

≈ SUMMARY ≈

**A MULTIVARIATE ANALYSIS OF TAXONOMIES USED FOR THE
CATEGORIZATION OF INFORMAL INVESTORS IN NEW ZEALAND**

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Principal Topic

This research broadly falls in the area of entrepreneurial finance and focuses on informal investors in New Zealand. Of particular interest is the suitability of models or taxonomies used for the categorisation of informal investors in NZ using GEM and MED data.

Since Wetzel's (1996) seminal study of informal investors, researchers have struggled to define and categorise informal investors into meaningful groups. Many attempts have been made to develop a robust taxonomy that meaningfully categorises informal investors in a way which can be replicated cross-nationally. To date, no taxonomy achieves this goal.

This study clarifies the issues and discrepancies, and then proposes an improved taxonomy for the categorisation of informal investors. The researcher uses complementary data gathered from 2002-2004 by the Global Entrepreneurial Monitor (GEM) New Zealand project and by the New Zealand Ministry of Economic Development (MED) in 2003. It is believed that these New Zealand-based improvements will be generalisable to other countries and circumstances.

The role of informal venture capital has become the focus of considerable international research in recent years. Wetzel's (1983) seminal paper was followed *inter alia* by Wetzel (1986), Riding (1993), Harrison and Mason (1992), Coveney and Moore (1998), Landström (1993), Lumme (1998), Hindle and Wenban (1999), Mason and Harrison (2000), Linde (2000).

The reason for such attention is related to the crucial role that informal venture capital plays in the supply of funds to SME's (small to medium sized enterprises) in the early stages of firm development. This funding, it is believed, contributes significantly to the firm's performance and consequently to growth in the overall economy (Sorheim and Landström, 2001).

There is considerable debate regarding what variables or factors that should be analysed as the basis for this categorisation or segmentation of informal investors (Sorheim et al., 2001, p.5). Without an internationally accepted method for categorisation, there is a degree of ambiguity and confusion amongst international experts (Hindle, 1999, p.5), (Sorheim, 2000, p.353).

Most of this research has been conducted outside New Zealand and is almost exclusively focused on a particular type of investor called the 'business angel', or 'angel' for short. This study takes a different tack in shedding light on one sub-set category of angels, namely informal investors, which has been identified by the Ministry of Economic Development (MED) as useful (Infometrics Ltd, 2004, p. 26).

New Zealand research has not extensively examined the demographic and behavioural characteristics of informal investors. The most comprehensive research in NZ has come from

the Global Entrepreneurial Monitor 2003 report (Frederick, 2003) and a 2004 report released by the MED (Infometrics Ltd, 2004, p. 26).

The GEM Report's focus is on overall entrepreneurial behaviour and does not attempt to differentiate investment patterns amongst categories of informal investors in NZ. The report, however, discusses the need and importance for further study in the area of informal investment and in particular, the characteristics of groups of investors other than business angels (Frederick, 2003, p.3).

The Infometrics report, though far more detailed and perhaps the most in-depth report into informal investment in NZ, similarly does not focus on the investment patterns of informal investors as a whole but rather only on those that match the international description of an angel investor. The Infometrics report also highlights the need for further categorisation of informal investors in NZ (Infometrics, 2004, p.26).

In conclusion, there is an identified gap in the literature regarding the investment behaviour of the various types of investors in NZ and there is little consensus amongst authors regarding a framework for the categorisation of informal investors.

Methodology/Key Propositions

The sample comprises two data sets. The first was supplied by the GEM New Zealand in 2004 which consists of 2002 respondents. The other was supplied by the MED also in 2004 which consists of 611 respondents.

The literature review shows that there are a number of variables used internationally to describe the investment characteristics of informal investors. This study seeks to not only test the validity of those variables but also to potentially identify more robust variables for the taxonomical categorisation of informal investors.

We carry out a K Means non-hierarchical cluster followed by a series of One Way ANOVA's using a Scheffe and Tukey post-hoc analysis. These tests were chosen because Sorheim and Landström used them in their analysis. We also use correlation and principle component (factor) analysis.

We examine the propositions that primary dichotomous tension best suited to account for heterogeneity amongst informal investors are the two factors *investor activity* and *investor competence*.

Results and Implications

We seek to:

- Highlight the strengths and weaknesses of different taxonomies used to categorise informal investors with the intention of further clarifying key issues and addressing some of the gaps in the literature.

- Provide much needed data from NZ which will help international researchers to increase the international knowledge of informal investment in a global context (see for example, Freear, Sohl and Wetzel, 1996, p.2; and Hindle, 1999, p. 169 -171).
- Buttress the Ministry of Economic Development's belief in the usefulness of further analysis of informal investors by using a wider number and variety of primary factors in order to enhance the available knowledge of informal investors in NZ.
- Help entrepreneurs seeking early-stage investment who are often shunned by institutional investors and are forced to fund their ventures through the use of informal venture capital (see for example, Infometrics, 2004, p. 8; and Equinox Management Consultants, 2000, p. 9).
- Deepen the GEM analysis of informal investors in NZ as captured in their data.

In conclusion, this research has benefits for academia, the New Zealand economy, the MED, entrepreneurs, and the investment community in general.

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