

**THE DEMOGRAPHY OF INVESTOR HEAVEN**  
**A Synthesis of International Research on the**  
**Characteristics, Attitudes, and Investment**  
**Behaviour of Business Angels**

**Kevin Hindle**

Director of Entrepreneurship Research  
Swinburne Graduate School of Management  
Swinburne University of Technology  
Tel: +61 3 9214 8732, Fax: +61 3 9214 5245  
E-mail: [khindle@swin.edu.au](mailto:khindle@swin.edu.au)

**Susan Rushworth**

Research Project Officer  
Swinburne Graduate School of Management  
Tel: +61 3 9214 5871, Fax: +61 3 9214 5245  
E-mail: [srushworth@swin.edu.au](mailto:srushworth@swin.edu.au)

Paper first presented at the conference: 'Financing the Future: Small Medium  
Enterprise Finance, Corporate Governance and the Legal System'

Sydney

13 December 1999

## **Bionotes**

### **Kevin Hindle**

Kevin Hindle is an Associate Professor and Director of Entrepreneurship Research in the Graduate School of Management, Swinburne University of Technology. His research interests include entrepreneurial business planning, informal venture capital and analysis of rapid growth in new ventures. He is co-author of Australia's leading textbook in Entrepreneurship and is actively building a programme of entrepreneurship research focused upon Australia, New Zealand and South East Asia.

Contact details:

Tel: +61 3 9214 8732; Fax: +61 3 9214 5245; E-mail: [khindle@swin.edu.au](mailto:khindle@swin.edu.au)

Postal address: Mail No. 25, PO Box 218, Hawthorn, Victoria 3122, Australia

### **Susan Rushworth**

Susan Rushworth is Research Project Officer in the Division of Entrepreneurship Research at Swinburne University. She has a fifteen year career in the IT industry and recently commenced a second career as an academic researcher having completed the Master of Entrepreneurship and Innovation program at Swinburne.

Contact details:

Tel: +61 3 9214 5871; Fax: +61 3 9214 5245; E-mail: [srushworth@swin.edu.au](mailto:srushworth@swin.edu.au)

Postal address: Mail No. 25, PO Box 218, Hawthorn, Victoria 3122, Australia

## **Abstract**

The purpose of this paper was to compile and compare the findings of all robust international research providing national profiles of business angels (informal venture capitalists). At the outset, it was not clear how comparable studies would be and, as the project advanced, it became clear that few direct comparisons would be possible. Nevertheless, there were broad categories common to many studies and consequently a template was developed and used to summarise each study in a consistent format. The resulting report thus provides a summary of the data across 16 studies covering 9 different countries, with key points from the findings of each study.

This is by no means an elegant report, but the authors believe it is a useful one. It provides a compendium of international angel research neatly bundled in one package. It should benefit anyone considering conducting the first study of business angels for their country or building on research already completed.

# **The Demography of Investor Heaven:**

A Synthesis of International Research on the  
Attitudes, Behaviour and Characteristics of Business Angels

## **Introduction**

The purpose of the study reported in this paper was to compile and compare the findings of all robust international research providing national profiles of business angels (informal venture capitalists). Units of analysis comprised all research articles published in refereed, English-language, scholarly journals as at December 1999. The endeavour was to collect and examine a *census* of published national angel profiles as at this date but scholarship is accelerating so rapidly that it is impossible to claim that all relevant articles have been included.

In no way can this study be described as a ‘meta-analysis’ it is, more humbly, a mere list. A formal, quantitative meta analysis of contemporary scholarship on national angel profiles is not possible (Wolf 1986). The data do not permit it due to incompatibility of sampling methodologies among researchers, the generally small sample sizes they employ and the exploratory nature of their work. However, what this study lacks in elegance is, hopefully, counterbalanced by its utility. Many entrepreneurship scholars and practitioners may be pleased to have a compendium of international angel research neatly bundled in one package.

Angel research is not a fruitful domain for those who demand elegant inferential statistics employed to develop causal relationships. In the words of Jeffry Timmons: ‘Creative techniques are required to identify and reach [angels]. Invariably they are found by tapping an entrepreneur’s own network of business associates and other contacts.’ (Timmons 1994: 482). Put more bluntly, angel research is a crude field in an early stage of development where convenience sampling is often a necessity and statistically valid generalisation is nearly always impossible. The general consensus of existing angel research is that the target market is very difficult to identify

(Harrison and Mason 1996b: 64). Informal investors are essentially wealthy individuals who may well be or have been successful entrepreneurs. For the purposes of this synthesis 'Informal Venture Capitalists', synonymously called 'Business Angels' or just 'Angels' can be defined using the formal definition presented in Hindle and Wenban (1999: 171):

**“High net worth, non-institutional, private equity investors.”**

That is, individuals who have the desire and sufficiently high net worth to enable them to invest part of their net worth into high risk - high return entrepreneurial ventures in return for a share of voting control, income and ultimately, capital gain.

Most scholars would find this definition both comprehensive and uncontroversial. It is applicable to all units of analysis in all the studies reported in this synthesis.

Though relatively easy to define, angels are hard to study. They are a diverse and dispersed group with a general preference for anonymity. The nature of the informal venture capital market in Western cultural milieus has been described as ‘a giant game of hide-and-seek with every one blindfolded’ (Harrison and Mason 1996b: 24). This difficulty is echoed by many other researchers (Wetzel 1981, Reitan and Sorheim 1999, Tashiro 1999).

In Asia things are even more difficult. Hindle and Lee report that in Singapore, with its predominantly Asian social mores, 'the game is similar but the blindfolds are thicker'. (Hindle and Lee 1999). In addition to a strong preference for privacy and anonymity, Singaporeans have developed a well known attitude called ‘kia-su’ - literally translated as ‘afraid to lose’ (Lee Tsao Yuen and Low 1990: 191). In this context, ‘kia-su’ people tend to withhold information for fear that others will know more than they do, or will use the information against them.

Despite difficulty of respondent access and many other methodological limitations, angel research is a very important field within the discipline of entrepreneurship and

in the life of national economies. Methodological limitations do not diminish the importance of angel research and ought not to reduce scholars' willingness to perform the unglamorous task of exploration. In the words of Randall Collins, '... much of the best work in sociology has been carried out using qualitative methods without statistical tests...' (Neuman 1997: 418- 419). The necessity of seeking private equity finance for business ventures is a perennial problem faced by entrepreneurs worldwide. According to Drucker (quoted in Lee Tsao Yuen and Low 1990: 199), lack of capital is the 'most crippling ailment of infant enterprises'. There is nearly universal consensus that angel finance is a far larger and more important contributor to the seed, startup and early-stage financing of new ventures than is the formal venture capital market.

'Although the venture capital industry plays a major role in providing equity financing for businesses, formal venture capital tends to move away from start-up or early stage ventures .' (Harrison and Mason 1996a: 6).

The importance of informal venture capital is evidenced by the growing volume and many branches of international angel research which includes topics such as: syndication, matching services, comparisons with formal venture capital, attempts to quantify the informal venture capital market and much more. However, the root of the angel research tree in every country or region is the attempt to draw a *profile* of the angels operating in that country or region. International angel research is deeply concerned with discovering what Freear, Sohl and Wetzel call the 'ABC' factors of angel investing:

'More research is needed into the ABC of angels - their attitudes, behavior and characteristics. This research should shed light on questions about the existence of categories of angels, i.e. subsets of angels that display common characteristics.' (Freear, Sohl and Wetzel 1997: 48)

In this descriptive approach ‘A’ stands for ‘attitudes’ (i.e. the *a priori* mindset regarding general factors that attract the angel to any private-equity opportunity). ‘B’ stands for ‘behaviour’ (i.e. the angel’s investment and related behaviour when participating in an entrepreneur’s venture) and ‘C’ for characteristics (i.e. the demographic and other descriptive characteristics defining the personal attributes of the angel).

The call for more research has certainly been heeded. Since Bill Wetzel’s pioneering study (Wetzel 1981) which created the field, nearly two decades have passed and researchers have produced ‘ABCs’ of angels in many countries and regions. So much work on angel profiling has been conducted internationally that the sheer volume of scholarship puts access to findings beyond the time boundaries of all but the most specialised scholars. So, the authors have produced this synthesis as an attempt to bring the ABC of angel knowledge back within the purview of the general scholar and informed practitioner. Investor heaven holds many varieties of angel. Here, in one place, a reader can discover their demography: the essence of what they have in common and what distinguishes them from one another.

## **Method**

### Basic Approach to the Synthesis

For presentation purposes, most ‘ABC’ angel studies, as we may call them, replace alphabetical order with logical order. They begin with ‘C’, personal characteristics, follow with ‘A’, investment attitudes and conclude with ‘B’, investment behaviour. This simple schema guides the synthesis presented in this paper. Every national study reported here is scrutinised and classified with respect to three key questions of angel profiling - who, what and how.

*Who* are these people?

*What* attracts them to invest in an entrepreneur’s venture?

*How* do they behave when investing?

### Population, Sampling and Collection of Units of Analysis

While, as discussed above, the original aim was to collect a census, the studies selected for this synthesis actually represent a convenience sample based on an existing collection of original angel research papers assembled by one of the authors over several years. The collection was enhanced by the 'snowball' method (analogous to that used by many angel researchers to locate angels for their studies). Studies already in the collection provided an 'introduction' to other studies via their reference list. A particularly important 'reference generator' was Freear, Sohl and Wetzel (1997). Some studies (for example Harrison and Mason 1992a) contained selected comparisons with previous studies. Such information has been used at 'second-hand' where a copy of the original study could not be obtained within the timeframe available.

The studies employed in this synthesis are listed below, in order of publication date:

1. (USA) Wetzel, W. E., 1981, Informal Risk Capital in New England. In Vesper Karl H. (Ed.) *Frontiers of Entrepreneurship Research*, (Wellesley, MA: Babson College) 217-245.
2. (USA) Tymes, E. R. and Krasner, O. J. 1983. Informal Risk Capital in California. 346-369.
3. (USA) Gaston, R. J. and S. Bell. 1986. *Informal Risk Capital Investment in the Sunbelt Region*. Washington, DC: US Small Business Administration, Office of Advocacy.
4. (USA) Aram, J. D. 1989. Attitudes and Behaviors of Informal Investors Toward Early-Stage Investments, Technology-Based Ventures, and Coinvestors. *Journal of Business Venturing* 4,333-347.
5. (Canada) Short, D. M. and Riding, A. L. 1989. Informal Investors in the Ottawa-Carleton Region: Experiences and Expectations. *Entrepreneurship and Regional Development* 1,99-112.



6. (USA) Freear, J., Sohl, J. E. and Wetzel, W., 1992, The Investment Attitudes, Behavior and Characteristics of High Net Worth Individuals. In Churchill N.C. et al. (eds.) *Frontiers of Entrepreneurship Research*, (Wellesley, MA: Babson College) 374-385.
7. (UK) Harrison, R. T. and Mason, C. M. 1992. International Perspective on the Supply of Informal Venture Capital. *Journal of Business Venturing* 7,459-475.
8. (Sweden) Landstrom, H. 1993. Informal Risk Capital in Sweden and Some International Comparisons. *Journal of Business Venturing* 8,525-540.
9. (UK) Stevenson, H. and Coveney, P., 1994, Survey of Business Angels: Fallacies Corrected and Six Distinct Types of Angels Identified. In R. Blackburn et al. (eds) *Small Firms : Contributions to Economic Regeneration*, (London: Paul Chapman Publishing)
10. (USA) Freear, J., Sohl, J. E., and Wetzel, W. 1995. Angels: Personal Investors in the Venture Capital Market. *Entrepreneurship and Regional Development* :85-94.
11. (Finland) Lumme, A., Mason, C., and Suomi, M. 1996. The Returns From Informal Venture Capital Investments: Some Evidence From Finland. *Entrepreneurial and Small Business Finance* 5,2,139-158.
12. (Australia) Hindle, K. G. and Wenban, R. 1999. Australia's Informal Venture Capitalists: an Exploratory Profile. *Venture Capital* 1,2,169-186.
13. (Norway) Reitan, B. and Sorheim, R. 1999. The Informal Venture Capital Market in Norway - Investor Characteristics, Behavior and Preferences. *Frontiers of Entrepreneurship Research*. Babson Park, MA: Babson College.
14. (Japan) Tashiro, Y. 1999. Business Angels in Japan. *Venture Capital* 1,3,259-273.
15. (Singapore) Hindle, K. G. and Lee, L. T. J. 1999. An Exploratory Investigation of Informal Venture Capitalists in Singapore. *Venture Capital* .

The 16<sup>th</sup> study was of subscribers to the LINC investor network, conducted by Harrison and Mason in 1992 and reported in a paper comparing angel and venture capitalist investments (Harrison and Mason 1992b).

During the information gathering process, we were referred to two other studies of business angels, of which we were unfortunately unable to obtain copies. We mention these for the benefit of readers who may wish to track them down. They were:

- a Dutch study "The role of informal investors in the Dutch venture capital market" by K+V Organisatie Adviesbureau in 1996.
- a German study, Lessat et al, 1999 "Beteiligungskapital und technologieorientierte Unternehmensgrundungen", published by Der Gabler Verlag.

We found a summary version of the Dutch paper in Dutch on K+V's web site ([www.kplusv.nl](http://www.kplusv.nl)). We understand an English version is available. The German study is, we believe, only available in German and may very well be easy to find on Gabler's web site ([www.gabler-online.de](http://www.gabler-online.de)) by those with better than the rudimentary knowledge of German possessed by the authors of this paper.

### Comparison Issues

Most studies of business angels have made comparisons with prior studies and most have commented on the difficulty of making direct comparisons. Studies of business angels are always convenience samples to some degree since there is no truly random way to select a sample from such an elusive population. Thus the samples used by different authors are never *directly* comparable. Sample sizes also vary hugely - from as small as 10 (actual) Japanese angels (Tashiro 1999) to as large as 484 UK angels (Stevenson and Coveney 1994).

Compounding the comparison problem is that each study, even though building on previous research, focuses on different aspects of business angels with differing degrees of intensity. There is no one attribute which is common to every study and there are usually several attributes which are unique to each study.

Finally, there is the definitional problem of whether what *appear* to be comparable attributes are truly comparable. A simple example of this is choice of averaging method used for numeric data such as age, income, net worth, size of investment. Mode, median and mean all have their advocates. Where researchers have been rigorous enough to quote both mean and median, there is such a significant difference that comparisons between two averages without knowing the type of average used would be meaningless. Even more difficult are complex attributes such as 'stage of growth' of investee companies. At what point in a given researcher's point of view, does a company cease to be 'early stage' and become 'established'?

Clearly these sorts of issues can only be completely resolved by understanding the full detail of how each study was conducted (questionnaires, interview notes etc) and how the results were analysed (statistical analyses) - a level of detail which is not often published in journals and is not readily available even to researchers with the time and inclination to examine it. Were such an examination to be carried out, the conclusion would probably be that no findings were directly comparable on any single attribute.

But to conclude from the above that comparisons are impossible would be to miss the point of the good work which has been done in researching business angels. Most of the studies are intended to be descriptive and consciously try to give the broad profile of their particular, national business angel community in a context which is acutely aware of international research and precedent. This is infinitely better than guesswork or abandonment of hope because statistical perfection is impossible. Most studies yield a vibrant mixture of expected and unexpected insights and all identify potentially fruitful areas for further research.

Thus, despite severe limitations, an attempted comparison of descriptions across existing studies can add value and provide useful information.

#### Comparison Technique

The only firm component of the intended comparison at the outset of this project was the commitment to structure it around the Who, What and How of business angels as

described in the introduction. Other than these broad categories there was no fixed idea about which attributes might be comparable across studies. The most practical way to determine this was to make a start and see what emerged.

A spreadsheet was prepared with individual studies forming the columns and individual attributes forming the rows. As each study was examined, a column was added for that study and new attributes were introduced as required. The resulting spreadsheet, as might be expected, had a lot of blank cells, representing attributes which were absent in specific studies. The rows with fewest blank cells were obviously the most fruitful areas for comparison. Several of the scrutinised studies surveyed *potential* angels as well as *actual* angels - that is, wealthy individuals who indicated an interest in investing in entrepreneurial ventures but had not actually done so yet. It was decided not to include these findings in the synthesis on the grounds that they provided a much less reliable indicator of the characteristics of business angels and to include them would be confusing. All comparisons are based on findings about actual angels only.

A summary version of the 'grand' analysis spreadsheet was then created, containing only those attributes which were either :

- a) present in three or more studies or
- b) too interesting to be discarded simply because no other study had covered them.

#### Presentation Format

There then followed the difficult task of translating the results into a format which would be easy for any reader to understand without losing too much richness of information. The final choice was to create a 'national study reporting template' consisting of a tabular format with the Who, What and Why categories in the rows and subsets of those categories in the columns. The resulting 'template' is reproduced as table 1.

#### **Table 1 - The National Study Reporting Template**

	<b>COUNTRY</b>		
	<b>Author(s) and year</b>	<b>number of respondents =??</b>	
<b>WHO</b>	<b><i>Age and Sex</i></b>  Average age % over specific age Percentage male	<b><i>Education and Work Experience</i></b>  Education level Work experience	<b><i>Wealth</i></b>  Income Net worth Net worth : income ratio
<b>WHAT</b>	<b><i>Financial factors</i></b>  Expected yield  Importance of: <ul style="list-style-type: none"> <li>• Rate of return</li> <li>• Capital growth</li> <li>• Cash flow</li> </ul> Time to exit	<b><i>Positional factors</i></b>  Proximity to home Industry sector(s) Stage of growth	<b><i>Other factors</i></b>  Importance of: <ul style="list-style-type: none"> <li>• Management team</li> <li>• Marketability</li> <li>• Technology</li> <li>• Business plan</li> <li>• Familiarity with sector</li> <li>• Fun</li> <li>• Socially useful</li> <li>• Supporting entrepreneurship</li> </ul>
<b>HOW</b>	<b><i>Investment value factors</i></b>  \$ per investor \$ per investment \$ for future investments % in entrepreneurial ventures	<b><i>Investment process factors</i></b>  Deal awareness  Deal frequency (last 3 yrs): <ul style="list-style-type: none"> <li>• Deals considered:</li> <li>• Deals short-listed:</li> <li>• Deals done:</li> <li>• Rejection rate:</li> </ul> Expected future deal frequency Screening time	<b><i>Behaviour factors</i></b>  Role in investee company Equity % obtained Co-investing Exit mechanism Actual time to exit Achieved yield <ul style="list-style-type: none"> <li>• Above expected:</li> <li>• Met expected:</li> <li>• Below expected:</li> </ul>

The template provided a presentation mechanism. Each study's salient data was summarised and overlaid on this template. For countries where several studies have been published, each one was overlaid separately unless there were obvious opportunities for consolidation and where this has occurred it is clearly indicated.

Only so much can be conveyed by raw figures, therefore after each 'template' overview, the key points which impressed the authors as (not necessarily the points highlighted in the original published papers) were also noted, often in truncated, 'bullet-point' form. It is also instructive to know what method was employed for

locating the sample studied, so this has also been explained. Broadly, angel researchers have used, alone or in combination, three methods of sampling:

- **large-scale postal survey:** questionnaires sent to a mailing list - for example subscribers to a business matching service, members of an investment club etc.
- **investee introduction:** entrepreneurial businesses who have received angel finance provide introductions to their investors
- **snowball method:** a few angels located usually through personal contacts provide introductions to more angels


#### Major Analytical Objective – Facilitating Each reader’s Own Insights

There was no grand plan to forcefully distil an international stereotype of ‘the typical international angel’. A much looser objective was simply to compile each study’s salient features in a common format and see what, if any patterns emerged. Most importantly, the researchers were far less interested in forcing any ‘grand synthesis’ or detected pattern on any reader than they were in providing every reader with the potential to form his or her own opinion based on easily-accessible, compatibly-presented information.

## Findings – In Alphabetical Order of Country

Countries are presented in alphabetic order and, where more than one study is reported for a country, in chronological order within country.

**Table 2 - Australia 1999**


	<b>AUSTRALIA</b>		
	<b>Hindle and Wenban 1999</b>		<b>n=36</b>
<b>WHO</b>	<b>Age and Sex</b> <ul style="list-style-type: none"> <li>• Median age: <b>40</b></li> <li>• <b>14%</b> over <b>50</b></li> <li>• <b>100%</b> male</li> </ul>	<b>Education and Work Experience</b> <ul style="list-style-type: none"> <li>• <b>42%</b> undergrad degree</li> <li>• <b>8%</b> masters degree</li> </ul>	<b>Wealth</b> <ul style="list-style-type: none"> <li>• Median income range: <b>A\$100K - 199K</b></li> <li>• Median net worth range: <b>A\$1M - 4.49M</b></li> <li>• Net worth : income ratio: <b>11.7</b></li> </ul>
<b>WHAT</b>	<b>Financial factors</b> <ol style="list-style-type: none"> <li>1. Rate of return (<b>20%+</b>)</li> <li>2. Capital growth (<b>x2</b> in 3 years)</li> <li>3. Cash flow (+ve <b>within 18 months</b>)</li> <li>4. Tax benefits</li> </ol>	<b>Positional factors</b>	<b>Other factors</b> <ol style="list-style-type: none"> <li>1. Management team</li> <li>2. Marketability of product or service</li> <li>3. Familiarity with industry sector</li> </ol>
<b>HOW</b>	<b>Investment value factors</b> <ul style="list-style-type: none"> <li>• <b>A\$150,000</b> per angel available next 12 months</li> <li>• Median <b>10-14%</b> of capital in entpren'l ventures</li> <li>• <b>Majority</b> intend to increase such investment</li> </ul>	<b>Investment process factors</b> <ul style="list-style-type: none"> <li>• Deal rejection rate <b>68%</b></li> <li>• Rejection rate trending down from <b>80%+</b></li> </ul>	<b>Behaviour factors</b> Time to exit: <b>3 years</b>

**Sample method:** A convenience sample located via the snowball technique

### Key Points:

- Two distinct groups in terms of investment size:
  - "Seraphim": \$200,000 to \$500,000 per investment
  - "Cherubs": \$20,000 to \$50,000 per investment
- Two distinct groups in terms of education:
  - No more than high school (speculate these are older angels)
  - University plus (speculate these are young, high-flying professionals)
- Exclusively male

**Table 3 - Canada 1989**

	<b>CANADA</b>		
	<b>Short and Riding 1989</b>		<b>n=25</b>
<b>WHO</b>	<b>Age and Sex</b>	<b>Education and Work Experience</b>	<b>Wealth</b>
	Average age: <b>50</b> Male		<ul style="list-style-type: none"> <li>Income: &gt; <b>CN\$150,000</b></li> <li>Net worth: &gt; <b>CN\$1,000,000</b></li> <li>Net worth : income ratio: <b>6.67</b></li> </ul>
<b>WHAT</b>	<b>Financial factors</b>	<b>Positional factors</b>	<b>Other factors</b>
	<ul style="list-style-type: none"> <li>Capital growth main motivation (<b>80%</b>)</li> <li>Expected yield: <b>32%</b> p.a.</li> <li>Time to exit: <b>5 years</b></li> <li>Capital gains tax exemption not a major influencing factor.</li> </ul>	<ul style="list-style-type: none"> <li><b>80%</b> invested <b>within 50 miles</b> of home</li> <li><b>Hi-tech manufacturing</b> was main industry sector</li> <li><b>100%</b> had invested in young or startup companies as this was part of inclusion criteria</li> </ul>	
<b>HOW</b>	<b>Investment value factors</b>	<b>Investment process factors</b>	<b>Behaviour factors</b>
	<ul style="list-style-type: none"> <li>Mean <b>CN\$109K</b> per investment</li> <li>Median <b>CN\$25K - 49K</b> per investment</li> <li>Mean of <b>CN\$114K</b> for future investment (<b>over 2 year</b> period)</li> </ul>	<u>Deal frequency</u> <ul style="list-style-type: none"> <li><b>3</b> investments last 3 years</li> <li>Expect future rate of <b>1 per year</b></li> <li><b>20-24</b> investments screened</li> <li>Rejection rate: <b>85%</b></li> </ul>	<u>Role in investee company</u> <ul style="list-style-type: none"> <li><b>37%</b> board member</li> <li><b>4%</b> working in company</li> <li><b>28%</b> passive</li> </ul> <u>Equity % obtained</u> <ul style="list-style-type: none"> <li><b>70%</b> had <b>less than 10%</b> equity</li> </ul> <u>Co-investing</u> <ul style="list-style-type: none"> <li><b>92%</b> of deals were with co-investors</li> </ul> <u>Achieved yield</u> <ul style="list-style-type: none"> <li>Above expected: <b>26%</b></li> <li>Met expected: <b>23%</b></li> <li>Below expected: <b>33%</b></li> <li>Too soon to tell: <b>18%</b></li> </ul>

**Sample method:** Angels who had invested in one or more young or start-up firms within the previous five years, located by the snowball technique.

**Key Points:**


- Government initiatives appeared to have little effect on investor behaviour. Two had 'recently' been introduced (exact date is not given). They were
  - a tax incentive for directing super funds (RRSPs) to small businesses



- lifetime capital gains exemption for investments in young and startup companies

Two possible reasons for the lack of influence of the latter incentive are suggested a) that investors had already exceeded the upper limit of tax exemption through being active in the risk capital marketplace and b) that they did not trust future governments not to remove the incentive.

**Table 4 - Finland 1996**

 <b>FINLAND</b> Lumme, Mason and Suomi 1996 <span style="float: right;">n=38</span>			
<b>WHO</b>	<b>Age and Sex</b>	<b>Education and Work Experience</b>	<b>Wealth</b>
	Median age: <b>54</b> Percentage male: <b>95%</b>	Education level: <ul style="list-style-type: none"> <li>• Undergrad degree: <b>56%</b></li> <li>• Masters degree: <b>8%</b></li> </ul>	
<b>WHAT</b>	<b>Financial factors</b>	<b>Positional factors</b>	<b>Other factors</b>
			<ul style="list-style-type: none"> <li>• <b>Management team</b> key factor for all investors</li> </ul> <p>"Successful" investors:</p> <ul style="list-style-type: none"> <li>• Potential for fun</li> </ul> <p>"Failed" investors:</p> <ul style="list-style-type: none"> <li>• Socially useful</li> </ul>
<b>HOW</b>	<b>Investment value factors</b>	<b>Investment process factors</b>	<b>Behaviour factors</b>
	<ul style="list-style-type: none"> <li>• Mean <b>US\$765K</b> per investor (last 3 yrs)</li> <li>• 75% &lt; <b>US\$175K</b> per investment</li> </ul>	<p><u>Deal awareness:</u></p> <ul style="list-style-type: none"> <li>• "successful": magazines and media</li> <li>• "unsuccessful": friends</li> </ul> <p><u>Deal frequency</u> (last 3 yrs)</p> <ul style="list-style-type: none"> <li>• <b>30</b> deals screened</li> <li>• <b>11</b> deals done</li> <li>• Rejection rate: <b>63%</b></li> </ul> <p><i>"Successful" investors screened more deals and made fewer investments</i></p>	<p><u>Achieved yield:</u></p> <ul style="list-style-type: none"> <li>• Above expected: <b>20%</b></li> <li>• Met expected: <b>26%</b></li> <li>• Below expected: <b>52%</b></li> </ul> <p><u>Time to exit:</u></p> <ul style="list-style-type: none"> <li>• positive ROI: <b>5 years</b></li> <li>• break-even: <b>1.8 years</b></li> <li>• negative ROI: <b>2.8 years</b></li> </ul> <p><u>Exit mechanism:</u></p> <ul style="list-style-type: none"> <li>• Trade sale: <b>16%</b></li> <li>• Sold shares: <b>44%</b></li> <li>• Write-off: <b>39%</b></li> </ul> <p><u>Anticipated exits:</u></p> <ul style="list-style-type: none"> <li>• IPO: <b>4%</b></li> <li>• Trade sale: <b>20%</b></li> <li>• Sell shares: <b>28%</b></li> <li>• Write-off: <b>4%</b></li> <li>• Won't sell: <b>12%</b></li> <li>• Don't know: <b>33%</b></li> </ul>


**Sample method:** combination of large-scale postal survey based on names obtained from professional investor associations and snowball technique using referrals obtained from these sources. Followed up by face-to-face interviews.

**Key Points:**

Makes an extensive study of exit mechanisms and consequently is able to make comparisons between successful and unsuccessful investors

- 45% of angels had no particular exit mechanism in mind or did not plan to sell
- The most common exit mechanism was by private sale of shares either to individuals or via trade sale. Not one exit was via IPO.
- Only about 1 in 5 investments performed above 20% IRR.
- Successful vs unsuccessful investors (note very small sample sizes - 6 and 8):
  - No significant difference in age or educational background.
  - Successful investors had substantially more management experience.
  - Successful investors screened more deals but made fewer and smaller investments than their unsuccessful peers.
  - Unsuccessful investors relied on personal contacts for deal flow, whereas successful investors relied more on dispassionate sources such as newspapers and magazines.
  - Successful investors rarely have a friendship connection with their investee (2 out of 17 investments) in contrast to unsuccessful investors where 24 out of 36 investments were in friends' businesses.
  - Successful investors were motivated by fun and satisfaction of being involved in entrepreneurial ventures, whereas unsuccessful investors tended to be influenced by altruistic and social responsibility motives.
  - Unsuccessful investors had a higher estimation of the value they added, possibly indicating that they overvalue their contribution.

**Table 5 - Japan 1999**


	<b>JAPAN</b>		
	<b>Tashiro 1999</b>	<b>n1=10, n2=1,124</b>	
<b>WHO</b>	<b>Age and Sex</b>	<b>Education and Work Experience</b>	<b>Wealth</b>
	<ul style="list-style-type: none"> <li>• Median age: <b>60</b></li> <li>• Over 55s: <b>52%+</b></li> <li>• Percentage male: <b>97%</b></li> </ul>	<u>Education level:</u> <ul style="list-style-type: none"> <li>• Undergrad degree: <b>57%</b></li> <li>• Masters degree: <b>13%</b></li> </ul> <u>Work experience:</u> <ul style="list-style-type: none"> <li>• Company owner: <b>48%</b></li> <li>• Mgmt experience: <b>67%</b></li> </ul>	Income: <b>&gt;Y80M</b> (US\$640K) Net worth: <b>&gt; Y 1 billion</b> (US\$8 million) Net worth : income: <b>12.5</b>
<b>WHAT</b>	<b>Financial factors</b>	<b>Positional factors</b>	<b>Other factors</b>
	Key motivation: <ul style="list-style-type: none"> <li>• Capital growth (<b>47%</b>)</li> </ul> Rate of return: <ul style="list-style-type: none"> <li>• Between <b>10%</b> and <b>50%</b></li> </ul> Time to exit: <ul style="list-style-type: none"> <li>• <b>3 - 6 years</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>68%</b> of <b>potential</b> angels had a preference for technology-based companies.</li> <li>• Technology less important to <b>actual</b> angels.</li> </ul>	1. Management team 2. Marketability 3. Supporting entrepreneurship 4. Socially useful (the last two were important mainly to <b>potential</b> angels)
<b>HOW</b>	<b>Investment value factors</b>	<b>Investment process factors</b>	<b>Behaviour factors</b>
	<ul style="list-style-type: none"> <li>• Average <b>Y 100M</b> (US\$800K per investor)</li> <li>• Average <b>Y 12.5M</b> (US\$100K) per investment</li> <li>• Potential angels average of <b>Y 7.7M</b> (US\$62K) per investment</li> </ul>	<u>Deal awareness:</u> <ul style="list-style-type: none"> <li>• Friends: <b>80%</b></li> <li>• Business: <b>80%</b></li> <li>• Active search: <b>20%</b></li> </ul> <u>Deal frequency:</u> <ul style="list-style-type: none"> <li>• 5 investments in last 3 years</li> <li>• Rejection rate: <b>40%</b></li> </ul>	<u>Role in investee co:</u> <ul style="list-style-type: none"> <li>• Board member: <b>50%</b></li> <li>• Consultant: <b>40%</b></li> <li>• Passive: <b>10%</b></li> </ul> <u>Equity % obtained:</u> <ul style="list-style-type: none"> <li>• <b>50%</b> had <b>voting control</b></li> </ul> <u>Co-investing:</u> <ul style="list-style-type: none"> <li>• <b>60%</b> preferred alone or with trusted colleague</li> </ul> <u>Anticipated exit:</u> <ul style="list-style-type: none"> <li>• IPO: <b>70%</b></li> <li>• Trade sale: <b>20%</b> (alternative to IPO)</li> <li>• Won't sell: <b>10%</b></li> <li>• Don't know: <b>20%</b></li> </ul>

**Sample method:** Face to face interviews with active business angels located through 'reliable sources' including government officials, bankers, venture capitalists and angels themselves. Potential angels were also surveyed, but the profile above applies only to actual angels.

**Key Points:**

- Japanese angel activity is limited compared with other countries but conditions are favourable for an increase in activity due to recent policy changes.
- Japanese angels are much older than their overseas counterparts
- Only one out of the 10 angels reported financial gain as their reason for investing. Most were motivated by contributing to the community in terms of stimulating entrepreneurship and technology development and supporting their local region.
- Japanese angels, both actual and potential, are significantly more wealthy both in terms of income and assets than angels in other countries studied. They also make the largest investments.
- Differences between expectations of 'potential' and 'actual' angels indicate that studies of potential angels might have low reliability in predicting actual angel behaviour.

**Table 6 - Norway 1999**

	<b>NORWAY</b>		
	<b>Reitan and Sorheim 1999</b>		<b>n=425</b>
<b>WHO</b>	<b>Age and Sex</b>	<b>Education and Work Experience</b>	<b>Wealth</b>
	Average age: <b>47</b> 97% male	38% company owners 46% founding experience 46% mgmt experience	Income: <b>US\$76,300</b> Net worth: <b>US\$410,000</b> Net worth : income:5.37
<b>WHAT</b>	<b>Financial factors</b>	<b>Positional factors</b>	<b>Other factors</b>
	<ul style="list-style-type: none"> <li>Expected yield: &lt; <b>30%</b></li> <li>Time to exit: <b>3-4 years</b></li> </ul>	<u>Location:</u> <ul style="list-style-type: none"> <li><b>48%</b> invested <b>within 50km</b> of home</li> </ul> <u>Preferred sectors:</u> <ol style="list-style-type: none"> <li>Industry / technology</li> <li>Finance / real estate</li> </ol>	
<b>HOW</b>	<b>Investment value factors</b>	<b>Investment process factors</b>	<b>Behaviour factors</b>
	<ul style="list-style-type: none"> <li>Average <b>US\$292,000</b> per investor (3 years)</li> <li>Average <b>US\$76,300</b> per investment</li> <li>Average <b>US\$70,000</b> per investor for future investments</li> </ul>	<u>Deal sources</u> <ol style="list-style-type: none"> <li>friends (<b>46%</b>)</li> <li>magazines/media (<b>36%</b>)</li> <li>banks, investment cos, VCs (<b>29%</b>)</li> <li>business connections (<b>25%</b>)</li> <li>active search (<b>24%</b>)</li> <li>investor clubs (<b>7%</b>)</li> </ol> <u>Deal frequency:</u> <ul style="list-style-type: none"> <li><b>3</b> deals last 3 yrs</li> <li>Expect <b>1 deal per year</b></li> <li><b>6-7</b> deals per year considered</li> <li>Rejection rate: <b>80%</b></li> </ul>	<u>Role in investee co:</u> <ul style="list-style-type: none"> <li><b>66%</b> passive</li> <li><b>22%</b> had board seat</li> <li><b>7%</b> acted as consultant</li> </ul> <u>Shareholding:</u> <ul style="list-style-type: none"> <li><b>90%</b> had minority equity holding</li> </ul> <u>Co-investing:</u> <ul style="list-style-type: none"> <li><b>67%</b> of investments were with coinvestor(s)</li> </ul>


**Sample method:** large scale postal survey sent to individuals discovered through a combination of members of an investment association, members of investment networks and the researchers' own databases

**Key Points:**

- High percentage of investments in early stage companies
- "Lead investor" phenomenon widespread

- Relatively passive investors - much less involved than Swedish (Landstrom) and UK (H& M 1991) investors
- Invest close to home
- Would increase investment activity if there were:
  - good meeting places between entrepreneurs and investors
  - better exit channels
  - better tax incentives

**Table 7 - Singapore 1999**

	<b>SINGAPORE</b>		
	<b>Hindle and Lee 1999</b>		<b>n1=29, n2=61</b>
<b>WHO</b>	<b><i>Age and Sex</i></b>	<b><i>Education and Work Experience</i></b>	<b><i>Wealth</i></b>
	<ul style="list-style-type: none"> <li>• Median age: <b>40 - 49</b></li> <li>• <b>69%</b> under 50 years</li> <li>• <b>90%</b> male</li> </ul>		
<b>WHAT</b>	<b><i>Financial factors</i></b>	<b><i>Positional factors</i></b>	<b><i>Other factors</i></b>
	<ol style="list-style-type: none"> <li>1. Rate of return</li> <li>2. Capital growth</li> <li>3. Time to exit</li> </ol>	Preference for proximity to home.	<ol style="list-style-type: none"> <li>1. Management team</li> <li>2. Marketability</li> <li>3. Familiarity with sector</li> </ol>
<b>HOW</b>	<b><i>Investment value factors</i></b>	<b><i>Investment process factors</i></b>	<b><i>Behaviour factors</i></b>
	<p><b>S\$350,000</b> per investment</p> <p>Total of <b>\$7.3 M</b> invested by 21 angels who disclosed investment amount.</p>	<ul style="list-style-type: none"> <li>• <b>86%</b> deals found through direct approach from entrepreneur.</li> <li>• <b>52%</b> had known entrepreneur &gt; <b>5</b> years</li> <li>• Acquaintances mainly through work.</li> </ul>	<p><b>70%</b> held board seat</p> <p>Average equity <b>37%</b></p>


**Sample method:** convenience sample of actual business angels at second-hand via the companies in which they had invested, those companies being located through register of new and existing businesses.

**Key Points:**

- Singapore culture does not allow for direct approach to business angels, so information must be gathered second-hand via investee companies. For the same reason, it is not possible to get information on income or net worth as these questions would be considered intrusive, even at second-hand.
- Relationships are very important. 80% of investors had known their investee for more than a year and more than 50% had known them for more than 5 years.
- Contrary to popular perception, these relationships most commonly arise not through family ties but through business contacts.
- More female angels than in other studies. They were amongst the youngest angels.



**Table 8 - Sweden 1993**

	<b>SWEDEN</b>		
	<b>Landstrom 1993</b>		<b>n=52</b>
<b>WHO</b>	<b>Age and Sex</b>	<b>Education and Work Experience</b>	<b>Wealth</b>
	<ul style="list-style-type: none"> <li>• Median age: <b>54</b></li> <li>• Over 55s: <b>47%</b></li> </ul>	<u>Work experience:</u> <ul style="list-style-type: none"> <li>• <b>69%</b> company owners</li> <li>• <b>96%</b> founding experience</li> </ul>	<ul style="list-style-type: none"> <li>• Income: 60% &lt; <b>US\$91K</b></li> <li>• Net worth: 57% &lt; <b>US\$900K</b></li> <li>• Net worth : income: <b>10</b></li> </ul>
<b>WHAT</b>	<b>Financial factors</b>	<b>Positional factors</b>	<b>Other factors</b>
	Min expected yield: <b>15%</b> Time to exit: <b>5-7 years</b>	<u>Industry sectors:</u> <ol style="list-style-type: none"> <li>1. Finance / real estate</li> <li>2. Production / industry</li> </ol> <u>Stage of growth:</u> <ul style="list-style-type: none"> <li>• Seed / startup: <b>27%</b></li> <li>• Infant / young: <b>43%</b></li> <li>• Established: <b>30%</b></li> </ul>	
<b>HOW</b>	<b>Investment value factors</b>	<b>Investment process factors</b>	<b>Behaviour factors</b>
	<ul style="list-style-type: none"> <li>• Mean <b>US\$218K</b> per investor</li> <li>• Mean <b>US\$91K</b> per investment</li> <li>• <b>75%</b> intend to make further angel investments</li> <li>• Average <b>US\$275K</b> per investor available for future investments</li> <li>• <b>34%</b> have &gt; <b>25%</b> of assets invested in entrepreneurial ventures</li> </ul>	<u>Main deal sources:</u> <ul style="list-style-type: none"> <li>• Active search</li> <li>• Business connections</li> </ul> <u>Deal frequency</u> (last 3 yrs) <ul style="list-style-type: none"> <li>• <b>10</b> deals considered</li> <li>• <b>5</b> deals short-listed</li> <li>• <b>3</b> deals done</li> <li>• Rejection rate <b>70%</b></li> <li>• 10-30 hours spent screening each deal</li> </ul>	<u>Role in investee co:</u> <ul style="list-style-type: none"> <li>• Board member: <b>56%</b></li> <li>• Consultant: <b>28%</b></li> <li>• Working in co: <b>7%</b></li> <li>• Passive: <b>7%</b></li> </ul> <u>Equity % obtained:</u> <ul style="list-style-type: none"> <li>• <b>65%</b> minority holding</li> </ul> <u>Co-investing</u> <ul style="list-style-type: none"> <li>• <b>81%</b> of deals involved co-investor(s)</li> </ul> <u>Achieved yield:</u> <ul style="list-style-type: none"> <li>• Above expected: <b>27%</b></li> <li>• Met expected: <b>41%</b></li> <li>• Below expected: <b>32%</b></li> </ul> <u>Anticipated exit:</u> <ul style="list-style-type: none"> <li>• IPO: <b>11%</b></li> <li>• Trade sale: <b>22%</b></li> <li>• Sell shares: <b>15%</b></li> <li>• Won't exit: <b>24%</b></li> <li>• Don't know: <b>20%</b></li> </ul>


**Sample method:** respondents to a questionnaire mailed to 134 names obtained via a combination of investee introduction and snowball method.

**Key Points:**

- Swedish angles are typically experienced entrepreneurs

- Swedish angels are more cautious, investing in more established ventures and spending longer evaluating deals than their UK counterparts in particular.
- They tend to invest in low-tech, asset-intensive industry sectors
- They have a moderate level of involvement in portfolio firms. They do not tend to own majority shares and serve in an advisory role e.g. board member and/or consultant.

Table 9 - UK 1992

	<b>UK</b>		
	<b>Harrison and Mason 1992a</b>		<b>n=86 (LINC 53)</b>
<b>WHO</b>	<b>Age and Sex</b>	<b>Education and Work Experience</b>	<b>Wealth</b>
	<ul style="list-style-type: none"> <li>• Median age: <b>53</b></li> <li>• Over 55s: <b>44%</b></li> <li>• Percentage male: <b>99%</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>49%</b> company owner</li> <li>• <b>67%</b> founding experience</li> </ul>	<ul style="list-style-type: none"> <li>• Income: <b>£46,000</b></li> <li>• Net worth: <b>£312,000</b></li> <li>• Net worth : income: <b>6.78</b></li> </ul>
<b>WHAT</b>	<b>Financial factors</b>	<b>Positional factors</b>	<b>Other factors</b>
	<p>Expected yield: <b>31%</b> min</p> <p>Time to exit: <b>3 - 5 years</b> (LINC <b>5 years</b>)</p>	<p><u>Proximity to home:</u> <b>&lt; 50 miles</b></p> <p><u>Industry sectors:</u></p> <ul style="list-style-type: none"> <li>• Consumer services</li> <li>• Distribution</li> <li>• High-tech manufacturing</li> <li>• Finance</li> </ul> <p><u>Stage of growth:</u></p> <ul style="list-style-type: none"> <li>• Seed / startup: <b>30%</b></li> <li>• Infant / young: <b>51%</b></li> <li>• Established: <b>19%</b></li> </ul>	
<b>HOW</b>	<b>Investment value factors</b>	<b>Investment process factors</b>	<b>Behaviour factors</b>
	<ul style="list-style-type: none"> <li>• Median <b>£22,000</b> per investor (LINC <b>£100,000</b>)</li> <li>• Median <b>£10,000</b> per investment (LINC <b>£30,000</b>)</li> <li>• <b>70%</b> intended further investment (LINC <b>86%</b>)</li> <li>• Median of <b>£50,000</b> available per investor (LINC <b>£100,000</b>)</li> </ul>	<p><u>Deal awareness:</u></p> <ol style="list-style-type: none"> <li>1. Business connections</li> <li>2. Friends</li> </ol> <p><b>47%</b> were dissatisfied with current channels for sourcing deals.</p> <p><u>Deal frequency</u></p> <ul style="list-style-type: none"> <li>• Deals considered: <b>29</b></li> <li>• Deals short-listed: <b>5</b></li> <li>• Deals done: <b>2</b></li> <li>• Rejection rate: <b>93%</b> (LINC <b>98%</b>)</li> </ul> <p>Screen time: <b>10 - 30 hrs</b></p>	<p><u>Role in investee co:</u></p> <ul style="list-style-type: none"> <li>• Board member: <b>Some</b></li> <li>• Consultant: <b>Some</b></li> <li>• Passive: <b>Some</b></li> </ul> <p><u>Equity % obtained:</u></p> <ul style="list-style-type: none"> <li>• <b>10 - 24%</b> had voting control</li> </ul> <p><u>Co-investing:</u></p> <ul style="list-style-type: none"> <li>• <b>36%</b> of investments (LINC <b>42%</b>)</li> </ul> <p><u>Achieved yield</u></p> <ul style="list-style-type: none"> <li>• Above expected: <b>28%</b></li> <li>• Met expected: <b>31%</b></li> <li>• Below expected: <b>38%</b></li> </ul> <p><u>Anticipated exit:</u></p> <ul style="list-style-type: none"> <li>• IPO: <b>25%</b></li> <li>• Trade sale: <b>29%</b></li> <li>• Sell shares: <b>26%</b></li> <li>• Won't sell: <b>8%</b></li> <li>• Don't know: <b>17%</b></li> </ul>

**Sample method:** Two studies are reported here:

1. Combination of postal survey using a mailing list obtained from a very broad range of sources and supplemented by snowball technique.

2. Postal survey of members of the LINC business introduction service

(Note: information on the second of these surveys is obtained from Harrison and Mason 1992b)

**Key Points - broad-based sample:**


In comparison with US investors (based on {Gaston & Bell 1986 #4210}), UK investors:

- were significantly older than US investors
- had more investment opportunities brought to their attention, but made about the same number of investments
- operated independently with syndication / joint investment relatively uncommon.
- failed to identify entrepreneurs themselves as a primary source of information on investment opportunities.
- had slightly higher rate of return and capital gains expectations, were slightly less patient and were less satisfied with overall performance of their portfolios (probably reflecting at least in part higher expectations)

**Key Points - LINC investors:**

- LINC members were more 'serious' investors:
  - They invested more in total and more per investment. They have more funds available for further investment and a greater willingness to invest further.
  - They were more patient and more inclined to co-invest

**Table 10 - UK 1994**

 <span style="float: right;"><b>UK</b></span>			
Stevenson and Coveney 1994			n=484
WHO	<i>Age and Sex</i>	<i>Education and Work Experience</i>	<i>Wealth</i>
			Income: <b>£75,000</b> Net worth: <b>£500,000</b> Net worth / income: <b>6.67</b>
WHAT	<i>Financial factors</i>	<i>Positional factors</i>	<i>Other factors</i>
	Expected yield: <b>21% min</b>  1. Rate of return 2. Cash flow  Time to exit: <b>6 years</b>	<ul style="list-style-type: none"> <li>• Majority prepared to invest up to 200 miles away from home.</li> <li>• Substantial minority prepared to invest even further away</li> </ul>	1. Management team 2. Potential for fun  Socially useful - <b>low</b> importance
HOW	<i>Investment value factors</i>	<i>Investment process factors</i>	<i>Behaviour factors</i>
	<ul style="list-style-type: none"> <li>• Median <b>£85,000</b> per investor</li> <li>• Median <b>£40,000</b> per investment</li> </ul>		

**Sample method:** large scale postal survey, based on a number of mailing lists, but biased towards current, former and prospective subscribers to business introduction services.


**Key Points:**

- A controversial study, criticising Harrison and Mason's recommendations from their 1992 study (above). Specific points of challenge were:
  - UK angels were richer and made more and larger investments
  - Most angels were prepared to invest outside their local area
  - UK business introduction agencies are just as good, if not better than, their US counterparts
  - Informal investors would be best served by a national network (rather than several local ones) which should be commercially run rather than not-for-profit.

- Identified 6 types of angels:
  - **Virgin:** have not actually made any investments (cf 'potential angels' in other studies)
  - **Latent:** have invested before, but not in last 3 years
  - **Wealth Maximising:** multi investors motivated by financial gain
  - **Entrepreneurial:** very rich individuals motivated by fun and better returns than 'city' investments
  - **Income Seeking:** invest to generate income or even a job
  - **Corporate:** companies which make angel type investments often for majority stakes


Harrison and Mason published a response to this study (Mason and Harrison 1996) arguing that three of the six categories of angels were not truly angels and suggesting that the sample was skewed by its heavy reliance on subscribers to business introduction services.

**Table 11 - USA 1981**

	<b>USA (NEW ENGLAND)</b>		
	<b>Wetzel 1981</b>	<b>n=133</b>	
<b>WHO</b>	<b>Age and Sex</b>	<b>Education and Work Experience</b>	<b>Wealth</b>
	<ul style="list-style-type: none"> <li>Average age: <b>47</b></li> </ul>	<ul style="list-style-type: none"> <li>Education: Post-graduate degree, often technical</li> <li><b>75%</b> had founding experience</li> </ul>	
<b>WHAT</b>	<b>Financial factors</b>	<b>Positional factors</b>	<b>Other factors</b>
	Expected yield: <ul style="list-style-type: none"> <li><b>50%</b> for inventors</li> <li><b>20-25%</b> for established firms</li> </ul> Overall portfolio: <b>20%</b>  Time to exit: <b>5-7 years</b>  Diversification and tax benefits not important	<u>Proximity to home:</u> <b>&lt; 50 miles</b>  <u>Industry sectors:</u> Preferred high-tech manufacturing  <u>Growth stage:</u> Preferred startup and early stage	<ul style="list-style-type: none"> <li>Familiarity with technology and market</li> <li>Non-financial rewards may reduce expected financial return.</li> </ul>
<b>HOW</b>	<b>Investment value factors</b>	<b>Investment process factors</b>	<b>Behaviour factors</b>
	<b>US\$50,000</b> per investor  <b>US\$10,000 - \$25,000</b> per investment	<u>Deal awareness:</u> 1. Friends 2. Business connections <b>65%</b> were dissatisfied with current channels for sourcing deals.  <u>Deal frequency</u> (last 3 yrs): <ul style="list-style-type: none"> <li><b>10</b> deals considered</li> <li><b>1-2</b> deals done</li> <li>Rejection rate: <b>85%</b></li> </ul>	<u>Role in investee co:</u> <ul style="list-style-type: none"> <li>Board member</li> <li>Consultant</li> </ul> Active  <u>Voting control:</u> <ul style="list-style-type: none"> <li><b>20%</b> had &gt; 50% equity</li> <li><b>39%</b> sought control</li> </ul> <u>Co-investing:</u> Typically participated with others

All data above was obtained from Harrison and Mason 1992a and Tymes and Krasner 1983 therefore no information on sample method or on key findings is available.

**Table 12 - USA 1983**

	<b>USA (CALIFORNIA)</b>		
	<b>Tymes and Krasner 1983</b>		<b>n=41</b>
<b>WHO</b>	<b>Age and Sex</b>	<b>Education and Work Experience</b>	<b>Wealth</b>
	<ul style="list-style-type: none"> <li>Average age: <b>42</b></li> </ul>	<ul style="list-style-type: none"> <li>Education: <b>MBA</b></li> <li>Most had founding experience</li> </ul>	
<b>WHAT</b>	<b>Financial factors</b>	<b>Positional factors</b>	<b>Other factors</b>
	Expected yield: <ul style="list-style-type: none"> <li><b>50%</b> (inventors)</li> <li><b>20-25%</b> (established)</li> </ul> Capital growth over 5 yrs: <ul style="list-style-type: none"> <li><b>31</b> times (inventors)</li> <li><b>5</b> times (established)</li> </ul> Primary objective for <b>80%</b> <ul style="list-style-type: none"> <li>Time to exit: <b>5-7 years</b></li> <li>Indifferent to tax benefits</li> </ul>	<u>Proximity to home:</u> <b>41% &lt; 50 miles</b> <b>33%</b> - no limits  <u>Industry sectors:</u> 1. high-tech manufacturing 2. industrial manufacturing 3. services  <u>Growth stage preference:</u> <ul style="list-style-type: none"> <li>Seed / startup: <b>43%</b></li> <li>Infant / young: <b>43%</b></li> <li>Established: <b>14%</b></li> </ul>	<ul style="list-style-type: none"> <li>Non-financial rewards may reduce expected financial return.</li> <li>Diversification an objective</li> </ul>
<b>HOW</b>	<b>Investment value factors</b>	<b>Investment process factors</b>	<b>Behaviour factors</b>
	Mean <b>US\$18,000</b> per investment Median <b>US\$250,000</b>	<u>Deal awareness:</u> 1. Friends 2. Business connections Generally dissatisfied with current channels for sourcing deals.  <u>Deal frequency:</u> <ul style="list-style-type: none"> <li>Rejection rate: <b>5 deals</b> per year</li> <li>Expected future rate of 2 - 6 deals per year</li> </ul>	<u>Role in investee co:</u> <ul style="list-style-type: none"> <li>Board member (<b>51%</b>)</li> <li>Consultant (<b>56%</b>)</li> <li>Working in co (<b>20%</b>)</li> <li>Passive (<b>22%</b>)</li> </ul> Active  <u>Voting control:</u> <ul style="list-style-type: none"> <li><b>16%</b> had &gt; 50% equity</li> <li><b>51%</b> had &lt; 10% equity</li> </ul> <u>Co-investing:</u> Typically participated with other angels or VCs


**Sample method:** large scale postal survey (or delivered by contact groups) of members or associates of organisations deemed to make them likely to qualify as informal investors.



**Key Points:**


- Heavily based on Wetzel's 1981 study so good for direct comparison. Similar in most respects. Differences included:
  - Age (42 vs 47)
  - Education (MBA predominant)
  - Invested more and more frequently
- Some examination of reasons for rejecting deals

**Table 13 - USA 1986**

	<b>USA (SUNBELT)</b>		
	<b>Gaston and Bell 1986</b>		<b>n=158</b>
<b>WHO</b>	<b>Age and Sex</b>	<b>Education and Work Experience</b>	<b>Wealth</b>
	<ul style="list-style-type: none"> <li>• Average age: <b>49</b></li> <li>• Over 55s: <b>25%</b></li> <li>• Majority male</li> </ul>	<ul style="list-style-type: none"> <li>• &lt; <b>50%</b> had founding experience</li> </ul>	<ul style="list-style-type: none"> <li>• Mean Income: <b>\$70,000</b></li> <li>• Mean net worth: <b>\$750,000</b></li> <li>• Net worth : income: <b>12.5</b></li> </ul>
<b>WHAT</b>	<b>Financial factors</b>	<b>Positional factors</b>	<b>Other factors</b>
	<ul style="list-style-type: none"> <li>• Expected yield: <b>20%</b> min</li> <li>• Time to exit: <b>5 - 7 years</b></li> </ul>	<u>Proximity to home:</u> <b>&lt; 50 miles</b>  <u>Industry sectors:</u> <ul style="list-style-type: none"> <li>• Manufacturing</li> <li>• Finance</li> <li>• Real Estate</li> </ul>	
<b>HOW</b>	<b>Investment value factors</b>	<b>Investment process factors</b>	<b>Behaviour factors</b>
	Average \$37,500 per investor	<u>Deal awareness:</u> <ol style="list-style-type: none"> <li>1. Friends</li> <li>2. Business connections</li> </ol> <b>33%</b> were dissatisfied with current channels for sourcing deals.  <u>Deal frequency</u> (last 3 yrs) <ul style="list-style-type: none"> <li>• Deals screened: <b>9</b></li> <li>• Deals short-listed: <b>3</b></li> <li>• Deals done: <b>2</b></li> <li>• Rejection rate: <b>78%</b></li> </ul> Expected to make <b>one</b> investment within next year	<u>Role in investee co:</u> <ul style="list-style-type: none"> <li>• Mostly consulting</li> </ul> <u>Equity obtained:</u> <ul style="list-style-type: none"> <li>• <b>50%</b> had voting control</li> </ul> <u>Achieved yield:</u> <ul style="list-style-type: none"> <li>• Above expected: <b>34%</b></li> <li>• Met expected: <b>37%</b></li> <li>• Below expected: <b>28%</b></li> </ul>

All data above was obtained from Harrison and Mason 1992a therefore no information on sample method or on key findings is available.

**Table 14 - USA 1989**

	<b>USA</b>		
	<b>Aram 1989</b>		<b>n=55</b>
<b>WHO</b>	<b>Age and Sex</b>	<b>Education and Work Experience</b>	<b>Wealth</b>
	<ul style="list-style-type: none"> <li>• Average age: <b>47</b></li> </ul>	<u>Education level:</u> <ul style="list-style-type: none"> <li>• Undergrad degree: <b>40%</b></li> <li>• Masters degree: <b>42%</b></li> </ul> <u>Work experience:</u> <ul style="list-style-type: none"> <li>• Founding: <b>33%</b></li> <li>• Management: <b>80%</b></li> </ul>	<ul style="list-style-type: none"> <li>• Income: <b>\$112,000</b></li> <li>• Net worth: <b>&gt; \$1.5 million</b></li> <li>• Net worth : income: <b>13.4</b></li> </ul>
<b>WHAT</b>	<b>Financial factors</b>	<b>Positional factors</b>	<b>Other factors</b>
		<u>Proximity to home:</u> <ul style="list-style-type: none"> <li>• <b>76%</b> within <b>50 miles</b></li> <li>• <b>86%</b> within <b>150 miles</b></li> </ul> <u>Industry sectors:</u> <ul style="list-style-type: none"> <li>• <b>Two-thirds</b> preferred non technology-based</li> </ul> <u>Stage of growth:</u> <ul style="list-style-type: none"> <li>• Seed / startup: <b>55%</b></li> <li>• Infant / young: <b>30%</b></li> <li>• Established: <b>15%</b></li> </ul>	
<b>HOW</b>	<b>Investment value factors</b>	<b>Investment process factors</b>	<b>Behaviour factors</b>
	Average <b>\$49,000</b> per investor per year  <u>Capital in entp'l ventures:</u> <ul style="list-style-type: none"> <li>• <b>32%</b> of investors &lt; <b>5%</b></li> <li>• <b>46%</b> of investors &lt; <b>25%</b></li> </ul>		<u>Co-investing:</u> <ul style="list-style-type: none"> <li>• <b>92%</b> of investments involved co-investor(s)</li> </ul>


**Sample method:** large scale postal survey of CEOs of companies selected from the SBA's Enterprise and Establishment Microdata file, restricted to firms with less than 500 employees.

**Key Points:**

- Tendency to invest locally, with other investors and in early stage

- Aram suggests that informal investors could be segmented according to growth stage, technology orientation and coinvestor involvements.
- Aram also hypothesises that angels with direct experience of start-ups are more likely to invest in this stage.

**Table 15 - USA 1992 & 1995**

 <b>USA</b> Freear, Sohl and Wetzel 1992 and Freear, Sohl and Wetzel 1995    n=146 and 177			
<b>WHO</b>	<b>Age and Sex</b>	<b>Education and Work Experience</b>	<b>Wealth</b>
<b>WHAT</b>	<b>Financial factors</b>	<b>Positional factors</b>	<b>Other factors</b>
	Expected yield: <b>33%</b> min (1992) Time to exit: <b>4.75 years</b> (1995)	Proximity to home (1992): • <b>65%</b> within <b>300 miles</b>  Stage of growth (1995): • Seed / startup: <b>60%</b> • Infant / young: <b>16%</b> • Established: <b>24%</b>	1. Supporting entrepreneurship 2. Proximity to home 3. Socially useful  (1 = 1992 & 1995, 2,3 = 1992 only)
<b>HOW</b>	<b>Investment value factors</b>	<b>Investment process factors</b>	<b>Behaviour factors</b>
		<u>Deal awareness:</u> • Friends: <b>55%</b> ( <b>83%</b> in 1995) • Direct approach: <b>42%</b> • Business: <b>28%</b> ( <b>83%</b> in 1995) • Other entrep'rs: <b>31%</b> (1995)  <u>Deal frequency</u> (last 3 yrs) • Deals screened: <b>9</b> • Deals done: <b>2.5</b> • Rejection rate: <b>72%</b>	<u>Role in investee co:</u> • Board member: <b>8%</b> (1995 - <b>most</b> ) • Consultant: <b>20%</b> • Working in company: <b>33%</b> (1995: <b>25%</b> ) • Passive: <b>34%</b> (1995: <b>&lt;20%</b> )

**Sample method:** Two studies are reported here:

1. (1992) A random sample of high net worth individuals
2. (1995) A study of informal and formal investors based on a sample of 284 new, technology-based firms in the New England area, selected from the register of businesses founded in the region between 1975 and 1986

**Key Points (1992 study):**

- Investment activity had declined over five years surveyed. Investments made declined 42% with a similar decline for investments considered.
- Most productive sources of deals (measured by investments seriously considered) were, in order: friends, business associates, lead investors.

- A trend toward investing further from home was observed - only 50% of future investments expected to be within 300 miles of home.

**Key Points (1995 study):**

- Angels were taking more active role in investee companies than in 1992 study
- Overall, sample companies raised only \$1 from angels for every \$5 they raised from venture capitalists. However, the lower the amount of money being raised, the higher percentage of capital came from angels
- VCs only supply funds for start-up ventures if the amount of capital required is significant. Smaller start-ups depend on angel funding for initial capital but can go to VCs for later rounds.
- Angels make decisions faster. It was quicker to find and meet with angels than decision makers in VC firms (median 1 month vs 1.75 months). From initial meeting to receipt of funds, angels were much faster (median 2.5 months vs 4.5 months).
- Angels expect lower rates of return than VCs
- There was no significant difference between value added by angels and by VCs.

## **Discussion – is a ‘Grand Synthesis’ possible or desirable?**

It is usual at this stage to offer a discussion of findings, interpreting the results and offering possible explanations. At the outset, the authors believed that some unforeseen insights **might** be revealed, however, our conclusion is that the differences between the samples, the methodology and the chronological span of these 16 studies make it unsafe to draw overall conclusions on most aspects of angel attitudes, behaviours and characteristics. We therefore present the data without interpretation for others to examine for patterns from whatever perspective interests them most.

There are, nevertheless, some messages which emerge consistently. The fact that they are consistent over such a wide range of disparate studies makes them all the stronger. While they are unlikely to surprise anyone who is at all familiar with this field of research, they are still worth stating explicitly.

### **WHO - Characteristics**

- Angels are overwhelmingly male and middle-aged.
- Whatever their education level, the vast majority have management experience.
- They are more likely than the average member of the population to have direct experience of startups.

### **WHAT - Attitudes**

- They usually invest close to home (this conclusion is based on actual investments rather than expressed preferences).
- They invest in earlier stage than formal venture capitalists.

### **HOW - Behaviours**

- They reject more deals than they accept (but have lower rejection rates than formal venture capitalists).
- They invest smaller amounts per deal than formal venture capitalists.
- They use a wide variety of channels to source deals.

If any other message emerges from this synthesis of existing research, it is that business angels defy categorisation. This reflects the fact that they are **informal**

providers of risk capital - they operate outside any official programs and each one has his (and occasionally her) own rules of behaviour and networks. This does not mean that it is not worthwhile to attempt to study them, nor that existing studies from one region have no relevance to other regions. On the contrary, studies of business angels increase the knowledge of this elusive and heterogeneous population and add value in several ways:

- every well-constructed study yields new and valuable insights;
- if other environmental factors are similar (such as population, geography, economic activity), then an existing study of one region provides a better hypothetical profile of angel activity in another region than intuition and guesswork can offer;
- well-constructed studies provide a framework which future studies can use and expand, providing for comparison across regions or time periods;
- each study identifies areas for further research;
- all studies so far have confirmed that angel funding is a significant source of capital to new and growing businesses.

The main value of this paper lies in providing a useful compendium of international angel profiling research as at the close of the century. Information is presented in a consistent manner and with key points summarised. It should benefit anyone considering conducting a first study of business angels in their country or building on research already completed.

## Reference List

- Aram, J. D. 1989. Attitudes and Behaviors of Informal Investors Toward Early-Stage Investments, Technology-Based Ventures, and Coinvestors. *Journal of Business Venturing* 4,333-347.
- Freear, J., Sohl, J. E. and Wetzel, W., 1992, The Investment Attitudes, Behavior and Characteristics of High Net Worth Individuals. In Churchill N.C. et al. (eds.) *Frontiers of Entrepreneurship Research*, (Wellesley, MA: Babson College) 374-385.
- Freear, J., Sohl, J. E., and Wetzel, W. 1995. Angels: Personal Investors in the Venture Capital Market. *Entrepreneurship and Regional Development* :85-94.
- Freear, J., Sohl, J. E., and Wetzel, W. 1997. The Informal Venture Capital Market: Milestones Passed and the Road Ahead. *Entrepreneurship* 2000 :47-69.
- Gaston, R. J. and S. Bell. 1986. *Informal Risk Capital Investment in the Sunbelt Region*. Washington, DC: US Small Business Administration, Office of Advocacy.
- Harrison, R. T. and Mason, C. M. 1992a. International Perspective on the Supply of Informal Venture Capital. *Journal of Business Venturing* 7,459-475.
- Harrison, R. T. and Mason, C. M. 1992b. The Roles of Investors in Entrepreneurial Companies: a Comparison of Informal Investors and Venture Capitalists. *Venture Capital* :388-405.
- Harrison, R. T. and Mason, C. M. 1996a. Developments in the Promotion of Informal Venture Capital in the UK. *International Journal of Entrepreneurial Behaviour and Research* 2,2,6-33.
- Harrison, R. T. and Mason, C. M. 1996b, *Informal Venture Capital: Evaluating the Impact of Business Introduction Services*. (London: Prentice-Hall)
- Hindle, K. G. and Lee, L. T. J. 1999. An Exploratory Investigation of Informal



- Venture Capitalists in Singapore. *Venture Capital* .
- Hindle, K. G. and Wenban, R. 1999. Australia's Informal Venture Capitalists: an Exploratory Profile. *Venture Capital* 1,2,169-186.
- Landstrom, H. 1993. Informal Risk Capital in Sweden and Some International Comparisons. *Journal of Business Venturing* 8,525-540.
- Lee Tsao Yuen and Low, L., 1990, *Local Entrepreneurship in Singapore, Private and State*. (Singapore: The Institute of Policy Studies: Times Academic Press)
- Lumme, A., Mason, C., and Suomi, M. 1996. The Returns From Informal Venture Capital Investments: Some Evidence From Finland. *Entrepreneurial and Small Business Finance* 5,2,139-158.
- Mason, C. M. and Harrison, R. T. 1996. Business Angels in the UK: A Response to Stevenson and Convey. *International Small Business Journal* 15,2,83-89.
- Neuman, W. L., 1997, *Social Research Methods: Qualitative and Quantitative*. (Massachusetts, US: Allyn and Bacon)
- Reitan, B. and Sorheim, R. 1999. The Informal Venture Capital Market in Norway - Investor Characteristics, Behavior and Preferences. *Frontiers of Entrepreneurship Research* (Babson Park, ). Babson Park, MA: Babson College.
- Short, D. M. and Riding, A. L. 1989. Informal Investors in the Ottawa-Carleton Region: Experiences and Expectations. *Entrepreneurship and Regional Development* 1,99-112.
- Stevenson, H. and Coveney, P., 1994, Survey of Business Angels: Fallacies Corrected and Six Distinct Types of Angels Identified. In R. Blackburn et al. (eds) *Small Firms : Contributions to Economic Regeneration*, (London: Paul Chapman Publishing)
- Tashiro, Y. 1999. Business Angels in Japan. *Venture Capital* 1,3,259-273.

- Timmons, J. A., 1994, *New Venture Creation: Entrepreneurship for the 21st Century*.  
(Homewood, Illinois: Irwin)
- Tymes, E. R. and Krasner, O. J. 1983. Informal Risk Capital in California. 346-369.
- Wetzel, W. E., 1981, Informal Risk Capital in New England. In Vesper Karl H. (Ed.)  
*Frontiers of Entrepreneurship Research* , (Wellesley, MA: Babson College)  
217-245.
- Wolf, F. M., 1986, *Meta-Analysis: Quantitative Methods for Research Synthesis*.  
(Beverly Hills, CA: SAGE Publications)