of enquiry and determining whether the evidence converges. In this manner, construct validity also can be addressed, because the multiple sources of evidence essentially provide multiple measures of the same phenomenon (Mathison, 1988). In their meta-study of methodologies in the entrepreneurship field Chandler and Lyon (2001) suggest that research studies in the field could benefit from the use of multiple data sources, finding that only five percent of all studies in their sample used more than a single data source.

The choice of case study is also justified on other grounds. For example, a number of commentators have called for more extensive use of case and field methods for studies in the entrepreneurship field (Steyaert, 1997; Gartner and Birley, 2002). Of the 416 studies published in the leading entrepreneurship journals during the 1989-1999 decade examined by Chandler and Lyon (2001), only 54 (12%) were empirical in nature using a qualitative methodology. Further the use of retrospective case study is supported by scholarly practice. Of those 54 studies employing qualitative methodology in the leading journals the strongly preferred approach was retrospective case studies (39) rather than “real-time” (frequent interview/participant observation) case study methods (8) or content analysis of documents (7).

Justification for the case study approach can also be found in the agency theory and TCE literature. The need for more varied and rich environments in which to examine the relevance of agency theory and TCE has been recognised by researchers. In discussing the application of agency theory to management studies, Baiman (1990, p. 367) suggests that:
“co-ordinating principal-agent and field-based research could result in benefits to both areas. First, applying the principal-agent paradigm to the research question underlying the field study would sharpen the focus of the field study. Second, using the results of field studies could sharpen our principal-agent models”.

**Experimental Design**

Experimental designs have been used widely by researchers to examine the criteria used by decision makers. The use of experimental designs has been largely borrowed from consumer choice research and then applied to the decision processes of venture capitalists and angel investors. For example, Hall and Hofer (1993) examined venture capitalists decision criteria applied to hypothetical cases (which were experimentally generated) using verbal protocol techniques which have been commonly used in other fields for the analysis of problem solving and decision making. From these protocols the authors derived a model of decision making. In two other studies, Riquelme and Rickards (1992) and Muzyka, Birley and Leleux (1996) use conjoint analysis, which is also a technique from the discipline of marketing. This technique is used experimentally to measure consumer preferences regarding the attributes of a product or service. In these studies it was used to identify the relative importance of various attributes in venture capitalists’ investment decisions. Their methodology has been adopted in subsequent studies by Zacharakis and Meyer (1998) and Shepherd (1999).

These experimental methods however are appropriate for decisions that are made by individuals, made routinely and repetitively and where the attributes influencing a decision can readily be identified and experimentally manipulated. However, decision-making by entrepreneurial firms on capital-raising is made in the context of an organisation, group or team and also is anything but routine in the context of the life of the firm. Further, an experimental design based on isolating the phenomena of interest from their context, whether in a laboratory or in this case in a field study, would not be appropriate as it is not possible to separate effectively the processes under investigation from their context. Hence an experimental method has not been used to analyse the different components of the decision on capital sourcing by STBFs.
3.3.3: Criteria for case selection

Case studies can involve either single or multiple cases and numerous levels of analysis (Yin, 1984). So having determined that the case study method should be used for this research, the next consideration was whether to use a single or multiple case study design. A single case study can sometimes be appropriate if the particular case is critical, unique or especially revelatory (Feagin, Orum and Sjoberg, 1991). This categorisation is similar to Ragin’s (1992) concept of a “specific” (as distinct from a “general”) case, and Stake’s (2003) “intrinsic” (as opposed to “instrumental”) case. Since these conditions would be difficult to satisfy in this study, the “multiple” (Yin, 1994) or “collective” (Stake, 2003) case study approach was chosen. Several reasons contributed to this choice.

First, multiple case studies can be used for theory generation (Gersick, 1998) which is appropriate in this research since there are few previous studies addressing the questions of interest. Next, multiple case studies are a methodologically sound approach based on the logic of replication (Yin, 1989; Parkhe, 1993; Miles and Huberman, 1994), which supports the level of external validity of this research. With the single case method, comparisons with other cases would not have been possible. Furthermore, multiple case studies can be used in testing theory as it emerges (Bonoma, 1985; Eisenhardt, 1989), therefore allowing tentative hypotheses or models to be both refined and tested simultaneously. In addition, multiple case studies provide a greater variety of evidence (Yin, 1989), as well as having enhanced validity due to the effect of the triangulation of evidence (Eisenhardt, 1989; Feagin, Orum and Sjoberg, 1991). In summary, a multiple-case design serves the purpose of this research better than a single-case design.

3.4: Case study research procedures

The case study research procedures used for this study are described and justified in this section. The number and selection of case studies is discussed in Section 3.4.1, which also includes a description of the sampling logic. Section 3.4.2 examines the case study protocols developed and utilised for the research. The pilot case interview
phase is considered in Section 3.4.3. The data collection process is described and the approach to data analysis is outlined, in Sections 3.4.4 and 3.4.5 respectively.

3.4.1: The number and selection of the cases: Sampling logic

When selecting the number of cases, consideration was given to the quality of the information generated by the cases and the analytical capacity of the researcher (Patton, 1990), as these factors impact on the validity and reliability of the information obtained from the cases. Eisenhardt (1989) suggests that the number of case studies should ideally be between four and ten, because less than four case makes theory generalisation difficult while more than ten cases causes practical difficulty in the process of data analysis.

Further, Eisenhardt (1989, p537) notes that while cases may be chosen at random, random selection is neither necessary, nor even preferable. Given the limited number of cases which can be studied, it makes sense to choose cases such as extreme situations and polar types in which the process of interest is “transparently observable” (p.537).

Accordingly the selection of small technology-based firms should include those exhibiting a broad variety of differing characteristics across a number of spectra, from a range of different industries, negative as well as positive cases and with a geographic spread between the States of Australia. This should create an opportunity to look at the consequences of how these characteristics affect the process adopted in searching for and selecting equity capital sources and the negotiations with capital providers.

Eisenhardt (1989) also notes that it is legitimate to define, and select from, a sub-population, in this case from within the general population of technology-based firms in Australia. Selection of cases is an important aspect of building theory. The concept of population is crucial, because the population defines the set of entities from which the research sample is to be drawn. Also selection of an appropriate population controls for extraneous variation and helps to define the limits for generalising the findings.
The research therefore targets both venture capital, and angel, financed firms and those which have sought equity capital from either or both of these sources but have failed to obtain it.

Taking Eisenhardt’s (1989) recommendations into consideration, it was decided to undertake six cases for this research. Each case consists of three interviews, one with the person identified as the lead entrepreneur, one with another member of the entrepreneurial team and a third with a venture capitalist or angel investor who had either invested or from whom investment had been sought unsuccessfully. Table 3.2 shows the characteristics of the participants that were selected to achieve theoretical rather than statistical replication (Yin, 1994).

The choice of unit of analysis is dictated by the nature of the research questions. Low and MacMillan (1988) find that the predominant unit of analysis across the field of entrepreneurship research in general is the individual. Entrepreneurship literature has, they suggest, exhibited a longstanding tendency to adopt what Kamm et al. (1990, p9) later refer to as “the myth of the lone entrepreneur”. Vesper (1988) suggests that this results from researchers assuming away any differences between a team venture and a solo venture. This approach would have been manifestly inappropriate where a key focus of the study was the impact of team as distinct from individual activities. Furthermore Low and MacMillan (1988) note that the different levels of analysis within entrepreneurship are intimately intertwined and call for researchers to adopt both alternative levels (i.e. other than the individual entrepreneur) and also combinations of different levels of analysis. Thirteen years after these observations Davidson and Wiklund (2001) conducted a meta-analysis of the units of analysis adopted in the leading US and European journals of entrepreneurship during the decade 1988/9 to 1998/9. They conclude that Low and MacMillan’s (1988, p83) call had succeeded to a limited fashion in that adoption of the firm level had come to predominate (used in 63% of articles), and that approaches combining different levels of analysis were still few. They note that “researchers have a preference for collecting data that are easily obtainable rather than data that are important” (p 83), and that the “entrepreneurial team” or the “network” are under-represented as units of analysis. The present research expressly seeks to examine the role of the entrepreneurial team,
thereby encompassing both the role of individuals and their interaction with other team members. The primary unit of analysis must necessarily be the small technology-based firm as it is ultimately the firm which raises the capital and is the organisational anchor-point of the activities of the team members and the link with the investor. However the team comprises a key “building block” of the firm. Therefore taking up the challenge of Low and MacMillan (1988) and Davidson and Wiklund (2001) an embedded design was used to allow two units of analysis: the small technology-based firm, and the entrepreneurial team within the firm. Moreover the firm itself is not examined in isolation: it is the dyadic relationship between the firm and the actual and potential suppliers of capital that comprises a further or contextual unit of analysis.

Data was collected through a series of semi-structured interviews conducted face-to-face with the subjects, as a first preference on-site at their offices, but if necessary, at the researcher’s office. The interviews covered three categories of interviewees:

(i) Lead entrepreneurs and other members of the entrepreneurial teams (particularly Chief Executive Officers (CEOs), Chief Technology Officers (CTOs) and Chief Financial Officers (CFOs) of small technology based firms);

(ii) Professional Venture Capitalists; and

(iii) Angel Investors.

The interviewees were selected to meet, as far as possible, Eisenhardt’s (1989) tests of extreme situations and polar types across firm age, industry, founder commercial experience, technical specialisation and development stage. The sample is biased in favour of interviewees located in New South Wales (NSW), primarily due to ease of access to participants for face-to-face interviewing. The sections below discuss the selection of each group of interviewees in turn.

**Selection of Firms (n=6)**

Participants include senior executives, founders, CEOs, CTOs and CFOs, and represent a sample of small technology based firms seeking equity capital. The interviews took place either in the firms’ offices or the researcher’s office. They were
selected in part from the Australian Venture Capital Association’s published directory, and in part from the researcher’s personal network of contacts within the sector. The list was supplemented by names assembled from the files of two venture capital firms which agreed to provide the researcher with access to those files. The firms were selected to reflect those demographic and structural characteristics referred to previously and to provide reasonable geographic dispersion beyond New South Wales.

**Selection of Venture Capitalists (n=4):**

Interviews were conducted with the individual professional venture capitalists who had invested, or declined to invest, in the relevant STBFs. As a secondary segmentation, where more than one venture capitalists had invested in a firm, venture capital firms were selected so that as far as practicable, they represent a cross section of the venture capital community. That cross-section sought to include firms representing a range in terms of the size of the funds they managed, their geographic locations and the age of the venture capital firm.

**Selection of Angel Investors (n=5)**

Angel investors who had completed at least one round of investment in the small technology-based firm were interviewed. Again as a secondary segmentation, where two or more had invested in a single firm, they were selected to represent a cross-section of the angel investment community by geographic spread, investment size and investment experience.

**3.4.2: Data Collection**

Evidence for case studies may come from at least six sources: (1) documents, (2) archival records, (3) interviews, (4) direct observation, (5) participant observation, and (6) physical artefacts (Yin 1993). In this research, all six sources of evidence were used in order to converge on the same set of facts or findings. A case study database has been created and maintained through a chain of evidence, as follows:

1. Interviews: The most important source of information has been the record of transcript of the interviews.
2. Documentation: A variety of documents have been collected. These include
copies of contracts and other legal documents, letters, memoranda, agendas, minutes of meetings, written reports, news clippings and other articles appearing in the media. The documents have been used to cross-check, corroborate and augment evidence from other sources. They have assisted in verifying the accuracy of information presented, particularly statements in interviews. In the event that the documentary evidence was contradictory rather than corroboratory, further investigation was undertaken.

3. Direct Observation: All subjects were offered confidentiality. Accordingly, provided it is without identification, all direct observations by the researcher have been considered available for incorporation into the final thesis.

4. Participant Observation: The researcher, to the extent that research activities were carried out at the place of work of the subjects, acted as a participant observer collecting information in the everyday life setting of the subjects and was able to consider it in the context of the research questions.

5. Archival Records: This type of evidence includes (1) organisational records, such as accounting statements and financial reports; (2) records of board of directors meetings and shareholders meetings; and (3) data from web-sites on the internet. These have been used by way of confirmation or corroboration in the same way as documents referred to in 2. above.

6. Physical Artefacts: Artefacts collected include company promotional material, project memorabilia, and in some cases samples of the firm’s product. Little use was made of these materials other than limited confirmation of product or service details from promotional publications.

The primary data consisted of the interview transcripts.

3.4.3: Case Study Interviews

All interviews were conducted by the researcher personally. Interviews lasted between one and two hours. With the consent of the interviewee, all interviews were taped and thereafter transcribed and checked by the researcher against the tape. Each interviewee was offered the opportunity to review and correct any mistakes in the transcriptions and these served as the transcript record of interview.
Consistency across the interview results was achieved by utilising semi-structured, in-depth interviews, following a protocol. The development of a protocol is a critical component of case-based research (Emory and Cooper, 1991; McDaniel and Gates, 1991). The protocol can provide direction for the researcher and it can also increase the reliability of the results from the research (Burns, 1994; Fontana and Frey, 2000). The protocol which the researcher used is shown as Attachment A. Background information on the interviewees or their organisations was reviewed in advance if this was available on the internet. These secondary sources (if available) typically included basic historical information and a summary of the technology or the target markets of the firm.

At the start of each interview, the subjects were handed, and invited to read, a general description of the research (this document is reproduced as Attachment B). In the early part of the interview, tightly worded close-ended questions were used for determination of attributes of the interviewee thereby permitting comparison between cases and the collection of concise historical data and some limited personal information about individual subjects and their firms. More open-ended questions were then used to bring out creative or original information and allow further probing. As Sproull (1995) suggested, open-ended interview questions allow an assessment of informants’ thought processes and a gathering of new information in areas where little previously existed. In-depth interviews were used in preference to closed ended questions as they allow a more thorough exploration of the thoughts, behaviour and motivations of individuals (Staddon, 1996). The interviews were conducted in the manner of the convergent interviewing technique as described by Dick (1990) and Williams and Lewis (2005). The approach is to collect, analyse and interpret information about the subjects' knowledge, opinions and experiences on the relevant questions through a series of interviews that gradually converge on the important issues. In each interview, each subject was invited to add any other relevant comments or personal experiences that he or she may wish.

The interviews, in combination with the opportune use of probes from the menus appearing in the protocol in Attachment A, were used to refine the direction and focus the questions, as the interviews occurred, and to enable assessment of the validity of
constructs and variables as they emerged. By this means the results of the interviews are intended to form the basis for theory development.

3.4.3: Pilot Case Studies

Several researchers have highlighted the importance of studying a pilot case or cases to refine their data collection plans with respect to both the content of the data and the procedures to be followed before the cases are investigated (Eisenhardt, 1989; Parkhe, 1993; Yin, 1994). The main themes for the questions in the protocol were developed prior to the pilot case studies. The researcher then carried out six case study interviews. Each pilot case included one interview with a (lead) entrepreneur, one with a second member of the entrepreneurial team and a third with an investor. This data was coded in a preliminary manner as further described in Section 3.4.5 below before proceeding with the remaining cases. The purpose was firstly to provide some conceptual clarification for the research design and secondly to test and modify the interview protocols and the procedures used, ensuring on the one hand that data relevant to every issue of interest were obtained and on the other that a minimum of data was being collected that was not being coded for any issue. The interviewees for the pilot were chosen on the basis of a combination of their expressed interest in and enthusiasm for the subject matter of the research, the variety of industry sectors represented (financial services and fisheries acoustics software) and the convenience of access to the researcher, one being in Sydney and one in Hobart.

3.4.5: Data Analysis

In their meta-study of methodological issues in international entrepreneurship research, Coviello and Jones (2004, p497) found that in qualitative studies over the period 1996 to 2002 published in the six leading US and European refereed journals, the “general emphasis is on pattern identification/matching and explanation building”. The use of a modified inductive analysis technique seeks to accommodate the extremes of “the ideal of no theory under consideration and no hypothesis to test” (Eisenhardt 1989, p536) at one end of the spectrum, and an initial theory approach recommended by Jankowski and Wester (1991, p690) at the other:
“Data, of and by themselves, cannot generate theory. It is only through the intervention of a researcher, operating within a theoretical perspective, that data can be examined and used to generate theory”

So themes and patterns must not be imposed upon the data prior to collection and analysis, but must be allowed to emerge from the data in the course of analysis. On the other hand this approach allows consideration to be given to the guidance which has emerged from an examination of the existing literature. As proposed by Wollin (1996) it involves adoption of the basic model of theory building from case research method as proposed by Eisenhardt (1989) combined with the sequential and iterative processes of analytical induction, within a scientific realist epistemology. Wollin (1996, p7) recommends to start by “developing a preliminary model or possible orienting framework” before entering the field for data collection. The tentative propositions described in Chapter 2 and summarised in Table 2.7 provide are intended to form the orienting framework to support this approach. Further, while the purpose is to obtain generalisations as a step in theory generation and model building, this should not be at the cost of losing the “thick description” of the issues, contexts and interpretations of each case (Stake, 2003).

In seeking to reconcile these conflicting purposes, the pilot study data was subjected to a “coding”, which Miles and Huberman (1994, p 56) define as the “tags or labels for assigning units of meaning” to words, phrases or sentences, as it is the meaning, and not the actual words which matter. The data was systematically coded using Nvivo computer software for qualitative data analysis. Nvivo was used because of the need to manage the large amount of data. The software neither develops nor proves theory. That is the role of the researcher (Richards and Richards, 1994). In essence Nvivo was used as a tool to identify the passages in the interview transcriptions evidencing the “tags or labels”, described by the software as nodes. In the first instance the coding was deliberately descriptive or “natural”, each node consisting only of a word or words or short phrases extracted directly from the text of the interviews, so that loss of context and richness of the data would be minimised and that the codes would accord as closely as possible with the language of the participants. A second coding was then conducted in which more inferential or interpretive codes were assigned in which the
use of words determined by the researcher to describe conditions, interactions or consequences were permitted, as suggested by Strauss (1987). By this means the “within case analysis” recommended by Eisenhardt (1989) was conducted before attention turned to a search for cross-case patterns in the pilot cases. Upon completion of the second coding for the pilot cases and a review of the tentative propositions to ensure that data responding to all the propositions would be available, the interview protocols were checked for completeness prior to proceeding with cross-case analysis.

The search for cross-case pattern search adopted the approach recommended by Eisenhardt (1989) seeking the within-group similarities and the inter-group differences between cases across a series of categories by reference to the attributes of the case and the attributes of the interviewee appearing in Nvivo, using several different methods of analysis to achieve a form of analysis method triangulation in the spirit of Denzin (1978).

First, the search function of Nvivo was used as a tool for the convenient display of the associations between passages coded with particular nodes or constructs, and the attributes of the interviewee or the case. By this means a range of potential patterns or themes could be conveniently explored across a large database of interviews (Miles and Huberman 1994). Second, individual “time-ordered critical incident charts” (Miles and Huberman 1994) were constructed for each pilot case in the form of visual map or graphical representation of the case with time on the horizontal axis and events recorded in boxes, further segmented on the vertical axis according to the issue domain with which they were associated, in the manner recommended by Langley (1999) for the analysis of data concerning a process. The interview protocol was reviewed to ensure that relevant data was being captured over all the process. The major data collection phase then continued.

Based upon the themes, concepts and relationships between variables that began to emerge in the pilot cases, the systematic comparison of the emerging theoretical framework for goodness of fit with each subsequent case was then conducted in a series of iterative steps following the constant comparative method associated with the original form of grounded theory as propounded by Glaser and Strauss (1967). This
sought to integrate one case after another developing a chain of evidence either confirming or disconfirming the emerging “medium level theory” (Miles and Huberman 1994).

As a final step, the literature was “enfolded”, that is to say, the emerging theory was compared and contrasted with the existing literature both confirming and conflicting (Eisenhardt 1989). Closure was reached when theoretical saturation had occurred, that is to say, the emerging theory was consistent with the data from each case and the last case had not materially further contributed to theory generation.

### 3.5: Methodological Soundness

#### 3.5.1: Overview

Establishing reliability and validity for any research technique can be a challenge, but qualitative research poses particular problems in this regard. While there are no universally agreed measures of validity for qualitative techniques, a number of authors have sought to demonstrate how reliability and validity can be achieved through case study research (Lincoln and Guba, 1985; Eisenhardt 1989; Patton 1990; Miles and Huberman, 1994; Yin 1994). In essence four tests are generally applied to ensure the quality of the application of the research design although different names are applied by different authors. Mirroring the logic of the positivist position, but adapted for the requirements of qualitative research, these tests are construct validity (Section 3.5.2), internal validity (Section 3.5.3), external validity (Section 3.5.4), and reliability (Section 3.5.5) (Yin 1994; Riege 2003; summarised in Table 3.2 below).

### Table 3.2: Case study strategies for four design tests

<table>
<thead>
<tr>
<th>Tests</th>
<th>Case study strategies</th>
<th>Phase of research in which tactic occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct validity</td>
<td>- use multiple sources of evidence</td>
<td>Data collection</td>
</tr>
<tr>
<td></td>
<td>- establish chain of evidence</td>
<td>Data collection</td>
</tr>
</tbody>
</table>
3.5.2: Construct Validity

Construct validity relates to how well information about the constructs in the theory being built is measured. The iterative process of testing against each additional case, revision and retesting is intended to achieve this requirement. The need for robust constructs requires the researcher to ensure that the characteristics are measured using the correct operational measures for these concepts (Yin 1994). For this purpose several different strategies are adopted for this thesis. Multiple sources of evidence both primary and secondary are used: these include the literature review (Chapter 2), personal observation, interviews with participants and a variety of documents, a technique referred to by Denzin (1978) as “triangulation of sources”. Second, these strategies are all carried out in a manner which establishes a “chain of evidence”, that is, linking information together in a logical pattern. Further, this chain of evidence is enhanced, and the linkages to the evidence strengthened, by the use of consistent research protocols and also by the extensive use of direct quotations from interviews to demonstrate as vividly as possible how the theory emerges from the data.
Triangulation of theory refers to the use of a variety of theoretical perspectives from different fields within the research design. Use of multiple theoretical lenses can provide for a more holistic analysis of data, and an enhanced ability to recognise alternative interpretations of the same data. For this reason a multi-lens theoretical perspective is adopted, combining elements from fields as diverse as cognitive psychology, decision theory, economics and socio-economics.

3.5.3: Internal Validity

The second test of quality is internal validity. Internal validity of case studies, also known as credibility (Nair and Reige, 1995; Gabriel 1990), relates to the development of causal relationships (McDaniel and Gates, 1991; Zikmund, 1997). If causal relationships between variables are inferred incorrectly, the evidence will not support internal validity. The test is self-evidently more applicable to research which has as its goal the demonstration of causality, so it will principally be used in experimental or explanatory research designs where the paradigm is positivist.

In this exploratory research, various approaches are adopted to enhance internal validity in the broader sense of ensuring that inferences of causality drawn from the data can be correctly drawn. The first arises from application of the data analysis techniques described in Section 3.4.2 seeking causal relationships in combination with an iterative and sequential process in which the postulated relationships are formulated, tested, modified and retested until no further non-conforming case is found. The second is pattern matching, in which patterns in the data are sought and then matched to see whether they coincide with patterns in subsequent data. Eisenhardt (1989) and Yin (1994) suggest that these two techniques, properly applied, can enhance internal validity.

3.5.4: External Validity

Like internal validity, external validity is an essentially positivist criterion. It refers to the extent to which research findings can be generalised beyond the actual case studies which comprise the research (McDaniel and Gates, 1991). When applied to qualitative research, it is also known as transferability (Gabriel, 1990). In contrast to hypothesis-
testing research which expressly aims to achieve statistical generalisation by random sampling across a population (and unlike the tentative hypotheses generated from the literature review whose purpose is solely to form an orienting perspective or possible theoretical framework for data collection and analysis in the manner described in Section 3.4.5 above), case study research aims for analytical generalisation of theories, using purposive sampling to choose cases which are likely to replicate or to extend existing theory (Yin, 1989). Replication cases be either “literal”, in that the emerging theoretical propositions explain satisfactorily the available evidence, or “theoretical” in that they are selected such that they are expected to yield contrary results, but for predictable reasons (Parkhe, 1993). As set out in Section 3.3.2, the search for underlying generative mechanisms, which is an inherent element of the scientific realism paradigm, is consistent with this concern for generalisability. Further, although to a limited extent only, a greater number of cases studied (in this case, six) tends to enhance the external validity of the research.

3.5.5: Reliability

Reliability, sometimes called dependability (Gabriel 1990) or confirmability (Lennon and Wollin, 2000) refers to the demonstration that another researcher could reproduce the same results. That is, if the operations and procedures of the research were repeated similar findings could be achieved. It is not that the other researcher would be able to gather similar data by applying the same methodology to different cases, but rather that if the same case were re-studied, that consistent results would be found (Emory and Cooper, 1991; Yin, 1994). Where the purpose of the study is theory generation, it is problematic that another researcher would theorise in an identical fashion. Because different minds might detect different patterns and generate different theories, it is important to have documented and executed the procedures with precision (Miles and Huberman, 1994). In order to address this issue, an interview protocol and a case study database were used in this research. The development of the interview protocol was described in Section 3.3.5. The interviews were taped and transcribed and the tapes themselves maintained in the database. Further, extensive use has been made of interviewee quotations. By using these materials the research can be verified (Lincoln and Guba, 1985).
3.6: Ethics

Finally research cannot properly be conducted, no matter how well designed or intended, using human subjects, unless the question of ethical standards has been addressed. The principal objective of these standards is to protect the subjects from adverse or harmful consequences to themselves or to the organizations they represent (Neuman, 1994). The five key ethical issues in human research are summarised by Patton (1990, p356). Each of these, and the researcher’s strategy to address them, are set out below.

First, the researcher should establish with the subjects the purpose of the interview and outline reasons why the subject might wish to participate. Any promises made should be kept. Patton (1990) described this as “promises and reciprocity”. An essential element of the University’s Ethics in Human Research procedures is the preparation and acceptance by the Committee of a one-page document describing the subject matter and the methodology of the research, followed by an explanation to each subject at the commencement of the interview of the nature of the research question. The researcher’s experience is that having understood the nature of the research, no subject declined to participate. Given the nature of the purposive sampling technique, this should not be surprising. Subjects frequently referred to their interest in receiving the results of the research, and each subject was promised an executive summary of its findings. The researcher will prepare and forward it to them upon completion and acceptance of the research.

Second, the researcher should identify the risks to the participants from their participation, and cites a range of risks including potential psychological damage, legal liability and exposure to political repression (Patton, 1990). In this research, the interview subjects are all (18/18) over 40 years of age, with significant business experience, all having a bachelor or higher university degree, and all are responding on matters relating to activities in their commercial as distinct from personal domain.

The third and related issue is that of confidentiality. The subjects were given the assurance of confidentiality, and this is achieved by maintaining the names of the individuals and their organisations anonymous in the reporting of the findings.
including quotations. Accordingly individual participants and their organisations are not considered to be exposed to risk from participation.

The fourth item is informed consent. The subject matter and methodology of the research was outlined to each subject and the entire process of the interview was explained before the interview commenced and before he or she was asked to sign the written Consent form. The Consent form is reproduced as Attachment B. Approval from each case study participant was sought to tape-record the interview. The participants could thereby decide the level of information they were willing to divulge, in the knowledge that the information was being recorded.

Finally, the issue of data access and ownership requires that access to the data be restricted and that ownership of the data be clear. The researcher has maintained the research database in physical form in a locked filing cabinet in his office, to which only he and his secretary have keys. In electronic form, the database, the data analysis and the research report and supporting materials are maintained on the researcher’s laptop computer at his home, which is password protected, and on the desktop and server at his office access to which is restricted through password at several levels (user and administrator). Physical access to these premises is further restricted to authorised persons carrying security passes. The researcher’s secretary, who knows the researcher’s passwords, is familiar with, and operates under, a regime of confidentiality appropriate for compliance with the rigorous standards of solicitor/client confidentiality practiced in law firms. Given that the researcher has received no financial assistance for the research, ownership of data falls to be determined by general law rather than contract. Much of the data is in the public domain in the form of web-sites, articles in newspapers and other publications, and advertising and promotional brochures. The Consent embodies a license to use both the results of interview and other materials provided to the researcher such as copies of legal agreements, minutes of meetings and memoranda. The use of other material in which copyright might subsist in another person is permitted by the “fair dealing” exception contained in s 42 of the Copyright Act 1998 (Commonwealth).
3.7: Chapter Integration

After reviewing the philosophical foundations of research which rest on ontologies and epistemologies which guide the selection of the research methodology and methods, research philosophy in general, scientific realism was selected as the research paradigm justified with respect to the research question.

The research design is outlined, and the case study method explained and justified. A multiple case approach is adopted and discussed in terms of purpose and justification. The case sampling strategy is outlined, data collection including the pilot cases and analysis methods summarised, and the strengths and weaknesses of both the case study approach and the data collection and analysis methods identified. The approaches to triangulation within and between sources and theoretical perspectives are also described. The chapter concludes with a description of the strategy adopted to accommodate ethical issues.

The following Chapter presents a narrative review of the six case studies and Chapters 5 and 6 present and analyse the data collected in the course of the case studies.
Chapter 4: Presentation of the Case Studies.

4.1: Introduction

The objective of Chapter 3 was to provide an understanding of, and justification for, the adoption of the case study methodology employed in this thesis. This chapter presents a narrative description of the six cases analysed, the common theme of those cases being the early-stage commercialisation of technology developed in Australia. Each case contains fundraising efforts directed at both angel and venture capital sources. Collectively they reflect a mixture of success and failure in those efforts. Chapter 5 continue the presentation of data by providing a comprehensive review of the interview data relating to the six cases in the form of responses to the tentative propositions emerging from the literature and set out in Chapter 2 and identifies key themes and patterns in such data. Chapter 6 then provides interpretation of these findings in relation to the variables identified from the literature set out previously in Figure 2.8 and concludes with conceptual models explaining the process of fundraising by STBFs from venture capital and angel investors.

4.2: Case Studies Summary

As detailed in Chapter 3 the research design employed a combination of the iterative analytical induction process described by Denzin (1978), in combination with data collection and analysis by the multiple or collective case study method as described in Eisenhardt (1989). The approach in essence involves a process of developing theory from multiple case studies using the research method of Eisenhardt (1989) but the sequential and iterative steps associated with analytical induction.

Table 4.1 shows the six case studies conducted for this research and their locations, New South Wales, Victoria, Tasmania and Queensland. They span four of the six Australian states and a range of industry sectors, details of which are summarised inTable 3.2. Interviews were completed, documentation studied and observations taken covering both sides of the relationship; that is, two members of the
entrepreneurial team on the one hand, and one or more investors on the other. The objective behind investigating both sides of the relationship was to assist in gaining a triangulated perspective on the facts of each case and so that issues unique to either side of the relationship could be explored. In each case the firm had sought to raise both venture capital and angel investment monies. The pattern of success (defined as having successfully completed a funding round agreement with one or more of the relevant category of investor, and received the monies) or failure (defined as having made active efforts to obtain, but failed to complete, such funding), and the geographic dispersion of the principal business location of each company in the study as well as its industry sector, is set out in Table 4.1

**Table 4.1: Geographic Spread-Industry Sector and Success/Failure of Funding Attempts**

<table>
<thead>
<tr>
<th>CASE STUDY</th>
<th>STATE/SECTOR</th>
<th>VC SUCCESS</th>
<th>VC FAILURE</th>
<th>ANGEL SUCCESS</th>
<th>ANGEL FAILURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ReadCo</td>
<td>QLD Medical</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PowerCo</td>
<td>NSW Energy</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FishCo</td>
<td>TAS Aquaculture</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CapCo</td>
<td>NSW Electronics</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FinCo</td>
<td>VIC Financial Services</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhoneCo</td>
<td>NSW IT</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

*Source: developed for this thesis.*
The cases will be presented in narrative form following the analytical stages of the relationship formation identified in Chapter 2, as adapted from Ring & Van de Ven (1996): the search, the negotiation and the commitment stages.

4.2.1: Case Study One: ReadCo

This case study examines a firm in the medical, health and allied services sector based in Queensland. The firm provides a novel and patented form of treatment for dyslexia and related reading disorders. The treatment comprises a series of exercises combining high levels of visual stimulation delivered as background and foreground on computer screen, with aural delivery of words and phrases (through headphones) requiring identification of those words and phrases, and completion of related tasks.

Table 4.2: Case Study One Summary

<table>
<thead>
<tr>
<th>Case Study Number</th>
<th>One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Age</td>
<td>9 years</td>
</tr>
<tr>
<td>Industry Sector</td>
<td>Medical/Health</td>
</tr>
<tr>
<td>Employees</td>
<td>12</td>
</tr>
<tr>
<td>Angel Investors</td>
<td>Two angel investors.</td>
</tr>
<tr>
<td></td>
<td>Australia=1</td>
</tr>
<tr>
<td></td>
<td>Singapore=1</td>
</tr>
<tr>
<td>Total amount raised from investors</td>
<td>$480,000</td>
</tr>
<tr>
<td>Tranches</td>
<td>Initial= $125,000</td>
</tr>
<tr>
<td></td>
<td>Further= six tranches, varying between $5,000 and $20,000 each</td>
</tr>
<tr>
<td>Venture capital funds</td>
<td>One venture capital fund pursued: terms sheet signed but conditions not met</td>
</tr>
<tr>
<td>Investment Form</td>
<td>Convertible redeemable preference shares</td>
</tr>
<tr>
<td>Board</td>
<td>Board Representation from each angel investor.</td>
</tr>
</tbody>
</table>
**ReadCo: History of Capital Raising**

In 2002, in conjunction with the start-up of the firm, the entrepreneurial team sought to raise $2.2 million from the venture capital market to fund both the start-up of the business (including the writing of the necessary software programs to exploit the novel technology) and to acquire an existing business in the same field to provide market access and cash flow. It was successful in signing a terms sheet for raising $1.2 million from a Sydney-based venture capital firm, conditional on completion of the acquisition of the existing business. This did not occur, and the entrepreneur then chose to approach a range of angel and venture capital investors. He was able to raise in aggregate $480,000 from one Singapore and two Sydney-based angel investors, investing in parallel, the last round having occurred in February 2006. The business continues to operate at approximately break-even.

**ReadCo: Search Stage.**

The founder of the firm is an engineer by training. He did not have the financial resources to commit to the funding of such a venture. The entrepreneur is also the inventor, and was introduced to the field, and therefore to the business opportunity, as a result of an approach by a member of his own business network to act as both an angel investor and venture manager. Attracted by the market potential, he applied his prior experience in invention (having been named as inventor in several patents in the course of his prior employment) and assessment of the business potential. While several other people assisted in the early technical development stages, within twelve months after the firm commenced business they had ceased any day-to-day involvement.

The founder/inventor had previously been the chief executive of the South-East Asian region for a division of a US company in the largest 50 NYSE-listed companies. He relied on his business network to make contact with a Sydney-based boutique investment bank which introduced him to several venture capital firms. Through the same network he was introduced to a lawyer to assist in the legal aspects of the
process. The lawyer in turn introduced him to a business associate of the lawyer who shared not only a background in technology commercialisation but whose son had suffered from a reading disorder. The family of that investor had expended considerable resources and energy over a ten-year period in seeking treatments for their son, and the investor believed he had a good understanding of the available treatments and the dynamics of that market. In addition, the investment bank introduced the investment to private biotechnology investors connected with a member of the extended family of one of the principals of the bank in Singapore. All of the investor, the Sydney-based angel investor and the Singapore group invested in the venture. The original venture capital firm declined to invest in the venture after the failure to meet the condition concerning acquisition of the other business.

ReadCo: Negotiation Stage

The negotiation stage occupied approximately three months. During this time the entrepreneur made two visits to Singapore and had several meetings with the patriarch of the family. During these visits he answered questions based upon the business plan he had submitted and upon his experiences in Singapore during his corporate career. He spent considerable time interacting socially, or at least informally, with various members of the family. This is consistent with the activities which lead to the formation of incomplete contracts as described by Landstrom, Manigart, Mason and Sapienza (1998) and by van Osnabrugge (1999).

ReadCo: Commitment Stage

The commitment stage was relatively short, less than one month. The lawyer for the Singapore investor proposed that the investment take the form of Series “A” convertible redeemable preference shares, with rights typical of institutional venture capital (Kaplan and Stromberg, 2003) and the other parties agreed. The documents were negotiated during a further three-day visit of all the parties to Singapore and by
email. Funds were made available to the venture by each investor prior to the final signing of the formal documents which was completed by mail.

4.2.2: Case Study Two: PowerCo

This case study involves a renewable energy firm based in New South Wales which commenced business in April 2003. The business plan envisaged that the company would become a developer of wind farms to meet the demand for electricity from renewable energy sources created by the state and federal regulatory schemes for “green power”. It relied upon a novel, though not patentable, combination of existing technologies known to those specialising in the field, together with particular site characteristics. Speed to market was proposed as a key driver of value for the business. PowerCo was founded by two engineers, respectively in their late 20’s and 30’s at the time the business was founded; one has a PhD in chemical engineering, and the other has a master’s degree in electrical engineering. Both had more than a decade of experience in both government and private sectors in the field of renewable energy.

Table 4.3: Case Study Two Summary

<table>
<thead>
<tr>
<th>Case Study Number</th>
<th>Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Age</td>
<td>8 years</td>
</tr>
<tr>
<td>Industry Sector</td>
<td>Renewable Energy</td>
</tr>
<tr>
<td>Employees</td>
<td>15</td>
</tr>
<tr>
<td>Angel Investors</td>
<td>Two angel investors.</td>
</tr>
<tr>
<td></td>
<td>Australia=2</td>
</tr>
<tr>
<td>Total amount raised from investors</td>
<td>$700,000</td>
</tr>
<tr>
<td>Tranches</td>
<td>Initial= $50,000 each x 2 investors</td>
</tr>
<tr>
<td></td>
<td>Further= $600,000.</td>
</tr>
<tr>
<td>Venture capital funds</td>
<td>Nil</td>
</tr>
<tr>
<td>Investment Form</td>
<td>Ordinary shares ($100,000), convertible (but not redeemable) preference shares ($200,000), and subordinated, interest-free loan ($400,000)</td>
</tr>
</tbody>
</table>
**Board**

Board Representation from 3 out of 5 angel investors.

**PowerCo: History of Capital Raising**

PowerCo sought to raise initially $100,000 from angel investors, and subsequently a further $1.2 million from either angel or venture capital investors. The firm was successful in raising the first $100,000 from two angel investors in June/July 2003, and then a further $600,000 from a group of co-investing angels in May 2004. In July 2005, PowerCo was subsequently acquired by an overseas renewable energy company seeking to acquire a pipeline of such projects in Australia, resulting in an exit at a substantial profit for the founders and the investors.

**PowerCo: Search Stage**

The founders of PowerCo had both accumulated a considerable network of contacts in the course of their years of work experience, and during their years of employment had made a conscious effort to focus upon people who could provide both financial resources and relevant skills to the venture they intended to establish. Collectively they considered that they knew all the venture capital funds and private investors that had shown interest in investing in their sector over the preceding five years, as a result of their involvement in the funding of such businesses while working in a public sector agency providing finance of last resort to such companies.

The founders approached both angel investors and venture capital funds. Funds sufficient to commence the business were obtained from two separate groups of angels within approximately three months of completion of a business plan and presentations. Attempts continued sporadically to seek larger funding from venture capital funds but without success.

One year after the initial round the founders sought further funding for the business, and once again approached venture capital and angel investors. These investors were
identified through business network contacts. Again they were successful in obtaining angel investment funds and again they failed to generate interest from venture capital firms.

**PowerCo: Negotiation Stage**

The negotiation stages for the two funding rounds are considered separately as they exhibited quite different characteristics. The first was relatively short, less than one month. A form of shareholders agreement was prepared by one of the founders and presented to the angel investors. It was accepted with only minor amendments. None of the parties used outside lawyers (one of the angels was himself legally qualified).

The second round occupied a longer period of approximately two months. This second group of angel investors come from an investment banking background and one had also previously worked for a leading venture capital firm based in Sydney. The negotiations proceeded upon the basis of the new investors acceding to the existing agreement but they were unwilling to do so. The new investors sought a small number of amendments to the agreement essentially to protect their minority voting status and board representation rights. Legal, due diligence and other external costs were effectively zero. The process reflected substantially the integrative bargaining process described by Walton and McKersie (1965) as applied to the elements of the investment contract identified by Van Osnabrugge and Robinson (2000).

**PowerCo: Commitment Stage**

Commitment occurred during the negotiation stage in both rounds. That is, the parties were concurrently negotiating and committing in both rounds. The key step in achieving commitment was the conversion of part of the proposed investment from equity, with consequent effect on ownership percentages and valuation, to subordinated interest-free debt. The investors were able to agree upon this approach without delay.
4.2.3: Case Study Three: FishCo

FishCo is based in Tasmania and produces software for the fisheries research and commercial fisheries sectors, as well as manufacturing hardware and related software for the aquaculture industry. It sells these products directly to customers in Europe, North America, South America and Japan as well as Australia and New Zealand. It has 35 employees, of whom 32 are located in Tasmania and 3 in Japan. FishCo, which commenced business in 1999, was initiated by three founders: a software engineer, a marine science researcher and a PhD physicist. The latter two had identified the business opportunity through a shared dissatisfaction with the quality of the then existing software tools available to marine and Antarctic sector researchers.

In 2004 the firm merged with another company in a closely related sector (software and hardware for the aquaculture industry) and acquired the key personnel, intellectual property and tangible assets of the other company which had originally been founded in 1995 as a spin-off from a government and industry joint venture research and development organisation. Hence the firm is an amalgamation of the assets and personnel of two complementary businesses and relevant capital raising activities were conducted by each separately as well as by the merged firm.

Table 4.4: Case Study Three Summary

<table>
<thead>
<tr>
<th>Case Study Number</th>
<th>Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Age</td>
<td>12 years</td>
</tr>
<tr>
<td>Industry Sector</td>
<td>Software</td>
</tr>
<tr>
<td>Employees</td>
<td>35</td>
</tr>
<tr>
<td>Angel Investors</td>
<td>Two angel investors. Australia=2</td>
</tr>
<tr>
<td>Total amount raised from angel investors</td>
<td>$200,000</td>
</tr>
<tr>
<td>Tranches</td>
<td>Initial= $100,000 each x 2 investors</td>
</tr>
<tr>
<td>Venture capital funds</td>
<td>$4 million from one VC firm</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Investment Form</td>
<td>Angel: Ordinary shares ($200,000)</td>
</tr>
<tr>
<td></td>
<td>VC: Redeemable Preference Shares</td>
</tr>
<tr>
<td>Board</td>
<td>Board Representation by one angel investor, and by VC.</td>
</tr>
</tbody>
</table>

**FishCo: History of Capital Raising**

The firm raised $100,000 from each of two Australian angel investors in a single round in 2003 making a total of $200,000. In a predecessor business, the key entrepreneurs for the current business had raised funds from three venture capital funds respectively in Australia, the Netherlands and Norway. Hence the key staff had considerable experience in successfully raising venture capital both within and outside Australia. FishCo raised approximately $4 million from an Australian venture capital fund in 2007.

**FishCo: Search Stage**

The common element in the search stages for investors - both angel and venture capital - was the use of personal and business networks by the founders. Contact with the angel investors was made through the personal network of the CEO of the firm, who had worked in the aquaculture sector with one, and knew the other from information technology industry meetings.

The venture capital funding round was initiated by the founders making contact with the venture capital fund through an introduction to the manager of the fund by a business associate of the CEO, as a specialist in the food and agriculture sectors, although publicly available data from the venture capital association identified it accordingly.

**FishCo: Negotiation Stage**
The angel investors took less than one month to complete the discussions leading to their investment. They invested in ordinary shares in the company and without a shareholders agreement. They were provided with financial accounts, business plan and budgets.

The venture capital round occupied between 15 (first round) and 22 (second round) weeks. A detailed Information Memorandum was prepared for submission to investors, including full financial statements, forecasts, market and competitor analysis, patents and intellectual property and description of the product suite. The firm requested investment in the form of ordinary shares. Negotiations occurred both in Hobart and Melbourne. Due diligence was conducted in Tasmania and with customers in Europe and the United States, and extended over 6 (first round) and 10 (second round) weeks. The documentation consisted of a shareholders agreement, and corresponding provisions as required being inserted in the company’s constitution.

**FishCo: Commitment Stage**

The angel investors committed rapidly to the first round. The company was in need of funds to meet creditor obligations, a fact which was known to the investors.

In the venture capital round, competitive tension drove a rapid conclusion to the commitment stage. When the Dutch parent of the Australian venture capital fund exercised a right of co-investment with its local subsidiary, the effect of which was to reduce the investment size by the Australian fund by half. To increase the investment size back to what had been previously expected the Australian fund then sought to increase its commitment, thereby increasing the total size of the round. The issue was resolved by several of the existing shareholders agreeing to sell-down part of their holdings.

**4.2.4: Case Study Four: CapCo**
CapCo was established in 1999 to commercialise technology originally developed by the CSIRO in the field of electricity storage devices. It designs, manufactures, and markets high power density super-capacitors. These devices provide power in mobile wireless devices, digital cameras, medical appliances and many other devices. With high power and energy densities, super-capacitors are capable of producing the high burst power required, for example, when taking a digital photo using the camera with flash in a mobile phone or sending wireless phone or PDA transmissions.

**Table 4.5: Case Study 4 Summary**

<table>
<thead>
<tr>
<th>Case Study Number</th>
<th>Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Age</td>
<td>12 years</td>
</tr>
<tr>
<td>Industry Sector</td>
<td>Electronics Manufacturing</td>
</tr>
<tr>
<td>Employees</td>
<td>38</td>
</tr>
<tr>
<td>Angel Investors</td>
<td>Twenty five (25) angel investors. Australia=23 United States=2</td>
</tr>
<tr>
<td>Total amount raised from angel investors</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Tranches</td>
<td>Angel investors: One Venture Capital: Four</td>
</tr>
<tr>
<td>Venture capital funds</td>
<td>Nine venture capital funds, total investment US$42.5 over four rounds</td>
</tr>
<tr>
<td>Investment Form</td>
<td>Angels=Ordinary shares. Venture capital funds =A and B Series convertible redeemable preference shares, and convertible notes</td>
</tr>
<tr>
<td>Board</td>
<td>No board representation appointed by angel investors; two representatives and one observer from venture capital funds.</td>
</tr>
</tbody>
</table>

**CapCo: History of Capital Raising**
CapCo raised its first capital from investors in 1999, $1,200,000, from a group of 18 angel investors. These investors subscribed pursuant to an information memorandum issued privately to a group of angel investors, one of whom was the company’s chairman.

In September 2000 CapCo raised a first venture capital round of A$ 8 million (US$6.5 million, at then exchange rate) from four investors, being two venture capital firms, one private investment trust of investors and the in-house venture capital arm of a major US corporation with commercial interests in this field of technology.

In February 2003 the shareholders swapped their shares in the Australian holding company for shares in a Delaware incorporated company and through that entity raised US$ 24 million in a second venture capital round from a range of venture capital funds from the US, Singapore, Taiwan, the Netherlands and Australia.


**CapCo: Search Stage.**

The founder of CapCo and its chairman used their respective personal networks and business contacts to find the angel round investors. As a former McKinsey and Company consultant the founder was well-connected with a group of investors who had both the knowledge and resources to be able to make early-stage technology investments of the kind represented by case four in its start-up phase. All investors were already known to one or both of the founder and chairman.

The investors in the first venture capital round were found through a combination of personal approaches to the venture capital funds, existing personal relationships (the investment trust) and through industry contacts. The founder deliberately sought investment from the US corporation as, in addition to money, a major investment from
a company in the same industry would provide an implicit validation of the technology, customer linkages, and a potential purchaser to allow the investors an exit via a trade sale. The founder was successful in doing so.

The investors in the second venture capital round comprised most (but not all) of the investors in the first venture capital round, and other venture capital firms known to the group of existing investors, including the existing venture capital firms. In view of the relatively large investment sum sought in the context of Australian technology companies at the time, the latter group provided introductions to and encouragement of the new investors in the second venture capital round.

Convertible notes were subscribed by the existing investors, together with several other companies having trading relationships with the company. The notes were retired in the process of listing on the London Stock Exchange.

**CapCo: Negotiation Stage**

CapCo represents the contrasts which occurred between the various stages in the negotiation of each of the fundraisings. The angel round consisted of an offering, on terms determined by the company, of ordinary shares at a price and in a number determined by the directors, and without any shareholders agreement or other document constraining the company or its body of shareholders. In this sense the negotiation stage was both short in time and simple in nature, consisting of a yes/no proposition to investors who had a pre-existing relationship with one or more of they founder and key personnel. There was no “negotiation” in the adversarial sense of that term.

The first venture capital round occupied some five months. The terms of the securities to be issued, “A” series redeemable convertible preference shares closely followed the terms of the standard model for venture capital contracting (Kaplan and Stromberg 2003). They were negotiated at length between the founder on the one side and the lead venture capital investor, and to a lesser extent the corporate venture capital fund, on the other. The other investors had agreed to leave the negotiation task to the lead investor.
The documents had been produced by lawyers for the investors. The negotiations were “forthright and vigorous”, as recalled by the founder. Principal among the issues at stake were valuation, but also extensive negotiation on the terms of warranties, authority limits for the CEO and the terms of employment contracts for the key staff including the CEO and in particular, termination provisions.

The second venture capital round built on the framework of the legal structures created in the first round, but extended over a number of months as the move to the US became intertwined with the fundraising. The convertible note issues were for the purpose of continuing the operations of CapCo as it sought a larger fundraising in the context of a public listing of its shares.

**CapCo: Commitment Stage**

The angel investor commitment consisted of individual commitments by each investor over a period of approximately 2 months, after which the issue was closed. The personal and commercial relationships between the each investor and one or more of the team drove the commitments, and there was no shareholders’ agreement entered into, nor due diligence done, and the investment form consisted of ordinary shares, which were then the sole existing class of shares.

By contrast, the first venture capital round continued over a period of almost 12 months, consisting of: extensive due diligence; the presentation of a detailed “Terms Sheet” by the investors; and then a lengthy and adversarial negotiation of the terms of that Sheet leading to a signed and agreed set of proposed investment terms in semi-legal language. This was followed by detailed contracts encompassing the changes to the company’s Constitution embodying the rights to be attached to the investors’ A preference shares, lengthy shareholders and subscription agreements including warranties given personally by the key management shareholders and formal employment contracts for all senior staff.
The second venture capital round occupied approximately eight months and was complicated by the move to a Delaware, US, holding company. All shareholders exchanged their shares in the Australian holding company for shares with substantially similar rights in a newly created Delaware company, which then proceeded to issue B preference shares with rights ranking prior to the A class, but otherwise on similar terms, and in each case preserving preferential rights relative to the ordinary shareholders.

The events comprising the commitment stage in each round were principally set by the needs of the accounting, tax and legal advisers, with input from the representatives of the major investors and the lead entrepreneur.

**4.2.5: Case Study Five: FinCo**

FinCo was established in 1999 by three experienced finance sector managers who had left their previous employment when that business was sold to a major bank. The objective of the company was to exploit an opportunity to combine the potential of the internet with the rapidly expanding market for investment advice and fund management services for personal superannuation. The business sought to provide a combination of investment advice and management with record–keeping and reporting services for personal superannuation on-line to allow fund trustees an on-line “one-stop-shop” for these services. It targeted in particular the emerging trend towards “do-it-yourself” (now usually called self-managed superannuation funds or “SMSFs”) funds of individuals and families.

**FinCo: History of Fundraising**

The founders applied funds acquired as a consequence of their departures from their former employment to commence the business and then turned to external sources of funds to finance the completion of the technical development and market introduction of the services. They were successful in raising one round from angel investors of $950,000 followed by one round of $4 million from a venture capital fund and shortly
thereafter by an exit through a back-door listing, in this case a reverse takeover through a listed shell company. This was a transaction in which a company listed on the stock exchange but having no active business or trading activities, acquires the shares of the company seeking to be publicly listed in return for an issue of its own shares, so that by this means the business became listed on the Australian Stock Exchange in 2003.

**Table 4.6: Case Study 5 Summary**

<table>
<thead>
<tr>
<th>Case Study Number</th>
<th>Five</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Age</td>
<td>11 years</td>
</tr>
<tr>
<td>Industry Sector</td>
<td>Financial Services</td>
</tr>
<tr>
<td>Employees</td>
<td>25</td>
</tr>
<tr>
<td>Angel Investors</td>
<td>Seven (7) angel investors.</td>
</tr>
<tr>
<td>Total amount raised from angel investors</td>
<td>$950,000</td>
</tr>
<tr>
<td>Tranches</td>
<td>One only</td>
</tr>
<tr>
<td>Venture capital funds</td>
<td>One venture capital fund, A$4 million in one tranche</td>
</tr>
<tr>
<td>Investment Form</td>
<td>Angels=Ordinary shares. Venture capital fund =A Series convertible redeemable preference shares</td>
</tr>
<tr>
<td>Board</td>
<td>No board representation from angel investors; two representatives from venture capital fund.</td>
</tr>
</tbody>
</table>

**FinCo: Search Stage**

As experienced senior executives in the finance sector, the founders of FinCo had developed a considerable network of contacts in the course of their years of work experience. They considered that between them they knew most of the venture capital funds and private investors that would have both an interest in, and relevant knowledge for, investing in the sector.
The angel round search occupied approximately three (3) months, and raised $950,000 from eight investors. Each investor had some pre-existing relationship with one of the founders: in some cases, a family relationship, and in others a prior business or commercial relationship. A number of the investors knew each other, and had co-invested previously, although they were not participating through any kind of formal angel investor group or club. All were located in either Sydney or Melbourne.

The venture capital round was more lengthy. As participants in the finance sector in the broad sense, the founders considered they knew or could through their personal contact networks arrange an approach to all venture capital funds in Australia that might have appetite for an investment in this sector. Approaches were made to six venture capital funds selected by the founders on the basis that they were known to the founders or their immediate associates and were thought to have an interest in the internet or information technology sectors and a willingness to invest in a business in the finance sector.

**FinCo: Negotiation Stage**

The issue price and other terms for the angel investors were determined by the founders. The investors were offered and issued ordinary shares. The investors were not offered and did not seek board seats. The transaction involved paperwork being prepared by the founders that was sent to the investors who then signed those documents and deposited their funds. Negotiation concerned the willingness of investors to invest, as distinct from the terms of the investment. Discussions centred on the business opportunity and how the various parties might contribute to its successful exploitation, against a background of an existing relationship with each investor. The negotiation was essentially distributive in terms of Walton and McKersie (1965).

In the case of the venture capital investor, the basic deal structure was determined by the investor and set out in a terms sheet. There followed several months of negotiation, a period during which the company was expending funds at a rapid rate in order to pursue the objectives of the business in a manner that the founders considered was
required to stay ahead of the competition, remembering that the years 2000 and 2001 were the peak of internet “hype”. The company was in danger of running out of money as the negotiations with the venture capital funds dragged on.

Two terms sheets were received: the first, from the fund with whom the founders preferred to work, suggested a performance based ratchet which was so complex, and with so many contingencies, that even the financial modelling skills of the founders from a finance sector background could not understand and hence the simpler structure proposed by the other fund was preferred.

**FinCo: Commitment Stage**

The angel round consisted of individual discussions with each investor over a period of three months. The stage then ended. Because of the relationships between each investor and one or more of the team, the founders did not propose a shareholders’ agreement and the investors did not require one. The investment form consisted of ordinary shares, the sole class of shares at the time.

The venture capital round occupied a period of around six months, consisting of extensive due diligence, the presentation of a detailed “Terms Sheet” by the investor based on its standard investment form of preference share, followed by a lengthy and at times hostile negotiation of the terms of that Sheet, detailed contracts setting out the rights to be attached to the investors’ A preference shares, shareholders and subscription agreements and formal letters of engagement and non-compete obligations for the founders.

**4.2.6: Case Study Six: PhoneCo**

PhoneCo was created as a vehicle for four engineers from a large electronics company to pursue their own business opportunities. A colleague of the engineers had left the electronics company and embarked on a career in a venture capital firm. In part as a result of the encouragement of the colleague, and in part in pursuit of their own
dreams, the four founders resigned together and set up in business with seed funding provided by the venture capital firm. Hence the first source of capital other than funds from the pockets of the founders, was from the venture capital fund.

**Table 4.7: Case Study 6 Summary**

<table>
<thead>
<tr>
<th>Case Study Number</th>
<th>Six</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Age</td>
<td>13 years</td>
</tr>
<tr>
<td>Industry Sector</td>
<td>Telecommunications equipment</td>
</tr>
<tr>
<td>Employees</td>
<td>175 (at last funding round)</td>
</tr>
<tr>
<td>Angel Investors</td>
<td>Nil</td>
</tr>
<tr>
<td>Total amount raised from Venture Capital Funds</td>
<td>$75 mill</td>
</tr>
<tr>
<td>Tranches</td>
<td>Six</td>
</tr>
<tr>
<td>Venture capital funds</td>
<td>One</td>
</tr>
<tr>
<td>Investment Form</td>
<td>Convertible (but not redeemable) preference shares.</td>
</tr>
<tr>
<td>Board</td>
<td>Venture capital firm= 4 out of 5 directors.</td>
</tr>
</tbody>
</table>

**PhoneCo: History of Capital Raising**

PhoneCo raised capital from a single venture capital firm in a series of funding rounds. Angel investment was sought but never successfully obtained. Ultimately, the firm listed on the Australian Stock Exchange in a manner which resulted in the investors in the venture capital fund becoming the shareholders of PhoneCo following its listing.

**PhoneCo: Search Stage**

PhoneCo was unusual in the sense that the venture capital firm actively sought the individuals who were to comprise the entrepreneurial team, as much as the team members themselves sought funding from the venture capital firm. It has much in common with the “entrepreneur-in-residence” model (Lerner, 1998) in which an experienced entrepreneur is employed or contacted by a venture capital firm to seek
out opportunities to establish or catalyse the establishment of a technology based firm, and in the process transition to become a member of the entrepreneurial team. The relationship which gave rise to the rapid coming together of the team members and the funding was through a network of pre-existing co-workers.

**PhoneCo: Negotiation Stage**

Notwithstanding the ease and speed with which the team and its funding source found each other, the negotiation stage proved rather more lengthy and contentious. The nature of the process by which the two sides had found each other led the venture capital firm to adopt the attitude of “take-it-or-leave-it” as the team had no other alternative source of funding. While the negotiator for the venture capital firm was well aware that unless the key members of the entrepreneurial team achieved an outcome sufficiently attractive for them to be enthusiastic and motivated, there would be no business and the effort in putting it together would be wasted. This was counterbalanced by the desire to see a “standard” venture capital deal structure “imposed” on the entrepreneurial team. The advantages of such a structure were needed for the underlying fund investors. So despite good personal relationships, the negotiation phase continued for several months with many negotiating sessions between the parties and their respective lawyers. The negotiations were strongly distributive in terms of the Walton and McKersie (1965) classifications.

**PhoneCo: Commitment Phase**

Once the terms were negotiated, commitment followed rapidly. The “dual” role of the manager of the venture capital fund in catalysing the birth of the firm in concert with the founders contributed to the commitment by the fund in a prompt manner, and having agreed the terms of investment, and without any other source of funding even having been explored, the team were keen to commit and proceed to the establishment of the business.

**4.3: Contractual Terms in Case Studies**
This section analyses the contractual terms for the funding transactions for the six firms in the study. Whether an investment is made by a venture capital firm, by an angel or by multiple investors from either group in syndicate, agreement between the parties upon contractual terms prior to investment is an important mechanism to promote the economic interests of the respective parties. It establishes a “rule-set” in advance, while at the same time building in flexibility to respond to changing circumstances (Landstrom, Manigart, Mason & Sapienza, 1998; Kelly, 2000). The patterns of presence-or-absence of these terms in investments sourced from venture capital or angel sources respectively has potentially important implications for the entrepreneurial firm.

Contractual terms for funding have been the subject of analysis by researchers and practitioners, principally in the United States (Kaplan and Stromberg, 2003; Wilmerding, 2005) and the United Kingdom (Kelly, 2000) in studies that draw out the distinctions between venture capital transaction investment terms and angel investor terms (Van Osnabrugge and Robinson (2003). Lists of these terms are available to relevant practitioners (and the lawyers who document the transactions) both in the form of standard legal agreements, and standard practitioner texts or guides for venture capital and angel investors. While no single list could be considered exhaustive in nature, the data reveal a substantial commonality of provisions within the menu of terms, sufficient that they could most conveniently be presented in summary or tabular form, without compromising essential details. A summary prepared for this research of the key provisions is set out in Table 4.8:

**Table 4.8: Summary of Key Contractual Safeguards in Investment**

<table>
<thead>
<tr>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Investor veto rights over acquisitions and divestitures</td>
</tr>
<tr>
<td>2. Investor approval required for strategic plans and/or budgets</td>
</tr>
<tr>
<td>3. Management can be forced to seek an exit if required to do so by investors</td>
</tr>
<tr>
<td>4. Investor approval required to hire and/or fire senior personnel</td>
</tr>
<tr>
<td>5. The level of management compensation must be approved by investors</td>
</tr>
<tr>
<td>6. Shares or options may not be issued without investor approval</td>
</tr>
</tbody>
</table>
Non-compete contracts required of management upon termination

Investor veto rights over capital expenditure plans

Investor(s) countersign cheques above a certain amount

Restrictions on the ability to raise additional debt or equity

Equity ratchet provisions are included as part of the deal

A specific dispute resolution mechanism agreed in writing

Source: prepared for this thesis based upon the research data; standardised descriptions based on Kelly (2000), Kaplan & Stromberg (2003) and Wilmerding (2005).

In addition to the 18 convergent interviews conducted with entrepreneurs, team members and investors both venture capitalists and angels, the transaction documents, information memoranda, minutes of board and other meetings, company web-sites and sales and marketing brochures were examined. The content of these documents is summarised in Table 4.9, in terms of the key contractual safeguards identified in Table 4.8 that the investor and the firm have agreed upon in the documentation of the investment terms. These may form part of the constitution of the firm, the shareholders’ and subscription agreements, or a combination of each or all of these. Where there are different terms between different rounds of capital raising these are treated separately, but where multiple tranches or rounds are invested on substantially the same terms, these are treated as one. Hence, from the six cases, the aggregate of successful venture capital and angel investment raisings appearing in Table 4.1 is increased to nine.

From the analysis of the deal terms, a number of observations can be made. Firstly, while strategy and business direction is important to both categories, venture capital investors appear to have a relatively higher level of concern over these issues reflected in the terms of the investment agreements. Secondly, there is much greater variability of contracting behaviour on the part of angel investors, and relatively greater adherence to standardised contracts by venture capital firms. Thirdly, there is little variability on issues that can affect the equity stake that the investor acquires, such as anti-dilution and pre-emptive rights, and vesting. Fourthly, there is a striking difference in relation to those issues which concern the personal aspects of the
entrepreneurial team: this includes the power to hire and fire the chief executive and other members of the entrepreneurial team, and to determine their remuneration.
<table>
<thead>
<tr>
<th>Safeguard</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
<th>Case 5</th>
<th>Case 6</th>
<th>Total Angel</th>
<th>Total V.C.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor rights over acquisitions and divestitures</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>X</td>
<td>X</td>
<td>√</td>
<td>X</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Investor approval required for strategic plans and/or budgets</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>X</td>
<td>X</td>
<td>√</td>
<td>X</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Management can be forced to seek an exit if required to do so by investors</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>√</td>
<td>X</td>
<td>√</td>
<td>0</td>
</tr>
<tr>
<td>Investor approval required to hire and/or fire senior personnel</td>
<td>X</td>
<td>X</td>
<td>√</td>
<td>X</td>
<td>X</td>
<td>√</td>
<td>√</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Level of management compensation</td>
<td>√</td>
<td>X</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>
must be approved by investors

<table>
<thead>
<tr>
<th></th>
<th>Share options may not be issued without investor approval</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>6</th>
<th>3</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Non-compete contracts required of management upon termination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Investor veto rights over capital expenditure plans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>Investor(s) countersign cheques above a certain amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Restrictions on the ability to raise additional debt or equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Equity ratchet provisions are included as part of the deal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>A specific dispute resolution mechanism agreed in writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

X= Clause not included in relevant agreements. Source: prepared for this research
4.4: Conclusion

This chapter presents a narrative description, integrating the data from both the interviews and documentary materials in a common framework including, where appropriate, a tabular analysis identifying common features of the six cases that have been collected and analysed for the purpose of addressing the research question. The cases include investment from one or more venture capital firms, from one or more angel investors and from a combination of angel investors followed sequentially by venture capital. Freear, Sohl and Wetzel (1990) in their analysis of the informal capital market (angel investment) in the United States identify a degree of complementarity between the two investor types, having found that the angel investors typically invest at an earlier stage, and in smaller amounts, than venture capital firms. They viewed the process as a continuum, in which angel investors have a role to take early stage companies which are not yet “investment-ready” and shape and form them into firms capable of investment by formal venture capital which are then “handed-on” to the venture capital sector. While there was some support for this concept, within the target range of the research, namely $500,000 to $2 million, the two categories of investor operate in parallel, as alternatives rather than complements thus providing a choice to the small technology-based firm as to source of capital. The strategy of venture capital funds co-investing with angel investors to enhance deal-flow at lower cost thereby to address the “diseconomies” of monitoring and due diligence costs by venture capital was not found to be a significant feature. This complementarity has been confirmed by the research of Wong et al.,(2009).

These issues will be pursued in following chapter which will seek to identify, present and explain the data emerging from the interviews and documents as they respond to the issues raised in the tentative propositions identified in Chapter 2 in a manner which will permit the application in subsequent chapters of the analytical induction techniques selected as the appropriate methodology as described in Chapter 3.
Chapter 5: Data Presentation

5.1: Introduction

The objective of Chapter 4 was to provide a narrative review of the six cases that were the subject of this study. This chapter presents the data that have been collected and analysed. The aim of this chapter is to find and identify the data as they emerge through an enfolding of the cases into the framework provided by the tentative propositions developed in Chapter 2. Chapter 6 then interprets these findings in relation to the map of variables contained in Table 2.8. From these findings the process of capital search by small technology-based firms will be presented in a manner that incorporates the constructs and variables which have emerged from the literature and the findings of the research. The final goal of Chapter 6 is the development and presentation of a conceptual model of the process.

Direct quotations from the transcripts of the interviews will be used extensively through this chapter. These quotations assist in explanation building and highlighting emerging themes and patterns (Miles & Huberman 1984; Yin 1994). The quotes also show the participants’ attitudes, experiences and feelings, and are selected because of the representative nature they have for the concepts being investigated. Quotations throughout this chapter will be in italic print. To preserve anonymity, pseudonyms have been substituted for all company names and interview subject names, referring to them by their case number and interviewee number with each case. The excerpts from the transcribed interviews have been edited for clarity, with repetitions and hesitations removed except where they carried meaning or emphasis.

This chapter is divided into five sections. Section 5.2 presents and analyses the interview data collected from the participants, and the documentary and other materials collected in the course of the case studies, in terms of the tentative propositions identified in Chapter 2. The order of presentation in that Chapter followed the general course of historic development of the trans-disciplinary theoretical approaches to entrepreneurship research, followed by a review of the empirical studies relevant to the research question. The propositions developed in that chapter were then re-presented
as key-words to associate them with the stages of the investment process in the Map of Variables in Table 2.3, while at the same time associating those key-words with the discipline which gave rise to each. In this Chapter the propositions will firstly be examined in the same order in which they were presented in Chapter 2. Then in Section 5.3 the themes and patterns will be re-ordered to align with the flow of the capital raising process also identified in Chapter 2, and incorporated into the Map of Variables in a manner which seeks to associate the variables with the several streams of literature. Chapter 6 proceeds to explain the process of fundraising by STBFs and proposes a conceptual model of that process setting out the main stages in the process as well as enabling the identification of the main factors which impact the process.

**5.2: Outline of Findings**

In this section, the data collected will be presented in the form of a response to each of the tentative propositions, and then those data will be placed in the context of the variables presented in the map of variables. Each such proposition will be examined in turn, concluding in each case with reflections upon the effect of the findings on the variables in the map of variables. In particular, the data will be examined for their consistency with either the rational dimension or the normative/affective, a distinction which will underlie the decision process of the firm in its choice of capital source and the processes it undertakes to obtain that capital. The tentative propositions are represented below, this time tabular form, as Table 5.1. Each is associated with one or more stages of the process of fundraising as described in Chapter 2, and a key-word or words is assigned to each for ease of reference.

**Table 5.1: Summary of Tentative Propositions**

<table>
<thead>
<tr>
<th>P #</th>
<th>Stage</th>
<th>Proposition</th>
<th>Keyword(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2, 3</td>
<td>The small technology-based firm seeking to raise capital is faced with an incentive-based deal structure from both angel and venture capital</td>
<td>Incentive-based deal structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>investors.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---------------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>2</td>
<td>2, 3</td>
<td>The small technology-based firm seeking to raise capital is faced with an insistence upon structural and procedural safeguards by both angel and venture capital investors.</td>
<td>Structural and procedural safeguards</td>
</tr>
<tr>
<td>3</td>
<td>2, 3</td>
<td>The entrepreneurial team has a tendency to act with “deceit with guile” rather than ethically, resulting in the imposition of incentives, structural and procedural safeguards or governance mechanisms.</td>
<td>Opportunism of entrepreneurs</td>
</tr>
<tr>
<td>4</td>
<td>2, 3</td>
<td>The small technology-based firm needs to be concerned at the search stage about later opportunistic behaviour on the part of angel and venture capital investors in order to minimise exposure to “reverse-agency” risk.</td>
<td>Opportunism of Investors</td>
</tr>
<tr>
<td>5</td>
<td>1, 2, 3</td>
<td>The technology firm may be able to identify and use non-financial motivations of angel investors (but not venture capital firms) in the design and execution of a fundraising strategy.</td>
<td>Investor non-financial motivations</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>The small technology-based firm does not take the lead in determining the basic deal structure or terms, but instead cedes that role to both categories of investor</td>
<td>Determination of basic deal structure</td>
</tr>
<tr>
<td>7</td>
<td>1, 3</td>
<td>Small technology-based firms do use social</td>
<td>Social</td>
</tr>
<tr>
<td>Contracting Strategies</td>
<td>Information Sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal and direct sources of information are more likely to be relied on by the entrepreneurial team as opposed to impersonal sources such as published materials.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is the content of the lead entrepreneur’s and entrepreneurial team’s network of relationships which impacts the fundraising process, rather than the size and diversity of that network.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cognitive Mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy and persuasive ability by members of the entrepreneurial team are important factors contributing to successful capital raisings from venture capital firms and angel investors, but social perceptiveness and emotional intelligence are not.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>The emergence of mutual trust (defined to comprise ability, integrity and benevolence) between the investor and the STBF impacts the process of raising capital.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reputation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The reputational concerns of VC firms, and of individuals in the entrepreneurial team of the STBF impact the process of raising capital, but the reputation of angel investors does not.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sources of Bargaining Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>STBFs have certain sources of bargaining power.</td>
</tr>
</tbody>
</table>
both with venture capital and angel investors providing them considerable scope to negotiate more favourable investment terms and that this scope is greater in the case of angel investor deals than venture capital

<table>
<thead>
<tr>
<th>14</th>
<th>2, 3</th>
<th>STBFs tends to underestimate the complexity of negotiations, under-search for information and fail to access relevant expertise resulting in a failure to take best advantage of their bargaining power</th>
<th>Failure to use bargaining power</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>1, 2, 3</td>
<td>The entrepreneurial team leader within an STBF influences the firm’s process of raising capital</td>
<td>Entrepreneurial team leader</td>
</tr>
<tr>
<td>16</td>
<td>1, 2, 3</td>
<td>Prior experience in fundraising influences the process of seeking capital</td>
<td>Prior experience of fundraising</td>
</tr>
</tbody>
</table>

5.2.1: Incentive Based Deal Structure

Proposition 1:

*The STBF seeking to raise capital is faced with an incentive-based deal structure from both angel and venture capital investors.*

Agency theory holds that in order to protect against the assumed “deceit with guile” of the entrepreneur (Ring and Van de Ven 1994), an investor must establish incentives which are able to ensure that the behaviour of the entrepreneur is aligned with the needs of those investors. Consistent with the findings of Kaplan and Stromberg (2003) in relation to venture capital in the United States, and Cumming (2006) in relation to Canada, the data revealed that Australian venture capital firms in all cases use an investment form (the redeemable convertible preference share) with terms which are designed to create an “incentive” in the agency theory sense, and further, that the
design of that instrument is largely pre-determined, in that there is a “boiler-plate” or standard model that is applied:

The VC’s arrived with a kind of preferred structure, which was independent of us, it was the sort of structure that they would want to use for anything.

They (VCs) had the pro-forma and we went through the pro-forma agreeing on all of what we would accept and what we wouldn’t accept and what we would compromise and what the compromise was going to be on each of the clauses in the pro-forma term sheet.

The VC’s sort of came with, in a sense, with a standard list of things they wanted.

That model is a version of the contracting form first used in the United States, and now adapted to accommodate Australian corporate and commercial law differences.

From the entrepreneurs’ perspective, these contracts are highly complex and beyond the typical experience of a technology entrepreneur:

We had a sort of spread-sheet competition to see who could analyse the incredible complex structures that were being proposed to us by the VC’s. We’d never been exposed to how shares like that (redeemable convertible preference shares) worked, we pretty soon realised we were out of our depth.

The universal use in venture capital financed transactions of the convertible preference shares, in which the conversion formula results in reducing the rewards to the entrepreneurs in the event of exits at lower prices, reflects the “alignment of incentives” as is envisaged by, and flowing from the logic of, agency theory. A summary of the rights attached to this class of shares are set out in Table 4.8. Their specific application varies remarkably little between the various transactions which are
the subject of this research. The only material difference is that in certain cases the
anti-dilution protection (a contractual provision which allows an investor to keep a
constant share of the equity of a company notwithstanding later share issues to others
at a lower per-share price) afforded to the venture capital firm was on a weighted
average basis (more advantageous to the STBF), but in others a full ratchet basis (more
advantageous to the venture capitalist) was used. The concept of variable conversion
formulae designed to increase the “share of the pie” of the entrepreneurs who have
achieved a successful exit reflects an underlying assumption that in its absence,
incentives would be misaligned, and entrepreneurs would behave opportunistically. It
will be recalled that opportunism is considered by agency theorists to expose investors
to two kinds of risk: adverse selection due to informational asymmetry, the agents
being better informed about their true abilities than the principal, or deliberately
misrepresenting them; and moral hazard being “shirking” or pursuing personal
interests. The incentive mechanisms are designed to ensure that the founders of the
STBF remain with the firm until the venture capital firm can exit, bear a relatively
higher percentage of loss than would be implied by their nominal percentage
shareholding in the event the venture fails and are entitled to a relatively lower
percentage of the gain if the venture succeeds.

Conflict can arise because of entrepreneurs’ opportunities outside the firm. They may
wish to pursue these opportunities at a time when they are difficult to replace. To the
extent that they may have developed firm-specific skills or knowledge, their early
departure could greatly reduce the firm’s value. The data revealed that the most
draconian manifestation of “alignment of incentives” in use in venture capital contracts
in North America, the so-called “loss of unvested benefits” penalty in which a founder
or executive who already held shares prior to the venture capital investment is made
subject to a condition of vesting over time, and upon departure from the small
technology based firm for any reason prior to a liquidity event for the venture
capitalists forfeits his or her shareholding (Kaplan and Stromberg 2003), was notably
absent in the Australian context.
However other forms of incentive-based deals were common with venture capital transactions, although not presented in a form of positive incentive to the firm, but rather a “punishment for failure”:

That led us to agree to a deal which had a nominal valuation that was slightly above the previous round but with claw-back arrangements that the VC’s were using at the time, so that you could in effect reset the VC’s entry price later on if the world turned out to be as black and gloomy as the VC’s all said it would be.

As pointed out by several entrepreneurs, the negative implication has the potential to de-motivate rather than act as an incentive:

These are the rules and you have to set these milestones and if you don’t do this by this date, you know we won’t give you this. That isn’t a way of committing people to do something.

There’s also a strength and control issue in the structures of working with somebody like a VC. ... Once you start working with a VC you end up working for the VC and it’s very difficult to step back from that as a perception.

Valuation resetting mechanisms, which can be thought of as disincentive mechanisms in the sense that the apparent value of the deal to the existing shareholders is subsequently reduced to their disadvantage, may not be purely matters of cosmetics, but may have motivational effects on the entrepreneurial team. Sapienza (1989) found that in the context of the venture capitalist/entrepreneur dyads he studied, expression of compassion and concern by the former, and the creation of a relationship hallmarked by positive rather than negative interactions, led to enhanced performance by the entrepreneurial ventures. In the cases studied, no such positive motivational interactions were observed in the course of the funding process of venture capital, which can be characterised as adversarial rather than co-operative.

As practiced in the venture capital transactions studied, this allocation of loss or gain which results from an incentive-based deal applied in all cases irrespective of whether
the reason for failure, or success, could be attributable on the one hand to the efforts (or lack thereof) of the entrepreneurial team or on the other to alternative causes not within the control of either party (for example, an unforeseeable regulatory change which eliminates an existing market overnight). It is therefore, at best, a rather crude method of addressing the potential for “shirking” behaviour on the part of entrepreneurs. It is more consistent with a position that the value of the contribution to the venture outcome by the venture capitalists, other than the provision of money, is actually irrelevant to the agreement on the sharing of the returns. It is directly opposed to the “effectuation” logic (Sarasvathy 2000) under which both parties to the exchange cooperate to achieve a mutually agreed goal where the methods of achievement are both unknown and, arguably, unknowable, in advance. It is, however, consistent with the position taken by entrepreneurs that the non-financial skills of venture capitalists are not material to their selection decision between different venture capital firms:

So they (VC firm) had control and the people that actually had the control were pretty much financial people from accounting and stock broking and banking sort of backgrounds but didn’t really understand the business.

Right now we have already got two VC board members. To have more VC board members, I would much rather put someone on that really added value than have another VC represented on the board.

This view is supported by a body of research finding that entrepreneurs find little value in the contributions of venture capitalists, and that there is no evidence of improved performance of investee firms associated with increasing levels of venture capitalist input (Macmillan, Kulow and Koylian, 1989; Busentitz, Moesel, Fiet and Barney, 1997). Indeed, Busenitz et al. (1997) found no consistent support for the proposition that increased advice and assistance from VC’s added to venture performance, but in contrast found strong support for “the positive effects of a sense of fairness within the VC/New Venture Team relationship” (p 15).
Angel Investors

In the case of transactions with angel investors, the STBF is less likely to be faced with an incentive-based deal structure in the form of convertible preference shares combined with contractual covenants such as equity ratchets and vesting. It is evident from Table 4.9 that the elements of such a structure were limited to a single case (Case 1: convertible preference shares). It will be recalled that Case 1, although characterised as an angel investment, comprised a co-investment by two investors one of whom was a private biotechnology investment vehicle of a family from Singapore who in their other interests were also investors in venture capital funds, and hence were more likely to be familiar with and influenced by the terms applicable to such investments.

How then was the alignment of incentives perceived by the parties to the angel investment transaction, if not through the rights attaching to the shares and the contractual commitments? In essence it is through the development of an interpersonal dynamic between the lead entrepreneur and entrepreneurial team and the investor. Entrepreneurs must convince critical resource holders to become active participants in their ventures, despite the high levels of uncertainty, ambiguity and risk surrounding those ventures, and they do this through an intensely personal process of appeal to the angel investor as an individual.

It will be recalled from Chapter 2 that sociologists have argued that the economist’s account of the relationship between the investor and the firm in which the investment is made is “undersocialised” (Granovetter, 1985; Cable and Shane, 1997; Shane and Cable, 2002), failing to address the role of social or personal relationships. These theorists suggest that the entrepreneur’s social relationships are imbued with a sense of mutual obligation and trust that go a long way towards regulating the behaviour of the entrepreneur. The issue of trust will be examined in greater detail in Section 5.2.11 below. At this stage the key message is that the formation of the angel investor and entrepreneur relationship must occur over a number of different dimensions: not only the economic, but in parallel, a moral or ethical dimension as well as an emotional dimension. The words of Gartner, Bird and Starr (1992), used in a broader context, are particularly apt: the entrepreneur must:
...create a constellation of different motivational systems to involve different stakeholder groups in the organizing process. Entrepreneurs suggest to different individuals (e.g. potential buyers, suppliers, investors, employees, partners, governmental regulators) that certain outcomes (e.g., a better product, a significant new form of demand, a high rate of return, a rewarding and stable position, involvement, compliance with the law) will occur from the organizing process (p 25).

The task of the entrepreneur is to engage the potential stakeholders in a manner which motivates them to participate in, and to support, the venture, and persuades them that the venture can be a vehicle by which each stakeholder can achieve his or her personal aspirations and goals. The “personalising” strategy is the key to the relationship with the angel investor, and in a manner quite distinct to that with the professional venture capital investor.

I just wanted to get him [target angel investor] thinking... my goal was to let him know that I was a real person, that I was interested in him and that I hoped he would like me and be interested in the project and sort of make a first connection... .

I started asking him about himself and his experience with [another venture] and how they got involved and where he grew up, just hearing about his life. Somewhere not long into this lunch we just clicked personally....

When we came up here for our first visit... the way we were treated, everything just sort of clicked.

He (the entrepreneur) was very good at putting the personal touch on everything.”.

This theme will be further pursued in Section 5.2.7 which considers the role of social contracting strategies.

The strong tendency towards incentive based deals with venture capital funds supports the central role that both agency theory and TCE would suggest as the mechanism for alignment of interest. This stands in contrast to the relative infrequency of such structures in angel investor transactions, which exhibit a tendency towards a mutual or
shared outcomes basis which lead away from agency and transaction cost assumptions and towards a more socialised view of the formation of the relationship.

In addition to incentive based deals, TCE posits that the financial resource provider will insist upon imposing strict structural and procedural safeguards in order to protect his or her interests; and the following subsection examines the application of that element of the TCE lens to the STBFs search for capital.

5.2.2: Imposed Structural and Procedural Safeguards

Proposition 2

The small technology-based firm seeking to raise capital is faced with an insistence upon structural and procedural safeguards by both angel and venture capital investors.

Venture Capitalists

Venture capitalists operate within a contractual framework established with their underlying investors which embodies a set of obligations of a fiduciary nature which they undertake as a necessary consequence of the structure of professional venture capital fund formation: they are spending someone-else’s money, not their own. This contributes to an approach that carries with it the need to act rationally and to be seen to act rationally, and to be able to demonstrate that they have acted rationally. Consequently the time periods for commitment are necessarily more lengthy, as the venture capitalists go through their internally mandated sets of procedures: business plan review, structured meetings and presentations, detailed financial modelling, market, customer and competitor enquiries, due diligence, terms sheets and investment committee approvals (Knockaert et al., 2010).

Venture capital firms universally impose ongoing monitoring stipulations in the contract, including control mechanisms such as board seats, detailed restrictive covenants curtailing management powers and reporting and information provision.
requirements (Table 4.6). Together these are also consistent with the assumption of mistrust that underlies the agency and TCE theories, viewing entrepreneurs as rationally calculative agents seeking to maximise their self-interest, in the face of which an extensive and rigid set of safeguards must be mandated.

In their dealings with venture capital firms, entrepreneurs were faced with standard or template documents with an exhaustive set of structural and procedural safeguards, all designed by, and inserted for the protection of, the venture capital investor.

They (VC’s) wanted to have all the rights of control so that they can, although they had a minority voting on the shares (and) on the board, they wanted a whole lot of protection which allows them to step in and do this, do that, if anything went off schedule or sales weren’t made ... they could step in and take much more active control. That was very important to them.

What they (VC firm) were certainly trying to do is to protect themselves if any of us went awry and the management team didn't perform or the founders went off and did anything crazy or didn't follow the plan or what have you. I think that was very important to them.

Angels Investors

From the data contained in Table 4.9, a number of observations can be made. In general, angel investors place relatively less importance on the need to insert a wide range of contractual safeguards to protect their interests. The focus is on shared gains:

Having an aim and a business plan and all being committed to that, saying, yes this is what we are going to do and then setting the conditions around that so that everyone wins is the way to do it.

However it is apparent there is a small core of provisions that, assuming special provisions have been inserted in either a shareholders’ agreement or constitution in the course of the investment transaction, are almost universally adopted: restrictions on the ability to raise additional funding through debt or equity; level of management compensation requiring approval of the investors; and share options not to be issued
without investor approval. In respect of items which directly affect size of the stake of the angel investor in the outcome (e.g. changes to shareholdings, and option issues), or which represent "pure" conflicts for the entrepreneurs (e.g. setting their own salary levels), angel investors appear to demonstrate a tendency to act in a manner akin to venture capitalists, but in matters which go more to operational and procedural matters (such as approval of plans and budgets and capital expenditure, signing of cheques, timing of exit, hire and termination of senior staff) angel investors are less likely to require formal contractual provisions to protect their interests as shareholders. The entrepreneurs sought, and were able to persuade the angel investors to accept, a regime of safeguards that retained simplicity and avoided the exotic, unusual or difficult to understand.

We were I guess informed enough to recognise that the more of that sort of stuff you put into the business earlier on the harder it is for a latter stage investor to dissect the capital structure and understand what it is, so you know it’s always best to keep it ordinary shares for as long as you can.

I felt the impression of going through the whole thing, was that having the simple structure that we did was never a hindrance, and it enabled the discussion to move on pretty quickly, I think a more complex structure would have required some time to be discussed and probably being the sort of people they are, no one would have been able to resist the temptation to modify it.

**Structural and Procedural Safeguards and Complementarity**

Some observations can be made about the complementarity of angel investment and venture capital with respect to terms of contract, concerning structural and procedural safeguards. Freer, Sohl and Wetzel (1990) were among the first to recognise a degree of complementarity between angel and venture capital investment, in that while on the average, angels tended to invest earlier, and in smaller amounts, than institutional venture capital investors, they can be viewed as assisting the economics of venture capital by providing a wider pool of investable early-stage businesses for venture capital, at a lower cost. Murray (1994) suggested that the diseconomies faced by
venture capital funds in maintaining a portfolio of early-stage investments could be lessened where experienced angel investors with specialised industry knowledge have already invested. One measure of this effect would be the extent to which, as follow-on investors after angel investors, venture capital investors would increase their knowledge and experience in negotiating the terms of investment and thereby reduce the extent of the structural or procedural constraints imposed in their contracts. Indeed, entrepreneurs expressed a hope that such an effect would occur, and would work in their favour:

One of the reasons why we looked for competent people in that very first (angel) round was that when you hit venture capitalists you hit a wider variety of deals and options and arrangements which we did and we wanted some experience around the table to help us get a better deal.

However in the two cases in which angel investment was followed by venture capital investment (Case 4 and Case 5), there was no material difference in the structural or procedural safeguards subsequently sought by the venture capital investors resulting from prior participation by angel investors; that is, there was no observed lessening of safeguards relative to the standard template used by the venture capitalists in transactions in which they were the first external investors (Cases 1, 3 and 6).

So the structural and procedural safeguards in venture capital relationships are characterised by a strong insistence on a standardised set of safeguards, set out exhaustively in contracts preceding the investment, and with relatively little variation between transactions with VC firms. In contrast, angel investors exhibited little insistence on such safeguards and those that were applied were relatively shorter and more simplified.
5.2.3: Opportunism of Entrepreneurs

Proposition 3.

The entrepreneurial team has a tendency to act with "deceit with guile" rather than ethically, resulting in the imposition of incentives, structural and procedural safeguards or governance mechanisms.

The traditional approaches within the rational dimension emphasise the problem of opportunism; in the words of Ring and Van de Ven 1996, “deceit with guile” on the part of the entrepreneur. Recall that opportunism, according to agency theory and TCE, assumes that agents (in this case, the entrepreneurial team members) are better informed than the principals (investors) concerning their “true” level of skill and effort, (adverse selection problem), and the level of effort to be expended to the benefit of the principals (the moral hazard problem). These twin implications laid at the feet of the entrepreneurial team, of incomplete or misleading information, and shirking behaviour, are both essentially negative in nature, and also imply that there is little or no room for trust to prevail between the parties at the time the relationship is formed. This negative view of the behaviour of the entrepreneurial team is what is seen by advocates of these theories to drive the need for the alternative responses of incentive alignment structures (drawing on agency theory) and detailed contractual governance mechanisms (drawing on TCE).

Entrepreneurs’ Perspective

The data suggest a very different approach by the entrepreneurs within the STBF. Rather, the entrepreneurs spoke of their emotional connection with, and sense of care and responsibility toward, the investors.

Things had changed dramatically and we sort of felt protective of the previous investors and sort of protective of the valuation we had used.

So that was a really important driver, that happened a couple of times actually, in later rounds as well, if you were facing the same dilemma, should I agree to a down round and I have to honestly say, and this sounds sort of self serving, but our concern
was not the dilution of our own interests by a down round, it was in effect dishonouring our implicit contract with our earlier investors [both angel and VC].

The deal is I get paid last. And I believe that as long as I am going to request the ability to make decisions based on my judgment and my ethics or strategic decisions then the deal is I shouldn’t make other people suffer for those consequences disproportionately.

Rather than obfuscate or “gloss-over” the issue of risk or their own abilities, entrepreneurs tended to refer to, even emphasise, the risky nature of the venture in their dealings with investors:

I know I could spend years working on this and have it all fall apart, and walk away with nothing more than I came with.

It’s pretty risky. I told every single investor, “This is not a blue chip investment. We believe we’ve got a lot of good things going for us ... Is this a guarantee? No.

Angel Investors’ Perspective

These ethics are perceived by, and then mirrored back in the comments of the angel investors, who spoke of their sense that the entrepreneurs are “looking out for” them in a responsible fashion. Angel investors spoke of a decision process that went fairly quickly and required minimal due diligence. Based on the strong feel they get about the entrepreneur and the strong emotional pull of the venture, these investors went on the basis of “gut feeling”:

I know he would literally give me the shirt off his back kind of thing, that’s just acknowledged with the trust and compassion that exists.

He cares about the people at his company.

He has this attitude that he’s responsible for my well-being.

Angel investors tended to underplay the role of business plans, market research and resumes, those parts of the process in which over-optimism or deceit could potentially
have a role, calling these essentially less useful under such speculative circumstances than their feel for the entrepreneur, the venture team and the concept:

No matter what kind of numbers I can run, no matter how many present value analyses, no matter how many discounted cash flows I could do, in the end it’s all based on whether the dream is going to be real or not.

It seemed like something that was worthwhile to take a risk on. There is always recognition that it might go pear-shaped. That’s why I think the credibility is so important: you know that this person is credible. That he is who he says he is. That he’s smart and going to be honest, that’s what I’m looking for.

The findings are broadly consistent with the findings of Fiet (1995) in the context of angel investor behaviour that they are more likely to rely on their own personal assessment of the entrepreneurial team than advice from others, and on their assessment of the capabilities and intentions of that team than on market, product or financial information, and with the findings of Dunham (2003).

From the investor perspective, the findings of Sapienza (1989) and Cable and Shane (1997) examining venture capitalist behaviour support the view that an expression of compassion and concern by the latter for the entrepreneur’s needs often resulted in better performance by their ventures. The value of these same qualities when exhibited by the entrepreneur appears to have similar positive effects on the process of obtaining capital from angel investors by increasing the likelihood of securing investment and by speeding the overall acquisition process, in particular by shortening the decision-making and due diligence period. It increases the likelihood that the angel investor will agree to participate by moving normative and affective criteria to the fore during the investor’s decision process, for instance, by, creating an immediate sense of trust and interpersonal connection between the entrepreneur and the angel investor, thereby making the investor more receptive to the entrepreneur’s message. By appealing at both the emotional and affective level, it enables the individual angel investor to evaluate his or her alternatives in not just economic terms. While economic considerations are certainly factored into the decision process, the emotional and affective appeal of the venture enables the potential angel investor to subordinate
these concerns, concerns over issues of risk and return, and to emphasise the other aspects of the venture—the personal and social satisfactions to be derived.

**Venture Capitalists**

By contrast, the venture capitalists, faced with similar behaviour by the entrepreneurs, saw those entrepreneurs as somewhere on a spectrum between naively optimistic at one extreme and inclined to deliberately downplay the negative aspects of the venture at the other:

*I thought they (entrepreneurial team) were looking at the world through rose coloured glasses. I admire enthusiasm but it needs to be tinged with a healthy dose of reality as well.*

*He (lead entrepreneur) didn’t seem to want to relate to all the things that could go wrong; I have seen zillions of these plans over the years, always with the hockey stick shaped curve somewhere out in the future.*

For the entrepreneurial firm, the consequence of the venture capitalists concern over opportunism, and the need to demonstrate to the investors in their funds that they have responded to such concern in their deal-making, appears to be an aversion towards technologically risky ventures, and a concentration on those aspects of the contractual relationship with the new venture to which the venture capitalists consider they can contribute and thereby enhance performance:

*That led us to agree to a deal which had a nominal valuation that was slightly above the previous round but with claw back arrangements that the VC’s were using at the time, so that you could in effect reset the VC’s entry price later on if the world turned out to be as black and gloomy as the VC’s all said it would be.*

*VC’s are not technocrats, you know they’re not trained in developing sophisticated views on the potential success of a technology – no they’re people with commercial skills who are trained in understanding business dynamics and commercial dynamics so you know that’s what they’re good at, that’s what they should do, and that’s what they do do.*
Institutional investors when they're giving money to VC's they don't want their VC's going out and taking on technology risk. They want their VC's going out and investing in real businesses.

It just takes a long time for newer VC’s to convince an institutional investor that you've got the wherewithal to manage that sort of technology but its very, very hard to do.

The data indicate that the venture capital assessment process conforms more closely to the dictates of economic rationality. Similarly to the conventional view, venture capital investors consider entering the relationship almost entirely on the basis of two key criteria sets or themes, both concerned with the economic attractiveness of the venture. The first set criteria concern the financial and market-related elements of the business model of the venture, including such items as market size, influence of competitors, ease of market entry and financial returns. The second set of criteria concern the entrepreneurial team’s perceived management skills, their ability to achieve the economic objectives of the venture, including items such as their ability to manage the business, plan strategically and communicate persuasively to key audiences.

Venture capitalists conduct a much more extensive process of due diligence than angels:

*We always need to look at all the corporate records.*

*We always look at the business plans in more depth and read all the supporting materials.*

As an essential part of their due diligence process, venture capitalists consult with other individuals whom they think have greater working knowledge of the products, markets and technology for the venture. They spend time going over company records, meeting employees and other investors. They carefully review the business plan and follow up with lists of questions and concerns. They also focus on an assessment of the abilities of the entrepreneurial team in a technical or commercial sense (Nadeau, 2010):
I was looking at how would they’d be able to manage their way through the issues to reach the market that they were hoping to reach.

We do extensive due diligence on all aspects of the venture. It’s part and parcel of the process. You have to form you own view about what you are being told, or even more importantly, what you are not being told.

The concern over opportunism is then translated into the contractual arrangements which give expression to the deal with the STBF.

**Impact of Opportunism Concerns on Deal Terms**

Venture capitalists are greatly concerned with governance issues and invest on condition they receive a seat on the board and membership in what they see as critical board committees:

*We have to be on the board.*

*Well from us (VC) we had to have enough of the company for it just to make it worth the effort in a commercial sense but also just to make sure that we were going to have a seat at the board table – that was important for us.*

However the data also indicate a sharp distinction perceived by entrepreneurs as between board nominees of venture capital firms and an angel acting as board member. The board member or members nominated by the venture capital investor is seen as an expression of the monitoring role of such investor in response to opportunism concerns, and viewed by the STBF as essentially negative in character:

*So they (VC firm) had control and the people that actually had the control were pretty much financial people from accounting and stock broking and banking sort of backgrounds but didn’t really understand the business.*

*Right now we have already got 2 VC board members. To have more VC board members, I would much rather put someone on that really added value than have another VC represented on the board.*
In the case of angel investors, the entrepreneurs pro-actively sought board involvement by the angel investors:

*We were always comfortable to offer board seats (to the angel investors), certainly in the first round, we really did want that, we wanted that almost more than cash.*

Venture capitalists insisted on the ability to control how funds were used by the venture and wanted to be in a position to fire the entrepreneurial team and take control of the business if they felt it was being mismanaged:

*As outside investors in this situation...(we) must have the power at all times to step in and over the business if (we) feel it's not being run right.*

*Our (VC) contract provisions (are) designed to limit opportunism on the part of the entrepreneur: the exaggeration of the quality of the business at the time he seeks financing and, once he obtains financing, taking high risks, and so forth.*

*I believe if you have an emotional tie and an emotional incentive that's much much stronger than a financial one. If you have a financial risk you still haven't got the same commitment as if you were fully emotionally tied to something and I think that's the difference..... Once you are fully committed to it, you are fully committed to it, you will do it... that's what I think makes the difference, for me anyway and I think the other 3 founders were the same.*

*I guess those sort of structures are useful when you've got clear informational asymmetry between the executives of a business and the financial investors in a business and you've got differences in views on where the business will go and you know you can use convertibles to allow an investment to be made at a point where you've still got that divergence of views and but you know I guess at that time (i.e. prior to last investment round) to that information asymmetry wasn't really pronounced.*

Hence the data reveal a pattern which distinguishes the behaviour of venture capital firms which universally impose incentive-based investment conditions, and governance structures consistent with a concern for opportunism by entrepreneurs,
whereas angel investors tend to rely on the formation of a relationship with the entrepreneurial team based on shared ethics, value systems and beliefs.

5.2.4: Opportunism of Investors

Proposition 4:

*The STBF needs to be concerned at the search and commitment stages of capital raising about opportunistic behaviour on the part of angel and venture capital investors respectively, in order to minimise exposure to this form of “reverse-agency” risk.*

In Section 2.3.5 the suggestion that opportunism may not be exclusively the preserve of entrepreneurs in the dealings with capital providers was introduced. The relationship between venture capital investors and technology entrepreneurs is *not* hierarchical in nature and there is scope for *each* to indulge in opportunistic behaviour which can cause difficulties for the other: Cable and Shane (1997). Examples of this are cited by Gompers (1996), who describes opportunistic behaviour on the part of venture capital investors to behave opportunistically and prematurely force companies to be sold or listed on the stock exchange in order to achieve “runs-on-the-board” so that the venture capitalists can more readily raise a new fund. Support for the existence of this form of “reverse-agency” concern is found by Gompers (1996) from IPO data, in which the length of tenure of board seats by young venture capital firms is, on average 14 months less than more established firms; the equity percentage held at the time of listing is less and the company is more “underpriced”. This is said to flow from the fact that venture capital firms have a *need* to make investments (because that is what they are paid to do), and thereby be enabled to raise further funds in increasing amounts (in contrast to angel investors can *choose* to invest or not, as they wish). This research sought to explore the extent to which members of an entrepreneurial team perceive, and are concerned about, the risk of exposure to such behaviour on the part of the venture capital firms or angel investors, and the extent to which this affects the process of fundraising.
Unlike most venture capitalists (who come predominantly from a finance sector background: Bygrave and Timmons 1992), angel investors bring a wealth of practical experience building and running businesses themselves, typically in the industry sector relevant to the potential investment (Mason and Harrison, 2002). While this experience is vital in helping them form an opinion about the attractiveness of a given opportunity and the quality and integrity of the people pursuing it, the possibility for better informed, better connected and more experienced angel investors also behaving in an opportunistic manner vis-à-vis the firm seeking capital is a potential concern (Sapienza and Gupta 1994).

**STBF’s Perception of Angels**

In the case of angel investors, entrepreneurs appeared to be aware of the potential for the behaviour of the angel investor to be disruptive, but at the same time the benefits of a contribution which could support their efforts as managers of the venture. This included an express recognition of the tension between the role of the entrepreneurs as managers to drive the business, and the rights of the investor whose funds were at risk to protect their interests:

*It was about finding X amount of dollars with an investor that didn't scare the daylights out of us because of their behaviours.*

*We wanted someone who was sympathetic to what we were trying to do and who would provide things to support what we were doing as opposed to someone who would try and dominate proceedings.*

*I sensed that he was going to be ethical long-term, not going to bail out too quickly, or not going to come in and try to tell you on day one how to run the company.*

*So we had it written in quite clearly what the controls were on the board and what the voting was, we didn't feel that they were going to come in and know all the answers and just tell us what to do.*
The data show that the entrepreneurial team members did not consider they were impacted by opportunistic behaviour on the part of the angel investors:

_We found he (the angel investor) really wanted more than anything for us to be successful and it helps when we all have the same goals and objectives._

_No matter what numbers you run, no matter what the present value analysis shows, no matter how many discount factors you apply, in the end it all depends on whether the dream is realised or not, and he (the angel investor) knew that as well as we did; we never felt he had any other agendas in his dealings with us._

The reason for this appears grounded in the nature of the relationship between the team members and the angel investors. While the literature suggests that entrepreneurs tend to underestimate the risks associated with starting new ventures, and tend to be over-optimistic in assessing their own ability to overcome those risks (eg Busenitz 1999), in fact the risks are recognised and understood by both sides, but are put to one side or “bracketed” and are subordinated to the positive elements in the relationship formation, such as recognition of common goals and shared values, and the mutual challenge:

_He became a friend, and is still a friend and is probably the person who gave me the most inspiration on an emotional level of anyone involved in the company... he knew that these things take time and he never expected it to be some flashy dotcom with a quick and dirty IPO._

_He seemed to “get it” you know? He understood the things I care about and also wanted to change them. I never felt that it was like: “We are going to do this so we can make a squillion dollars”._

_I said to him: “I can’t guarantee any money or success; but I can guarantee we are going to do some fun and interesting things together._

_It (the company) seemed like something that was valuable to take a risk on. I thought: if this works it will really be good for a lot of people._
Consistent with this emphasis on relationship formation, the angel investors as stakeholders placed a reduced emphasis on the role of business plans and market research and analysis, and focussed instead on their “gut feel” for the members of the entrepreneurial team, and the concept embodied in the venture. The team members for their part, having selected the angel investors for the personal characteristics and perceived ability to work together, exhibiting little concern for the possibility of opportunistic behaviour by those investors.

**Venture Capital Investors**

By contrast, the entrepreneurial teams were aware of, and did exhibit concern for, potential opportunistic behaviour by venture capital investors. For example

*He (the VC) said: “You know, what's important here guys is to protect me”, and the rest of us said: “well, we have got much more of our personal assets in this than you do, and we would like to protect ourselves as well”, so there was a lot cultural conflict caused by that later on.*

*We wanted to get another investor in as well because we were concerned that the original VC would own too big a stake and we wanted to make it a more” balanced” sort of ownership; so they couldn’t keep on squeezing us every time something didn’t go exactly as forecast.*

*[Initially] they (VCs) behaved as though ordinary shareholders. What transpired later was that they behaved very much like bankers. They started off with the mindset of equity investors and very quickly reverted to the mindset of bankers, totally focused on down side, totally lost interest in the upside within a matter of months and that caused a lot of friction. That change of mindset (by the VCs) caused a lot of friction.*

*We started to look at running in parallel an IPO program just to keep the VC process in the follow-on funding round honest.*

This finding is likely to be rooted in the more adversarial nature of the relationship between venture capitalists and the entrepreneurial team, in which expressed concerns
about “conflict”, “squeezing” and “friction” arising in the course of the relationship, together with concerns about an “honest” process, evidence a consciousness on the part of the entrepreneurial team of reverse opportunism on the part of the venture capitalists.

Indeed, in contrast to the asymmetry of information in favour of the entrepreneurial team noted in the literature referred to the previously, the team members voiced a concern about information asymmetry in favour of, rather than against, venture capitalists:

Obviously they went into the deal knowing a lot more about how these things work than we did: were we at a disadvantage, sure we were. I read all the books I could find about VC but that really didn’t help all that much.

The possibility of using their contractual powers to advantage their own position was acknowledged by several venture capitalists:

For instance, we (VC) could threaten to withhold later rounds of finance unless the entrepreneur agrees to a low valuation; or...fire the entrepreneur simply to take away his unvested shares and to replace him with a manager who will work for less…the contracts allow us to do that.

Venture capitalists are in the market to make new investments in entrepreneurial firms, and to do so, they have to attract high quality entrepreneurs. High quality entrepreneurs ... avoid VCs with reputations for taking unfair advantage...But does it never happen...I can’t say that!

One manifestation of opportunism is in relation to the resolution of issues surrounding the replacement of management, termination and appointment of new executives. There emerged a sharp contrast in how the entrepreneurs viewed their exposure to this risk in the two different investor types. This is consistent with Hellmann and Puri (1996) who found that a venture-backed firm is twice as likely to replace its CEO with a non-founder than a firm without venture capital. In the case of venture capital investors there was recognition by members of the entrepreneurial team of, and concern about, the fragility of their position:
Their (VCs) first initiative is to unload the team that's on board, it’s woeful… anybody who’s in this initial team with the current membership of the executive and on that board, if they think they’re going to get a bean out of this they are naive. I think that's reality, if indeed the company has its back against the wall.

Anything which allows a VC to do things to management but then the company has to continue on, to me it’s just sort of like fighting against nature and I don’t see how it can ever work and in the subsequent evolution of the company, that situation did actually arise for us and it proved to be disastrous.

Accordingly, the STBF does need to be concerned about opportunism by venture capital investors, as suggested by Gompers (1996). Behaviour such as forcing exits at a time and in a manner which suits the venture capital investor but may not be optimal from the perspective of the STBF and replacement of founders at a time and in a manner which may substantially eliminate their founders’ equity positions are both specific examples which should be addressed in the fundraising process. This concern is relatively less in the case of angel investors, where the nature of the emergent relationship between the investor and the firm appears to mitigate any tendency towards opportunistic behaviour on the part of the angel investor.

5.2.5: Non-Financial Motivations

Proposition 5

The technology firm may be able to identify and use non-financial motivations of angel investors (but not venture capital firms) in the design and execution of a fundraising strategy.

Both the entrepreneurship literature (e.g. Van Osnabrugge and Robinson 2000; Benjamin and Margulis 2005; Berkery 2007) and entrepreneurship educational course materials (e.g. Timmons 1999) stress the importance of the economic or financial story behind a new venture for both angel and venture capital investors. There is emphasis on the preparation of a comprehensive business plan and templates or models for the contents of such plans are provided to readers and students. The STBF is exhorted to
address issues including market size and accessibility, margins, valuation and exit potential (Kirsch et al., 2009). There is an unstated assumption that the business plan to be presented to a venture capital firm will do equally well for an angel investor. This is notwithstanding the studies of angel investor decision making which have noted that while the majority of angel investors state their primary motivation to be the expectation of high financial reward, a minority of business angels are motivated primarily by non-financial return factors, and that the pursuit of altruistic motivations is more likely with angels from rural and sparsely populated areas (e.g. Van Osnabrugge and Robinson 2000).

The data, however, suggest that the commitment of angel investors is contributed to by a venture story that appeals to prospective angel investors on multiple levels – economic and financial certainly but also emotional and philanthropic. While the economic story must be there – i.e., the venture has to appear economically viable – commitment by angel investors is enhanced when the entrepreneur is able to communicate the ‘human story’ elements of the venture and “sell” the non-financial benefits to which angel investors respond at an emotional level.

This human story has many facets. Firstly it stresses the social benefit associated with the venture. Secondly it appeals to the personal interests and motivations of the investors. It incorporates an emotional, almost romantic, dimension by stressing the “David and Goliath” aspect of taking on the large or established players, starting from scratch together, creating new worlds. In short, the human story of the venture transforms the venture from merely a vehicle for financial gain – to one that resonates with the desire of the potential angel investor to do good in the world, to leave a lasting achievement or to satisfy other personal goals of each investor. Through their involvement in the venture, angel investors see themselves as people who take risks, who want to make an important contribution, who have an impact on the world.

The human story is captured both in the stories entrepreneurs tell prospective investors about the venture and in the perceptions of the investors regarding the purpose of the venture and their motivations for investing.
Investors describing their motivation for becoming involved typically used words which centre around the concept of making the world a better place:

*I wanted to be doing something that sort of had real potential value to a lot of people.*

*I thought to myself, ‘What would be really meaningful? What are some things that I could do to make a difference to society?.’*

*If I’m investing in something, I like to invest in something that has a social merit, a kind of a higher purpose. That means making the world a better place, and hopefully making money in the process.*

*It’s passion and vision that attract people, turn people on, make you believe it’s important and it could happen.*

These findings are similar to those suggested by other researchers regarding the role of entrepreneurial narratives and story-telling. It has been noted that as emerging phenomena, new ventures are enveloped in ambiguity (Gartner, Bird and Starr, 1992). It is an entrepreneur’s job to provide meaning, to “offer plausible explanations of current and future equivocal events as non-equivocal interpretations” (Gartner et al, 1987, p17). The entrepreneurial team must communicate the new venture in ways that are understandable, believable and compelling to the key audience, the potential investors in the venture.

For each entrepreneur, this includes but is not limited to establishing his or her own trustworthiness and the level of risk involved in the venture. It means he or she must begin from scratch, explaining the very nature of the venture and establishing a compelling connection to the would-be investor. He or she must describe the venture in such a way as to motivate his or her audiences to support and participate in it. It is not enough that he or she simply allay their concerns about risk; he or she must convey a concept of the venture that can serve as a vehicle for the particular aspirations of the potential investors. In the case of angel investors, and in contrast to venture capitalists, this may include not only the philanthropic purposes described above, but also the
desire to be part of a “David and Goliath” challenge, and further, simply the “fun of
the ride”:

*I think the VC's behave like, without any emotion at all when the chips are down,
that’s the impression I would have, angels would be there for probably different
reasons not purely investment. Because the fun of the ride to a certain extent and
whatever else they get out of it. That's a very clear distinction I would have between
the two of them.*

*It felt it was like fighting a battle against the biggest companies on the planet in that
field: it’s all David versus Goliath which made it that much more rewarding when you
succeed.*

Literature on storytelling and entrepreneurship suggests that narrative accounts
supplied by entrepreneurs play an important role in establishing the unique identity of
the new firm (O’Connor, 2002). O’Connor suggested that these narratives must
include both personal as well as economic stories if they are to fully resonate with their
audiences, in this case, the potential investor. Both Lounsbury and Glynn (2001),
O’Connor (2002) and Dunham (2010) have suggested that the accomplishment of
these objectives will lead to the entrepreneur successfully acquiring the various
resources necessary to establish and maintain the venture. The entrepreneur needs to
be able to “develop stories about who they are and how their resources or ideas will
lead to future benefits for consumers and society” (Lounsbury and Glynn 2001). This
“story” then becomes the key vehicle for conveying information about the venture, and
attracting the necessary commitment of financial resources from investors; and this is
ture of communications with both angel and venture capital investors:

*He was really good at spinning the story, explaining why it all made sense. (Angel)*

*I really like to get to understand their (entrepreneurs’) personal journey, if you will.
Hearing them tell their life-story, how they got to this point, you need to understand
that when you are assessing the venture and its chances of success. (VC)*

Related to the imparting of the “story” of the venture is the ability of an entrepreneur,
in the context of attracting angel investors, is the adoption of a set of “personalising”
strategies that he or she consciously undertakes in order to imbue these exchange relationships with a personal dimension. These strategies include meeting the prospective stakeholder in informal, even personal, settings; becoming quickly acquainted with prospective investors’ family members; seeking to engage the stakeholder in discussions of personal goals and aspirations, or other personal topics:

_"I was trying to convince him I wasn’t some sort of techie weirdo."

_"I just wanted to get him thinking…my goal was to let him know that I was a real person, that I was interested in him and that I hoped he would like me and be interested in the project."

_"I started asking him about himself and his experience with [the angel’s previous venture] and how they got involved and where he grew up, just hearing about his life. Somewhere not long into this we just clicked personally."

_"I invested in it [the venture] mostly because of the people and principally [the lead entrepreneur]. My wife and I met him, his wife, pretty early on and we really feel close to him as well."

_"He was very good at putting the personal touch on things. When we came here for our first visit we saw his family just the way they were. We met his wife and brand new baby."

In summary, the non-financial motivations and aspirations of potential angel investors play an important role in the attraction of investment. Entrepreneurial teams are able to appeal to these other motivations and aspirations with appropriate strategies through personalising and story-telling communication skills. The ability to appeal to the potential angel investors on this level can transform an arms-length exchange-based relationship into a form of social identification between investors and entrepreneurial team members, and potentially with the venture itself.

By contrast, the data revealed no role for non-financial or altruistic motivations on the part of venture capital investors; this is entirely understandable and indeed arguably appropriate in the light of the fiduciary obligations of venture capitalists investing funds entrusted to them by others.
5.2.6: Determination of Deal Structure or Terms

Proposition 6

The STBF does not take the lead in determining the basic deal structure or terms, but instead cedes that role to the investor.

Previous research suggests that the so-called “golden rule” (those with the gold, rule!) (Benjamin and Margulis 2005, p233) results in the basic deal structure, and the investment terms, being principally to protect the investor, are determined by the investor. These are then subject to a period of negotiation between the parties, using the basic approach determined by the investors or their advisors as the starting point (Freear, Sohl and Wetzel 1995-US; Mason and Harrison 1996-UK).

Contractual Provisions

From the data presented in Table 4.9, it is evident that in relation to the key terms of investment contracts there is close to uniform outcomes in contracts with venture capital firms, both as to the basic deal structure, and other terms embodying the key elements of alignment of incentives (eg loss of founder unvested benefits), control of decision making (eg board rights, covenants) and financial downside protection (eg staging of share issues against milestones, anti-dilution provisions).

In the case of angel investors the position is much more mixed, with a wide range of types of security issued, and degree of control of decision making and downside protection. These range from preference share based investments, with contractual provisions incorporating many of the protection commonly sought by venture capitalists (Case 1), through to ordinary shares with only the most basic pre-emptive rights generally contained in private company constitutions (Cases 2, 4 and 5). At the latter extreme, the angle investor appears content with protection only in matters which touch on the level of his or her equity stake.
**Venture Capital**

The data give support to the “imposed deal structure” view of the process in case of venture capitalists. They utilise a predominantly technical, market and financial assessment, to which they then apply a form of “template” or “cookie-cutter” transaction structure rooted in the assumptions of agency theory and TCE, and the entrepreneurial firm is left to a “take-it-or-leave-it” decision in which there is only modest room for negotiation on the issue of basic structure:

*The basic framework of the deal was established by the VC's, we went into the discussions with views on valuation and so forth but the VC's arrived with a kind of preferred structure, which was independent of us, it was the sort of structure that they would want to use for anything.*

*I mean they (VC) had the pro-forma and we went through the pro-forma agreeing on all of what we would accept and what we wouldn't accept and what we would compromise and what the compromise was going to be on each of the clauses in the pro-forma term sheet.*

*We didn’t know what a term sheet was at that stage so they drove the process of what they needed.*

*The VC’s sort of came with, in a sense with a standard list of things they wanted and we negotiated some them some of them back.*

Case 5 (FinCo) presented an exception, in that the members of the entrepreneurial team were themselves experienced in financial structures:

*When it came to work out issues like the structure of what was being offered, the nature of the rights issue, the valuation, the form of the equity instrument that was being offered etc, that was our bread butter, that's what we all did for a living, sorry not all of us, but some of us... some of our guys were investment bankers, that was their job. We were as sophisticated at that as the people we were dealing with (ie the VCs).*
A distinguishing feature of venture capital deals appears to be the emphasis on “big picture” issues such as strategic plans and budgets, subjects that are often among the most important items of business to be dealt with in board meetings. By focussing their activities with the venture at the board level where decisions are debated and documented in the form of minutes of meetings provides a measure of audit trail or “legal cover” for fund managers and may be explained as supporting their efforts to signal their competence to their own fund providers, and in particular to the institutional allocation “gatekeepers”.

Transactions involving a venture capitalist imply therefore a much more comprehensively documented contractual deal. Accountable as they are to outside fund providers, it appears that venture capital funds do pay greater attention, relative to the angel investors, to the form and content of the contract with the entrepreneurial firm.

**Angel Investors**

So while both investor groups placed importance on and incorporated contractual safeguards to protect themselves from actions that could impact their relative equity stake in the venture (restrictions on ability to raise additional equity finance or issue of share options without investor consent), in other areas there was considerable latitude for the entrepreneurial team to present, and thereafter negotiate and achieve, a more straightforward and less restrictive share structure and contractual framework for the relationship with angel investors than with venture capitalists.

From the perspective of the STBF, the members of the entrepreneurial team took the lead in suggesting the basic deal structure. The motivations were to keep the structure simple, and therefore easily comprehensible, and in the belief that this would enhance later fundraising rounds:

> I think A and I had an inclination to keep everything extremely simple..., and partly because we didn't want the overhead of having to run complicated share structure and partly because I didn't really think I could make one up!.

> We decided pretty early on and then presented to everybody else, that there
would only be one sort of share, there would be no options and that the structure be kept as simple as possible so as not to distract from the purpose of the company which was raise enough money to develop enough to be able to get out.

I felt the impression of going through the whole thing, was that having the structure that we did was never a hindrance, and it enabled the discussion [with the angels] to move on pretty quickly, I think a more complex structure may not have been a hindrance but would have required some time to be discussed and probably being the sort of people they are, no one would have been able to resist the temptation to modify it a bit.

We were informed enough to recognise that the more of that sort of stuff (convertible preference shares and incentive mechanisms) you put into the business earlier on the harder it is for a latter stage investor to dissect the capital structure and understand what it is so you know I think it’s always best to keep it common for as long as you can. So we invited them to subscribe for ordinary shares and that’s how it stayed.

The angel investors for their part were attracted to the concept of simplicity, and by a need to avoid items that would lead to disagreement:

I was convinced that we’d have a drawn out discussion every time we I they hadn’t quite met a milestone and they felt they had met it. I couldn’t see the benefit in setting up things to disagree about so I just wrote cheques once the deal was done.

I guess those sort of (complex) structures are useful when you've got clear differences in views on where the business will go and you know you can use all these powers to allow an investment to be made at a point where you've still got that divergence of views and but you know I guess at that time if I didn’t feel I trusted them enough I wouldn’t have put my money down at all.
Reasons For Different Approach

From Table 4.9, and for the data above it appears that, relative to angel investors, venture capitalists are more likely to apply greater attention to and insist on contractually providing for management and control issues such as the composition (and replacement) of the senior management team, their level of compensation, the steps taken to tie them to the venture by way of non-compete contracts, and super-majority voting rights at board and shareholder level on key matters.

There are two alternative explanations for this: venture capitalists, deeply embedded as they are into networks, face less inefficient replacement markets for managerial talent than might be the case for angel investors, may consider that they are more capable of actually exercising such rights without destroying the firm and therefore are more likely to insist on these rights; the other is that the nature of the relationship with angel investors, characterised with high levels of interpersonal trust and relationships of a personal nature precludes both the inclusion or subsequent exercise of such a right.

So in the case of the venture capital funding transactions, the venture capital firm takes the lead in setting the basic terms of the deal structure. This finding is consistent with research findings in relation to both the US and UK markets (Kaplan and Stromberg, 2003-US; Van Osnabrugge, 1999-UK). In the case of angel investors the basic deal structure is either led by members of the entrepreneurial team or is determined by mutual agreement between the two parties. These findings reveal a somewhat different practice that that prevailing in the US (Wetzel 1986, Van Osnabrugge 1998 and Benjamin and Margulis 2005 and the UK (Mason Harrison and Allen 1995; Kelly and Hay 2003) where business angels have been found most commonly to insist on convertible preference equity instruments and on the strict contractual frameworks they prefer, more closely therefore mirroring the practice of venture capital firms. However, the findings of the present research may be viewed as consistent with the inferences that may be drawn from recent finding by the Department of Industry, Tourism and Resources (2007, p23) that the predominant investment form by angels in Australia is the ordinary share, and that most angels did not require restrictive covenants in investment agreements.
5.2.7: Social Contracting Strategies

Proposition 7:

*STBF’s use social contracting strategies in the search and commitment stages.*

The conventional view of social exchange theory (Blau 1964; Larson 1992; Larson and Starr 1993) as to how relationships can be used in the task of financial resource acquisition by a firm is based on a slow development between parties acting rationally and deliberately, engaging in a series of gradually larger economic exchanges. It is a step-by-step process, in which individuals whose initial linkages are manifested by weak ties, engage in small exchanges. These small exchanges have the effect of signalling to the other party a commitment to the relationship, and a willingness to engage in further exchanges of increasing magnitude. According to the accepted view of social exchange theory, these repeated transactions are motivated by the pursuit of self-interest by each party and are screened through measurable economic criteria.

According to that theory, transactions can only occur at all if they are supported by external accountability structures — which for present purposes would include formal contracts, reputational capital at stake, control and monitoring structures through negative covenants and restrictions on management decision-making, representation on boards of directors and the various other governance mechanisms suggested by both agency theory and the TCE approach. Through repeated cycles of these transactions the parties come to be able to gauge the reliability and trustworthiness of the other. Larson and Starr (1993) describe the evolution of network ties as a (necessarily lengthy) process during which a “quid pro quo pattern of reciprocity develops with each side placing incrementally more at risk, yet maintaining a reciprocal balance” (p 14). These authors suggest that this results over time in a deepening of the relationship and in “incrementally increasing structure and density to the socio-economic linkages” (p 15). Blau (1964) expressed a similar idea in terms of the development of trust:

“Social exchange requires trust. But little trust is required for the minor transactions with which exchange relations typically start, and the gradual
expansion of the exchange permits the partners to prove their trustworthiness to each other.” (p315).

Thus, over a period of time, and through repeated interactions, some of these relationships gradually deepen to include a social or personal dimension. On this view the relationships are distinguished by a slow build-up of trust between the parties, but a trust which is still based on expectations of reciprocity and mutual economic gain. As summarised in Chapter 2.4.2, the theory suggests a process which remains motivated by the self-interest of each of the parties, is time-dependent and unfolds through a repeated set of transactions, requires the initial establishment of contractual accountability and monitoring structures and results in a slow development of trust between the parties.

Angel Investors

The data suggest that the entrepreneurial firms successfully raising capital from angel investors engaged in behaviour which was primarily focussed on social and inter-personal relationship aspects, rather than on the technical, market or financial aspects. Furthermore, while it relied on social and inter-personal motivations, the process of forming the transaction occurred in a manner which appears to be quite different from the “classical” socio-economic view of this process based upon the application of social exchange or social contracting theory as described in Section 2.4.3 above. The process was different, it led to different outcomes, and it occurred over a much shorter time frame.

Relationship formation in the case of the angel investors occurred not only much more quickly, but also in the absence of formal accountability structures and indeed in most cases prior to any transaction taking place. As described in Section 2.4 above, the levels of uncertainty involved in early-stage technology ventures are so high that they cannot be controlled and outcomes determined through contractual or other formal mechanisms. Even mechanisms such as reputation are not sufficient to explain the data because the entrepreneurial firm typically went outside its circle of pre-existing social or commercial networks in order to secure the necessary financial resources. The relationship at an inter-personal or social level between the members of the
entrepreneurial team and the angel investor(s) formed prior to the undertaking of any transaction of an economic nature. Hence it cannot be explained in terms of the gradual, repeated interaction model reflected in the conventional social exchange or social contracting approaches.

The data were more suggestive of motivations arising from an assessment based on social and personal considerations. In contrast to a process unfolding through a series of transactions screened through financial criteria, the process between angels and entrepreneurs appears driven by a sense of personal commitment or “relationship” that formed quickly between the entrepreneurial team and the investor. Whereas the conventional view of the process requires the passing of time in order for the repeated cycle of transactions to transpire, the formation of this connection seemed to depend more on personal connection and a sense of shared values. It more closely represented a congruence of like-minded people, for which the term “swift trust” proposed Meyerson et al (1996) may be adopted as an extension of its meaning. Myerson et al (1996) saw swift trust emerging in temporary groups brought together by a “co-ordinator”, the trust being conferred as a result of the different individuals in the group each having a trust in the co-ordinator based on previous interactions such that the members of the group are obliged to forego the right to pursue self-interest at the expense of other members.

Whereas the rational model depicts a process that is supported by “external” or imposed accountability structures, the data reflect a process which commences with immediate rapport and sense of connection between the two parties and a sense of personal commitment, at both an ethical and an emotional level, to live up to obligations accepted. The process appears to represent the antithesis of the concept of “deceit with guile” (Ring and Van de Ven, 1996) implicit in the rational dimension, the approach found to underlie the venture capital approach in Section 5.2.1. By contrast, funding transactions follow from entrepreneurs rapidly forming personal ties with angel investors with whom they seek to carry out economic transactions with high levels of uncertainty.
They (angel investors) didn't have the capabilities or the desire to do huge amounts of due diligence in virgin territory, whereas in an area that they are aware of they would be quite happy to back their hunch.

Venture capitalists

By contrast, the patterns which emerged in the dealings of entrepreneurs with venture capitalists bore resemblance to the logic of rational choice, and in particular to the economic as opposed to social exchange elements of that dimension. Entrepreneurs who successfully raised capital from venture capitalists designed their approach around a carefully constructed business plan, and were not seeking from their investor(s) any industry, market or business management skills. Their objective was to obtain “pure” money, with the occasional addition of financial skills to aid in further capital raising, exit via IPO, obtaining debt facilities and the like. The process from the entrepreneurs’ point of view carried the hallmarks that would be suggested by the agency-based analytical framework discussed in Chapter 2.

A number of factors appear to contribute to venture capitalists choosing such an approach. Firstly, venture capitalists need to ensure that they have access to a “deal flow” which desirably for them is high in both numbers and quality. They therefore seek to maximise the number of businesses submitted to them for funding. All venture capital firms in the research had established web-sites which set out basic details such as contacts and personnel details, and also gave a history of their investment portfolios, their sector or industry specialisation, and their investment process. They were relatively easy to find, as they are listed in guides such as that published by the Australian Venture Capital Association Ltd. They give speeches and make presentations at technology parks. Entrepreneurial firms were encouraged to apply in the first instance by email with a summary of their proposal. In other words they sought to create a “deal-flow” which was as expansive as they can achieve. Necessarily they had established a process for rapid and minimum cost exclusion of those businesses in which they are not interested, by a “first-cut” high-level culling. Pressures of time and cost result in little opportunity for consideration of the normative or affective characteristics of the small firm or the individuals involved.
Secondly, venture capitalists had a relatively sharper focus on the market opportunity and the projected returns, that is to say, the financial and market aspects of the proposal, than on the entrepreneurial team, that is to say, the “people” aspects. The issues of primary concern to the venture capital manager are the target market (market size, identification of potential customers and “first-to-market” advantage), the product or service (meets customer needs, use of proprietary technology, innovation level, superior to competitive offerings), the quality of the business plan (explanation of the business model, customer needs and competitor analyses) and capital payback projections (financial projections, particularly cash flow and break-even analyses, exit strategy, discussion of risks faced by the business).

They are... thorough, these younger ones, new investment managers, more thorough... they will analyse it and do endless interviews of customers and strange people on the phone, run around the world talking to people?.

I look at an average of a business plan per day, maybe 300 a year. Good ideas and good products are a dime a dozen. I am looking for indications of good execution and good management.

I’ve invested in many companies where there was already an angel invested as well... I have always been surprised how little due diligence they actually did before getting in.

While they do perform assessments of the management team, these focus primarily on the technical, R and D and product development skills, as well as the marketing, sales and project management skills of that team.

Thirdly the venture capitalists have standardised procedures for the conduct of their investigations, usually referred to as “due diligence”, which are undertaken after the initial examination phase. This due diligence is a detailed and costly process for the exhaustive evaluation of proposals. It has as its underlying logic the assumption that there is information which is discoverable by diligent search and enquiry, but which the entrepreneur has chosen not to disclose, and that this information if discovered will
have a value in terms of the venture capitalist’s decision process which exceeds the cost of obtaining it.

The result is a strong contrast between these two approaches. The angel investor is more emotional, and more intuitive, stressing the immediate personal connection between the angel and the entrepreneur, as well as the personal interest of the investor in the business proposition. The venture capitalists decision process focuses on the economic aspects of the venture concept, and to the extent that the personal qualities of the members of the STBF play a role, it is their perceived management skills, that is the ability to pursue successfully the economic goals of the venture, which resonate with the potential investors. The suggests the need to distinguish, from the perspective of the entrepreneurial firm, between a model of the process of search, engagement and commitment in respect of an angel investor from a distinctly different model of the process in respect of a venture capital firm; this will be further pursued in Chapter 6.

5.2.8: Information Sources

Proposition 8:

*Personal and direct sources of information are more likely to be relied on by STBFs as opposed to impersonal sources such as published materials.*

Entrepreneurial teams in Australia have available an array of sources of information concerning sources of capital. In the case of venture capital, lists of firms can be accessed through the membership of the association Australian Venture Capital Association Limited (AVCAL), comprising the majority (but not all) of funds active in Australia. These funds can be sourced by companies in the early and intermediate stages of growth, which is relevant for the companies that are the subject of the present research, or those involved in leveraged or managed buy-outs. All have web-sites, and a short list of potential contacts can be readily compiled. Additionally, from the same web-sites, a more nuanced list can be refined eliminating those who do not express interest in the relevant sector: either industry, technology or geography.

Two of the cases which sought venture capital had proceeded in this manner:
We basically just started with the AVCAL membership list and ran down that and filtered out all the ones who had no healthcare interest, gone through the process, rung them, sent them exec. summaries, talked it through, filtered it down, so it just basically started from that list.

There was some information about VC groups in Australia that had been published and then we reviewed that, sort of looked at those that we felt would be most likely to come on board with us.

Any VC search comes down to sort of starting with the long list and then eliminating most of the possibilities until you get down to one or a handful.

Notwithstanding this broad availability of published information, teams seeking venture capital tended to rely on the knowledge and information that they or their contacts possessed:

The VC's were a mix of personal contacts and simply knowing who was in the market and approaching them. But the people who we had most serious discussions with were people that we had some personal contact with, we had some previous knowledge of.

Chances are you are going to get funded through someone you know, who knows someone, who knows someone else.

We already had the relationship with J (CEO of VC), J had worked in (the same company as the team) in the past and by the time we formed the company he'd been gone for about nine months. So there was already a bit of a relationship there, so I guess it was a little bit easier than some normal ventures.....

I don't think anybody really cold-called anybody. I think we always knew somebody, somehow through some connection of one of the firms we (members of the entrepreneurial team) had been at.
Even where the published sources of information were used, it was for the purpose of a “high-level” analysis, with the more detailed process of refining the search left to information from personal sources:

Within the networks we had, there was some information about VC groups in Australia that had been published and then we reviewed that, sort of looking for those that would be most likely to come on board with us, so it’s primarily through networks that we decided our targets.

I went to a VC networking event and there were a number of venture capitalists there. So I called everyone I met. Even if they’re not in that space they’ll recommend other people. You call those other people and after a lot of calling, a lot of emails and internet searching, you get a feel for the players in your area.

Case 5 (FinCo) differs in that it consisted of a venture in the field of finance, and hence the team had knowledge of the sector which they acknowledged was unusual for entrepreneurial teams seeking funding:

In our case, it would have been an unusual group of entrepreneurs, we were aware of all people who worked in financial services so we knew everybody. There was no shortage, I mean we could produce a list of 2 dozen people to ring who we all knew in 5 minutes. That’s very unusual for start-up companies, most of them have to find their way in to the world of funding, that’s where we’d always worked.

**Angel Investors**

By contrast, making contact with angel investors is much more of a personal search. As discussed in Section 1.3.4, angel investors value their privacy, and in Australia, in common with the United States, UK and European countries, there are no directories of individual angel investors, no public record of their investment transactions, and very few vehicles by which potential investors and the ventures seeking funding can be brought together; hence Freear and Wetzel’s (1992) description of the market as ”a virtually invisible and demonstrably inefficient segment of the total market for capital” (p.462). More colourfully, Gaston (1989, p.4) described it as “…a giant game of hide-and-seek, with everyone blindfolded”. In this context it is not surprising that virtually
universally, friends and business associates’ referrals proved the link to angel investors:

*The angel rounds were done with people who I knew and that made the communication very easy and there were certain levels of trust that already existed from past dealings.*

*The angels certainly are personal contacts ...the people who we had most serious discussions with were people that we had some personal contact with, we had some previous knowledge of.*

*It (the search for investors) was driven by myself and using some of networks I have got at home, people with the right skills and money.*

*We spent some time talking to wealthy individuals who they (the co-founders) knew, who I felt were going through the motions with me just out of courtesy to their friends, but were not really ever serious investors. So I stuck mainly with my own professional contacts.*

*They (the co-founders)) thought that they knew a lot of wealthy people who had put money into ventures (as angel investors), so we went off on some red herrings as we learnt who were the people that invested in these kind of projects... for amounts that we were looking for, which in the first round was $1 million Australian.*

Beyond the task of identifying the potential investors, it is reasonable to expect that the entrepreneurial team would seek other information about the investors, to determine whether to accept a funding offer or continue the search. Because the relationship is likely to continue over a lengthy time period and involve sometimes stressful interactions, one might expect that entrepreneurial teams would make extensive enquiry from a range of different sources concerning the previous behaviour of the investor in matters such as willingness to make follow-on investments, the investor’s contribution to making investee companies successful, and general reputational issues such as a compatible personality. In contrast to the findings of both Smith (1999) and Hustedde and Pulver (1992), the entrepreneurial teams members in the present
research relied on a narrow range of personal and business contacts, together with their own experience, and made little effort to conduct a rigorous process of information gathering from a wider range of sources such as lawyers, accountants, other venture capitalists or angel investors, bankers, government agencies and even publicly available information on the Internet. In the case of angel investors, the informants evidenced a notable disinclination to go beyond their own assessment, and self-justified this approach based on the personal nature of their interactions with the investor, and a reliance on their faith in their own judgment of people:

*I go with my assessment of the integrity and credibility of the person I am eye-balling; it’s really about the individual.*

*I found them through my personal network...we just got on well, that is the key ingredient: if you can’t get on with the people in the room, then it would never have worked anyway.*

*I didn’t ask too many questions; I felt we had the same goals and objectives, so I just didn’t feel the need to check the references, as it were. So I didn’t.*

In the case of venture capital investors, entrepreneurs were either sceptical of the value of a broader information search, or cognisant of the failure to conduct more extensive searches or more detailed enquiry into the venture capital process:

*Well it was more our own assessment of the people we were dealing with than the VC as a firm...so what’s the point of doing a kind of due diligence on the (VC) firm: you know you are going to go through some bad times and you are going to hear all the horror stories a lot of other founders are telling about VC: just close them all down, piss them all off, grab the thing, we have got them by the balls because we’ve got the money etc etc. Why bother?.*

*I’d known [J] (managing director the VC firm) through industry association things for a while and knew his interest in the field. I knew he personally had an interest in scientific medical area, so I could check them out if I felt I needed to; but I didn’t.*
It might have been better if we had done a lot more backgrounding and knew a lot more about how VCs work. I would say that after five different rounds (of capital raising) in two companies, my knowledge is twenty times what it was before the first. I would really be ready now to do my very first round again properly (laughs). None of us realised how complicated these deals are when we started down this road. We did ask our advisers around the table what they had heard about the VC, but that was about the sum total of it.

Thus the evidence from the cases studied is that both in the case of potential angel investors, and venture capital investors, entrepreneurial teams tend to under-search for information. In the case of venture capital investors they use certain impersonal sources such as websites and directories, but tend to rely on a narrow range of available informants including other entrepreneurs and even other venture capitalists, but do not seek to exhaust even the range of publicly available information sources. They place some reliance on professional advisers such as lawyers and accountants.

In dealing with angel investors, it appears that the intensely personal nature of the engagement between the entrepreneur and the investor leads to a distinct absence of broader information search or verification.

5.2.9: Network Content

Proposition 9:

It is the content of the lead entrepreneur’s and entrepreneurial team’s network of relationships which impacts the fundraising process, rather than the size and diversity of that network.

Chapter 2.3.3 referred to the work of Granovetter (1973 and 1985) and Burt (1992) who emphasised the importance of the size and diversity of an entrepreneur’s network, usually associated with the term “the strength of weak ties”. In the context of the search for capital, this would suggest that the entrepreneurial team would benefit from the widest and most diverse network of family, business and social contacts. Alternatively, Ferraro (2003) in the perhaps unique environment of Silicon Valley, found that a successful strategy for entrepreneurs seeking funding from venture
capitalists depended not on the size and diversity of a network, but rather on a careful cultivation over time of targeted individuals, contacts and relationships that could remain “sleepers” (in the parlance of espionage) until activation at an appropriate moment as part of a funding search. This suggests that the content and quality of the relationships within a network is more important than the size and diversity of that network.

The data firmly support the use of networks by the entrepreneurial team to seek out both venture capital and angel investors. In the preceding section it was demonstrated that, while the use of publicly available information concerning venture capital firms may form a preliminary component of the search process, access to the personal and business networks quickly subsumed the task, and allowed those contacts to move through to the engagement and potentially commitment phases:

Within the networks we had, there was some information about VC groups in Australia that had been published and then we reviewed that, sort of looking for those that would be most likely to come on board with us, so its primarily through networks that we decided our targets.

...the VC's (were) a mix of personal contacts and simply knowing who was in the market and approaching them, but the people who we had most serious discussions were people that we had some personal contact with, we had some previous knowledge of.

However it should be noted that in each of the cases under study, firms were seeking funding from investors with whom the entrepreneurial team had no pre-existing investment or financial relationship upon which they could build. Equally, in no case was investment actually obtained from persons or organisations who were complete strangers to the entrepreneurial team prior to the contact which sought their investment in the venture, in the sense that there was a successful “cold-call” — a contact by a member of the entrepreneurial team with a potential investor based on a list or name from the media without the benefit of a prior personal contact or a third-party referral:

We already had the relationship with J (CEO of VC), J had worked in (the same company as the team) in the past and by the time we formed the company
he'd been gone for about nine months, so there was already a bit of a relationship there, so I guess it was a little bit easier than some normal ventures ....

I don't think anybody really cold-called anybody. I think we always knew somebody, somehow through some connection of most of the firms we had been at.

Every contact was based either upon direct knowledge or indirect introduction, referral or recommendation. The cold-call was notable by its absence in the context of successful raisings from venture capitalists, even in Case 3 in which one of the rounds involved contact with venture capital firms in Norway and the Netherlands:

I am sure we would never have got a hearing from the Dutch VC unless the contact had come through their colleagues in Sydney.

J (business contact, who had previously lived in Tasmania) knew a bunch of VC’s from Oslo; this is one of Norway’s major industries and so you didn’t have to tell the whole fish-farming story from scratch: you know, wild catch down, farming up etc. He knew who might be interested and so he introduced us to the right guys. It certainly speeded up the process, getting J to make the connections.

Notwithstanding that information is publicly accessible via industry guides and websites, entrepreneurs successful in raising capital used their social, professional and business network ties to source introductions and referrals to venture capitalists. In turn the latter are correspondingly reliant on their own ties as a source of referrals or “deal-flow”. However, consistent with Shane and Cable (2002), the data indicated that such a referral is a favourable, but not a sufficient, condition for an entrepreneurial firm to obtain funding from venture capitalists. There is an element of endorsement by the referrer which is relied upon by the venture capital firm to increase the speed and efficiency, and therefore lower the costs, of the first-cut review of the deal-flow:

It certainly helped to get through the door that we had some introductions by S. It got us a hearing at least. But it’s hard to know that it made much of a difference in whether we got the money or not: you still have to stack up on all
the VC’s criteria, go through all the DD (due diligence), investment committees and all the rest of their stuff.

They (VC) asked a lot of questions about how I knew R (successfully exited entrepreneur, who referred the company to VC firm), what we had done together etc, it certainly seemed have some value to them.

It wasn’t really in our sweet spot, and I might not have given it much effort if it hadn’t come through R.

However, that influence is limited by the respect the venture capitalist has for the business judgment of the referrer:

If I get a business plan from a lawyer or an accounting firm, I figure they may know the people well, but probably not much about the business itself.

**Angel Investors**

In the search for angel investors, reference has already been made to the inefficiency of the market mechanisms by which angels are introduced to potential deals (Chapter 1.3.4), in that angel investors in Australia largely do not proactively use formal angel networks or businesses that provide professional deal-matching services in return for fees, but tend to rely on informal networks of friends and business associates (Vitale, 2007). Hence the challenge for the entrepreneurial team is to understand and exploit that mechanism by establishing and maintaining a network of known angel investors, or trusted associates of known angels:

You just have to know heaps of people to make it work. I call it “frog-kissing”, you need to kiss a lot of frogs before one turns into a prince.

The angels certainly are personal contacts ...

It (fundraising) was driven by myself and using some networks I have got at home, people with the right skills and money.

I asked D who I should talk to. He rang his old friend. As it turns out, one of his old friends was one of the (well-known Sydney) family who he knew well as
one of his mates and said that he wanted to know, what should I do with this medical stuff, do you know anybody into the medical stuff. And he said well you ought to call P (exited medical technology investor), who has a squillion dollars and he called P who said “Well, I'm out of that business now but you ought go and see R”. So that's how the connection was made: it was through a personal network.

I had known J (who referred the founder to the angel) for quite a while, and I respect his judgment. So obviously when someone like that asks you to take a look at a deal, you will put more credibility on it.

Hence it appears that both in the case of venture capital firms and angel investors, the entrepreneurial team’s network of relationships plays a critical role in securing direct contact with, or referrals to, potential investors; and that while the size of the network is relevant insofar as selecting from a larger number of contacts must necessarily be better than from fewer, it is the quality or content of the relationships, either from direct previous contact, or expressed in terms of the endorsement effect from the strength of the relationship with an intermediate referrer, which is most important.

5.2.9: Cognitive Mechanisms

Proposition 10

_self-efficacy and persuasive ability are important factors contributing to successful capital raisings._

Prior research (Koen, Markman, Baron and Reilly (2001), described in Chapter 2.4.2) found that, in the context of raising start-up funding for new product ideas within large companies, certain cognitive abilities were more likely to be associated with successfully obtaining that funding than others. In particular, two mechanisms were found to be strongly associated with success: self-efficacy and persuasive ability. Self-efficacy is one’s self-belief that he or she can effectively and successfully pursue certain actions; and persuasive ability is the ability to sway the actions of other individuals.
**Venture Capital**

In the case of venture capital investment, there is some evidence to support the suggestion that the first cognitive ability, namely self-efficacy, resonates with those making the decision to invest, and that highly efficacious individuals within the teams perform better in this context:

*He gave the impression that he could handle every situation. Even when it appeared hopeless, he would somehow find a way to change the outcome and keep the discussions on track.*

*He had that knack of always being able to convince you that he would be successful: I like a manager who believes in himself and is always setting the bar beyond his comfort zone, I think the best people need that extra bit of challenge.*

*These guys are used to operating in high-uncertainty, stressful and time-constrained situations, I need to know they can succeed because it will take huge effort and a strong belief in yourself.*

Self-efficacy would seem to be beneficial for any entrepreneur or indeed any career, but appears particularly beneficial when dealing with venture capital firms; one can speculate that this may be because those investors are most acutely conscious that the creation of a successful technology company, with new or innovative products or services, is a pathway littered with failure, and that to succeed requires strong self-belief and sustained efforts in the face of frequent rejection.

The second cognitive factor is the ability to influence the attitudes and actions of other people. Persuasive ability is a skill that underlies a number of occupations, obvious examples being marketing, advertising, sales and the law. The ability to persuade coworkers, customers, suppliers and resource providers to make available their time as well as money is self-evidently an important challenge for entrepreneurs where the new product or service has no guarantee of success. The “pitch” for funds, whether in writing through a business plan or information memorandum, or orally before one or more individual venture capitalists, must be “sold” to an educated, experienced and, of
necessity, critical audience. Prior research by Hall and Hofer (1993) and Clark (2008) indicated that presentation, both of the plan and the person, is one of the crucial factors in the decision as to whether to provide funding. The ability to be persuasive would then be expected to influence the outcome in favour of the entrepreneurial team. The data supported this perspective:

*Coming out of a sales role, I’ve always thought of myself as being pretty good at getting other people to do what I want. VCs are a tough bunch to win over, though.*

*He did a great sales job on the committee, had them eating out of his hand pretty much by the end of his presentation.*

*We had sales skills in our nature.*

*If I really want to sell something to someone, or get someone to change their views on something, I mostly succeed in doing it. I just seem to be able to get folks on-side.*

**Angel Investors**

By contrast, angel investors did not report characteristics associated with the cognitive perspectives of either self-efficacy or persuasive ability as key drivers:

*I am always a bit suspicious of pitches that are too slick, it makes me look for the parts that they aren’t telling me.*

*If he came over as having all the answers, I just wouldn’t believe it. Getting me to join him in a journey of discovery was how I’d describe the approach that would work for me.*

Rather, the data revealed that the key mechanism for entrepreneurs in the engagement and commitment phases with angel investors is the ability of the entrepreneur to communicate effectively, rather than either persuasive ability or self-efficacy. Frequency of communication and an openness to discuss all issues on the part of members of the entrepreneurial team were often referred to as key to the decision by angels to invest.
Potential angel investors reported reacting most positively to the efforts by the entrepreneurial team to keep the dialogue continuing, and always to respond in a timely way to requests for further information or for clarification:

*We had very, very open communication. We spent a lot of time together.*

*I think that's the process, they probably did just take some time so even when it appeared that nothing was happening, we were still speaking on the phone once a week and we always met deadlines that came up and we kept them up to date on what was going on and we tried to reinforce our credibility all the time.*

*He spent quite a bit of time talking about it that if I had any questions or concerns that he would be open to answer them.*

In addition to the frequency of communication, the quality of the communication in terms of openness and honesty on the part of the team appears to be important to angel investors, a “warts-and-all” approach:

*I have seen how he reacts to different situations and I’ve seen how he treats different people and I think that he is very thoughtful and very honest in how he does it.*

*We interact with him and he’s always been straightforward and honest. I’ve never had any reason to doubt.*

*In every discussion that we have we always start by putting all the facts on the table. There’s never a fact that’s not on the table.*

*We’re often told details that aren’t flattering for the company. They are the kind of details that make you say Ouch! But I like that.*

Open and frequent communication reinforces the strength of a relationship and helps to establish trust. These ideas are consistent with findings by researchers studying the formation of interpersonal and organisational trust referred to in more detail in relation to Proposition 11 below.
Accordingly, in the case of dealings with venture capitalists, both self-efficacy and persuasive ability of members of the entrepreneurial team are important factors sought by the investors, and contribute to successful capital raisings. On the other hand, the personal and social engagement between the team and the potential angel investor, triggered by the ability of the entrepreneur to communicate openly and honestly with the investor appear more significant than either self-efficacy or persuasive ability on the entrepreneur’s part.

5.2.11: Trust

Proposition 11:

*The emergence of trust (defined to comprise ability, integrity and benevolence) between the parties impacts the process of raising capital by the small technology-based firm*

While interpersonal trust has been found to be capable of coming into existence between entrepreneurs and venture capitalists and therefore having a role to play in venture capitalist-entrepreneur relationship, this has been seen in the literature to develop from repeated interaction (Maxwell and Levesque 2011) during the investment, post-investment or monitoring stage as opposed to the pre-contract or relationship formation stage (Sapienza and Gupta 1994).

Harrison, Dibben and Mason (1997) examined the role of trust in the decision-making process of angel investors. They adopted the concept of “swift trust” developed by Myerson, Wieck and Kramer (1996) to account for the emergence of trust relations in situations where individuals have no history of working together, and are involved in complex, non-routine once-only tasks, swift trust could emerge in such temporary group situations, and found that there existed the potential for the emergence of swift trust through the role of the “co-ordinator”, that is, an individual who has already formed an experience-based trusting relationship with all the other individuals within the group. The co-ordinator might be personal or business associates of the investor, or a business introduction service (including angel network managers). They found that swift trust could emerge for a number of angel investors through their trust of the co-
ordinator, and that this was stronger when the co-ordinator was a member of their personal network than a business introduction service. The authors referred to, but did not find evidence to support the existence of, identification-based trust (Lewicki and Bunker 1995), being the trust formed between individuals with a high degree of identification, characterised by mutually shared values, and saw this as a higher level form of trust which can only emerge following a history of interactions.

**Venture Capitalists**

For venture capitalists, the nature of the interaction in the early stages of the process is essentially rational and calculative and the underlying approach adversarial. Whereas the entrepreneurs tended to speak in emotive terms about their engagement with the venture, the response elicited from venture capitalists appeared as focussed on the economic dimensions of the venture, matching the costs, benefits and risks:

*We were quite passionate about the business. They (the VC’s) were sort of neutral about it. They didn't particularly care about it as a business. They were sort of a bit interested, but not much.*

*We (VC) go through the business plan with a fine tooth comb. I use what I call the two-four rule: the venture will either take twice as long and cost four times as much, or take four times as long and cost twice as much, as they think.*

*When we are asked for money we look at the market, we make lots of phone calls to check on it (the market), just do lots of homework.*

*And if you really don't appreciate up front that there are people who will play hardball then, you know, we are talking thuggery...it's a tough world, it ain't fair and that's life and if you think people (VC’s) aren't going to negotiate as hard as they can, then you probably need to rethink.*

*Venture capitalists are much more adversarial as you talk to them, trying to get the deal done and much more controlling than the (angel) deals that we ended up with.*
This is akin to the “calculus-based trust” referred to by Lewicki and Bunker (1996), and the cognitive trust identified by Young (2006) comprising the calculative elements such as assessment of costs, benefits, value and risk.

**Angel Investors**

In contrast, angel investors spoke of an almost immediate, intuitive sense of the entrepreneur’s trustworthiness:

> I think D himself, D was the top seller. If it wouldn’t have been him and his personality I probably would have done a lot more questioning and there was a good chance I wouldn’t have invested.

> He just comes over as so trustworthy, straightforward, honest that you just get a good feeling.

> We, I think, had the respect of the people that were coming in as shareholders and the trust of them and certainly on our side we felt that very strongly that we trusted and respected the people we had as shareholders.

> At the time it was just sort of a gut feeling but it was trite, that’s just the way he is.

> We wouldn’t have made it through if we hadn’t trusted each other.

These findings in relation to angel investors approach are consistent with the previous literature on the role and causes of trust. Researchers have identified trust as playing a critical role in enabling cooperative exchange, in the context of developing interpersonal business relationships (Harrison et al, 1997; Maxwell and Levesque, 2011). The factor which emerges strongly is the swiftness with which such trust emerges, and in the absence of either a passage through simpler forms of trust to more complex forms, or from cognitive trust to emotional trust (Young 2006), or mediated through the role of a co-ordinator (Harrison et al 1997).

The development of this form of swift trust is strongly influenced by the trustor’s perceptions of the trustee’s character (Mayer et al, 1995). As referred to previously in Section 2.4.3 three traits of the trustee are most frequently cited in the research on trust
as explaining a major portion of trustworthiness: ability, benevolence and integrity (Mayer et al., 1995). Ability encompasses the talents, skills, and knowledge necessary for effective action within a particular domain. Benevolence entails the degree to which the trustee is perceived as wanting to do good to the trustor, “aside from an egocentric profit motive” (Mayer et al., 1997). Benevolence implies a positive attachment between the trustee and the trustor that goes above and beyond the specific transaction. Integrity is attributed to the trustee when the trustor believes that the trustee will adhere to a set of principles acceptable to the trustor. The latter condition is key in cases of trust. While integrity is often defined as behaviour consistent with a set of principles, in situations where one party is seeking the trust of another, the perception of shared values and agreement on principles is critical. Each of these three elements was cited by angel investors as contributing to the development of a trusting relationship over a compressed time frame.

Ability included both an assessment of skill and intelligence, and in communication approach:

\[
\text{I realised he [the entrepreneur] knew exactly what he was doing.}
\]

\[
\text{There was no waffle . . . if you asked a question, he answered it. In an instant I decided he was interesting . . . call it intuition’}.
\]

\[
\text{I was obviously impressed by his intelligence.}
\]

Integrity comprised both honesty and directness:

\[
\text{I could tell that he was honest.}
\]

\[
\text{[He] came over as very direct, to the point and very honest about what he was trying to do.}\
\]

Benevolence manifested itself in concern for the broader community as well as staff and investors:

\[
\text{He is a straightforward guy that wants to change things for the better.}
\]
He’s a nice person ... and wants to do right by everyone. He gave the impression that he cared about the team and the investors as well.

He was very excited about being able to make a change for the better.

So while the underlying elements of trust are all in place, what is it that drives the development of swift trust, in a situation of high uncertainty which would otherwise appear to require angel investors to proceed with great circumspection. The answer appears to lie in the congruence or alignment between the personal values of the parties. Both entrepreneurs and angels repeatedly spoke of a great deal of overlap in the personal values that drive their decision-making processes. They shared an early sense that they were similar in terms of what was most important to them, about how they thought about problems, and what they wanted to achieve through their involvement in the venture. In particular, shared values seemed to promote an overall sense of similarity between the prospective angel and entrepreneur that enabled the angel to identify with the entrepreneur, in a sense to see themselves in the entrepreneur. In addition, a sense of shared values also enabled the angels to see the entrepreneur as someone who can help them achieve their own goals:

I think our values align very closely.

I think the very fact that we have similar values is what allows us to trust each other.

He seemed to get it, you know? He understood the same things that I cared about ... so it didn’t feel like it was just like ‘we’re going to start this up so we can make a zillion dollars.

Pretty much everyone has similar stories ... We’re not just after it for the money.

What he wanted to do is right in line with what I wanted to do.

This finding corresponds with much sociological and psychological research cited in Section 2.4 above that has shown people tend to be more attracted to people who share similar attitudes (e.g. Byrne, 1969), including similar values. According to these
theories others who hold similar views and beliefs confirm our own, and this in turn adds to our sense of well-being and self-worth. These positive feelings become associated with the other person thus increasing the likelihood we will be attracted to them (Johnson 1989). Sapienza and Gupta (1989) have similarly found that shared values drive co-operative working relationships between venture capitalists and their investees, but in the period of co-operation after the funds have been committed.

A sense of shared values facilitates the development of positive perceptions of the entrepreneur by the prospective angel investor. These perceptions of the entrepreneur’s character are quite critical, both in terms of the investor’s evaluation of the venture and in engendering “connectedness”.

Perceptions of the entrepreneur’s character centre on the entrepreneur as the embodiment of the venture and this has to do with perceptions on the part of potential angel investors of an “organic” fit between the entrepreneurs and the venture. That is, based on an entrepreneur’s personal story and stated purposes behind founding the venture, the resource holders come to see the entrepreneur as the natural steward of the opportunity (Dunham 2010). The entrepreneur becomes strongly identified with the venture on a level beyond that of someone simply pitching an idea. Angel investors speak of the entrepreneurs “visionary nature”, their “passion”, or their “commitment” and similar expressions. They are seen as having an emotional attachment to venture, beyond the rational and economic commitment so central to the decision of the venture capital firms:

*He is genuinely in love with what we do.*

*He just comes across as such a believer and he’s got so much faith and it just sort of rubs off on you.*

*I guess if there wasn't any equity and there wasn't anything with that emotional tie it, then I wouldn't have been interested in it because what I was looking at that time for was starting up some business of my own and I guess this was the closest thing.*
This is his baby and he has goals in terms of what he wants to achieve not only from a financial perspective but from a perspective of what this company will stand for and be remembered by.

So the dealings with the venture capitalists do entail the development of a gradual cognitive or calculus-based trust. By contrast the approach of the entrepreneurs to the angel investors was characterised by an immediate sense of shared values and purpose resulting in the rapid development of trust and a personal sense of identification between the investor and the investment.

5.2.12: Reputation

Proposition 12:

The reputational concerns of VC firms, and of individuals in the entrepreneurial team of the STBF impact the process of raising capital, but the reputation of angel investors does not.

Several studies have found that the primary way for venture capital funds to win out in the race to raise capital from a limited pool of underlying institutional investment funds is to have a better reputation (Norton (1995) and Zacharakis and Meyer (1995)). Reputation from the perspective of the funders of the venture capital firms arises out of successfully investing in, and subsequently exiting, the ventures of successful entrepreneurial firms. In order to do that, the venture capital fund must be an attractive source of funds to the entrepreneurs. Prior research by Smith (1999) found that the reputation of a VC firm is an important criterion influencing the decision of the entrepreneurial team in their selection of funding source.

The data were consistent with the findings that venture capital firms need to be concerned with their own reputations and investment track records.

All VCs are repeat players, no that many entrepreneurs are. Maintaining a good reputation is maybe the single most important thing for a VC in negotiations...Sydney’s a small town and bad stories spread quickly.
In addition the data provided insights into the particular elements of reputation which operated in the minds of the entrepreneurs. The first element centred on personal compatibility, the ability for the venture capital firm and the entrepreneurs to work together as a team:

*There were two elements to it, there was one the amount of the money and the equity they were going to get i.e. valuation issues, but there was also: who are they, and are these people we can work with?.*

*We didn't feel that they were going to come in and know all the answers. That some young MBA was going to tell you how to run the company who couldn't spell medical.*

Secondly, several respondents viewed the ethics of the venture capitalists as a key aspect of reputation; ethical stance as evidenced by prior behaviour of the individuals or firm:

*Reputation was critical, M (the inventor/ scientist) thought that everyone commercial in his experience in life, was trying to screw him, he was very suspicious and K (co-founder) was a bit wary about it too. He had been around, but not at this sort of small end of the business, in the venture capital business and he was very suspicious too, so I think the ethics and people you can work worth are very important.*

*I sensed that he was going to be ethical long-term.*

Thirdly, a reputation for continuation of support, including in the face of the inevitable ups-and-downs of developing technology based ventures, was seen as an important element in a good reputation for a venture capital firm:

*I sensed that he was going to be ethical long-term, not going to bail out too quickly, or not going to come in and try to tell you on day one how to run the company.*
Well it was more the people you were dealing with (than the VC as a firm) because you know you are going to go through some bad times and you hear these stories a lot of people are just saying: “Close them all down, piss them all off, grab the thing. We have got them by the balls and we got the money”. And you want somebody [who] has a longer track record of doing early stage and sticking with early technology companies and lasting for a while.

The fourth aspect of venture capitalists reputation cited by entrepreneurs was specific industry or sector experience, preferably at an operational level. Experience as an executive, or strong independent industry contacts were seen as positively enhancing reputation:

I noticed the good venture capitalists, certainly in healthcare, tend to be people who have actually worked in health care or worked in biotech ... and there are not a whole lot of accountants, MBA, financial analyst kind of people. I think they are asking more intelligent questions.

I think his (the VC manager’s) daughter was a doctor and so had a lot of interest in that, and generally in healthcare personally, in medicine and medical things and that's partly why he picked up the project and enjoyed it and did a lot of work talking to people and personally getting himself comfortable. [It was a] bit of a ballsy decision by himself to push this one hard. It helped a lot.

Finally, respondents referred to the perceived benefits from having a venture capital firm with size and with international connections, which indirectly provides an endorsement of the firm itself:

I thought maybe we’d do better with H (VC firm), because of its international connections and they sold that a bit....

Our market development of our new business model was way beyond the resources of private investors, except if we had a lot of private investors and we just couldn't effectively have recruited that many. Plus the cachet of having
a large VC fund as an investor, which was seen as a positive thing generally. You got endorsement from a professional VC investor: that's a good look.

Among venture-backed firms, high-reputation VCs have been found to replace CEOs and other founding team members more frequently than lower-reputation VCs do: (Baker and Gompers 2000). While this was referred to as a concern by respondents, no instance of actual forced replacement was reported in the data.

In the case of angel investors, no entrepreneurs reported a concern for the reputation of the potential investors in the search and selection stages. Further, angel investors have no need to preserve or enhance reputations, and accordingly their investment track record is of no concern other than to themselves:

If I make money or lose, it it’s my look-out and only mine.

Entrepreneurs did report that the reputation of the investors was a useful incidental outcome of having obtained investment from angel investors who themselves enjoy a reputation:

I think the (angel investor) shareholders were invaluable in really just complementing the team, providing the weight and the re-assurance I suppose, that not only had we tried to check all the boxes but also that these smart people had backed it already.

The issue of reputation is therefore important for entrepreneurs in their selection of venture capital firms. The principal elements are the ability to form part of a cohesive team, business ethics, propensity to continue support and industry or sectoral skills or experience. However in the case of angel investors, entrepreneurs did not evince concerns for the reputations of their potential angel investors. This latter finding is consistent with the findings in Proposition 8 concerning information search, that entrepreneurs were disinclined to search for information beyond their own personal assessment of the angel investor.
5.2.13: Sources of Bargaining Power and Bargaining Scope

Proposition 13

*The small technology-based firm has certain sources of bargaining power and there is considerable scope to negotiate detailed terms.*

When the entrepreneurial team enters the negotiations with venture capital firms and angel investors, the interests of each side are, while not wholly adversarial in nature, certainly different and potentially in conflict.

The interests of the demand side, i.e. the STBF, are to obtain the cash to fund the expenses of the venture as, by their nature, these ventures have extended periods of negative cash flow. In addition, they will need expertise and contacts, including expertise on the industry and market, a range of connections, and knowledge of the processes and organisational development strategies that will maximise the chances of success. So the entrepreneurial team gives up part of their ownership of the business, in return for which they seek capital and assistance. However it is in their interest to retain as much as possible of the value to be created in the company, and hence they wish to minimise the equity conceded. They also seek to maintain for themselves as much control over the decision making process as possible, and enhance their position in terms of later funding rounds in this, and subsequent, ventures.

The investors’ side is more complex. While both categories of investor will seek to maximise their financial returns, a distinction needs to be drawn between the negotiating interests of the venture capital firm and the angel investor. As referred to in relation to Propositions 5 and 12, angel investors typically seek other rewards of a non-financial nature such as a sense of doing-good and enjoyment, and are not concerned about their own reputations as investor, and their negotiating stance is moderated accordingly.

In contrast, the venture capital firm is faced with a *need* to invest, and to invest successfully. The logic of its business model relies on reward for making investments, and a consequence of the relationship with the fund investors is that failure to invest is
a failure to perform. Venture capitalists are paid fees to deploy the funds committed by the investors in all market conditions, and typically with a requirement to deploy minimum percentages of the investable pool within certain time periods of the fund’s life (Gorman and Sahlman, 1989). They cannot simply decide to “sit it out” for lengthy periods waiting for market conditions to improve. By contrast the angel investor always has the alternative of not investing. STBF’s were conscious of this:

Most VC's were struggling to find deals at the time and they needed to do something. They had just raised the second fund, a much larger one, and prolonged inactivity would not have been a good look either.

We needed the money and they needed to get momentum in the investment of the new fund that they had raised.

The need to invest notwithstanding market conditions, and the concern for their reputations for successful investment, contribute to the venture capitalists’ need to minimise their downside risk on every individual investment, by means including the staging of their commitments against achieved milestones, and by syndication with other venture capital firms (Cases 1, 3 and 7) or industry investors (Case 4).

Further, there is no particular need for angel investors to exit their investments within any particular time frame:

I made it clear to him: I have told the kids this may well become part of their inheritance.

Consequently the pressures around exit issues would be considerably greater in the engagement stage in the case of venture capitalists, who are constrained by the need to achieve an exit or realisation of the investment within time frames dictated by the terms of the fund they are managing:

It’s a ten year closed-end fund: we have to be in and out of within that time, and our investors just hate being asked for extensions. They want to see the money turn over.
In summary, the competing interests of the demand and supply side which impact on the engagement process between the parties are as follows:

- Prompt availability/deployment of capital.
- Percentage of equity capital conceded, an issue closely related to valuation of the venture.
- Retention of control; constraints on entrepreneur behaviour.
- Realisation and exit-timing and terms.

**Barriers to the Negotiation of Agreements**

From Chapter 2.5, analysis of the bargaining process requires identification of the barriers to reaching agreement that impact upon the parties. In the case of STBFs and investors, a number of barriers emerged in the research which arise from their differing expectations and perspectives. Firstly, the entrepreneurial team is likely to have the venture as their primary if not sole focus of activity, and with a substantial part of their actual or potential net worth at stake, whereas the VC will, and angel investor is likely to, have multiple other concurrent interests:

_They (VCs) didn’t seem to appreciate the fact that we had everything on the line. If it collapsed, we lost our houses._

_I (angel investor) wanted to get it right, but I didn’t want to agonise over it forever. You make a decision and move on, and anyway the day I write the cheque, I figure the money is gone._

_We (VC) look at hundreds of business plans every year, we have to sort through them fast or we waste a lot of time._

Secondly, as there are no objective and universal valuation methods to which resort can be had for companies in this space, it can be difficult, and perhaps impossible, for either party to convince the other of the fairness of proposed values on the basis of any compelling logic:
Valuation is a very imprecise science...actually I shouldn’t call it a science at all it is more of a black art.

We could have debated value forever and never agreed; that’s what the anti-dilution and ratchet are for, so we can move on without getting stuck on valuation issues.

There are no real guidelines – you’ve just got to use your judgment.

It was almost impossible.

I (angel) got a feel for what was right as the process went along.

It’s a process of negotiation . . . there is no point if they [the entrepreneurs] feel short-changed.

Thirdly, a number of the issues which need to be resolved are, by their nature, distributive (see Chapter 2.5) in which for one party to gain, the other must lose. For example, for the percentage share of the equity of the venture to be acquired by the investor to increase, the equivalent percentage has to be given up by the members of the entrepreneurial team.

**STBF’s Sources of Negotiating Power**

Within this framework, it might be expected that there would be relatively little room for the STBF to negotiate terms in a manner favourable to the entrepreneurial team; that the terms for the investment would in effect be set unilaterally by the investors or their advisers, and proposed on a “take-it-or-leave-it” basis. However the data suggest a somewhat different position. Entrepreneurs identified a number of sources of negotiating power.

The most significant is the existence of special expertise amongst the members of the team in an industry or market sector, or in a technology. Within an entrepreneurial team there often exists industry or technical expertise, relationships with suppliers, alliances with important complementers, and high quality business models: data supported the view that such firms should be in a relatively strong negotiating position.
Entrepreneurs who have proven their abilities, for example, by having actually grown companies similar to the current start-up, by assembling a solid management and technical team, and leveraging a relationship with customers, suppliers or alliance partners, should have better negotiating positions:

*These guys are absolutely the experts in fisheries acoustics at a high science level as opposed to a commercial fishermen’s level. This is at a scientific level. Almost irreplaceable. That was the best thing we had going for us when it came down to negotiating the deal.*

*There were skills within both teams that were unique to the world, I would say. In the areas of fish behaviour, there were only a few scientists that were working in the area and that formed the basis of algorithms used in the fish feeding systems. I think the VCs valued that.*

*We had the technology from CSIRO and the best guys in a narrow field of carbon science, plus we knew where the others were, that was our strength and they (VCs) recognised that.*

*We looked incredible as a management team with experience and so forth and we had a wide range of relevant experience and background in the company so it was easy in that sense that we only had to one or presentations and one or two discussions and the VC money was there.*

Investors need to have a good working relationship with the firm. While in theory it can be in an investor’s short-term interest to be a tough negotiator, they must build productive long term relationships with the members of the entrepreneurial team:

*There was no point trying to screw every last bit out of the deal or arguing every point. It would have gotten us off on the wrong foot.*

*They (VC) could have really put us through the wringer, but in the end we all have to get on together after the deal is done, so I never felt they were as tough as they could have been.*
When the negotiations got difficult they (VCs) would just come back with: “well, that’s what you said in your IM (Information Memorandum)”. Hard to argue with!

This is consistent with the findings of Van Osnabrugge and Robinson (2000) that angel investors typically do not negotiate hard over terms and conditions of investment in order to avoid negatively affecting the ongoing working relationship with entrepreneurs; and with other findings that venture capitalists, despite being tough and experienced negotiators, seek to minimise conflict with entrepreneurs by linking the contractual hurdles back to the STBF’s representations in the business plan (Rea 1989).

Much of an entrepreneur’s negotiating power comes from the fact that the entrepreneurial team can find other sources of capital. The extent to which this occurred depended principally on the situation in the market at that particular time:

Well it was deceptively easy, because of the climate of the time. People were on the lookout for proposals to be put in front of them, they wanted to invest in things and they wanted to believe that things would be successful and we looked good, ...but that was everybody's experience at the time, it was just very, very easy to raise money in that climate, not just for us.

I think generally VCs are very difficult to raise the money from but you have to be there at the right time (emphasis added).

On the other hand they (VCs) were struggling to find deals at the time and so they were willing to look at us, ‘cause they quite liked this sector.

Their strength was that they had the money and we needed it and we were down to only two contenders, two VC’s that we were talking to and what was the strength of our position? Most VC’s were struggling to find deals at the time and they needed to do something, they had just raised the second fund the much larger one and prolonging activity would not have been a good look either. So we absolutely had to do something, we needed the money and they needed to get momentum in the investment of this new much larger fund that they had raised.
Linking back to the venture capitalists’ need to maintain their reputation, the STBF is also able to take advantage of the need for the venture capital firm to be able to use existing investees as an important reference for future potential investees:

They (VC) wanted to use us as a reference site, and we were quite happy to do this: we thought they would be less likely to squeeze us.

In summary, the sources of negotiating strength for the entrepreneurial team are to be found in the following factors: irreplaceability or other specialist technical expertise of the team members, the quality of the track record of the team, the need for the investor to lay the groundwork for a long-term working relationship, the situation in the market for risk capital at the relevant time and the need for venture capital investors to have references from invested firms to enhance their reputation.

**Venture Capital Contracts: What Matters have Limited Negotiability**

From Chapter 4.3 it emerged that the transaction with angel investors had a wide variety of contractual arrangements, ranging from little or no contractual constraints on the entrepreneurial team beyond that which arises from ownership of ordinary shares to a contract broadly similar to that used by venture capital firms. By contrast, it also emerged that the contracts of venture capitalists were remarkably similar to each other, as if from a standard template. In the context of an examination of the degree of negotiating latitude the entrepreneur may have vis-à-vis a venture capital fund, it is useful to identify from the informants those items in which there appears to be little scope for negotiating variations to contractual terms with a venture capital fund.

The data revealed limited scope to vary the standard venture capital terms in the following areas:

1. Establishing the level of management compensation:

   They really came with some strong views on what we should be paid, and wouldn’t budge...Arguments about market rates got nowhere...they expected us to wait for our real rewards until we could all get out, and I could kind of understand that.

2. Employment Contracts including non-compete clauses
They insisted on tying us up with what they called standard employment contracts, which had some pretty draconian clauses which we thought would stop us from putting bread on the table if we left, I don’t think they could have enforced them anyway now slavery has been abolished!

Legal agreements, even my own employment contract, had to be negotiated and amended to suit their (VC) needs.

3. Veto rights over capital raising:

They (VCs) didn’t have very much operational control of the business, but they made sure they had pretty effective control of fundraising.

4. Senior personnel hiring/firing:

If things started to go really wrong, ... we could be given the boot....

Conclusion

While the findings of this research generally support the conclusions reached by both Landstrom et al., (1998) and by van Osnabrugge (1999) that contracts are necessarily incomplete by their nature and that the relationship between the parties is an important element to provide the flexibility to adapt to change as circumstances warrant, it emerged that there were two distinct and contrasting outcomes in relation to the negotiation and content of the contracts. Because of the practical impossibility to specify all of the possible contingencies that may arise, both categories of investor must to an extent look to the working relationship that will develop between the parties as a basis for flexibly dealing with difficulties as they are encountered. However by examining how the approach to contracting varied between the venture capitalist on the one hand and angel investor on the other, it is possible to provide guidance to entrepreneurial teams about the areas in which a measure of negotiating latitude may exist for the STBF, and the sources of strength in the course of that process. The sources of negotiating strength for the entrepreneurial team were found to reside in the irreplaceability or other specialist technical expertise of the team members, the quality of the track record of the team, the need for the investor to lay the groundwork for a long-term working relationship, the situation in the market for risk capital at the
relevant time and the need for venture capital investors to have references from invested firms to enhance their reputation. Issues in which there appear to little scope for bargaining with venture capitalists are those which impinge on the equity share of the investor (rights associated with new equity issues) and those in which the members of the entrepreneurial team are personally conflicted (hiring and firing, salary and employment terms).

5.2.14: Use of Bargaining Power

Proposition 14:

The STBF tends to underestimate the complexity of negotiations, undersearch for information and fail to access relevant expertise, and thereby failsto take best advantage of its bargaining power

Chapter 2.4 referred to the “fog” of negotiation, that is, negotiation in the real world taking place under time pressure and with imperfect information available to the negotiators (Stuhlmacher and Champagne, 2000). Theoretically, when negotiating, one should get all the information possible about one’s own side’s preferences, the preferences of the other party and about the range of potential outcomes (Lax and Sebenius 1986). In this sense, information is seen as power, or at least as potentially conferring power, in negotiation by arming the party possessing it with an enhanced ability to adjust the initial offered positions, and to understand the resistance points of the other party. It might therefore be expected that the members of the entrepreneurial team would apply considerable personal energy and obtain other resources both internal to the firm and external, in an effort to understand the complexities of the risk-capital contracting and thereby take maximum advantage of the scope for bargaining available to the team.

With one exception (FinCo), for each of the entrepreneurial teams in the research, the first fundraising they undertook was the first exposure that any member of the team had to negotiating and contracting with angel or VC investors respectively. Their knowledge of the process could at best be described as rudimentary:
I hadn't had a lot of experience on those kind of standard (contracts), what deals they (VCs) expect for their equity money.

We didn't know what a term sheet was at that stage, so they (VCs) drove the process of what they needed.

It is a characteristic of the angel investment market that it is “inefficient”, in the sense understood by economists. A consequence is that systems and useful information to allow market participants to make fast and informed judgements are simply not readily available in a public sense. Angel investors value their privacy, do not typically disclose publicly the terms of their deal. Hence there are no publicly available comparative analyses of actual angel investment deal terms to set an individual deal term sheet against, either in Australia or even in the United States (Benjamin and Margulis, 2005). It should therefore come as no surprise that entrepreneurs are disinclined to incur expensive intermediation (investment banker or accounting firm) assistance, or legal advice from experienced specialist lawyers to assist in structuring the transaction or providing valuation advice at least until the deal is, in essence, done.

I think we did not give serious enough thought to getting some help and advice early enough, we just assumed that we would agree and the money would appear when needed.

I couldn’t see the point of spending money on hired guns to do a deal with people I trusted and who, I thought, trusted me.

This is consistent with the findings in relation to Proposition 8 that in their dealings with angel investors, STBF’s tend to rely on their own personal information sources and under-search for information, justifying this decision by referring to the personal nature of the relationship and trust which underlies the angel investors’ commitment to the venture.

In the case of dealings with VC firms, entrepreneurs were conscious that they were dealing with “professionals”, and accordingly there arose a need to seek professional help including, where applicable, help from angels who had already invested in the venture:
You don't know the norms, you don't look at what deals are going down, what is happening in the local industry. An investee who was to take VC investment on his own would be taken to the cleaners I think. No, I don't think you can do it without some kind of advisor.

One of the reasons why we looked for competent people in that very first (angel) round was that when you hit venture capitalists you hit a wider variety of deals and options and arrangements which we did and we wanted some experience around the table to help us get a better deal.

You can’t do that without access to advice, you can’t just do it based upon general commercial and business experience.

In each case the team sought legal advice upon the terms of the final agreement. However, in no case was external assistance sought beyond legal advice, and therefore did not include assistance either from accountants or management consultants in the preparation of business plans, or from investment bankers in deal structuring or negotiation:

No. We had enough engineers on our side without adding any financial engineers. And we had all been through that experience of having the wet-behind-the-ears MBA pretending to know things about our industry and embarrassing us all in front of the VC’s. We didn’t want to go there.

You absolutely need a lawyer, and not just your usual one. Someone who does these deals all the time and knows where the traps are. You don’t have the time to become an instant expert in venture capital contracts.

However lack of specific knowledge and experience did not deter the teams from embarking on the deal-making process with (arguably misplaced) confidence:

At the time I suppose we were probably over confident because of the buoyant nature of the markets and this feeling that money was there to be had, all we had to do is walk out on George Street and there it was.
We’d never been exposed to how shares like that (redeemable convertible preference shares) worked, we pretty soon realised we were out of our depth.

I got some advice from a lawyer friend of mine, he didn’t have a lot experience in the venture capital business either, but sort of a little, and just to get a feeling for what he thought about it and the feedback was that it sounded like a fairly reasonable sort of set up so we signed.

So in the case of negotiations with venture capital investors, the complexity of the standard contracting models with which the entrepreneurial team is unlikely to have prior familiarity, combined with an under-search by entrepreneurs for relevant available information and assistance from advisers beyond lawyers, mean that the elements of bargaining power available to the latter are counterbalanced by the risk of not being exploited to the maximum in the course of the flow of negotiations with tough and experienced negotiators on the other side of the table.

In the case of transactions with angel investors, STBF’s do not take extensive steps to prepare themselves for the negotiation process, tend to rely on a narrow choice of advisers, and are relatively little concerned about bargaining strength issues. They justify this on the basis that the trust and relationship formation of the angel investors commitment and that the contracts more straightforward, and to that extent the entrepreneurial team feels itself at a lesser disadvantage.

5.2.15: Entrepreneurial Team Leader

Proposition 15

The entrepreneurial team leader within a small technology-based firm influences the firm’s process of information search, negotiation and commitment for a capital source.

It will be recalled from Section 2.5 that there is general consensus in extant studies that technology-based start-ups are typically created by a team rather than by a single entrepreneur acting alone, and that within the high-growth segment, businesses which
were started by a team represent a disproportionate part (Kamm et al, 1990). Reich (1987) proposed that entrepreneurship be reconsidered in terms of the team, and not an individual, as the “hero”. Indeed, when the media focuses on venture creation, it tends to be on Bill Gates rather than Microsoft, on Steve Jobs rather than Apple, or in the Australian context, on Rupert Murdoch rather than News Corporation. However others such as Shaver and Scott (1991) insisted that ultimately entrepreneurship requires one individual who brings together in one mind all the elements to see the opportunity, and to have the determination to succeed. Timmons (1994) and Ensley et al (2000) sought to integrate these two views by suggesting that in each team there exists a “lead entrepreneur”, who creates and communicates a vision to which other members of an entrepreneurial team lend their support. Ensley et al (2000) claim to have “empirically demonstrated the existence of lead entrepreneurs” (at p72).

The history of each of the ventures comprised in the cases studied was characterised by one or more product or technology “champions”. In some cases, the champion(s) transitioned to being business leaders of the venture, and in other cases they did not. This is consistent with previous research which found that the technology champion frequently is not the appropriate person to take or continue in the leadership role which, over time as the organisation expands, changes from simply driving an idea in project form to the assembly and management of an entire team (e.g. Clarysse and Moray, 2004, p65). While much of the earlier research focussed on the role of the individual entrepreneur in selecting and implementing the firm’s strategy, the determination and execution of strategic decision-making is the role of the senior executive team: (Ensley, Pearson and Pearce 2003). The present research seeks to examine the existence of a leader, the role of such leader and process of interaction within the team, in the specific context of fundraising from angel and venture capital investors.

Five of the six cases were characterised by a single individual who was recognised within the team, and acted, as the leader of the venture. In certain cases he (as all were male) had been the product or technology champion, whether as the inventor (Case 1) or the assembler of technologies from varied sources (Cases 4 and 5):
I invented it, I had to raise the money and run the business: the buck has always stopped with me.

Probably the most important thing the CEO has to do is make sure you don’t run out of money. I spent an awful lot of time on that, time that I could have used elsewhere but I had put it all together and failure is not an option.

A… was the leader, no-one was in any doubt about that.

It was a joint effort between J… and me with T… playing a role as well and of course everybody was involved at presentations and so forth but the responsibility for it lay with me.

In Case 6, the team leader was one of four founders or co-champions, acting as a “first-among-equals”:

He (P) consulted with everyone, but at the end of the day he made the calls.

We have always agreed on what we needed to do; it was never a problem. Although we were all equal partners, someone had to take the lead.

In Case 3 the leader was a CEO recruited by the technology-skilled founders to continue the commercialisation pathway. In this Case, the founders as technical champions had come to the conclusion that they lacked the relevant skills to “professionalise” the management team, and deal with growth issues such as the raising of external capital:

None of us (the four founders) had ever had to do any of those things. We had managed a few people in the Antarctic Division (of CSIRO) but when we got to 20 people we knew we had to get someone who could take it to 100, and it wasn’t any of us. Someone who had been down the road of raising money, that would be really useful.
To this extent, the leader was specifically recruited with a view to enhancing the skills of the team in regard to fundraising.

The exception was Case 2 in which two individuals shared the role as co-founders, and continue as co-managing directors and co-leaders.

Nobody led it (the fundraising), the handful of people who were involved, me, T... the other managing director and two or three guys on the technical side, yeah that was really our domain; everyone else basically deferred to us on that, they played supportive roles but a small subgroup of two made the decisions.

Specifically in relation to raising capital from venture capital investors, two themes emerged. In Cases 3, 4 and 5, the search, selection and negotiation roles, and the subsequent decisions, were taken by a de facto leader to whom the rest of the team, or the board of directors, had effectively delegated responsibility:

I was giving a sort of superficial appearance to the process like in a sense everybody was equal, but there is no doubt on the (fundraising) strategy side, yes I got to play the dominant role.

We knew we didn’t have the skills to take this thing forward, we knew we needed someone who had “been there and done that” so we pretty much left it to R... to do it all, and he was really good at it. In fact that is probably the thing he did best.

A second emerging theme was one of consensus being reached between a small group within the entrepreneurial team, led by the CEO acting as leader of the team, in which the decision is then effectively ratified by the other team members:

Everyone else basically deferred to us on that, they played supportive roles but a small subgroup made the decisions and then got the others on-board.
Two of us worked up the deal with the VCs and when we were ready I took it to the board so they could give it a tick, I don’t think it works to get everyone involved in trying to do the deal.

Whether the model was one of delegation or ratification, several of the leaders expressed some doubts in hindsight about whether the process actually adopted was optimal:

*If it wasn’t just up to me we might have done the fundraising a bit differently. We might have put ourselves in a stronger position. You can’t say that for certain but it’s just one example of where a more robust debate with contrary views put would have been, undoubtedly, would have been a good idea, but it didn’t happen.*

*No-one else felt comfortable in saying well that is the value so let’s just get on with it, so I did. I did it only because I had to. I made the decisions because we had a screaming need for the money and so I couldn’t spend too much time worrying about whether the guys were feeling bruised or not.*

In contrast the dealings with angel investors were characterised by relatively less focus on the broader team aspects and more strongly on the personalising strategies of the leader or joint leaders. This follows from the findings set out in Proposition 11 concerning the development of an interpersonal relationship embodying trust between the angel investor and the lead entrepreneur:

*And the contacts were mine really. They (angel investors) had invested with me before so it was really me they looked to.*

*It was driven by myself and using some of networks I have got at home, people with the right skills and money. They (angel investors) wanted to know there was a team behind me, but they wanted to deal with me.*

The “human story” referred to in the findings on Proposition 11 is associated with the story of the lead entrepreneur, and the ability of the lead entrepreneur to imbue the narrative of the venture’s presentation with the human element to angel investors forms
an important part of obtaining commitment of financial resources. While the human story is multi-faceted, at its base it arises from a shared set of values and experiences, but also comprising a personal relationship and shared goals between the angel investor and the individual lead entrepreneur:

He was very good at putting the personal touch on everything.

It was D himself who got me hooked, I think we are quite similar really.

The things he was trying to do were pretty much what I wanted to do, so that made it an easy decision.

The data therefore support both the existence of a lead entrepreneur, and the importance of this role in the fundraising process. However the mechanisms by which the role operates is distinct as between the two investor types: in the case of dealings with the VC it is embedded in the ability of the leader to take executive decisions and to carry the members of the team with him or her; and in the case of angel investors it is the formation of the peculiarly personal relationship with the investor that transcends in importance the formation of an investor/entrepreneurial team dyad.

5.2.16: Prior Experience of Fundraising

Proposition 16

Prior experience in fundraising impacts upon the process of search, negotiation and commitment/contract for small technology-based firms in obtaining capital.

MacMillan et al (1985) and Starr and Bygrave (1991) found that the previous entrepreneurial experience of members of the management team was among the most important factors which investors take into account in their screening of investment proposals. The reason may reside in the demonstrated reduction in the potential adverse selection problems, based on the team members having demonstrated both their abilities and their commitment: they have done it before.
In the specific context of the capital raising process, previous research found that venture capitalists did identify major differences between novice and serial entrepreneurs in the negotiation process as a result of their experience with the venture capital process itself (e.g. Wright and Robbie 1998). Perhaps paradoxically, these differences have been found to cause concerns to venture capital firms in regard to providing funding to the new ventures of such entrepreneurial team members. Wright et al (1997) reported that UK venture capital firms expressed difficulties in negotiations with experienced entrepreneurs arising out of the ability of serial entrepreneurs to foresee the venture capitalists’ negotiating techniques, their ability to find other funders- i.e. to create a “competitive tension” in the search and selection process, and their ability to obtain a higher equity stake. The specific areas which venture capitalists have cited as a problem include the firm running an auction of funders, insisting on a greater say in the timing and nature of exit, and insisting on a veto over syndicate membership. No equivalent research was found which addressed these issues when the funder was an angel investor.

A considerable body of prior research (Vesper, 1980; Starr and Bygrave, 1992; Wright, Westhead and Sohl, 1998; Fuentes et al., 2010) suggests that entrepreneurs who have started and successfully exited a prior venture are more likely to succeed when they start their second or subsequent ventures. This suggests a process of learning-by-experience. Sapienza and Grimm (1997) therefore postulated a relationship between the total stock of prior experience of an entrepreneur and venture outcomes. However it has proven difficult to determine the effect of particular characteristics of entrepreneurs, and thereby to attribute overall successful venture outcomes to individual factors (Sandberg and Hofer 1987). It may be more useful to identify specific pieces of knowledge derived from prior experience and seek to identify the extent to which they may contribute to addressing particular items of the “liability of newness”, a principal one being acquisition of necessary financial resources (Stinchcombe 1965; Starr and Bygrave 1992).

Consistent with this literature, many entrepreneurs refer to the liability of inexperience:
When you hit venture capitalists you hit a wider variety of deals and options and arrangements and we wanted some experience around the table when we started working through those because we knew we didn’t have enough experience.

I think (when we started) we had maybe 60% or 70% of the competency we would show now and when it came to getting the third tranche of money ..., we were ready to do that deal properly.

This liability was known and acknowledged at the time of the fundraising activities: apparently it was not ignorance which only emerged with the benefit of hindsight. Secondly, a clear distinction emerged between the dealings with angel investors on the one hand and venture capitalists on the other: the issue of experience was specifically and consciously identified in relation to dealing with venture capitalists, but in those with angel investors. None of the entrepreneurial teams viewed either their lack of prior experience as a liability in seeking capital, or prior experience as an advantage, in the angel investor context. As opposed to seeing their lack of experience a constraint in dealing with angel investors, they viewed the skills of angels as an added advantage in subsequent dealings with VC investors; that is, involving one or more angel investors in early funding rounds provided necessary expertise for dealing with venture capitalists in later rounds:

One of the reasons why we looked for competent people in that very first (angel) round was that when you hit venture capitalists you hit a wider variety of deals and options and arrangements and we wanted some experience around the table when we started working through those because we knew we didn’t have enough experience.

There was a discussion about the need to bring skills in with the (angel) money, so they weren’t just going to bring funds in, it was going to be adding to the skills and experience of the board of the company.

This is consistent with the findings in Sections 5.2.3 and 5.2.11 above in which the entrepreneur and the angel investor become connected in a commercial co-operation through a process of emergent mutual respect and attraction built of a shared vision and shared goals, in which the negotiation of binding contractual commitments are subordinated to the joint creation of a venture in a context of interpersonal trust.
The less adversarial nature of the negotiation with angel investors, and the nature of the relationship, can lead to a paradoxical outcome as occurred with the team in Case 5. The team was highly experienced and from the finance sector, with skills and experience in fundraising at least equal to their venture capital counterparts. In that sense, Case 5 was unusual in that the entrepreneurial team came from the finance sector and could claim:

*We looked good, and we looked incredible as a management team with experience and so forth and we had a wide range of finance experience and background in the company so it (obtaining VC finance) was easy in that sense.*

*There were two groups of professionals negotiating with each other over something they all equally understood.*

*We were used to building financial models, so when one of the two VCs presented their standard terms with a ratchet formula they'd no doubt been using for years he wrote an algorithm which demonstrated their formula didn’t work: and still they wouldn’t change it! So we decided this was not a good start and didn’t go with them.*

The members of the team in Case 5 found themselves constrained by what they perceived as a “moral” obligation to the angel investors which led them to accept a transaction with the venture capital firm which was designed more to protect the position of the original investors, than to maximise the advantages of experience which they enjoyed relative to more typical team without extensive experience in the finance sector:

*Things had changed dramatically and we sort of felt protective of the previous investors and sort of protective of the valuation we had used. So that was a really important driver, that happened a couple of times actually, in later rounds as well, if you were facing the same dilemma, should I agree to a down round and I have to honestly say, and this sounds sort of self-serving, but our concern was not the dilution of our own interests by a down round, it was in effect dishonouring our implicit contract with our earlier investors.*
By contrast, there was a recognition that the highly standardised process of decision making, and the use of standardised template contractual forms coupled with a financial instrument specially designed for use in venture capital transactions place the entrepreneurial team without prior experience at a significant disadvantage, and necessitated a steep learning curve:

*I think I would know maybe 40% of the knowledge that I have now, I guess getting knocked back 60 times in a past life helped me to learn what they wanted, so the process of being turned away so many times, in the end it actually helped me to do a deal...painful though it was, I was a lot wiser about VC by the end.*

So entrepreneurial teams found that prior experience with venture capital fundraising appears to provide advantages of reduced time frames and a greater likelihood of successfully concluding a new fundraising. In addition, venture capital experience tends to contribute to better negotiating and contractual outcomes in what is essentially an adversarial process.

However prior experience of fundraising was useful but less significant in the context of angel investment as the process is less adversarial and less standardised. The formation of the relationship with angels is much more instinctive, and operates on a more personal and emotional level. To that extent experience in the process played a lesser role relative its role with venture capital. Instead of being based in a rationally calculative application of prior experience transformed into knowledge which knowledge is then applied to the task, to the extent it operated at all, experience contributed to the entrepreneur’s intuitive capacity to form relationships.

**5.2.17: Summary of Findings in Section 5.2**

Table 5.2 below summarises the findings in relation to each of the tentative propositions:
Table 5.2: SUMMARY OF FINDINGS

<table>
<thead>
<tr>
<th>No.</th>
<th>Proposition</th>
<th>Keyword(s)</th>
<th>STBF v VC Findings</th>
<th>STBF v Angels Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The small technology-based firm seeking to raise capital is faced with an incentive-based deal structure from both angel and venture capital investors.</td>
<td>Incentive-based deal structure</td>
<td>Strong tendency towards incentive-based deals</td>
<td>Low tendency towards incentive-based deals, tendency to shared outcomes</td>
</tr>
<tr>
<td>2</td>
<td>The small technology-based firm seeking to raise capital is faced with an insistence upon structural and procedural safeguards by both angel and venture capital investors.</td>
<td>Imposed structural and procedural safeguards</td>
<td>Strong insistence on extensive structural and procedural safeguards</td>
<td>Little insistence on structural and procedural safeguards, and those used are shorter and simplified</td>
</tr>
<tr>
<td>3</td>
<td>The tendency of an entrepreneurial team to act with “deceit with guile” rather than ethically results in the imposition of incentives, structural and procedural safeguards or governance mechanisms.</td>
<td>Opportunism of entrepreneurs</td>
<td>Incentives/governance mechanisms generally imposed, whether or not there is evidence of opportunistic behaviour</td>
<td>Relationship based in rapidly generated trust, shared ethics, beliefs and value systems, and so incentive/governance mechanisms not imposed</td>
</tr>
<tr>
<td>4</td>
<td>The small technology-based firm needs to be concerned at the search stage about opportunistic behaviour on the part of angel and venture capital investors respectively, in order to minimise exposure to “reverse-agency” risk.</td>
<td>Opportunism of Investors</td>
<td>Entrepreneurs are conscious of reverse-agency risk</td>
<td>Entrepreneurs form personal and positive relationship with investor which eliminates this need</td>
</tr>
<tr>
<td>5</td>
<td>The small technology-based firm may be able to identify, and make use of, non-financial motivations of angel investors (but not venture capital firms) in the design and execution of a fundraising strategy.</td>
<td>Investor non-financial motivations</td>
<td>Confirm absence of non-financial motivations of VC</td>
<td>Confirm presence of non-financial motivations as an important element in the formation of the trust and “mutual liking” leading to the making of the investment</td>
</tr>
<tr>
<td>6</td>
<td>The small technology-based firm does not take the lead in determining the basic deal structure or terms, but instead cedes that role to the investor.</td>
<td>Determination of basic deal structure</td>
<td>VC takes the lead, dictates basic deal structure</td>
<td>Basic deal structure either determined by the entrepreneur or mutually by the two parties</td>
</tr>
<tr>
<td>7</td>
<td>Small technology-based firms do use social contracting strategies in relation both to angel investors and venture capital firms.</td>
<td>Social contracting strategies</td>
<td>Some aspects of social contracting strategies are evident</td>
<td>Because the relationship is formed rapidly, at a normative/affective level, hence there is little role for social contracting strategies</td>
</tr>
<tr>
<td>8</td>
<td>Personal and direct sources of information are more likely to be relied on by members of the firm.</td>
<td>Information sources</td>
<td>Role for both impersonal (published materials) and personal sources (the views of</td>
<td>Heavy dependence on personal sources</td>
</tr>
<tr>
<td>9</td>
<td>It is the content of the entrepreneur’s and entrepreneurial team’s network of relationships which impacts the fundraising process, rather than the size and diversity of that network.</td>
<td>Network content</td>
<td>Size and diversity of network plays a limited role, however content of the network more important</td>
<td>Network content is critical, to the exclusion of size and diversity of that network</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>10</td>
<td>Self-efficacy and persuasive ability by members of the entrepreneurial team are important factors contributing to successful capital raisings from venture capital firms and angel investors, but social perceptiveness and emotional intelligence are not.</td>
<td>Cognitive mechanisms</td>
<td>Self-efficacy and persuasive ability are important factors</td>
<td>Personal and social engagement are highly important factors; self-efficacy and persuasive ability are not</td>
</tr>
<tr>
<td>11</td>
<td>The emergence of mutual trust (defined to comprise ability, integrity and benevolence) between the investor and the small technology-based firm impacts the process of capital raising.</td>
<td>Trust</td>
<td>Mutual trust is less important than presentation of technical and managerial abilities</td>
<td>Emergence of mutual trust is fundamental to the making of the investment</td>
</tr>
<tr>
<td></td>
<td>The reputational concerns impacts upon the process of raising capital in the case of VC firms and the individuals in the entrepreneurial team of the small technology-based firm; but not in the case of angel investors.</td>
<td>Reputation</td>
<td>Both VCs and entrepreneurs concerned about their own reputations</td>
<td>Angels are not concerned about their reputations but entrepreneurs are</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>12</td>
<td>The small technology-based firm has bargaining power both with venture capital and angel investors providing considerable scope to negotiate detailed deal terms; and this scope is greater in the case of angel investors than venture capital.</td>
<td>Sources of bargaining power and scope for bargaining</td>
<td>STBF has limited bargaining power, except where the sector is “hot” and the entrepreneurial team is “virtually irreplaceable” i.e. possesses unique skills; and limited bargaining other than on valuation</td>
<td>Considerable bargaining power, and scope for bargaining on most issues.</td>
</tr>
<tr>
<td>13</td>
<td>The STBF tends to underestimate the complexity of negotiations, under-searches for information and fails to access relevant expertise, resulting in a failure to take best advantage of such bargaining power as it may have.</td>
<td>Failure to use available bargaining power</td>
<td>Complexity of standard contracting models combined with under-search for information results in failure to take best advantage</td>
<td>Bargaining power more evenly distributed, and STBF can take advantage of bargaining power</td>
</tr>
<tr>
<td>14</td>
<td>The entrepreneurial team leader within a small technology-based firm is responsible for the firm’s process of raising capital.</td>
<td>Entrepreneurial team leader</td>
<td>Process is shared between leader and other team members</td>
<td>Process is particularly focussed on investor/lead entrepreneur relationship</td>
</tr>
<tr>
<td>16</td>
<td>Prior experience in fundraising impacts positively upon the process of raising capital.</td>
<td>Prior experience of fundraising</td>
<td>Prior experience (prior transactions with VCs) contributes to reduced time-scales, greater success, and better contractual outcomes in an essentially adversarial process</td>
<td>Prior experience has positive influence but as process is less adversarial and less “standardised”, experience is relatively less important</td>
</tr>
</tbody>
</table>
5.3: Chapter Integration

Chapter 5 continues the presentation of the data collected in the course of the research by responding to the tentative propositions identified in the review of literature in Chapter 2, and following the narrative description of the cases contained in Chapter 4. It seeks to give the reader a clear understanding of the patterns and themes that emerge from the semi-structured interviews and the documents that form an important part of the study of the cases. The following chapter will examine these patterns and themes, describe the findings and draw conclusions for the research question.
Chapter 6: Presentation of Findings

6.1: Introduction

The previous chapter set out to report the data which emerged from the research in the form of a response to the tentative propositions identified in the course of the literature review presented in Chapter 2. This chapter seeks to present the findings firstly in terms of their place within the streams of literature previously identified and secondly to synthesise the findings into conceptual models responding to the challenge of the research question. Figure 6.1 below sets out the flow of the remaining sections of this chapter.

In order to assist the reader to understand how these findings relate to the extant literature, the findings summarised in Table 5.2 can be incorporated into the presentation of Variables set out in Table 2.8 in a manner which associates them with the respective stages of the capital-raising process and the different literature streams identified in Chapter 2. One critical finding emerging from the research is that, from the perspective of the STBF, a quite different approach is appropriate in relation to raising capital from venture capital sources on the one hand to that which is appropriate in relation to angel investors on the other. In order to illustrate these differences, and at the same time to refine the variables in a manner which assists in locating them within the various streams of literature presented in Table 2.8, two presentations will be shown, one for each type of investor, with some common features, but founded in different dimensions of the variables. In essence, the presentation appropriate for funding from venture capital sources centres on variables within the rational domain, and consistent with Dunham (2003) that for angel investors focuses on those within the normative/affective domain. In each case, as a graphical representation of how the findings have contributed to the refinement of the variables as emerging from the literature, the previous corresponding forms are shown as shaded terms.

A further critical finding of this research is that the description of the second stage of the fundraising process as the Negotiation Stage, which was based upon the
relationship formation literature presented in section 2.7, does not appear the most appropriate descriptor, for two reasons. Firstly, in case of the interactions with venture capitalists this stage is substantially impacted by the ability of the STBF to persuade the investor to provide funding, but the scope for negotiation as such is limited. Secondly, in the case of angel investors, the stage is characterised by the rapid formation of trust and alignment of goals and values, which minimises the need for negotiation in the adversarial sense. Accordingly, as a finding of this research, the term Engagement is adopted to describe this second stage as more appropriately reflecting the range of activities undertaken by the STBF.
Figure: 6.1: Flow Chart for Presentation of Findings

Section 6.2: Narrative Discussion and Table locating Findings concerning STBF/VC Variables in relation to Literature Streams

Section 6.3: Narrative Discussion and Table locating Findings concerning STBF/Angels in relation to Literature Streams

Section 6.4.1 and 6.4.2: Introduction to Conceptual Models of the Process

Section 6.5: Presentation and Discussion of Conceptual Model concerning STBF/VC

Section 6.6: Presentation and Discussion of Conceptual Model concerning STBF/Angels
6.2: Narrative Discussion and Table locating Findings concerning STBF/VC Variables in relation to Literature Streams

The variables in relation to venture capital investors are presented as Figure 6.2 below.

While the process has been separated into sequential search, engagement and commitment stages it should be noted that this should not be taken to imply that the stages necessarily occur in an ordered and linear way. Progression from one stage to the next can be disrupted by events associated with meeting the concerns of the investor, the need to add additional (or dispense with existing) potential investors, “cold-feet” on the part of members of the entrepreneurial team and also external factors as simple as parties becoming sick or otherwise occupied due to particular business or personal commitments. Further, the process is characterised by considerable iteration, in which new information or the occurrence of an unexpected event can lead to a reconsideration of the earlier parts of the process.

With that caveat the presentation seeks to draw out the major themes which emerged in relation to the STBF’s obtaining funding from one or a syndicate of venture capital firms, and locate them in relation to the rational dimension literature stream.

Located within the rational dimension are strong findings in relation to the key elements of agency theory and also TCE. In both the search and engagement stages the STBF is faced with concerns by the venture capital investor about the possibility for misinformation or exaggeration on the part of members of the entrepreneurial team as the latter seek to persuade the investor. The response from the investor, based on an assumption of opportunism on the part of the STBF both as to the quality and completeness of the information provided, and as to the level of commitment of the team members, results in a highly standardised process of due diligence enquiry. It also results in the application of a template form of investment
instrument and contractual engagement comprising restrictions on the STBF in the form of both structural and procedural safeguards for the investor’s funds. The transaction proceeds through the engagement phase on a lengthy, stylised and highly complex contractual form with which the investor has great familiarity, a familiarity not shared by the members of the team unless they have specific experience accrued from prior similar transactions.

The scope for negotiation on the part of the STBF is narrow. The theoretical advantages that could be achieved with more intensive preparation for the engagement phase and a better researched and more nuanced understanding of the non-distributive terms which might benefit the STBF without materially disadvantaging the venture capital firm’s position, are not generally pursued by entrepreneurs. Instead they generally fail to make the most of their negotiating strength- in particular that which arises in the case of unique or difficult to replace skills. They thereby fail to achieve the best outcomes in terms of the final commitment stage.

Issues falling within the normative/affective domain were less in evidence in the dealings of the STBF with venture capital firms. The role of venture capital firms as custodians of the funds of others resulted in a focus on the financial and market-related aspects of the venture, and hence the “pitch” of the entrepreneurial team, needs to be couched in those terms. While there is room for individual members of the team to apply personal skills such as their persuasive ability, and to enhance their chance of success through self-efficacy, in essence it is to the rational and calculative nature of the venture capital audience that the entrepreneurs should address themselves. Development of a personal relationship, of trust and shared values and ethics, have little or no role beyond satisfying the test of basic honesty. Entrepreneurs for their part exhibited a strong tendency to rely on personal and direct sources of information in assessing venture capital counterparts, and in approaching the task of deal-making, rather than indirect or other publicly available sources. Team leaders played a role, but the venture capital firm’s decision to invest is assisted by the existence of a team already in place rather than an individual at each stage of the process of search engagement and commitment.
6.3: Presentation of Variables- Angel Investors

The variables in Figure 6.3 below refer to the angel investor and STBF dyad.

In contrast to the variables applicable for venture capital in Figure 6.2, Figure 6.3 is striking for its emphasis on the issues arising in the normative/affective dimension and for the relative absence of those arising in the rational dimension. In particular, each stage of the process is driven by the development of relationships at a personal level. The relationship between the entrepreneurs and the angel investor is one characterised by the development of rapid and mutual trust. It is a relationship grounded in shared ethics and beliefs, and common value systems. The trust that develops enables a transaction to proceed in a less adversarial environment, and hence the contractual forms tend to be shorter and more simplified, and consummated within shorter time-frames. The content of the relationship between members of the entrepreneurial team and investor drives the terms of the deal. Concern for their own reputation which is so important to venture capital investors is notably absent in the case of angel investors, although entrepreneurs do seek to maintain a good reputation, a concern which in turn contributes to the formation of trust.

As a consequence, there is less room for emergence of concerns about opportunism, misinformation and shirking behaviour which underlie the assumptions of TCE and agency theory. The investors are motivated by a desire to make a good investment in the sense of financial returns, but these needs are counterbalanced by the desire to achieve a range of other, non-financial goals including having fun; making a contribution to a particular community or to society or the economy in general and the pursuit of a challenge.
FIGURE 6.3 - MAP OF VARIABLES STBF-ANGELS

PRIOR EXPERIENCE

LIMITED: STRUCTURAL SAFEGUARDS PROCEDURAL SAFEGUARD
NON-FINANCIAL SITUATIONS GOVERNANCE MECHANISM

SOCIAL CONTRACT-ING STRATEGY

SOCIAL CONTRACTING STRATEGY

SEARCH

ENGAGEMENT

COMMITMENT

TRAIT: Self-efficacy

PERSONAL/DIRECT INFORMATION SOURCES

ENTREPRENEURS PERSONAL ASSESSMENT

LEADERSHIP ROLE

CONTENT OF RELATIONSHIPS

TRUST - 2 WAY

REPUTATION

JOINT ETHICS

TEAM LEADERSHIP ROLE

TRAIT: Self-efficacy

PERSONAL/DIRECT INFORMATION SOURCES

ENTREPRENEURS PERSONAL ASSESSMENT

LEADERSHIP ROLE

CONTENT OF RELATIONSHIPS

TRUST - 2 WAY

REPUTATION

JOINT ETHICS
As with their dealings with venture capital investors, entrepreneurs dealing with angel investors again tend to rely more on personal and direct sources of information, and on their own judgement rather than the views of others or indirect information sources. In this case, however, the consequence in terms of deal formation does not result in less advantageous outcomes. The relationship formation is closer to the logic of effectuation (Sarasvathy, 2001): uncertain outcomes, to which the mutual contribution of each side will assist the pursuit of the shared goal- than that of an investor needing protection against the guile of an entrepreneur exploiting the benefit of asymmetrical information. It is the personal and social engagement skills of the entrepreneurs which contribute to their ability to enlist the commitment from the angel investor to embark on a shared journey.

There is some scope for the concepts of social exchange theory in the search and engagement stages. However in its strict version of rational agents determining that their short-run benefits from opportunistic behaviour are exceeded by the longer-run benefits of co-operation with potential investors, the theory seems discordant with the rapid development of interpersonal trust between angel investor and entrepreneur. In its examination of the role of networks, and in particular, on the content as distinct from the structural aspects of networks, socio-economics has some explanatory power.

However it is in relation to agency theory and TCE that the personal nature of the relationship formation inherent in STBF and angel investor does not resonate with the assumption of opportunism. Neither the behaviour of entrepreneurs, nor the response of investors, exhibits the “deceit with guile” posited by the assumption. Accordingly, there is limited role for the imposition by investors of structural or procedural safeguards other than of the most rudimentary kind.

6.4: Fundraising from the STBF Perspective-A Three Stage Process

The goal of this section is to distil from the research findings, and to present, a model of the process which will have utility for an STBF in undertaking the task of fundraising from angel and venture capital sources. In this section, that process is described and also placed in the context of the process as described by those who have
studied it from the perspective of the investors. Section 6.4.1 introduces the conceptual model of the process, and then the two conceptual models are presented and discussed, section 6.4.2 comprising the STBF and venture capital model, and section 6.4.3 comprising the STBF and angel investor model.

From the perspective of the STBF, the process commences with the Search Stage. From Chapter 2 this phase most closely corresponds with “supply-side” stages referred to variously as the Origination Stage (Tyebjee and Bruno 1984) or Screening Stage (Fried and Hisrich 1994) in the case of venture capital investors activities; and Familiarisation Stage (Mason 2006) or Screening Stage (Paul, Wittham and Wyper 2007) in the case of angel investors. In this phase, the STBF seeks to identify potential investors and to obtain the information that will be used to inform its participation in the remainder of the process.

In identifying potential investors, the STBF needs to ensure that it commences with the broadest range of ready, willing and able investors (those having capability to make the investment) through both publicly available sources and through personal networks but also make at least a preliminary assessment of the appropriateness of each investor (those who would be appropriate investors). The latter involves enquiry as to the reputation of the investor, both at large and based on previous specific experience of the particular investor from participants in prior deals, and also the existence of any knowledge, skills or contacts that the investor may possess which potentially could be made available for the benefit of the venture. This is sought through information generally available and also through the networks of the members of the entrepreneurial team. The members of the STBF team tend to under-search for information, and to rely on personal sources of information rather than publicly available information particularly in the case of venture capital investors. In addition, information is sourced from a limited range of informants such as other venture capitalists and other entrepreneurs, and only to limited extent from relevant intermediaries such as lawyers and accountants with whom the team had contact.

The Engagement Stage commences for the STBF when interest is shown by one or more investors or investor groups, and ends when the parties have agreed a hand-shake
or other non-binding basis that they will proceed to prepare the documentation for the investment. It includes the activities by which the STBF engages with the investors, sets the outline for the basic terms of the deal and resolves to move forward to final and binding documentation and monetary disbursement. The corresponding stage viewed from the demand side is variously subdivided into the Screening-Evaluation-Structuring Stage (Tyebjee and Bruno, 1984) and Specific and Generic Screening-First and Second Phase Evaluation Stage (Fried and Hisrich, 1994) for venture capital investors; and the Screening and Bargaining Stages for angels (Paul, Withham and Wyper, 2007). These stages were presented and discussed in Section 2.7 and Figures 2.4 and 2.5.

The Engagement Stage is the critical part of the process from the perspective of the STBF. It is during this Stage that the divergence emerges between the engagement process in dealing with venture capital firms, as against that when dealing with angel investors. A number of important characteristics underlie this divergence:

- Venture capital firms adopt a standardised or template approach to dealing with proposals, and the STBF must fit within this procedure. The consequences of this approach results in a relatively extended period of time taken to complete transactions, the need for the STBF to meet the requirements of the venture capital firm in terms of process (such as business plan formats, presentations to investment committees, commercial due diligence and the like) and the setting by the venture capital firm of the basic deal structure being the structure it uses in all investments, closely resembling the market practice adopted by its competitors.

- Dealings with angel investors were unstructured, occur over a compressed time frame, are highly personal and allow the members of the entrepreneurial team, particularly the lead entrepreneur, rapidly to form a relationship of trust with the investor based in shared ethics, beliefs and value systems.

- The key cognitive skills for members of the entrepreneurial team to bring to bear when dealing with venture capital firms are self-efficacy and persuasive ability. They need to project high levels of self-belief, and convince
professionally sceptical investors that they are capable of succeeding in the
market place, and of achieving a financial exit for the investor, within a time-
frame determined by the remaining life of the venture capital fund.

- Interpersonal engagement is the key element in formation of the angel
investor/STBF relationship, more closely resembling a formation of a
partnership in which the combined skill-sets of the partners contribute to the
business. A more holistic understanding of the non-financial motivations and
aspirations of the angel as an individual, play the key role in engaging the
participation of the angel in the venture.

The process described in the research ends with the Commitment Stage. It
commences following the reaching of agreement in principle, typically the “hand-
shake” deal in the case of angel investors, and a terms sheet in the case of venture
capital investment. It ends when the money flows into the STBF from the investor. It
includes final agreement on whatever is the documentation that the parties have
agreed upon as evidencing the terms of the investment. From the demand side it
equates in the case of venture capital investment to the final element of the
Structuring Stage (Tyebjee and Bruno, 1984), or the Closing Stage (Fried and
Hisrich, 1994); and in the case of angel investment, the Agreement element of the
Bargaining Stage (Paul, Wittham and Wyper, 2007; Smith et al., 2010).

The divergence which emerged in the preceding Engagement Stage between the
activities appropriate for the STBF in engaging with the respective categories of
investor continues and indeed increases. The venture capital investment process
continues with detailed due diligence and with the delivery of lengthy standard form
agreements designed to embody the contract format sought by the venture capital
investor adjusted for any specific items sought by the STBF during the Engagement
stage and accommodated by the former. However, the venture capital firm retains the
choice and the willingness at all times even during this stage to terminate the
transaction if there is something which is discovered on due diligence, or which
emerges as an issue in final documentation upon which it is unwilling to compromise.
By contrast, the Commitment stage for angel investors moved quickly and with relatively little conflict. Considerable scope existed for the STBF to bargain on terms of the investment, and the bargaining power of the investors was relatively evenly distributed between the parties. The rapid trust which was found to have emerged during the earlier stages permitted the contracting parties to move expeditiously to final agreement on terms that were more straightforward and less adversarial than in the case of venture capital agreements.

6.4.1: Conceptual Modelling of the Stages.

As an outcome of this research, the process of fundraising by STBFs separate three stage models are shown in Figure 6.4 for the interactions with venture capital firms; and Figure 6.5 for the interactions with angel investors.

Bygrave (1989) makes the point that modelling in the context of behaviours of entrepreneurs is somewhat problematic and risks failing to capture the richness and variety which results from the heterogeneity of both entrepreneurs and investors. Notwithstanding this, he argues in favour of well-constructed models in the entrepreneurship context as assisting the explanation of real-world situations. While it is not suggested that every circumstance is covered by the models proposed, the data which emerge in the research are considered not only to add to the literature in the field but also to contribute to the understanding of the process on the part of those who operate in the respective markets.

A key finding of the research is that there is a distinction which can be drawn between the interactions of the STBF and the two categories in terms of the relative degree of iteration inherent in the process. When interacting with VCs the process commonly takes a “backward” step, as new information emerges during the ongoing enquiry of the VC in the course of the due diligence exercise. Even up to the time of final agreement, the VC would typically be making further enquiry. New information gives rise to new line of enquiry, and results in new matters to be covered in the agreements. Consistently with the personal nature of the engagement by the angel investor, the angel process exhibited a significantly lower degree of backtracking. Outcomes of this less iterative approach include a more compressed time frame for the overall
investment relative to venture capital timeframes (see Figure 4.8) and shorter and more simplified documentation.

The models also seek to identify how and at which points the process can be impacted from the STBF’s point of view by the differing investment objectives of the angel investors as against the VCs. For example, the linked principal goals of the VC (financial return and reputational enhancement) impact the process at every stage through until final agreements, and at each stage the STBF needs to be conscious of, and to the extent needed, prepared to react to, the VCs pursuit of those objectives. The angel investor model acknowledges a broader range of objectives on the part of the angels, which affect more strongly the two earlier stages of the process, namely the Search and Engagement Stages. Upon achieving a multiple level engagement between the parties, the angel investor objectives contribute positively to, and accelerate, the passage through the rest of the process.

Similarly, the models acknowledge the impacts of the differing content of investment documentation. In summary VC documentation is template in nature, determined by industry practice and hallowed by experience, and due diligence is conducted in accordance with standard checklists and box-ticking. In contrast, the documentation brought into existence in angel investment transactions is non-template. It exhibits a higher degree of variability, contributed to by the input of both the investor and the STBF into the structure of the investment form, and is generally more concise and containing less wording whose purpose is to protect the investor by constraining the freedom of action of the STBF.

6.4.2: STBF and Venture Capital Investors Conceptual Model

Figure 6.4 shows a three stage model of the process by which STBFs seek and obtain capital from VC sources drawing attention to the factors which both enable, and constrain, that process, as those factors have emerged in the course of this research.

Search Stage

The two main activities comprised in this initial stage are the ascertainment by the STBF of a population of potential candidates to invest in the business followed by
initial meeting and interaction. It commences with a data and information gathering exercise in the course of which the STBF makes choices amongst the multiplicity of potential sources of information.

The model identifies the use of publicly available information sources such as websites and industry associations (AVCAL), and the wide network of the members of the STBF team. This wide network comprises not only persons known to those members but also their business and professional contacts. This includes the bankers, accountants, lawyers and patent attorneys of the STBF and also a broader network of other STBFs, other VCs and government agencies.

The second activity comprises a preliminary contact for the purpose of determining whether there exists a level of interest sufficient to justify proceeding to the next, or Engagement, stage.

This may vary from a single telephone call, through the submission of a business plan in summary or in entirety, to a first face-to-face meeting. The STBF is seeking to establish simply that the nature of the business is one which may be of interest to the VC and that the size and timing of the investment may make it sensible to expend the effort to continue. From the VC side, this is a first level filter, in which the VC must decide whether to apply any further time energy or resources to the opportunity.
Figure 6.4 CONCEPTUAL MODEL: STBF AND VENTURE CAPITALIST

VC DOCUMENTATION TEMPLATE
- Terms Sheet
- Due Diligence
- Shareholders/Subscriptions Agreements

VC INVESTMENT OBJECTIVES
- Financial Return
- VC Reputation

SEARCH STAGE
- Public Information
- Wide Network of STBF Leader(s)

ENGAGEMENT STAGE
- Persuasion
- Structuring

COMMITMENT STAGE
- Draft Agreement
- Final Agreement
- Cash
**Engagement Stage**

From this point onwards, the STBF’s activities are directed towards engaging the interest of the investor to provide the capital sought, to the point of an “in principle” commitment, usually in the form of a written Terms Sheet.

The Engagement Stage in the case of VC comprises two activities and while they are consecutive in nature, the possibility of iteration is considerable. Firstly, the STBF has to persuade the VC that the opportunity meets their investment objectives. The principal objective of the VC is achievement of a target rate of financial return. In order to do this the STBF will need to provide information, usually in the form of a succinct business plan, not exceeding 30 pages (Gladstone & Gladstone, 2002) addressing the question: given all the uncertainties of a new business based on technology, why is this investment a compelling opportunity for the VC? While meeting the members of the STBF team is a necessary part of the VC process, research suggests that the ability to prepare a persuasive business plan, addressing the issues which form part of the VC assessment template, is of itself an indicator of the competence and skills required to execute successfully an entrepreneurial venture (Timmons and Bygrave, 1992). While a description of the management team and their qualifications and track records needs to be present, the compelling case is more likely to involve a persuasive presentation on matters such as uniqueness of the product or service, customer needs, competitive landscape, market size and potential for exit via trade sale or IPO. Given the VC needs to invest and then exit for cash within a limited timeframe, all of these impact directly on the estimate of the rate of return to be achieved by the VC on behalf of the fund investors. Consistently with Baron and Koen (2002), the data indicate that this task of persuasion is enhanced where members of the STBF team demonstrate both persuasive ability and self-efficacy.

The second activity in the Engagement Stage is the structuring of the investment. By use of one-way arrows, the model seeks to illustrate that the structure of the investment, from the perspective of the STBF is largely determined by the VC as a
consequence of the VC’s investment objectives, and the standard processes and documentation templates applied by them. The relatively constrained flexibility of the VC results in a diminished range of negotiation within which the STBF can enhance its deal structure outcomes.

**Commitment Stage**

The Commitment Stage has two components. The first component is the preparation of draft agreements, and the second is the execution of final agreements.

The use of a one-way arrow linking the VC investment objectives to the draft agreements illustrates the practice of VC who (through their lawyers) take charge of the preparation of the draft agreements and presentation of those drafts to the STBF. These drafts are designed to reflect the contractual manifestation of the basic structure designed to protect the financial return of the VC, which return is a component of the reputation in the market the VC seeks to enhance. Similarly the one-way arrow from the investment template components illustrates a similar point: both the terms of the agreements (Shareholders and Subscription) are standardised in content and determined by the VC, as is the due diligence exercise. The STBF responds to the terms dictated by the investor.

VCs continue to conduct due diligence enquiries throughout the Engagement and Commitment Stages, and continue to monitor closely the day-to-day performance of the business. They are quite prepared to revert to previous steps including the need to be “re-persuaded” that the investment is a compelling one, that the investment structure requires change or that revisions to the agreements are needed. They maintain that stance until final execution. While this finding differs from Fried and Hisrich (1994, p35), who found that “at some point the VC develops an ‘emotional’ attachment to a proposal”, it is consistent with a number of other studies (Bygrave and Timmons 1992; Gompers and Lerner 1996, Van Osnabrugge 1999) which emphasise the rational and structured procedures within VC firms and their investment committees.
6.4.3: STBF and Angel Investors Conceptual Model

Figure 6.5 presents a three stage model of the process by which STBFs seek and obtain capital from angel investor sources. It draws attention to the factors which both enable and constrain that process.

*Search Stage*

Once again the two main activities comprised in this initial stage are the ascertainment by the STBF of a population of potential candidates to invest in the business, followed by initial meeting and interaction. It commences with a data and information gathering exercise in the course of which the STBF makes choices amongst the multiplicity of potential sources of information.

The STBF needs to find a solution to the lack of publicly available information of the identity and investment preferences of such investors. The search is undertaken by the lead entrepreneur or other key members within the STBF management team. Given that the objective of the search is for an investor who will engage at an intensely personal level with the members of the team, rapidly form bonds which transcend the purely commercial and financial and for whom satisfaction of a range of non-economic rewards will be a key element in obtaining the engagement of the investor, the search is narrowed to the range of the close and personal networks of the team members and existing professional associates (accountants and lawyers).

The second activity comprises a preliminary contact for the purpose of determining whether there exists a level of interest sufficient to justify proceeding to the next, or Engagement, Stage. The first meeting becomes a critical step leading towards the development of rapid trust. The STBF is presenting the leader and other team members with a view to laying the foundation for the development of personal “chemistry” with the investor, hence the personal and social skills of the members are critical to this meeting.
Figure 6.5 CONCEPTUAL MODEL: STBF AND ANGEL INVESTORS

**SEARCH STAGE**
- Networks of STBF Team Leader(s)
  - Personal
  - Professional Associates

**ENGAGEMENT STAGE**
- Multiple level Engagement
- Rapid Trust + "Liking"

**COMMITMENT STAGE**
- Draft Agreements
- Final Agreements
- Cash

**ANGEL INVESTOR(S) OBJECTIVES**
- Philanthropy
- Financial
- Employment Contribution
- "Fun"

**DOCUMENTATION**
- Mutual
- Short
- Non-template
**Engagement Stage**

The STBF’s activities are again directed towards engaging the interest of the investor to provide the capital sought, to the point of an “in principle” commitment. This can be in the form of a written Terms Sheet but typically is just a hand-shake.

The approach of the STBF is to engage with the investor at a number of different levels. This includes the personal level comprising meetings both in a business and also non-business context, social interaction including the respective families, and a communication of views across a range of subjects both related and unrelated to the business. The essence of the task is for the STBF is to get the investor to form a relationship of trust with the STBF members as soon as possible and to get the investor to like them, in a manner which results in the engagement of the investor with the business at a personal level. Demonstrating the existence of shared goals and values, convincing the investor of the integrity and ability of the members of the team are the characteristics of the generation of engagement by the angel investor which lead to the development of rapid trust. The model seeks to illustrate the importance of understanding the objectives of the particular investor, and together with the steps that are needed to satisfy those objectives and how they contribute to the formation of the relationship.

**Commitment Stage**

The Commitment Stage has two components. The first component is the preparation of draft agreements, and the second is the execution of final agreements. The distinctions between them are illustrated in the models in two ways: through the differing influences of the respective investment objectives and consequent different approaches to the negotiation of formal documentation; and the likelihood of backward steps, or iteration, in this the final stage of the investment process.

The use of two-way arrows in the angel investor model seeks to illustrate an interactive or cooperative approach to documentation, in which the drafts may be prepared by either side, also that the more varied nature of the investment objectives of an angel
investor can both drive a different form of documentation if prepared by the investor, or accommodate a wider variety of contractual provisions if prepared by the STBF.

The angel investor model allows for iteration, or backward steps re-covering earlier stages in the process, during the Search and Engagement Stages, but not during the Commitment Stage. In the cases studied, once in principle agreement had been reached, the angel investors had in their minds “done the deal”. The preparation of draft agreements and reaching consensus upon the terms of final agreements occurred in a linear manner and in the absence of continuous due diligence enquiry by the angel investor.

6.5: Chapter Integration

The objective of Chapter 6 is to analyse the data collected in the course of the research and presented in Chapters 4 and 5. Consistent with the modified analytical induction methodology the data responding to the tentative propositions described in Chapter 2 and presented in Chapter 5 were examined for themes and patterns which would address the research question. The research being exploratory in nature, these findings were then summarised as responses to the issues raised by the propositions. These findings were set out in tabular form in Table 5.2.

It emerges from the data that the process of raising capital from angel investors on the one hand, and venture capital firms on the other, is sufficiently different from the perspective of the STBF that the two should be addressed separately. This follows from identification of the engagement between the members of the entrepreneurial team and angel investors as highly personalised and value-laden, in contrast to the engagement with venture capital investors which is rational, standardised even template-driven. Accordingly, the narrative descriptions of the relevant variables for the fundraising process are presented separately and are located within the differing streams of literature which more appropriately accommodate those findings, in Sections 6.2 and 6.3.

An important outcome of the research is the presentation of two conceptual models of the process one for each category of investor, responding to the call a number of
authors (for example, Wright and Robbie, 1998; Paul, Witham and Wyper, 2007) for the process to be the subject of examination from the perspective of the STBF to address a gap resulting from the focus on the role of investor. Those models adopt a three stage description of the process. Attention is drawn to a distinction from the general relationship formation literature (which favours a description of the stage preceding Commitment as one of Negotiation) to the effect that such stage is more appropriately described as Engagement reflecting the relative lack of negotiation either with venture capital investors due to template “take-it-or-leave-it” deal structure and documentation, or with angel investors due to the rapid formation of trust between the parties and consequent lack of negotiation in the adversarial sense.

The following and final chapter revisits the main findings from this thesis and how they were developed and seeks to demonstrate their contribution to literature, to managerial practice and to public policy. Lastly the limitations of this research are explained and the implications for further research are discussed.
Chapter Seven: Conclusions and Implications

7.1: Introduction and Review

The purpose of this thesis is to increase our understanding of the process of search for equity capital by small technology-based firms from venture capital and angel investors. The goal of this chapter is to revisit the main findings from this thesis and demonstrate their contribution to the literature, to government policy and to practice. Directions for further research are discussed, and an explanation of the limitations of the research conclude the chapter.

The introductory chapter of this thesis set the scene for an exploration into STBFs in Australia. Specifically, this chapter identified the research question and sub-questions and justified the research agenda. Further, it highlighted the need to examine the role of both venture capital firms and angel investors as sources of capital external to the firm and its founders, and identified the “funding overlap” zone in which both sources may have a role, a zone which is often-cited as a “funding-gap” based on the relative paucity of funds thought to be available. Chapter 1 also introduced the reader to the context of the research, the place of small technology-based firms in the landscape of Australian business. The importance of this sector to the Australian economy was established, and finally the implications for this research were briefly discussed.

Next the literature relevant to the research topic was reviewed in Chapter 2. Two parent streams were examined, rooted respectively in different assumptions about human nature and human behaviour, namely the rational and the affective/normative streams. The former and predominant stream has its expression in agency theory, TCE and socio-economics. These theories seek to shed light on the resolution of the inherent conflicts which arise when cooperating parties with conflicting goals enter into engagement together, and how that engagement can be structured and operated in a manner that overcomes the inherent obstacles. The latter stream, more recent and less developed, seeks to present a more “socialised” version of the resource mobilisation
challenge of entrepreneurship, in which shared vision and the emergence of trust, can play a role. From this analysis of past research, gaps in the literature emerged. These gaps included limited scholarly research conducted concerning the process of search for capital by STBFs from the perspective of the firm and its entrepreneurial team, how these firms find, engage with and select their sources of capital and successfully obtain capital and the material terms applying to that supply; or put another way, the angel and venture capital markets from the demand-side rather than the supply-side.

Such empirical research in the field as exists implies a common process consisting of stages from location of counter-party, screening, due diligence, negotiation and investment, which were essentially the same whether the investor was a venture capital firm or a business angel. While conceding a limited place for certain non-financial characteristics in the decision criteria of angel investors, the process described in the majority of the existing academic research as well as practitioner guides emphasise product, market and economic return concentrations as the predominant factors for both investor categories. To that extent the accepted view closely aligns the nature of the process, and the strategy to be adopted, from the STBFs viewpoint whichever category of investor was involved and so equates the essential drivers of the “mating dance” that is embodied in the engagement between investor and investee. The picture that emerges from the literature is thus one of an STBF using a network of contacts to assemble a list of potential investors, preparing a business plan in a standardised form for submission to and consideration by them, and then seeking to find the investor whose pre-set investment criteria match the opportunity as described in the plan. Distinguishing the rational dimension from the affective/normative dimension enabled a set of tentative propositions to be presented and examined through the data collected, in a manner which could lead to the identification of the variables impacting on the stages of the capital raising process and enable an examination of the distinctions between the two categories of investor. In summary, consistently with a modified analytical inductive approach, the literature review sought to draw out, explain and justify tentative propositions for examination of the research question and presented as a tentative map of variables.
Chapter 3 of this thesis examined the methodologies adopted for this research. After a justification of the research paradigm used, the analytical induction approach for the research enquiry that underlies this thesis was explained and scrutinised. This research used a case study methodology. Six case studies, including in-depth interviews with 18 respondents, were undertaken using a convergent interviewing technique. Respondents came from both sides of the relationship: the providers of capital and the firms seeking that capital, in a ratio of one investor for two members of the entrepreneurial team. A range of company and personal records were examined including terms sheets, shareholders and subscription agreements and constitutions, as well as minutes of meetings and correspondence.

In Chapter 4 a narrative review of the six case studies was presented, and other data generated from this research were set out. Emerging forcefully from these data is a contract formation period significantly more compressed, and contract content significantly simpler and more flexible, in the case of angel investors than venture capital investors.

Chapters 5 and 6 presented and analysed the data from the case studies as those data shed light on the propositions. The STBF choosing between venture capital and angel investor sources is faced with certain similarities and certain differences. Both investor types consider the business opportunity including its sector, market for the product or service and the expected financial returns. Angel investors tend to be entrepreneur-investors coming out of previous entrepreneurial ventures and as such look for ventures at the start-up or early stage, perform limited due diligence, use either simple or no contracts and negotiate with an open and flexible approach. In contrast, venture capitalists tend to have investment and financial sector experience, prefer businesses which have already emerged from the start-up phase, do extensive due diligence and demand comprehensive standardised contracts leaving relatively little room for negotiation. The predominant motivation of venture capitalists is financial return, with a focus on risk-management and successful and prompt exit that will enable them to enhance their reputations and thereby raise subsequent and larger funds from their underlying investors. The primary motivations of the angels are a mix of personal
challenge, contribution to the community, leaving a legacy and forming a personal relationship with an entrepreneurial team of like-minded people, while recognising and accepting the risks inherent in early-stage businesses which are associated with the returns sought.

This final chapter of the thesis addresses the conclusions and implications for the research question. Following this introduction to the chapter, the key findings in relation to the research question will be presented, including the implications for theory. Then follows an outline of the implications for management practice and for public policy. Finally, the limitations of this research will be discussed and directions for further research will be identified.

7.2: Key Findings and Extensions to Existing Literature

7.2.1 Finding 1: Empirical Models of Fundraising Process from STBF Perspective

A principal outcome of this research comprises the empirical models of the process of fundraising from venture capital and angel investors which are set out respectively as Figures 6.4 and 6.5. These models seek to respond to the call by various researchers (e.g. Wright & Robbie 1996-venture capital; Paul, Witham & Wyper 2007-angel investors) for empirical examination of the process from the demand side, i.e. from the perspective of the STBF.

There are several important contributions which arise from those models. Firstly, they identify the need to model the process separately for each category of investor, a point which is elaborated in Finding 2 below. Secondly, there emerges from the research a range of variables, as well as impacts on the capital raising process, which imply that quite distinct approaches should be adopted by the STBF when dealing with angel investors compared to those suggested in the guidebooks and in the extant literature.
which equates the fundraising process from both sources. Thirdly, emerging from the models are implications for the relative explanatory power of the streams of literature in the affective/normative domain and the rational domain respectively, a point which is further elaborated in Finding 3 below.

Importantly, the variables identified in the models provide a tool for the development of empirical guidance for STBFs setting out on the task of raising equity from venture capital or angel investors. While it is beyond the scope of this thesis to provide a complete handbook or guide to STBFs, suggested strategies emerging from the process and variables are addressed in the Implications for Management Practice at section 6.3 below.

**7.2.2: Finding 2: Inappropriateness of a Common Process Approach**

The findings presented in this research have suggested that applying the same or similar theoretical approaches to the process of capital raising by STBFs when seeking resources from venture capital firms and angel investors is not appropriate. In particular, a distinctly different model of capital search from that which appears most commonly in the literature may be appropriate in the case of angel investors, in contrast to the case of venture capital.

The traditional economists’ view of capital-raising emphasises a process of resource “acquisition”. Whether the particular study takes the perspective of the entrepreneur or small firm on the one hand or the prospective stakeholder (angel investor or venture capitalist) on the other, the process is presented as one in which individuals engage in a search for and selection of opportunities in the pursuit of pre-determined goals. For the firm or the entrepreneur, this means finding a specific and identifiable set of resources, financial and other, seen to be required to pursue the particular market opportunity. For the investor this process entails finding an investment opportunity that offers attractive returns based on that investor’s existing set of criteria. When the firm’s needs match the investor’s, an investment transaction occurs. They then engage in a “contractual mating dance” during which each side deliberately seeks to shift as much risk as possible to the other party.
By contrast, the model which emerged from this research in respect of angel investors suggests a very different interpretation of participants’ decision processes. In this model, STBFs and angel investors do not indulge in a competitive, search and selection process driven by the need to maximise their wealth. Rather, they become connected through a process of mutual attraction built on a sense of shared values. The decision to cooperate is driven less by the desire to meet certain pre-set financial goals than by a desire to participate in a project which is important and meaningful to the participants at various levels. Contractual issues are subordinated to interpersonal trust in governing the interactions of the parties. Concerns over risk are recognised by each party; but rather than seek to quantify it and shift it onto the other party, they subordinate its importance in their decision process.

This model highlights the non-rational factors which influence participants’ decisions. It presents a more collaborative view of entrepreneurial opportunities in which the individuals themselves, on both sides of the dyad, become the critical elements in the process of pursuing the entrepreneurial opportunity. The pursuit of the venture depends upon the relationship created between entrepreneurs and angel investor stakeholders. This implies a new and alternative view in the case of investment by angel investors about which resources are the most important to an emerging venture. On this view, one critical resource for the STBF may be the relationship which emerges between entrepreneurial team members and the angel investor. In contrast to the existing literature on resources and established organisations, but echoing the findings of Dunham (2003), a critical resource for the firm may be not so much its physical assets, nor even the intangible and knowledge assets. One of the key resources may lie in the mutual bonds comprised of the shared beliefs and mutual commitments of the angel investor and the STBF team members, as it is these bonds that enable the emerging firm to gain initial access to financial resources which can power the transformation of the remaining resources into a valuable enterprise.
### 7.2.3: Finding 3: Explanatory Power of Rational vs Normative/Affective Dimensions in the Literature

As noted in Section 2.3.2, the existing literature suggests that entrepreneurs rely upon various cognitive biases and heuristics, particularly representativeness (deriving broad generalisations from only a few data points) and overconfidence (e.g. Busenitz, 1999). In other words, they fail to fully recognise the risks inherent in their actions. However, the data from this research suggest that both angel investors and members of the entrepreneurial team are in fact aware of the high-risk nature of an STBF. However, normative and affective considerations help them subordinate the issue of risk. Within the context of STBFs, normative/affective considerations (such as a strong belief in the goodness of the venture’s purpose and a passion for the problem being solved) make considerations of risk appear less important to the entrepreneurial team’s decision to pursue the venture, a finding consistent with those of Dunham (2003).

The venture capital investors, by contrast, were found to remain firmly rooted in the rational and calculative zone. The research noted the complementarities of the close alignment between the TCE and agency theory perspectives in trying to understand the rational choices parties to the economic exchange make with respect to structuring their relationship with one another. The central concern of both perspectives is to develop a structure that promotes the economic interests of all parties to the transaction, curbs the potential for opportunistic behaviour to occur, but at the same time allows the necessary degree of flexibility for all parties to adapt to changed and unforeseen circumstances. They remain the most pervasive theoretical perspectives in their application to venture capital investment, and such an approach found support in this research. However a number of reasons were advanced that pointed to limitations on their utility within the domain of venture capital and even more so in the case of angel investment. This arises from the underlying assumptions upon which both perspectives are based, namely the pursuit of self-interest to the detriment of the other party, thus leaving little room for trust to prevail between the participants and that individuals are motivated overwhelmingly by economic considerations, namely the
maximisation of their own wealth. As both agency and TCE arose out of the context of larger established publicly-listed companies that are characterised by widely dispersed shareholdings and generally liquid markets for equity shares, they appear to be better suited to addressing issues related to that context.

With its emphasis on the design of the incentive system to solve potential problems with respect to how the relationship between investor and entrepreneur is structured, the agency theory perspective holds an intuitive appeal for dealing with governance challenges arising in connection with investment by venture capitalists in small technology-based ventures.

It appears that such investors place a great deal of importance on, and often include, specific contractual safeguards that protect them from actions that could impact their relative equity stake in the venture over time. As evidenced in Table 4.7, among the most important and often included contractual safeguards are those that can have a direct bearing on, and impact the level of, the investor’s equity stake in the venture: i) restrictions on raising additional finance; ii) veto rights over acquisitions or divestitures; and iii) restrictions on issuing share options.

Hence despite the limitations noted above, agency theory still has considerable explanatory power in relation to the venture capital firm and STBF relationship, notwithstanding that the latter is characterised by concentrated shareholding structures in highly illiquid equity instruments.

Similarly, the focus of the TCE perspective on contractual detail and highly legalistic mechanisms for structuring relationships does also appear to hold a degree of relevance for institutional venture capital. The theory would anticipate contracts which are highly specific, cover a wide range of potential contingencies, provide mechanisms for dispute resolution and be in a form that can be conveniently monitored and if necessary legally enforced. Such contracts have been found to be an important mechanism to establish the transactional parameters with founding teams up front
(Landstrom, Manigart, Mason and Sapienza 1998), and the research supports such findings.

The research did however confirm that extending the transaction cost perspective into the domain of angel investment appears to be inappropriate. Two major issues stand out: while strict advocates of the transaction cost perspective would call for the parties agree in advance on a manner in which to resolve future disputes, the findings support the view that a substantial degree of contractual ambiguity appears to be built into the relationship. In all except one of the deals reviewed, angel investors chose not to include a specific dispute resolution mechanism in writing up front.

The implied (and negative) emphasis placed on defending and protecting the investor’s interest from the opportunistic behaviour of the entrepreneurial team as advocated by agency theory and TCE appears to be misplaced.

The findings highlight a significant issue that calls into question the potential usefulness of extending either agency theory or TCE into the domain of angel investment: the relationship between investors and entrepreneurs is more positive in character than either of those approaches would suggest. The relationship between angel investor and entrepreneur appears to be infused with higher levels of interpersonal trust from the outset. It appears that investors operate from a “presumption of trust” and not a “presumption of distrust” as the concern for opportunism underlying both agency theory and TCE would suggest. This goes beyond the mere recognition of a role for the non-financial motivations of the angel investor already acknowledged in the literature.

In summary, while both agency and TCE perspectives have traditionally provided some structure within a field of study of financing transactions for STBFs, the domain of angel investment highlights clearly some of the significant shortcomings of the underlying assumptions of these perspectives. In the case of agency theory, these shortcomings apply equally to the modified or incomplete contracts approach (van Osnabrugge 1999) as to traditional agency theory. Further, the fact that both parties
appear to seek out cooperative as opposed to competitive solutions (Cable and Shane 1997) implies the need to integrate more socialised theoretical perspectives, and to this extent supports the approach underlying socio-economics. The spirit of the relationship between the parties appears to be more positive and cooperative in character than the cautious and adversarial relationship implied by either the TCE or agency theory perspectives. To this extent the findings support the general assertion of Aldrich and Zimmer (1986) that as a theoretical lens, TCE is “under-socialised”, and that this has application to agency theory as well.

7.2.4: Finding 4: Rapidly Formed Trust in the case of Angel Investment

Within the trust literature, existing theory suggests a process which remains motivated by the self-interest of each of the parties, is time-dependent and unfolds through a repeated set of transactions, relies upon the initial establishment of contract-based accountability and monitoring structures and results in a slow development of trust between the parties based on expectations of reciprocity.

The model which emerges is driven in the first instance by an assessment based on social and personal considerations. It is emotional rather than cognitive, but unlike the emotional trust identified by Rousseau et al. (1998) and Young and Daniel (2003), does not arise from repeated interactions leading to the gradual formation of an attachment based on reciprocity. In contrast to a process unfolding through a series of transactions carried out in the self-interest of each party and screened through financial criteria, the process between angels and entrepreneurs appears driven by an immediate sense of personal commitment or “connection” that formed quickly between the entrepreneurial team and the investor. Whereas the traditional view of the process requires the passing of time in order for a repeated cycle of transactions to transpire, the formation of this connection seemed to depend more on inter-personal “fit” and a sense of shared values. It is closest in concept to the “swift trust” in temporary groups identified by Myerson Weick & Kramer (1996) which Mason Harrison and Dibben (1997) identified in their experimental testing of angel investor decision-making, but differs in the important respect that it does not exist ex ante as a result of the trust
placed by the investor in a referrer or co-ordinator of the relationship. Instead it is found to emerge without any mediation by any other person, and indeed in the absence of any referrer or co-ordinator.

7.2.5: Finding 5: Alternative Suggestions for the Basis for Relationship Formation

Landstrom et al., (1998) suggested that one of the purposes of establishing a detailed contractual framework up front is to provide a basis for a relationship between the parties to develop over time. While both categories of investor appear to view involvement in the venture development process to be an effective means of managing risk associated with the investment, this approach to relationship formation was not supported in the case of the angel investors in the research, for whom the development of rapid trust, and a relationship based on shared vision, values and personal commitment, preceded rather than followed the making of the investment and any contractual framework.

By contrast this approach did find some support in the venture capitalist/STBF context, supporting other research which found that an essentially adversarial relationship between the parties is capable of becoming positive in character over time (Landstrom, 1992). It appears that investors seek to establish a governance framework that is capable of becoming co-operative in nature (Cable and Shane, 1997) rather than remaining adversarial and in so doing thereby promoting the interests of all shareholders.

This study contributes towards understanding the content of the relationships between entrepreneurial firms and their early investor stakeholders. Research to date in network theory has demonstrated the role of social relationships in furthering economic action, but has yet to specify the nature or content of those relationships. Theorists in both fields have called for greater scrutiny in this area. As Friedland & Alford (1991, p252) put it,

“Social networks per se do not have content and as such do not entail interests, values, motives, beliefs and until we gain a better understanding of this content, it will be
impossible to explain what kinds of social relations have what kind of effect on the behaviour of organizations and individuals”.

This research advances our understanding of the content of the relationship that facilitates the process of obtaining financial resources for early stage technology ventures from angel investors. It helps explain why individuals with no previous history agree to work together on a high-risk enterprise such as a STBF. As such, this research makes a contribution to current research on the resource “acquisition” processes within entrepreneurship. Further, by describing an alternative conceptualisation of capital raising from angel investors the research makes a contribution to existing research exploring the role of social relationships on economic action. It also suggests potential new avenues for examining the processes behind the formation of emotional ties, shared values, and ethics in the context of the entrepreneurship which has suffered from the negative implications of opportunism and “shirking” behaviour attributed to entrepreneurs by the assumptions underlying the pervasive theories of agency and TCE.

7.3: Implications for Managerial Practice

For the small technology-based firm, the findings of the research provide information which the members of the firm may apply to become more informed participants in the search for capital. An aim of the research is to identify and explain the aspects of the process over which the firms can exert some influence and control. In the face of a process in which the “rules of the game” may appear to have been set by their opponents, the firm members may be assisted by a better understanding of how to choose between the alternative sources of capital— the “who” question; and the strategies and procedures best designed to enhance the prospects for success—the “how to” question.

In the “overlap” zone, the fundraising which is of a size consistent with both venture capital funding and angel investors, angel investment is most appropriately pursued when the entrepreneurial firm is conscious of the need to obtain a further set of skills or contacts: so-called “money-plus-smarts”, whereas the venture capital investor, from
the perspective of the small firm is a source of “pure-money”, in the sense that while it may provide access to recruiters, consultants and the like, will not add to the skill-set of the team. This finding is consistent with one of the categories of angel identified by Landstrom et al (1996), namely the co-entrepreneur angel, whose role in the firm post investment becomes sufficiently intertwined with the management of the firm as to render the angel part of the team.

The research identifies in the Australian context a markedly different approach needs to be taken in designing and executing an approach to angel investors on the one hand, and venture capital fund managers on the other.

The research identifies the advantage of obtaining introductions to potential venture capital investors from people who know the entrepreneurial firm member(s) personally, and whose opinions and judgments are in turn trusted by the venture capital investor. So in deciding upon referral sources within the network, an entrepreneur should ask of any potential referrer: who are the investors who trust your judgment? However they should not limit themselves to persons with whom they already have a personal relationship or a previous history, nor should they limit themselves to those referred by a third party referrer. Particularly in the case of angel investors, it is more important to attract individuals who share the values, interests and even passion of the entrepreneurial team members as they are the most likely to form a productive relationship which can sustain the new business through the inevitable challenges of new venture creation.

The research also has implications for the STBF in the early stages of the fundraising process. First, they are usually advised to spend a significant early effort in extensive business planning including the preparation of an exhaustive and investor-oriented business plan according to a standardised model. This research suggests that they should also spend time and effort thinking about the kind of people with whom they could form a productive relationship.
Second, they should also consciously consider how to translate the story of the venture in a manner which appeals to angel investors at multiple levels; the economic certainly, but also the emotional, the ethical and the aspirational. It should be emphasised that this is not a call for manipulation, nor creation of unrealistic expectations, but rather for an authentic bond based on mutual trust. It is a practical manifestation of the suggestion by Gartner, Bird and Starr (1992, p 25) that entrepreneurs should appeal to “a constellation of different motivational systems”.

Third, this research challenges the conventional notion that ethics has minimal role to play in business decision-making. The findings presented here suggest that ethics plays a central role in supporting the collaborative processes of entrepreneurship. Hence, entrepreneurs need to consider more fully incorporating ethical considerations and their personal values into the processes through which they identify and build the relationships required to obtain funding stakeholders.

7.4: Implications for Policy

There are a number of broad implications for public policy from this research. In order for investment into STBFs to flourish, Australian policy makers could address a number of the constraints to the process which are identified in this research.

7.4.1: Public Support for Angel Networks

Firstly, there is a lack of well-organised investor networks in Australia that could facilitate the bringing together of the supply and the demand side of the investment equation, particularly in the case of angel investment. Overseas experience would indicate that such networks require a public subsidy to survive (ref), and therefore there is scope for enhancing the number and aggregate value of such transactions with consequent increase in the total supply of funding to STBFs.

7.4.2: Education

Secondly, there is scope for educational institutions to provide both would-be entrepreneurs, and investors, with an understanding of the nature of private equity investment transactions, both venture capital and angel. The research found that the
pre-existing knowledge of the process by STBFs was very limited, and that they are at a knowledge disadvantage when compared to venture capital firms in particular. In the case of angel investments, both sides of the dyad have little knowledge of how to go about the activity leading to the phenomenon of the “virgin angel”: a significant proportion of those who might potentially make angel investments study many deals but never actually undertake a transaction (Van Osnabrugge & Robinson 2002). Innovation and Entrepreneurship has been a focus of federal government funding initiatives in recent times, and a number of new centres and courses have been established (e.g. Centre for Innovation and Entrepreneurship at Australian Graduate School of Management; Entrepreneurship, Commercialisation and Innovation Centre, University of Adelaide, Australian Graduate School of Entrepreneurship, Swinburne University). Chan (2005) found that of 38 universities in Australia, 13 (34%) offer courses or subjects at undergraduate level in entrepreneurship, and 11 (28%) offer some form of postgraduate or research study. However she found limited course content referencing venture funding and none concerning funding from angel investment sources. Potentially courses, both practical and theoretical, in angel investment may ameliorate this situation for both STBFs and investors.

A further implication of this research is that non-technical and non-financial skills are also very important for the successful fundraising aspect of new venture creation. The research suggests that while learning to write detailed business plans and calculate net present values are useful and necessary, such skills are far from sufficient for successfully attracting capital. A broader range of communication and inter-personal skills should be considered essential for a properly educated entrepreneur.

7.4.3: Corporations Act Fundraising Limitations

Thirdly, to the extent that the angel investment thresholds in Australia are constrained by the regulatory frameworks concerning fundraising and disclosure requirements, the scope for angel investment could be enhanced by a relaxation of those frameworks, in particular, by an increase in the funding threshold levels above the present level of $2 million (Corporations Act, s 708).
7.5: Limitations of Research and Future Research

The findings from the research demonstrate the value of a qualitative approach to generating rich data for theorising. However, as with all case studies, the purpose is to generate “theoretical” or “analytic” generalisations. The small sample size limits the ability to make generalisations to the larger population of STBFs.

In addition, it may be that the experience of Australian STBFs cannot be generalised well to those of small technology-based firms in other countries. The United States and United Kingdom are markets providing a substantial share of the relevant empirical studies in the field, and from which researchers and policy makers routinely draw lessons and make generalisations. However, issues of scale, as well as a tendency to concentrate on technology and investment clusters (such as Silicon Valley and the North Eastern states in the US, and the south-east of England in the UK) may mean that generalising from those studies to the rest of the world may be just as problematic as generalising from the Australian experience and, in particular, to other smaller, open economies within the OECD countries.

Further, by relying upon the retrospective narratives of the entrepreneurs and stakeholders, the research remains vulnerable to the biased memories of the interviewees. The research has sought to mitigate these effects by interviewing multiple parties, including members from both sides of the key dyads. Real-time data gathering, as in a longitudinal study, would be a good complement to this research.

A further limitation of this research, which is perhaps not so much a limitation in the strict sense but a note of caution for the reader, is that the research was performed under a realist paradigm and using qualitative methodologies. It is therefore in the nature of an exploratory study of the search, engagement and commitment phases of the acquisition of capital by STBFs. It is not, and does not attempt to be, a conclusive piece of quantitative research. Consequently the research does not seek to quantify the relative contribution of each of the variables in the models to the success in securing...
funding from either VC or angel investors. This could be the subject of further research.

7.6 Summary

This research seeks to understand how small technology-based firms go about raising equity capital from venture capital or angel investors.

The literature has a focus on the process from the perspective of the investors rather than the small technology-based firm which constitutes the demand side of the transaction. Further while acknowledging that the respective categories of investor may exhibit different decision criteria and motivations, both academic literature and practical handbooks treat the process as substantially similar: similar search, similar information flows and similar negotiation and contract formation activities. The theoretical perspectives underlying this approach fall principally within the rational domain, in particular agency theory and TCE, with more recent contributions from a more “socialised” approach encompassing socio-economics, network theory and cognitive components.

Data were collected from six case studies within Australia’s high-technology sector. From these data the variables relevant to a three-stage process of fundraising were identified. These variables were then located within the framework of the literature. Finally, models illustrating the process of fundraising from the perspective of the small technology-based firm were developed and explained.

As a result of this investigation four significant contributions have been made. First, the models provide a tool to assist in the generation of insights which can be applied by small technology-based firms to increase their understanding of the fundraising process which may potentially contribute to more successful outcomes.

The second finding is that from the small technology-based firm perspective the process of raising funds from angel investors is sufficiently different from that of
raising funds from venture capital investors that two separate and distinct models are needed.

Third, the differences between the respective processes with the different types of investor imply that the while the agency theory and TCE approaches may continue to have explanatory power for venture capital fundraisings, it is necessary to turn to the more “socialised” literature streams to understand the process of raising funds from angel investors.

Fourth, in the formation of the relationship between an angel investor and members of entrepreneurial team comprising the small technology-based firm, a key element is the emergence of rapidly formed trust which differs from traditional versions of trust formation. While it is a form of emotional as distinct from rational trust, in contrast to previous research the development of this rapidly formed trust appears neither to depend on repeated interactions between the parties nor on the role of an intermediary or co-ordinator.

The insights from this research will be helpful to small technology-based firms to improve their chances of raising funds, and to policy makers in enhancing the environment for fundraising through relevant education and training initiatives and, corporate law regulatory constraints and the encouragement of angel networks.
Bibliography


Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*: SAGE publications, Inc.


Attachment A: Interview Protocol
INTERVIEW PROTOCOL

General Description of the Research and Expectations from interview

Basic description of the firm

When founded;
Who were the founders;
Current stage of development of the firm;
Major products;
Major investors;
Organisational structure.
Interviewee’s background
Education;
Previous work experience;
Current responsibilities;
Interest in technology commercialisation;
Previous experience in/exposure to equity capital raising.

Entrepreneurial Team

Where did you/the CEO come from (within/out)?
Was there a solo entrepreneur or an entrepreneurial team?
How did you/the firm go about building the team?
How easy or difficult would it be to find a replacement for each of these? For what reasons?

Financial resources: additional capital and finding investors

After the initial [FFF] capital raising/s, how and when did you go about your first “external”
capital raising?
Who, as between the entrepreneur, the entrepreneurial team and/or present investors was most/least proactive about capital raising?

Did you consider alternative investor types to the one selected, eg Angel as -v- Venture Capitalists and vice versa?

If so, how did you decide? What criteria did you use?

What sources of information either formal or informal did you rely on for leads to new investors?

How were decisions on capital raising made, specifically relating to the role of team members or present investors?

In retrospect, are there some investors you would have preferred not to have the board? Why?

Do you consider you make any mistakes during the capital raising process?

How might you have avoided those mistakes?

How did you decide when to stop further enquiry?

Social relationships and networks

Did you make enquiries about the proposed investors? To whom?

What/who are your primary sources of information?

Did you rely mostly on professional or personal contacts?

How did you decide who to ask?

What do you consider the most reliable information source?

The Deal-making Stage

How was the basic framework of the deal established? (eg, proposed by the investor, suggested by lawyer/accountant/adviser, proposed by CEO)

Did you seek information about how these equity investments are structured? If so form who?

What do you think were the key issues at stake for the VC?

What were the key issues at stake for you?

Please describe the flow of the negotiations with the VC?
Were some issues “deal-breakers” for the investors? What were they?

Were any issues apparently “deal-breakers” for the investors? What were they?

**Negotiation**

Turning to some of the issues for negotiation please describe how the following issues were raised, negotiated and agreed:

Valuation.

Type of securities to be issued.

Vesting of shares and options of the entrepreneur and entrepreneurial team.

Covenants and other investor control mechanisms.

Staging of investment/milestones.

Anti-dilution and liquidation preference.

Investors’ ability to “fire” managers.

Board seats.

How well do you think you understood each of these issues? At the start of the deal? At the end?

What do you feel were the strengths of the negotiating position of the investor?

What do you feel were the strengths of your negotiating position?

How would you assess the balance between the strengths of each side?

On what issues do you feel there was alignment or mutual interest of each side?

[Other questions following convergent interviewing technique]
Attachment B: Ethics Consent
CONSENT FORM
CHARLES STURT UNIVERSITY

Name of Research Project: Decision-making and contract formation of small technology-based firms in the selection of venture capital and angel investors.

Name of Principal Investigator: ROBERT G SAUER

Address of Principal Investigator: 2 Shadforth Street, Mosman NSW 2088

Contact Phone Number of Principal Investigator: 02 8233 9565

I, …………………………………………………………………… consent to participation in the abovenamed research project.

I understand that I am free to withdraw my participation in the research at any time.

The purpose of the research has been explained to me and I have been given the opportunity to ask questions about the research and received satisfactory answers.

I permit the investigator to tape record my interview as part of this project.

I understand that any information or personal details gathered in the course of this research about me are confidential and that neither my name nor any other identifying information will be used or published without my written permission.

Charles Sturt University’s Ethics in Human Research Committee has approved this study. I understand that if I have any complaints or concerns about this research I can contact:
Executive Officer

Ethics in Human Research Committee

The Grange

Charles Sturt University

Bathurst  NSW 2795

Phone:   (02) 9338 4628

Fax:   (02 6338 4194

Signed By:  .........................................

Date:  ..............................................