

**Methodological Issues in a Study of
Relationships between Family Firms and Capital Providers:**

Empirical Evidence from Small Family Firm in Thailand

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Abstract

This paper presents the methodological Issues in a study of relationships between family firms and capital providers. This paper begins with short introduction to the topic. After that details of research methodologies are elaborated. The philosophical standpoint adopted in this study falls into the positivism position. This study is suitable for the deductive research approach and is designed within exploratory and descriptive research types. Accordingly the quantitative approach is recommended in testing the hypotheses. Questionnaire survey was chosen to gather data. Prior to its use pilot study was conducted. Descriptive and multivariate statistics are considered as the most appropriate techniques used for data analysis.

Keywords: small family firms, capital structure, financing decisions, networking, relationships, regression analysis, factor analysis, structural equation modeling

1. Short Introduction to the Topic

As small firms are the major engines of countries' economies and trade, the financial problem facing small firms obstructs firm development as well as economic advancement as a whole.

The availability of external finance for small firms is a significant issue to policy makers around the world and is a serious area of study for academics (Berger and Udell, 2006). It has been argued that several ingredients including finance, networks, strategic orientation of the firms and characteristics of entrepreneur have had an impact on small firm success.

Networking is of the utmost essence in the financing of small firms (Read, 1998). This study is focused on the investigation of how financing is taken care of in small family firms. In addition, the emphasis is on the conceptualization of small family firms finance, networking and connections for capital acquisition - especially the relationships between firms and their capital providers.

Small family firms differ from large firms in ways that can affect their ability to meet their need for finance as well as their capital structure. The need for control is said to have an impact on the financial policies of small family firms. The relationship between small firms as a customer and the bank or other potential capital providers could be essential for the financing process. For instance, Peterson and Rajan (1994) found that the primary benefit of building close ties with institutional creditors is that the availability of financing increases. It would appear then, that entrepreneurs or owner - managers should develop good relationships with their capital providers in order to improve access to sources of funds suitably priced. Specific techniques such as networks and relationships may be useful in facilitating greater access to finance.

2. Research Methodology Perspective

In this section an attempt is made to outline the methodological aspects of this study. Different choices are discussed and motivated in relation to the research question and objective of this study. The section will also contain the research philosophy, research approach, research design and research strategy of this study as well as research time dimension. The aim with this study is to gain an understanding on how relationships, networks, and entrepreneurs' characteristics effect capital acquisition and also capital structure. Moreover, another aim with this study is also to indicate ways to facilitate and improve the capital acquisition of small family firms.

2.1 Research Philosophy

The way a researcher views the world or his/her surroundings by some means influences the research philosophy the researcher adopts in his/her research project. There are three major ways of thinking about research philosophy that shape the way in which researchers think about research process: Epistemology, Ontology and Axiology (Saunders *et al.*, 2007). However, epistemology and ontology tend to be well-known in discussing philosophical issues behind research.

According to Bryman (2008) and Saunders *et al.* (2007), the concept of epistemology concerns what is (or should be) regarded as acceptable knowledge in a field of study. Epistemology is referred to “general set of assumptions about the best ways of inquiring into the nature of the world” (Easterby-Smith *et al.*, 2002: 31). This consideration grants the key question of whether the social world can and should be studied according to the same approaches and procedures as the natural sciences (Bryman, 2008). The discussion on epistemology is often delineated into three different philosophies: positivism, realism and interpretivism (Saunders *et al.*, 2007).

In a broader sense, positivism refers to the philosophical stance of the natural scientist. According to the positivist view, the research progresses through developed hypotheses (derived from existing theory) that will be tested and contribute to further development of the theory and requiring a large number of sampling selected randomly (Easterby-Smith *et al.*, 2002 and Saunders *et al.*, 2007). Therefore, the main focus of positivism is conducting a particular research through quantifiable observation of social reality as well as dealing with generalization through statistical analysis.

On the other hand, an interpretivist or social constructivist views the observer as a part of what is being observed and human interests are the main drivers of science (Easterby-Smith *et al.*, 2002). Thus, a researcher with the interpretivist view is likely to grasp the subjective meaning of a particular social phenomenon as well as to share interpretations of his/her socially constructed. Nonetheless, realism is another philosophical stance. Realism tradition presumes a scientific approach regarding to knowledge development which is similar to the positivism tradition (Saunders *et al.*, 2007).

Ontology is termed as “assumptions that we make about the nature of reality” (Easterby-Smith *et al.*, 2002: 31). Then ontology embraces two core concepts: objectivism and subjectivism (Saunders *et al.*, 2007). Objectivism describes the view that social entity and phenomena have an existence that is external to social actors whereas subjectivism considers that social phenomena are created from the perceptions and consequent actions of those actors. (Bryman, 2008 and Saunders *et al.*, 2007).

In this study the purpose is to develop hypotheses to investigate the impact of networking and relationships on capital structure of small family firms in Thailand. This is in line with positivist and objectivist approach; then it becomes the main guiding philosophy in this study. Furthermore, this is justified by the fact that various theories have been applied to formulate hypotheses which will be tested.

2.2 Research Approach

Generally, two research approaches are mainly concerned with inductive and deductive. In relation to inductive approach, theory follows specific observations or data findings, which refer to building theory (Bryman, 2008 and Hair *et al.*, 2007). A general proposition or conclusion is drawn from the basis of observation of particular facts or pieces of evidence and also conclusion explains facts and the facts support the conclusion (Cooper and Schindler, 2003 and Zikmund *et al.*, 2010). On the contrary, a deductive approach is the logical process of deriving a reasoned conclusion from logical generalization of a known fact (Sekaran, 2003). Thus, a deductive approach refers to the development of a theory and hypotheses and designing research strategy to test those hypotheses essentially in quantitative ways (Saunders *et al.*, 2007). Furthermore, it typically moves from the general to the specific (Babbie, 2004).

In investigating the impact of networking and relationships on capital structure, deductive approach is applied. A substantial body of knowledge in the area of small firm finance and networking/relationships already exists. As well the basis for the development of a theoretical framework and hypotheses were provided by the literature reviewed, making the deductive approach possible in this study. It is suggested that I can get some pre-understanding of the issue from the related theories and conceptual framework. This approach is considered as theory testing.

I will use original field data on relationships and networking between owner-managers and their capital providers to help illustrate and explain the mechanisms by which relationships and networking produce outcomes. I therefore use a random sample of small family firms to test the validity and generalization of the theories and hypotheses as well. In addition, the financial theory and networks theory and also other related theories described in the theoretical framework will be compared to the empirical findings of this study.

2.3 Research Design

Research in business can be classified into three types of research design; exploratory research, descriptive research and explanatory (causal) research. (Saunders *et al.*, 2007 and Babbie, 2004). An exploratory study is aimed to gain familiarity with the phenomena in the situation before developing a model and setting up a rigorous design for comprehensive investigation (Sekaran, 2003). Therefore, the key point in conducting exploratory research is to understand a new interest and insights that provide the researcher better clarification of the general nature of a problem. Zikmund *et al.* (2010) suggest that exploratory research is characteristically a first step, carried out with the expectation that further studies will be needed in order to gain more conclusive evidence. Several techniques could be used in conducting exploratory research such as through literature review, discussing or talking to experts in the field of study or focus group and case study.

Descriptive studies are usually structured and specifically designed to measure the characteristics described in research question (Hair *et al.*, 2003). Descriptive research is employed to provide descriptions of phenomena or characteristics concerning a subject of population, estimates of the proportions of a population that have those characteristics and discovery of associations among different variables (Cooper and Schindler, 2003). In general, the descriptive study is guided by an initial hypothesis. Moreover, this type of research design may be an extension of a piece of exploratory research (Saunders *et al.*, 2007).

For explanatory research, it concerns with determining cause-and-effect relationships (Zikmund *et al.*, 2010). Moreover, explanatory research moves beyond description to seek to explain the patterns and trends observed (Ticehurst and Veal, 1999). This kind of design can be conducted through field experiment and laboratory (lab).

Overall, three research designs are not definite independence then there is a connection and overlap between these research designs. In this study, I am trying to understand complex phenomenon in financing matters where small firms may rely on their networking and relationships with capital providers. This study is designed to describe the potential sources of finance for small firms and also to investigate the impact of relationships and networks on capital structure.

This study begins with exploratory research and follows by descriptive research. The first stage, previous literatures about financial theories, networking and relationships theories were review extensively to understand the current phenomenon and to narrow the research topic. Besides, interviewing entrepreneurs and talking with experts in the field were conducted to narrow and refine research questions. Once a clear framework of this study was located and related hypotheses were developed, the second stage, the descriptive research will be implemented. The descriptive study is therefore applied to analyze the related results by testing the hypotheses and describing situations or events.

The problem elaborated upon for this study can be handled by following a combination of quantitative and qualitative approaches. The latter provide an understanding and create knowledge through using interviews and observation. With relation to the first stage in exploratory study, on the basis of the knowledge gained from interviews, understanding can be reached about the way owner-managers or entrepreneurs apply networking and relationships for the handling of their capital acquisition problems. In a qualitative approach, small samples are investigated using a large number of variables. However, in quantitative large samples can be examined. Statistics are more easily used with quantitative data from data collection process. It can be stated that the qualitative approach provides in-depth (deeper understanding) of information, while the quantitative approach provides summary information on many characteristics (Hair *et al.*, 2007). As a consequence, these two different methodological approaches fulfill complementary roles in the development of knowledge that are useful here with the emphasis on quantitative approach.

2.4 Research Strategy

Selecting alternative strategies of inquiry follows the choice of research design. The research strategy refers to the procedure applied to meet research aim and also answer research questions that have been set (Saunders *et al.*, 2007). There are a number of methods or alternative strategies of inquiry from which to select: experimental designs, non-experimental designs (such as surveys), ethnographies, case studies or mixed methods (Creswell, 2003). For instance, ethnography is an approach of qualitative inquiry which attempts to learn about the social and cultural life of communities, institutions, and other setting that is investigative and scientific (LeCompte and Schensul, 1999). It involves the description of how people believe, think, and behave in particular setting. According to Bryman and Bell (2007), ethnography can be seen as a process of joining a group, watching what goes on, making some notes, and writing it all up.

Case study refers to a strategy which provides a possibility to be close to the studied objects, enabling rich description of events (Halinen and Törnroos, 2005). The case study approach is characterized by the fact that few cases are examined from many different aspects. On the other hand, the survey research strategy allows researchers to collect original data for describing a population too large to observe directly (Babbie, 2004). This strategy is typically associated with deductive approach and applied sampling procedure that is possible to generate findings that are representative of those populations (Saunders *et al.*, 2007).

In this study, the survey strategy was utilized but initiated by interviews. Prior to data collection by survey, I travelled to Thailand to make contact with those who were able to provide me with access to sources of data on small family firms in that country. Then, the first stage in this study was to carry out interviews with small family firms' owner-managers. Additionally, these interviews served as a basis for subsequent descriptive study.

In the second stage, a large survey strategy is applied to collect empirical data. Questionnaires were used to investigate and describe relationships, network practices and aspects of trust among small family firms in order to get information about the sources of finance used by small family firms in their capital structure. Furthermore, the survey was conducted in order to collect information from a sample of small family firms about firms' owner-managers ability to meet their need for financial resources by dealing with networks, trust and business relationships. To get access to potential respondents, official government

agencies' databases were used to gather contact information. Owner-managers and/or key informants from small family firms were identified and asked to cooperate in filling out the questionnaire, which will be mailed.

The argument for choosing the survey strategy is twofold. Firstly, surveys provide quick, efficient and relatively accurate means of assessing information about the population. Secondly, surveys are appropriate in cases where there is a lack of secondary data.

2.5 Time Dimension

According to the research time dimension of this study, it is theoretically possible to choose between a cross-sectional and a longitudinal study. Babbie (2004) defines cross-sectional study as a study based on observations representing a single point of time while longitudinal study is a study design involving the collection of data at different points of time. Then the number of times that data is gathered points up the distinction between two dimensions. This study employs a cross-sectional time dimension. That is it involves the investigation of particular event or situation at a particular point of time. Therefore, this study is exploratory and descriptive research was set to describe the contemporary phenomena of determinant of capital structure among small family firms, not observe events over a period of time. In addition, there is also a time constraint in PhD study. A cross-sectional study is more appropriate than longitudinal study.

3. Data Collection

Different techniques such as observation, structured, semi-structured, in-depth and group interviews, questionnaires and secondary data can be applied in the process for data gathering (Saunders *et al.*, 2007). The questionnaire survey was used as primary instrument to gather empirical data in this study. This section deals with target population, sampling procedure and questionnaire development as well as pilot study.

3.1 Population and sampling procedure

The population for this study is a set of small manufacturing firms in Thailand. Given the size of the entire population covered, I use only a representative sample in this study and it is not include all small manufacturing firms in Thailand. Then the sampling consideration was required. In sampling procedures, the process was carried out in the following steps.

First of all, the sampling frame describes the list of all population units from which the sample was selected. In this study, the sample of responding firms was drawn from the Institute for Small and Medium Enterprises Development (ISMED), an official government agency who provides updated list of enterprises of the whole country in trading, manufacturing and service sectors. Next, there are two types of sampling procedure: probability and non-probability sampling. Probabilistic sampling can only be used where each population unit has a known chance of being selected in the sample. The sampling procedure used in this study was probability sampling due to the sample frame is accessible and clearly defined. Then, simple random sampling technique was used in selecting the sample.

Later, sample size was determined. Prior literature has shown that sample size selection to a great extent is judgmentally decided. Rules of thumb, budget and time available and the accuracy required of the results in particular, the variability of the population are the factors that influence the number of sample size. However, this study employed statistical techniques to determine the sample size in order to ascertain representativeness and generalization of the findings. Two statistical formulas were used to calculate the number of sample size in two steps: the minimum sample size needed and the actual sample size. Then, the actual sample size and size of population were used to calculate the sampling interval for obtaining the list of sample from the sample frame. Lastly, the final list of samples was selected by the simple random technique for the administration of questionnaires.

According to all samples drawn from all small manufacturing firms in Thailand, only small family firms will be used to analyze. The principles used in the classification of respondent firms are therefore discussed on the basis of the character of the population referred to, which is narrowed down into small family firms. Although family firms are difficult to define given the diversity of definitions in the literature, small family firms can be described, for the aim of this study, as firms where family members have substantial ownership interests and exercise control over a firms' financing and other important operating decisions.

In line with Ibrahim and Ellis (2003), Sharma *et al.* (1996), Chrisman *et al.* (1998), Chau *et al.* (1999) and Birdthistle (2003), I consider all small firms (10 - 50 employees) where more than 50% of the equity is owned by one family and operated by them. That is, the majority of members of the management team will be members of the owning family and one member of

that family will be the owner-manager of the small family firm. The reason for stating the proportion of 50% as the cut-off point is because it provides a controlling interest to these families. This means that the firms in which more than half of ownership, voting and management control is owned by a single family group or family members, those firms are likely to be managed differently from other small firms due to this extensive family involvement.

3.2 Questionnaire Development

A Self-administered structured questionnaire was developed and used to collect data in the large survey. The questionnaire was built up based on the theories with regarding to capital structure of small firms, social networks theory, network contents, relationships theory and family firm issues in previous studies. The questions were designed to cover background information of the family firm in relation to capital structure decisions as well as the required information originated from theoretical framework compliant with proposed hypotheses. The questionnaire encompasses the following major sections: (1) general information of firm (2) sources of funds and capital structure decisions (3) networks and capital acquisition (3) relationships with capital providers (4) network ties in practices, (5) family firm issues and ownerships (6) demographic information of respondent.

The large survey for data gathering will be conducted in Thailand where the sample group is based. The targeted respondents are the owner-managers of small manufacturing firms. The questionnaires will be sent to targeted respondents through ordinary mail together with a postage-paid reply envelope and a cover letter identifying necessary information for asking respondents to fill and return the questionnaire. Conversely, in case of low response rate, follow-up mail would be used to increase the response rate. The whole period of distributing and receiving questionnaires is expected to be within 3 months.

3.3 Pilot Study

Subsequent to the survey questionnaire was developed, a pilot test was conducted with a small group representative of the population to assess the questions validity and consistency of the responses. Approaches to pretesting of questionnaire can be informal or formal which is a replication and undertaken on a small scale (Remenyi *et al.*, 1998).

The questionnaires were pretested with nine small manufacturing family firms. Respondents were conveniently selected as statistical conditions are not necessary in the pilot study (Cooper and Schindler, 2003). Owner-managers of nine firms were asked to fill out the questionnaire accompanied by interviewed in order to refine the meaning, understanding, wording and formatting of the questionnaire. During the individual pretest, each of the owner-managers and I went through the particular questions to determine what they think the questions are trying to ask. Likewise, a list of questions was used to check on pertinent issues related to the pretest questionnaire.

The revisions were made based on the feedback, comments and recommendations from the respondents. Therefore, respondents in the large survey will have no difficulty in answering the questions.

4. Data Analysis

This section is aimed to illustrate analytical instruments involved in the analysis of the data collected. According to the survey instrument based on self-administered structured questionnaires, the purpose of analytic methods is to convert data into information needed to make decisions. The data will be coded and analyzed by using statistical software program, Statistical Package for Social Science (SPSS). The confidence level of 95% is commonly used and accepted in most researches. Since, this study is mainly quantitative study, it is necessary to determine what statistical technique will be used.

Basically, descriptive statistics and correlations for the key variables will be used to present the characteristics and frequency distribution of examined variables. They will be used in this study to provide a general overview of variables being studied. Then, the analysis of empirical data will be started with regression analysis (both multiple and logistic) which will be used to analyze the significance of the relationship between differences in the amount of capital acquisition through relationships, networks practice and trust. Logistic regression will be used to test if relevant variables of interest influenced the probability of having debts or equity. Multiple regression analysis will be utilized to test the developed hypotheses by conducting regressions of the effects of networking and relationships on various measures of capital structure.

Moreover, like most other business problems, capital acquisition and structure are essentially multidimensional. They can be simultaneously influenced by many factors. That is, the effect of relationships and networking on small family firm capital acquisition and structure may be influenced by financial preferences, the efficiency of trust, the existence of social networks, the form of relationships and entrepreneurial characteristics. Examining of those factors simultaneously allows me to test for interaction effects. Therefore, multivariate analysis; factor analysis and structural equation modeling (S.E.M.) will be utilized in this study to examine a series of dependence relationships (Hair *et al.*, 1998, 2006 and Tabachnick and Fidell, 2007). For determinants related to owner-managers' behavior in networking and relationships, factor analysis will be utilized, through the Principle Component Analysis (PCA), to determine a minimum number of unobservable common factors. Moreover, S.E.M. will be applied to distinguish which networking, relationships and financial variables predict capital structure decisions.

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