Chapter 3   Research Methods

This chapter provides information on the research methods of this thesis. The survey research method has been chosen to determine the factors influencing hedge fund investment choices for sophisticated investors in Hong Kong. The sampling technique has been described followed by the measurement procedures. The survey instrument has been designed using Likert categorical scale to measure respondents’ attitude towards the important factors consistent to previous research findings. The data collection and data analysis are also included in this chapter. And lastly, the limitations of the thesis are discussed.

3.1   Sampling

This research is based on purposive sampling technique, the alternative use of probability sampling is not considered due to limited time and resources. The researcher will make contact with potential respondents with the use of telephone and e-mails for the participation of this survey research. The process will continue until the researcher has at least 30 respondents willing to participate in this research. An e-mail will be sent out to each respondent with a letter explaining the purpose of this research and to complete a survey between 16 December, 2004 and 31 December, 2004. Each respondent will receive a summary of the research result for the participation.

The samples are selected on the basis of the knowledge, connection and judgment of the researcher in the financial industry. It is through the researchers personal and work relationships with the sophisticated investors to ensure the participation and
completion of this survey. Most of them are financial professionals and executives of foreign brokerage firms or asset management companies. Hedge fund indexes, updated industry news and events, referrals, personal experience and other information all help to form the basis for the selection and ongoing maintenance of samples. This information is essential in developing a comprehensive understanding of the market and making appropriate judgment in the sample selection process.

To maintain the quality and effectiveness of this survey research, the researcher chooses to have at least 30 samples. The sophisticated investors in this sampling are regarded to wealthy investors, institutions and financial professionals that have sufficient knowledge and experience with investing and able to evaluate the merits or risks associated to an investment. Refer to Table 6: Definition of the Study Population.

Table 1: Definition of the Study Population

<table>
<thead>
<tr>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Element</td>
<td>Sophisticated investors in Hong Kong</td>
</tr>
<tr>
<td>Sampling Unit</td>
<td>In office or household</td>
</tr>
<tr>
<td>Extent</td>
<td>N/A</td>
</tr>
<tr>
<td>Time</td>
<td>Between 16 December, 2004 and 31 December, 2004</td>
</tr>
</tbody>
</table>

3.2 Measurement Procedures

The method of e-mail survey is used in this research. This particular instrument has been chosen due to the unique characteristics of the study population and the efficiency of data collection. The survey will be consisted close-ended questions formulated aiming to ensure more in-depth information is provided. The questions are formulated based on the objectives, research question and hypothesis of this research. The questions will follow a logical progression starting with simple themes and
progressing to complex issues to sustain the interest of respondents and gradually stimulate question answering.

A cover letter is attached to the survey to explain the purpose of this research and its relevance, and to seek their agreement to participate in this research. Contact information of the researcher has been provided in case a respondent has any questions. The questions of the survey have been designed to test the eleven hypotheses of this thesis. The wording of each question has been organized according to the multi-dimension constructs for the measurements of each factor derived from previous research. Refer to Table 4: Multi-Dimension Constructs of the Factors Influencing Fund Investment Choices. For more information of the research instrument, please refer to Appendix A: Hedge Fund Investor Survey.

One of the major advantages of using this instrument is lower cost. The use of the e-mail system promotes efficiency and offers respondents to answer the survey at their own pace and convenience. The disadvantages include possible bias based on the researcher’s judgment for sample selection and less spontaneous response. The survey design is cross-sectional in nature, being designed to find out from a cross-section of sophisticated investors in Hong Kong regarding the factors influencing their investment decisions in hedge fund. The basic approach of this survey include cross-sectional in nature, could be completed in office or household and it is self-administered.

The survey will be used to investigate respondents’ attitudes towards the factors influencing hedge fund investment decisions. The Likert categorical scale will be used to measure the respondents’ multi-dimension constructs measurement. The reference from the book “Research Methodology” written by Ranjit Kumar (1999) is used for
the scoring of the Likert categorical scale for the multi-dimension constructs measurement.

The questions are organized into two sections. Section A of the survey includes six categories and the questions are organized in each category namely, investors’ understanding, investment returns, investment risks, past performance, transparency and skills and experience of fund managers. Section B of the survey includes the ranking of the most important factor and the aspects that need most improvement, along with other questions related to investor profile. The measurement procedure is summarized as follows:

**Step 1:** Construction of the statements that are reflective of the multi-dimension constructs towards the main issue. The respondents are asked to answer in categories.

**Step 2:** Administration of the statements to a small group of people.

**Step 3:** Analysis of the responses by assigning weighting to the responses. For a positive statement the response indicating the most favorable measurement is given the highest score. For the five-category scale. 5 is assigned to the most favorable measurement “strongly agree” and 1 is assigned to the least favorable measurement “strongly disagree”. The scoring is reversed for the negative statements.

### 3.3 Data Collection

The feedbacks of the surveys are collected from the period between 16 December, 2004 and 31 December, 2004. The data has been recorded and updated simultaneously as responses are received. The results have been organized in the Microsoft Excel
spreadsheet with the code sheet that has been developed to measure the attitudes from the data of the survey results. The data is organized into separate rows and columns with the assigned attitudinal score as mentioned previously in this chapter. The responses of each question have been assigned with numerical values for the data analysis.

3.4 Data Analysis

The analysis of the survey data is processed using Microsoft Excel and the add-in software Analyze It. The statistical analyses that have been conducted include: overall multi-dimension constructs measurement towards each factor, descriptive statistics, regression statistics, non-parametric and parametric tests. The data is categorized into hedge fund investor and non hedge fund investors and the same descriptive statistical analysis is performed to provide comparisons. The regression statistics is used for the correlation between the multi-dimension construct measurement towards each factor and the actual percentage of investment in hedge fund of the investors. The line fit plot is provided for the illustration of the correlation and to predict the relationship between each factor and actual investment. Since the sample size is small, the use of non-parametric Mann-Whitney U statistics is used to test the hypothesis and p-value is computed. The computed t-Test: Two Sample Assuming Equal Sample Variances is also used for reference and comparison. Tabulation and charts are provided for the ease of comparison between different categories. An analysis for the investor profile is also provided for the ranking of the factors. Other information related to investors is organized in pie charts.
3.5 Limitations

The main concern of conducting this survey research is the sampling. Due to limited resources and time, only a small portion of the sophisticated investors in Hong Kong are requested to participate in the survey. It is only through the researchers personal and work relationships with the sophisticated investors to ensure the participation and completion of this survey. Most of them are financial professionals and executives of foreign brokerage firms or asset management companies and have extremely hectic schedules. The sample size may not accurately represent all sophisticated in Hong Kong, although most of the respondents are financial professionals and therefore are more likely to have in-depth knowledge of the subject to provide accurate reflections. The resources from previous research and studies are very limited. There is very little information available on the subject of factors influencing investment choices on an overall basis and the areas dedicated to hedge fund investment decisions are even fewer.

There are other investment activities that are also concerns of many regulators world-wide that are not discussed in this thesis. The aim of this thesis is to provide the general investing public and the hedge fund industry in Taiwan more insightful information of how sophisticated investors in Hong Kong relate to hedge fund investment. It is hoped that this thesis could provide more references for individuals’ hedge fund investment decisions and reflections for the industry to improve marketing strategy.