MOTIVES OF PROPERTY INVESTMENT AMONG UTAR STAFF IN KAMPAR

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DECLARATION

We hereby declare that:

(1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the research project.

(4) The word count of this research report is 25974.

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DEDICATION

We would like to dedicate this thesis to our parents who have supported us all the way since the beginning of our studies. With their endless love, support and encouragement, we are able to fulfil our bachelor's degree with the accomplishment of this thesis. They have taught us to not give up and be persistent when facing any difficulty and challenges throughout our life.

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BNM	Bank Negara Malaysia
GDP	Gross Domestic Product
SAS	Statistical Analysis System

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PREFACE

The property sector in Malaysia has been rapidly growing throughout the decades. It has attracts lots of foreign investments from overseas' investors, which encourage the development of the sector even further in the country. To meet the demand, property developers have been exploring new lands and launching many new projects to supply the market's need. However, a problem has occurred, whereby there is evidence that there is already an oversupply in the market Nadaraj (2015). Therefore, it is crucial to know what motivates the investors to invest in property sector rather than other investment vehicles.

This objective of this paper is to examine the factors affecting the decision making in property investment in Kampar, Malaysia. The research is important for the investors, not only for local ones but also foreign investors to understand the factors to consider before making an investment specifically towards the property sectors. This study has showed that the five factors, including property characteristic, social status, investors' sentiment and expectations, economic effect and information and outlook of investment property play an important part in property investment decision making.

ABSTRACT

Property market has been the major investment in Malaysia in recent years. It is important to know what factors that have been encouraging people to invest in this sector which have made it such a popular investment today. This paper provides a detailed factors that would influence investors in their decision making, in which the scope is focused in Kampar, Malaysia. By taking references from the past studies, this study aims to provide an evidence that the following factors are significant towards the targeted research area as well. Survey questionnaires will be distributed to UTAR's staff to examine the significance of the factors in their decision making. The outcome of this research aims to benefit investors, bankers and also the developers of property sector. Through this paper, the motives of investing in property market can be understood in depth and will provide a precise guideline for all the parties to create a better and prosperous property market in the country.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

Over here chapter 1 will be analyzing the background and field of study, which comprises five sectors. Firstly is research background followed by problem statement, research objectives and questions, significance of study, and lastly is the chapter layout. In the first section, a brief introduction on the field of study and its characteristics is delivered. Subsequently, the problem statement addresses issues on properties market in Malaysia today. The research objective provides the aims of study, while the significance of study highlights the contribution of this research. Lastly, the following chapters of this research are summarized in the chapter layout.

1.1 Research Background

1.1.1 Concept of Property investment

According to Hargitay and Yu (1993), investment has been widely defined as the process of wealth protections. Besides that, investment comprises the obligation of a capital sum for welfares to be acknowledged in the future. However, the welfares of interest may either be in the form of income or capital gain. Based on the researchers Sanghoon, Huynh, and Rowe (2013),

they indicate that as globalization is expanding over the years, the development of transnational properties have improved significantly. The concept of properties investment is referring to the properties itself, such as freehold land, leasehold land, Malay Reserve land, residential houses, and buildings that the investor able to earn rental income or even capital gain (Newell, Hwa, & Acheampong, 2002). The fundamental factors in investment decisions process needed to be fully understood in order to make a wise investment decision (Hargitay & Yu, 1993). However, property investment decision is apprehensive with the purchase or disposal of investment assets. For instance, the assets can either be a real asset or a financial asset.

Besides that, property investments are different with usual investment vehicle. It is because property investment included the direct ownership of all sectors property interests, such as agricultural, industrial, commercial, and residential property interests (Hargitay & Yu, 1993). Conjointly, investor can also take an indirect ownership in a property. For example, indirect own of property can be done by securing the stocks of property company, property unit trusts or property bonds. In short, investment is the consumption of capitals in a coherent approach in order to attain greatest returns in the future.

According to the study, Hargitay and Yu (1993) indicate that the importance of property has improved expressively among other investment vehicle over the past 30 years. There are many types of property that can be used as investment portfolio. Some of the major types of property include residential, commercial, industrial and vacant land. They can be categorized in either income producing or non-income producing investments where income producing investments usually are industrial, retail and leased residential while examples of non-income producing investments are houses and commercial buildings.

1.1.2 Supply and Demand of Property Investment

According to Mahmood and Zakaria (2007), the motives of properties investment are important tools to determine the supply and demand in the market of properties. For instance, the demand for properties can roughly be concluded by determining the motives of properties investment. Besides, conventionally investment and property investment in particular, have been viewed more as an artwork, where investors, decision makers and analysts depend on more on their familiarity, personal judgement and the feeling. Investments are done, and will continue to be done, on the basis of what investors believe, or assume, to happen in the future.

Furthermore, supply and demand of property in the globalization market can influence the market forces. Academically, operating market forces causes the demand and supply to achieve equilibrium level. But reality wise, demand and supply of property doesn't correlate with the housing market system (Mahmood & Zakaria, 2007).

Based on the Bramley (1995) studies, he stated that faulty market system such as unethical speculation by housing developers and irresponsiveness of the current planning practice will contributes to the issue of oversupply. However, according to the annual report of Bank Negara Malaysia in year 2014, the report indicated that the highest investments sector in Malaysia is in property sector.

1.1.3 Loan of Property – Housing Loan

Malaysia, interest rate charge on the investors for financing the housing loan is based on the BLR (Based Lending Rate). Most of the local bank in Malaysia is having 6.68% of BLR rate. However, the home loan rate proposed by banks is around BLR-2.4%, therefore, the real interest rate is 4.28% (Chin, 2014). The movement of the BLR rate is determine by the banks themselves not by central bank. BLR rate started to implement since years 1996 until years 2015. BLR rate is change accordingly based on the market economic.

In 2nd January 2015, the BLR is replaced by the Base Rate (BR) which the Bank Negara Malaysia revealed on 19th of March in year 2014. For those inventors held the loan before 2nd Jan 2015 will be referenced against the BLR until maturities date. Whereas, effective 2nd Jan 2015 the new reference rate – Base Rate will be use for new floating rate loans, financing facilities such as housing loan. The purpose of using BR is to provide a more transparent reference rate compare to BLR which can help investors in decision making among the loan products offered by financial institutions. According to Admin (2015), these new system bring plenty of beneficial to investors because the banks able to amend the interest rate based on advantage of competitive. For instant Maybank, Standard Chartered Bank, and Public Bank frequently set a price for customer loans at a considerable reduction to the base rate to attract more depositors and increase loan growth.

Table 1.1: Base Rate of Banking Institution as at 2nd Jan 2015

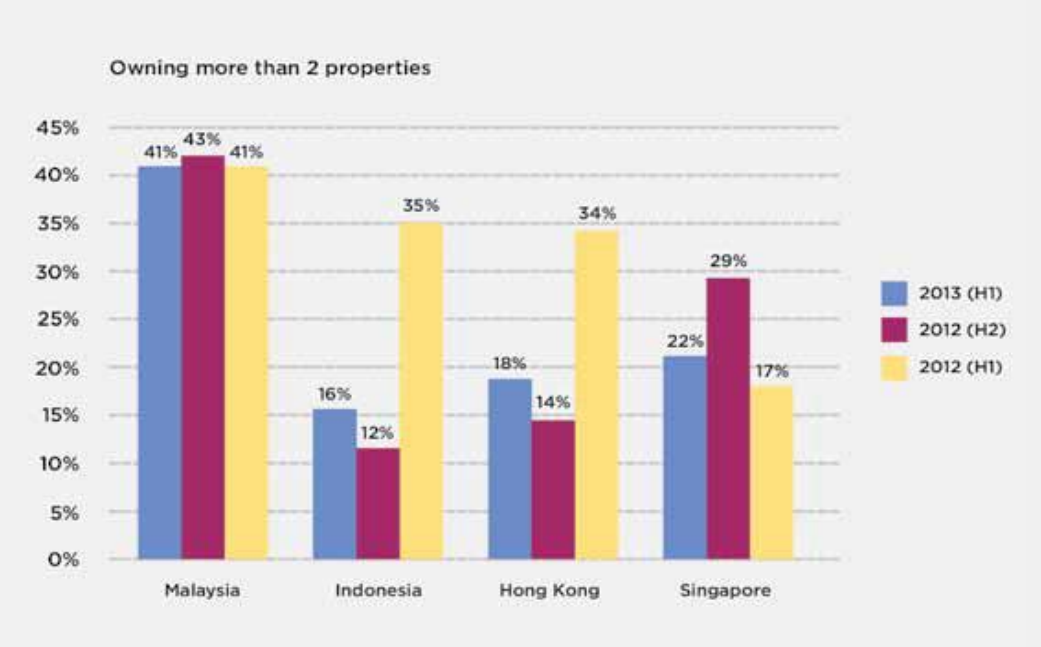
Bank	Base Rate %	Effective Date
Affin Bank	3.99	2nd January 2015
Alliance Bank	4.00	2nd January 2015
Ambank	3.99	2nd January 2015
CIMB Bank	4.00	2nd January 2015
Citibank	3.70	2nd January 2015
HSBC Bank	3.90	2nd January 2015
Hong Leong Bank	3.99	2nd January 2015
Maybank	3.20	2nd January 2015
OCBC Bank	4.02	2nd January 2015
Public Bank	3.65	2nd January 2015
RHB Bank	4.00	2nd January 2015
Standard Chartered Bank	3.67	2nd January 2015
OUB Bank	4.02	2nd January 2015

Adapted from: Bank Negara Malaysia (2015)

1.1.4 Property Investment in Malaysia Today

Based on the study, Mahmood and Zakaria (2007) claim that the property sectors have played an important role in the economy development in Malaysian. Besides that, properties investment is one of the main goals of investors in Malaysia (Tan, 2008). According to researchers, Tan and Ting (2004) indicate that domestic property such as accommodation has been acknowledged as one of the vital element in general investors fortune of Malaysia. For example, Kampar, Malaysia is experiencing a demand for properties, especially houses and shop lots from the investors around Malaysia. It is because the students' population of Universiti Tunku Abdul Rahman (UTAR) is expanding rapidly. Besides, this factor not only attracts the investors to invest but also attracted the developers to increase the supply of properties in Kampar area. Moreover, according to the Asia property market sentiment report, the result showed that the investors in Malaysia is reported holding the most amount of properties compared with other countries, such as Singapore, Hong Kong, and Indonesia (Asia Property Market Sentiment Report, 2013).

Figure 1.1: The Percentage of owning more than 2 properties



Adapted from: Asia Property Market Sentiment Report (2013)

Based on the Property Industry Survey done by the Real Estate and Housing Developers' Association Malaysia (Rehda), the property in reasonable accommodation rate scope lesser than RM1 million have been confronting a very hard sell mostly due to the difficulty of investors in getting financing. Furthermore, there is 31% of property, which ranged between the RM500, 001 to RM1 million were have not sold out after accomplishment in the past 3 years. These situations happened largely in hot property marketplaces such as Selangor and Johor. Besides that, the cost of property that ranged between RM250, 000 to RM500, 000 also encountered the similar problem, with 34% of the finalized units not sold. This kind problem can be found largely in Perak state and Pahang state. Based on the property industry survey, there are around 90% of the respondents encountered a slowdown in property sales because of cooling measures revealed in the Budget 2014. However, there are over 80% of the respondents believed a neutral viewpoint for the first half of the year 2015.

From the statement of the president of Rehda, Datuk Seri Fateh Iskandar Mohamed Mansor, he believed that the demand for property was intact, however the developers remained facing difficult to effectively sell in the affordable housing section due to the cooling measures introduced by Government. Besides, he recommended that the Government should reestablish the interest of developer bearing scheme for first-time property purchasers to permit the working class investors to own a roof over their head.

Based on the survey, there are 84% of developers able to get bridging financing for their projects, while 53% of their purchasers encountered the challenges of reaching supporting of finance to purchase the property. Amongst the loan rejections from financial institutions, the highest rate was among household purchasers in the RM200, 001 to RM500, 000 property ranges. In short, the 70% loan-to-value ratio implemented by the Government was beyond the affordability of many household purchasers. Therefore, the president of Rehda fascinated to the banks to reconsider the guidelines for accountable loaning to property purchasers.

In the year 1995-97, Malaysia property sector was stumbled with the driving force from the Asian Financial Crisis. During the period, the house prices had declined by 8 to 9.5 percent and government has implemented policies in order to help the market to recover. According to Nadaraj (2015), the property market in Malaysia undergone an exponential growth from 2006 onwards but started to weaken from 2009, especially towards high-end properties and condominiums today. The main two reasons for the downfall in property market is the implementation of the six percent Goods and Service Tax (GST) that was announcement in Budget Malaysia 2014 and the cooling measures put in place in 2013 by the Bank Negara Malaysia.

1.1.4.1 Implementation of Goods and Service Tax (GST) towards property market in Malaysia

With implementation of GST, the cost of building are confirmed to be increased since the tax will be imposed on building materials and services, that will be incurred on the developers additional expenses. Cost of building would likely to increase due to increased in labour cost, citing shortage of workers as a consequence of abundance constructions projects as well as infrastructure works. Although the residential properties will be exempted from being taxed, there is still much worry towards the consumers that the developers will seek out out for ways to transfer the increase in production cost to them (Nadaraj, 2015). This is a major concern for consumers nowadays since the housing price would affect their decision to own a house, especially the house prices today are already mounting towards the peak.

1.1.4.2 Mismatching in the supply-demand of propery in Malaysia

A question has be highlighted in the property market in Malaysia today, whether there is still a need in additional office, retail and residential space, providing the evidence that there is already an oversupply in the market. As mentioned by Nadaraj (2015), in his report he had studied that in the Rehda survey, it is shown that 31 percent of properties in the range of RM500k to RM1 million were unsold in the year 2014 in Selangor and Johor and 34 percent in Perak and Pahang of the price ranging from RM250k to RM500k. However, there is still a strong demand for residential properties less than RM500k category in the hot areas. Developers tend to focus in higher end market due to higher contructions cost and land, which needs to be re-strategise in order to overcome the mismatch in the property market in Malaysia.

1.1.4.3 Housing prices in Malaysia and comparison in the region

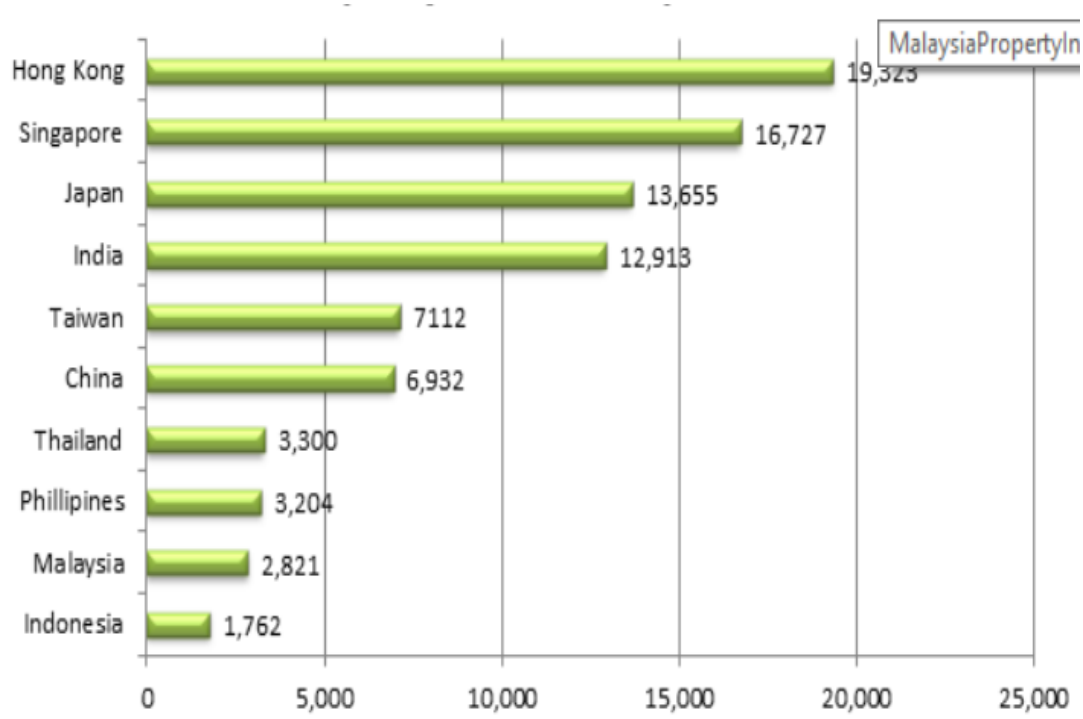
Figure 1.2: Malaysia House Price Index year 2001-2014

Adapted from: Trading Economics (2015)

Malaysia have been experiencing economic growth potential since the crisis and was rated one of the best for foreign investment destination in the world. This has encouraged foreign investors to eye their investment in the real estate sector in Malaysia. Referred from Expatriate Advisory (2013), Malaysia's property price index has been stable over the years due to continuous demand for properties from the local. The follwing chart shows the Malaysia house price index ranging from the year 2001 to 2014.

In the comparison among the countries in the region, it is seen that Malaysia's property price has increased much slower than other countries except for Indonesia, but the upward trend is shown to be steady and consistent throughout the years. Additionally, the price of properties in Malaysia today is among the cheapest comparing to other countries and this attracts foreign investments towards the country. The following table illustrates the price comparison in the region.

Figure 1.3 Property Prices Comparison Index 2013



Adapted from: Expatriate Advisory (2013)

1.1.4.4 Bumi and Non-Bumi Lots property in Malaysia

The Bumi lot or also known as Bumiputera reserved property refers to property that only can be own or purchase by Malay and other indigenous people. It is a regulation founded under the Bumiputera Lot Quota. The regulation was first introduced in order to increase the Bumiputera shares in the real estate sector up to at least 30% back in 1971. With the regulations implemented, the developers are required to allocate a minimum of 30% of the property units sold to the Bumiputera. The Bumi Lots is given a discount up to 15% off the initial price, in which the percentage differs among the states in Malaysia. This is known as the Bumi discount, which is beneficial towards the Bumiputera.

However, there are conflicts that arise with the implementation of this regulation, problems like lack of demand due to the restricted market, slow appreciation and rejection from the Land Office for the consent to transfer to non-Bumi. Bumi Lots can be released and sold to non-Bumi citizens, but it is not consider as non-Bumi Lots and the re-selling of the property will need to go through all the application procedures again. In the report from Wong, Lee, Ng and Daud (2014), they have also stated that the restriction of Bumiputera property also decreases the sale price, sale premium and the chances of sales of the property. This happen when there is a scarce demand against the supply, thus the discounted Bumi Lots do not appreciate at the same rate as the prices of non-Bumi Lots rise.

1.1.5 Financial Stability in Malaysia

Economic of Malaysia has been fluctuated and remain uncertain all the time which create more vulnerability for households and enterprises to do investment in property. Demand and supply in the housing market can have a prudential impact on financial stability. According to the speech of Governor Dr. Zeti Akhtar Aziz during the ceremony for the 50th Anniversary of Bank Negara Malaysia, Malaysia economic dropped into the bottom during 1997 and 1998. It started with the currency crisis then turn into a financial and economic crisis. During this period, the exchange rate for Malaysia Ringgit is depreciated about 40%; while the stock market declined nearly 80%. However, there is the 7.3% expand in the Malaysia economic during 1997, but in 1998 economic condition deteriorated significantly again and it contracted around 7.4% in the economic. In 1999, the economic rebound by 6.1% with the new set of measures was implemented in the financial and corporate sectors.

Due to the higher price of property such as residential property and the lower value of Malaysia currency, it makes difficulties for households and businesses to make investment in property. Based on the Bank Negara Malaysia report, house prices of Malaysia in 2010 are increase dramatically with the average 9.1% annually. Therefore, with the higher price of property households and investors have to lending more money to finance the housing loan. Consequently, the household's indebtedness is increasing which cause the risk arising toward financial stability. Among lower income households, they finance more housing loan to those have high income level. The debt service ratio for a new loans approved has substantially increased to 91.8% in the final month of 2014 compare to 85.9% in July 2013. This is because the currency keep depreciate, all the goods and services provide by Malaysia are expensive.

The housing price is higher in selected parts of Kuala Lumpur, Penang, Selangor and Sarawak especially in the industry area with higher population. Below table is the annual growth of housing prices in Malaysia before 2010 and after 2010.

Table 1.2: Annual Growth of House Prices in Malaysia

	Average of growth rate (%)	
	1Q 2001 – 4Q 2009	**1Q 2010 – 2Q 2012**
Malaysia	3.2	9.1
Kuala Lumpur	4.0	12.2
Selangor	2.4	11.3
Penang	4.3	8.9
Sarawak	4.1	5.1

Adapted from: Bank Negara Malaysia

1.1.6 Factors of Property Investment

However, there are a lot of factors that will influence the decision of investment in properties. It is important to determine the factors that affect investment decision because with the factors considered and evaluated, the investors able to precisely determine what kind of properties they want to invest and allow investors to manage and diversify their portfolio. Motives of properties investment are important for investor to make better and more precise decision. According to the study, Hargitay and Yu (1993) concluded that investment decision on property could be influenced by different variety of factors.

1.1.7 Type of Property Investment

Based on the Holland (2006) stated that investors can access to invest in property through two general ways which are direct investment and indirect investment. Direct investment or direct real estate investments commonly describe as purchase or owning physically real estate properties either individually or through pools while indirect investment describe as purchase or buying equity of listed real estate companies or contribute to a pension plan with property in its portfolio.

Direct investment in property is not easy as investing in bonds or equity (indirect investment). Besides that, to realize losses or gains in property by selling the property owned or rent out to the other party to receive the rental. There is advantage invest in direct property is owning the property 100 percent and can make ability on the property. However, there is also disadvantage in term of financial market risk, risk of default when rent out to other party as well as business risk. Compared to direct investment, indirect investment involves investing in expertise and skills of other people such as fund or property manager. Indirect investment will not have such high risk compared to direct investment which investors can invest in the stock of listed real estate company and property unit trusts. There is advantage in indirect property is the larger scale investor has access to. The investors can share the risk by invest in much larger portfolio. If a property fund well managed, the investors also can gain the income in form of dividends. Besides, there is disadvantage is investors need to pay an upfront and can not borrow much against shares when the investment is equity based.

1.2 Problem Statement

1.2.1 Research Problem

Properties investment has been growing over decades not only just in Malaysia but throughout the world as well. However, according to Tan (2008), there existed a massive over-constructing of housing industry has turned into the main concern towards the government. Therefore, it is essential for researchers to find out the problems and more importantly the factors that influence Malaysian investors' decision in properties investment. There are a few arguments on what could have affect investors' decision in properties investment. Property characteristics are the major concern for investors in their decision making (Rohe & Steward, 1996; Fisher, Gatzlaff, & Haurin, 2003; Anglin, 2003). Tan (2008) on the other hand suggested that the social status of the investors themselves is the main factor that influence their investment decision. Researches have been done on investors' sentiment and expectations and proven to be significant towards investment decision (Huerta, 2013; Frank Gyamfi-Yeboah, 2012; HomeGuru, 2011). As cited MacDonald (2011), he suggested that information on properties is the key of making investment decision. Lastly, economic situation of the country is also one of the factor that affects properties investment decision (Ong, 2000). Above are all the factors listed down by previous researchers that proven to be significant in their respective countries, and it is our primarily objective to prove that it is significant in our research area, Kampar as well. Conclusively, the problem statement highlighted in this study is that are the factors from the past studies significant and how strong it is in explaining the decision making of property investment in the targeted research area which is in Kampar based on UTAR's staff.

1.2.2 Past Studies

A few researches have been done in order to find out the determinants that encourage or discourage Malaysian investors to participate in properties investment within and even outside Malaysia. Sample of report from iProperties (2013) has found out that price and location is the major concerns when it comes to properties investment. Followed by factors such as potential capital appreciation, potential rental yield, size and security are also factors that have been affecting investment decisions. Researchers also proven that outcome measures of homeownership to both homeowners and society can be found in many housing studies, ranging from social to financial externalities (Tan, 2008).

1.2.3 Deficiency in Past Studies

Based on our findings, in this research could not find any articles that could explain the significance of those determinants towards properties investment decision in Kampar, Perak. The lack of studies in our research area seems to be a gap with previous studies done by other researchers. Therefore, it is important for us to research on the reasons why and what factors that is affecting their investing decisions.

1.3 Research Objectives & Questions

1.3.1 General Research Objective

The general research objective is to examine the factors, which could affect UTAR staffs making decision in the investment of the real estate properties, and how significant it is in affecting their decision making.

1.3.2 General Research Question

What are the factors that could affect the UTAR staffs to make decision in the investment of the real estate properties?

1.3.3 Specific Research Objectives

Firstly, the first specific research objective is to analyze the relationship between property characteristics and the decision of the investment in real estate properties.

Secondly, the second specific research objective is to analyze the relationship between social status and the decision of the investment in real estate properties.

Thirdly, the following specific research objective is to analyze the relationship between investors' sentiment and expectations with the investment decision in real estate properties.

Moreover, the forth specific research objective is to investigate the relationship between economic effect and the decision of the investment in the real estate properties.

Lastly, the last specific research objective is to examine the relationship between information toward investment properties with it decision making.

1.3.4 Specific Research Questions

There are five specific research questions in this study. Hence, the specific research questions are:

Firstly, what is the relationship between property characteristics and the decision of the investment in the real estate properties?

Secondly, what are the relationship between social status and the decision of the investment in real estate properties?

Thirdly, what are the relationship between investors' sentiment and expectations with the investment decision in real estate properties?

Fourthly, what is the relationship between economic effect and the decision of the investment in the real estate properties?

Lastly, what is the relationship between information toward investment properties with it decision making?

1.4 Hypotheses of the Study

In this research, there are five hypotheses have been examined.

Firstly, the first hypothesis is to determine the relationship between characteristics of property and the decision of property investment. Hence, in this study, the hypothesis is to test that whether the property investment decision-making will be affected by the property characteristic or not.

Secondly, the hypothesis is to study the relationship between social status and property investing decisions. Therefore, this hypothesis will show that whether the different level of social status will influence the property investment decision or not.

Thirdly, the following hypothesis is to test the relationship between economic effect and property investment decisions. Hence, this hypothesis will conclude that whether the different type of economic effect will influence the property investment decision or not.

Moreover, the forth hypothesis is to determine the relationship between the information toward investment property and the property investment decisions. Therefore, this hypothesis will clearly show whether the investment decision will affect by special information about the investment property or not.

Lastly, the fifth hypothesis is to examine the relationship between the investors' sentiment or expectation and the investment decision on property. In short, this hypothesis will show the result regarding whether the sentiment and expectation of investors will affect the property investment decision or not.

1.5 Significance of the studies

1.5.1 Contribution to Investors

This research will be significant to the investors in Malaysia, especially for UTAR staff as the research is done based on the feedback from them. Since invest in property is more easy compare to invest in bond or stock. Investor who does not have worthy knowledge toward property investment is still able to do the investment in property field. This is because people who have basic knowledge and sufficient financing are suitable to do the investment. But for the investors who likely to make the investment in bond and stock trading or open a business must have a sufficient knowledge on it. This is because the alternative outcome can have a high risk or low risk.

Hence, this research of study is considered significant because it provides more detail information about the determinants of invest in properties so that investors in Kampar could use the information to make the best properties investment decision. This study is important to investors in Malaysia because the study could provide more information about factors that affect investment in property. From this research, investors in Malaysia will be able to consider and acquire knowledge on investing in property before they invest. Moreover, the importance of study to the investors in Malaysia is that the risk of investing in property will reduce because the research will provide well-defined factors for investors to consider before making any properties investment decision. For example, investors will consider on the properties characteristic, social status, economic effect, sentiment and expectation of investors, and the information toward investment property. Therefore, the

investment decision made will be more accurate considering the motives toward properties investment by studying this research.

Moreover, this study is significant to investors because it may help investors to minimize losses on the investment by knowing the factors of properties investment. For instance, one of the purposes of determining the factors of properties investment is to ensure that the property chosen for invest will appreciate in the future, be attractive to renters and be affordable for investors. Hence, this study able to help investors in Malaysia to minimize the losses and maximize profit based on the factors of properties investment. Moreover, by maximizing profit and minimizing lost, this research is believed to indirectly upsurge the demand of property investment. In short, this research is believed to help investors gain knowledge about the property investment and encourage investors to make accurate decision based on personal preferences for the purpose of wealth maximization.

1.5.2 Contribution to Bankers

Besides investors, this study also brings huge advantages towards bankers because it will provide knowledge of properties about the motives of property investment toward investors. In our research, the research studies the factors of property investment such as property characteristic, social status, investors' sentiment and expectation, information and outlook toward investment property, and economic effect, toward the properties investment decision that will be significant to bankers. In general, this research provides this kind knowledge to investors and this will lead to the increase of interest on property towards investors in order to have a better chance and opportunity to increasing the volume of borrowing. According to the study of Nagel (2005), the researcher indicates that most of the investors tend to make loan and invest

as long as they believe the rate of return of investment is higher than the interest rate of borrowing. It is because invest in property require large amount of funds unlike invest in other investment vehicle such as stocks or bonds. Therefore, this research is important for banker since this study can indirectly affect the decision of investors on property investment. Besides that, the volume of borrowing could be increase due to the higher probability of property investment. For instance, the increase of knowledge about property investment toward investors will indirectly lead to the increase of probability investment, this kind of situation will indirectly enable the increases in the volume of borrowing which is beneficiary to bankers. It is because based on the assumption from the study, investors will tend to borrow money from banker and invest in property. In short, this study can encourage investors to invest in property and since investors need a large amount of funds to make investment of property, therefore, investors will tend to borrow the funds from banker, which will help to increase the volume of borrowing. In short, this research is believed to increase the volume of borrowing by the growth of probability of property investment since investors tend to borrow money and invest in property.

Moreover, this study not only important to investor for the purpose of minimizes risk but it is also important to banker because the motives of properties investment able to help banker to reduce default risk. For instance, based on the research, Rubinstein and Leland (1981) indicate that most of the investors are borrowing to invest. Therefore, banker will be able to alternatively analyze on the factors that lead to properties investment and to decide whether to borrow the money to what kind of investors by understanding the motives of properties investment, For example, the bank can choose to not borrow the money to the investors that plan to invest on the properties that will create losses in future. It is because there will be higher default risk if the investors unable to recognize what kind of properties they

want to invest. Therefore, the banker can reduce the default risk of investors by determining the factors of properties investment.

1.5.3 Contribution to Developers

This study not only will bring the advantages to investors and bankers, however this study is believed to bring advantages to the property developers such as housing developers in Kampar. The reason is because this study provides the knowledge about determinants that will affect the property investment decision of investors for developers. This study believed that developers could refer this research to have better opportunity and strategy to market their property in order to attract more investors to invest. For example, in this research, some factors are very important for developers such as the characteristic of property, and information and outlook toward property. It is because developers can have a better understanding on the characteristic of their property and help developers to have a clear direction on how to market their property based on the characteristic. For instance, if the research shows that investors of Kampar tend to invest in property based on the characteristic of property, this result will encourage developers to implement the strategy on how to market their property based on the characteristic. Moreover, in this research, information and outlook toward the property investment is one of the most important determinants to examine whether investors want to invest or not. In fact, this factor is important for developers to provide accurate and unbiased information of property to the public in order to attract more investors to invest. For instance, developers could consider including some information that can attract investors to invest in property. Marketing is very significant for investors to increase the probability of property investment of investors, however developers need information such as factors of property investment that been widely discussed in this research to market the unsold property. Besides, the unsold property can be referring to houses, lands, and

apartments. In short, this research is believed that developers could gain knowledge about property investment and help developers to enhance the attractiveness of property investment.

1.7 Chapter Layout

In this research, there are all together five chapters, which are research overview, literature reviews, methodology, data analysis, and discussion, conclusion and implication.

Chapter 1

In chapter one, the study provides an overview of the research background and continued by objectives of study, problem statement, hypotheses and lastly the significance of study.

Chapter 2

In the chapter two, the literature review about the relationship between all the independent variable such as property characteristic, social status, economic effect, investors' sentiment and expectation, as well as information toward property investment and dependent variable such as the probability of property investment.

Chapter 3

For chapter three, the study will explain about the methodology applied to evaluate the primary data collected regarding the motives of property investment toward UTAR staff.

Chapter 4

The chapter four will explain the result of the data analysis by using SAS program.

Chapter 5

In the last chapter, chapter 5, this research will summarize the result, discuss about the conclusion, major findings, and provide recommendation on the policy implication and as well as the recommendation for future study.

1.8 Conclusion

Investment is the use of resources in a rational way in order to achieve maximum rewards in the future. Hence, this study aims to determine the factors that affect the property investment decision by distributing 200 survey questionnaires to all the UTAR Academic Staff in Kampar, Malaysia. However, there are only few researches have done on this topic, especially in Kampar, Malaysia context. Hence, this study will provide an overview of the factors that can affect the property investment decision of UTAR Staff.

CHAPTER 2: LITRERATURE REVIEW

2.0 Introduction

There are 5 major parts that will be included in this chapter, in which the relevant theoretical and conceptual framework of the study will be first discussed, follow by the review of empirical studies. In the theoretical and conceptual framework, a total of five theories will be discussed proportionate towards this study. Next, the proposed conceptual framework and research model will be outlined and proceeding on with the hypotheses development. The proposed conceptual framework and the research model will explain all the variables in this study and how they could relate towards this research. Finally, the hypothesis for this study will be also outlined and they are necessary to relate with previous study. The last part of this chapter will be the conclusion and the summary of this chapter.

2.1 Theoretical / Conceptual Framework

2.1.1 Modern Real Estate Portfolio Management Theory

According to Souza (2014), Modern Real Estate Portfolio Management (MREPM) is a comprehensive-integrated research and strategic method in building and managing institutional grade on commercial real estate portfolios. The management includes portfolio diversification; optimization and

concentration analysis to determine portfolio allocation based on risk, return and cycle analysis. It also take into account of past portfolio performance measures for benchmarking and exit strategies, and introduces the development of transaction based indices for portfolio hedging and diversification using property derivatives. This theory is applied in our research as a support towards how investors make judgments on their investment portfolio in general. For instance, in our research, did come out with several determinants in examining the core of decision making in property investment among UTAR's staff. This theory would able to support why it is essential to consider the factors influencing the housing price and thus affecting the investment decision.

When establishing a portfolio of assets, it is imperative to understand the underlying policy and economic fundamentals, supply and demand for that property (Souza, 2014). The theory makes sense that generally when someone is constructing their portfolio of investments, they cannot ignore the existence of economic performance or situation. The economic and financial environments influence investments, so expected results are uncertain (Avram, Savu, Avram, Ignat, Vancea, & Horja, 2009). Therefore, we have applied this theory when examining the determinants that could affect investment decisions, where it is highlighted in the economic effect, investors' sentiment, and also the property characteristic. In the context of Modern Real Estate Portfolio Management, this study can notice that investors usually make assumptions, analyze the investment and implement strategies based on economic fundamentals and underlying policies of the property.

2.1.2 Decision Making Under Economic Theory

When it comes to decision making, in our case, to invest or not to, it seems be quite a challenge for investors. Decision-making can be a very complex activity because of the interdependencies which occur between reasoning and making decisions (Johnson, 1993). There are also problems when the feasible set of alternatives of a decision consists of a finite number of elements that are explicitly known in the beginning of the solution process. These problems are called multi criteria evaluation problems or also can be referred to as discrete multi criteria problems or selection problems (Mohamed Ibrahim, 2012). In example, in our research, our targeted respondents will have problems dealing with which investment vehicle to select, which vehicle would be the best alternatives among others.

Besides that, decision making also affected by a few other factors. Harcourt (1967) states that the decision, whether to make an investment or not, depends on the investor's profit expectation, the cost of the asset and availability to finance the investment, and how to finance that. It is common for investors to look upon profit expectations when they are making investment decision, and of course the higher the profit the better. The price of the property, ways to finance and availability to finance are also factors to be consider when making property investment.

Furthermore, the desired to plan an investment is also influenced by the investor's past profit experience and his assumptions about future profit opportunities. In making his plans, a businessman considers the expected profit and the risk of the various potential investment opportunities to him, and, on the other hand, of the cost of (Virlics, 2013). For our research, the study believes that experience and opportunities made up a great deal towards the investors in making investment decisions. Nevertheless, the decision to invest is subjective. The decision depends on the expected cost, his knowledge

of the improved techniques and his risk perception, which is entirely a subjective factor (Virlics, 2013).

In the decision making economic theory, the study realize that making an investment decision is mostly depending on the factors, such as cost of finance, profit expectation, ways to finance the assets, past profit experiences and knowledge and risk perception of the investor.

2.1.3 Risk and Uncertainty

There is always risk and uncertainty exist, either one or both, whenever talk about investments. Peterson (2009) explains that whenever decision theory is discussed, the risk and uncertainty cannot be and must not be neglected. The term uncertainty is used for ignorance or referring to both risk and ignorance. The difference among the decision making under risk, ignorance and uncertainty is that the decision maker knows the probability of the possible outcomes in the case of risk, but in the case of ignorance there is an unknown probability or even no probability at all. Similar case can be applied in property investments, whereby the risk is unknown due to a broad range of internal and external factors and also uncertainties which both will affect the investment decision.

Risk and uncertainty is subjectively perceived and it involves psychological and emotional factors (Virlics, 2013). Neuro-economic evidences state that the psychological and emotional influence on the decision making, may have an informative and helpful role in the decision making process. The decision making process can be affected on how the investor presumes the situation would be, in most cases, if the investor feels that the pricing of a property is slightly higher than average, he or she would take longer time to make decision, or gather as much information as possible to support his or her decision.

When mention about risk, there are always three types of individual which each holds a different characteristic that may affect their decision making. Gilboa (2010) state that a risk-averse decision maker's expected utility function is concave, meaning that the decision maker has a decreasing marginal utility. This shows that a risk-averse person will less likely purchase more or invest more because they do not feel the satisfaction from the product or investment. The opposite behaviour is the risk seeking type of decision maker, whose expected utility function is convex, with an increasing marginal utility. In contrast with risk-averse, a risk-seeking person would be more aggressive and would always want to buy or invest more. The last type of person, the risk-neutral type, is a person who will maximize the expected value and the expected utility (Gilboa, 2010).

2.1.4 Forecasting approach

According to Haran and Moore (2014), every decision depends, to certain degree, on a prediction. In this case, it means that every investment decision will somehow include the forecast of the future outcome or profit. It applies similarly in our case study on UTAR's staff, which meaning they also somehow will forecast the outcome before making an investment decision. Point prediction, an effort to predict the future precisely is the utmost common approach told by the author. Organizations forecast the outcome by asking their people for a point prediction: a single "best guess" of what will happen (Haran & Moore, 2014). For instance, they will guess how many units will be sold, how the cost would vary, or how long will it take to finish the project.

In addition, Haran and Moore (2014), also done a research on forecasting which found out that people's statistical intuitions can be very accurate, but their judgments are highly manipulated by the approaches they applied. It is important that knowing many people would rely on their forecast, or any other

sources of forecast, which may be right or wrong because it is one of the key criteria in making investment decision. However, making precise predictions of a future outcome is extremely challenging because it is difficult to foresee and consider all of the sources that might affect the upcoming results.

This study found out that in decision making process, people will always forecast the outcome before making an action. They will gather information on the particular investment and may say that the information have a significant effect on their decision making.

2.1.5 Investors Behavioral

It is important to analyze investment risks from the point of view of behavioral economics, and not only as an objective component (Virlics, 2013). According to Lowewenstein, Hsee, Weber, and Welch (2001), he stated that decision making often made by people based on assessing the consequences of the possible results of the alternative choices. The risk as feelings hypothesis says that, in decision making, people respond to risky situations too highly influenced by emotions. This highlight that people tends to rely on emotions when facing risky situation or making risky investment, for example, when facing a high risk investment, a risk-taker would probably take the chance without considering the rational consequences.

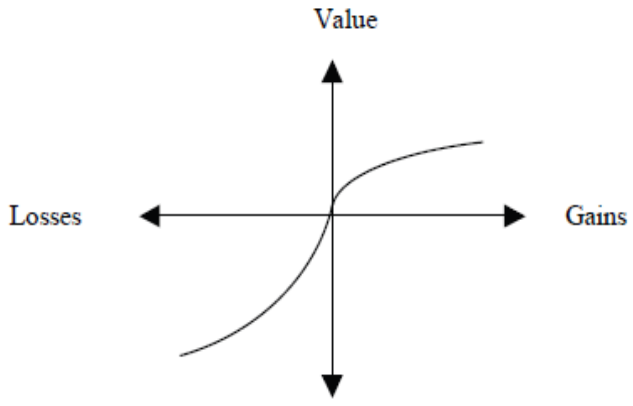
Barberies, Nicholas, Huang, and Santos (2001) present the behavioral approach to investment decision making, referring to people's belief. He pointed out that investors might have certain beliefs, which are incorrect most of the time, example when they believe that the mean dividend growth rate is more flexible than it really is and it is the exuberance of investors that pushes the price up relative to the dividends. It shows how the market could varies or changes relatively to the investors' behavior, whereby they show significant effect towards the market performance. It is also important that econometric

models of investment behavior are tested in order to find out whether they perform satisfactorily in the econometric work (Jorgenson, 1963).

In the psychological view, when the decision maker has to decide in a risky or ambiguous situation, he or she will be using several areas of his brain (Rustichini et al., 2005). The brain will most likely focus on ambiguous cases, when he does not know the exact value of the probability of certain results, as in risky situations. However, most of these areas will deal with the expected values of the alternatives, which influence that the decision process to consider both emotional and computational. In such a case, if a person is given a risky investment, he would probably take into account of his own emotions as well as any other valid judgments.

According to Kahneman and Tversky (1979), he did proposed prospect theory as an alternative to expected utility theory, also called as Morgenstern–von Neumann utility theory. In this theory, it provides robust evidences that people's actual decision making does not follow rational calculation. This theory shows that many people tends to rely on own feeling or emotions more than statistical calculations when making a decision, whether in big or small investment.

Figure 2.1: Value Function



In figure 2.0, the value function is an S-shaped curve, which clearly pointed out concave for gains and convex for losses. It suggests the tendencies toward

risk aversion when facing gains while toward risk seeking when facing losses. Furthermore, the curve is basically steeper for losses than for gains, which shows the tendency of loss aversion. Under the prospect theory, most people underweight the outcome that are merely probable in comparison with the outcome that are obtained with certainty. This so-called the certainty effect is a tendency that contributes to risk aversion in choices involving guarantee gains and to risk seeking in choices involving guarantee losses. The behavior in the losses domain contrast to the behavior in gains domain is called known as the reflection effect (Kahneman & Tversky, 1979).

2.2 Review of Empirical Studies

2.2.1 Reviews on Probability of Property Investment

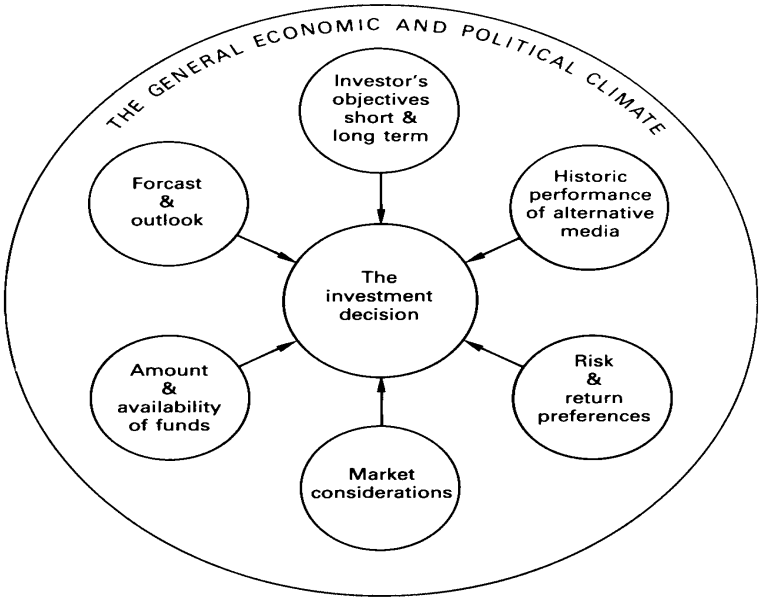
According to Kolmogorov (1950), any measurement with ranked potential, propensity, confidence, or evidential support is acknowledged as probability. However, researchers Hargitay and Yu (1993), express the word "investment" as the consumption of capital resources for maximum possible reward. In short, investment is one of the popular economic activities.

However, Jones Lang, and Wootton (1982) explained that the investment decision could be categorized into two major decisions. For instance, the strategic decision is one of the investment decisions that relate to the setting of the overall strategy aims, the variety of investment vehicle and the apportionment of funds to investment vehicle. Besides, the second type of investment decision is known as tactical decisions that can be refer to the application of strategic decisions within an investment vehicle. Normally, these decisions are about the selection of sectors of an investment vehicle and the selection of personal investment projects inside the selected sectors (Jones Lang & Wootton, 1982).

The property investment decision is the financing decision that estimated to undertake the subject of how much wealth should be increased (Hargitay & Yu, 1993). This type of financial decision also expected to solve the problem of in what ways the wealth can be increased (Hargitay & Yu, 1993). Investors that intent to invest in property have to involve in this type of decision making, hence, they need to clearly understand the rudimentary elements of the property investment activity. In addition, according to Dietz (1966), the environment that contains several factors influencing the attitudes of decision

maker will affect the investment decisions. Hence, the probability of property investment will be affected by several factors as well.

Figure 2.2 Factors affecting investment decision



Adapted from: Hargitay & Yu (1993)

According to figure 2.1 above, Hargitay and Yu (1993) concluded that investment decision on property could be affected by different type of factors such as forecast and outlook, amount and availability of funds, investor's short and long term objectives, historic performance of alternative media, risk and return preferences and market considerations. In short, the probability to invest in property will be affected by these factors.

Moreover, Hartigay and Yu (1993) also concluded that the investors would face several difficulties in every step of investment decision-making process. There are five fundamental steps of investment decision-making process, for example, to state the objectives of investment, to search for a set of unconventional investment projects which potential to attain the objectives and goals set, to evaluate the options of investments based on risk and return, to select the highest suitable options, to appraise the significances of the

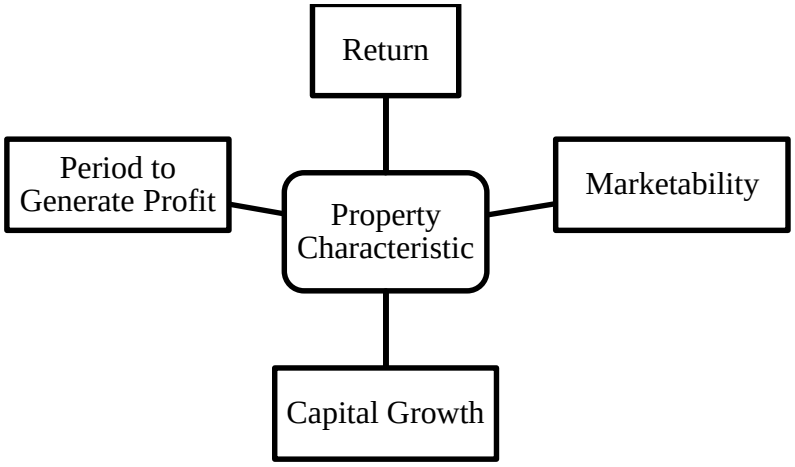
decisions made, and lastly is to review goals and benchmarks. Therefore, every steps of the investment decision-making process is considered as important elements that need to encounter when computing the probability of property investment.

Fundamentally, there are a lot of factors, types of decisions, and steps of decisions making process that can affect the computation of probability. Consequently, the probability of property investment refers to how the extent to which the property investment decision is likely to occur or be the case after taking the different type of factors and condition into account (Hargitay & Yu, 1993).

2.2.2 Reviews on the Relationship between Property Characteristics and Probability of Property Investment

Rohe and Steward (1996) explained that the property feature is one of the important factors that may affect the demand for the property. It is because people will consider the characteristic of the property before buying a property in order to avoid unwanted losses or any regret. Hence investor will aim the type of characteristic that will suit them before purchasing it. The property characteristics that will be considered by investor before investing are such as the figure 2.2 below. For instance, the risk and return of the property, the potential capital gain of the property in future, the period of property to generate profit, and the liquidity of the property. Hence, Tan (2008) claims that all of these characteristics are important for investors as a guideline to decide whether want to invest or not by following the objective of investors.

Figure 2.3 Types of Property Characteristics



Adapted from: Rohe & Steward (1996); Anglin (2003); Fiegenbaum & Thomas (1988); Fisher, Gatzlaff & Haurin (2003); Tan (2008)

First and foremost, refer to the figure 2.2, Anglin (2003) stated that the property characteristic the risk and return of investment would affect the investment decision. For instance, Hirshleifer (1958) explained there is a positive relationship between return and investment decisions. Hence, according to Fiegenbaum and Thomas (1988), it can be concluded that the higher risk on investment, the higher the return on investment. Consequently, the property investment decision will be affected by the return on investment. Tan (2008) concluded the return of property is such as the selling price of the property in the future. Fisher, Gatzlaff, and Haurin (2003) show that there is a higher possibly of property investment increases in the national index of returns and for properties that have outperformed that index. Therefore, there are a positive relationship between the return on property and the probability of investment.

Secondly, the capital growth of the property is one of property characteristic that is important when come to property investment. Besides that, Anglin (2003) indicates that the selling price of property such as housing will affect

the ownership of property. For instance, the higher the selling price of property in the future, there will be higher potential for capital gain. Hence, the higher the capital gains of property, the higher the possibility of investors to invest in property (Tan, 2008).

Moreover, according to Rohe and Steward (1996), investors need to aware of the timing of investment. It can be refer to how long the property needs to take in order to generate profit. For example, the period to earn money is an important aspect that needs to consider by investors before purchasing the property. However, there is a positive relationship between the period to make profit and the possibilities of property investment. For example, it shows that the faster the estimated period of property to make a profit, the higher possibilities to invest in property (Rohe & Steward, 1996). Henceforward, the period of property to generate ideal profit will indirectly affect the property investment decision.

In addition, marketability of property is a significant factor that affects investment decision. Based on the Hargitay and Yu (1993) research, they claim that there is a positive relationship between marketability of property and the property investment decision. However, the marketability of the property can be referring as the liquidity of the investment. Normally, according to Hart and Moore (1990), they explained that marketability could be defining as readily saleable on the market. For example, the higher the liquidity or marketability of property, the higher the possibility invests in those properties. Invest in properties with better marketability.

As a conclusion, Tan (2008) indicated that the area sample, the most popular type of cluster sample, is used to sample economically while retaining the characteristics of a probability sample. In the study, householders from Kuala Lumpur state and Selangor state are focused because these two states contributed more than 45% of the total amount of constructed residential units in the country. Also, the total number of householders in these two states

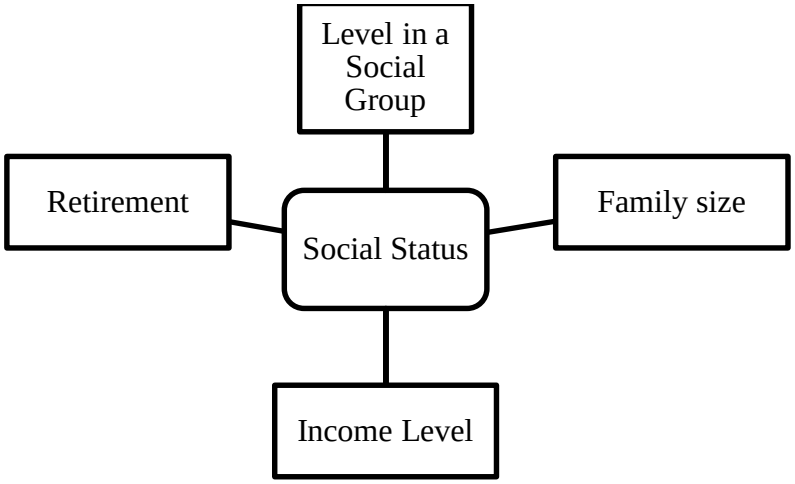
accounted for 31% in the country, which were 926, 747 householders in Selangor and 305, 154 householders in Kuala Lumpur (Population and Housing Census of Malaysia, 2000). Besides, in this study, districts within the states are chosen to ensure that the different areas are represented in the sample. For example, 4 districts each were identified in two states, which are Gombak, Klang, Petaling, and Hulu Langat in Selangor state and Kepong, Cheras, K.L city and Wangsa Maju in Kuala Lumpur state. Lastly, the researchers interviewed 400 householders by using convenience sampling. The interview and survey were conducted in identified residential areas nearer to major hypermarkets in each district. Therefore, the researcher concluded that there is positive relationship between the properties characteristic and property investment decision. The better the characteristic of property, the more likely the investor will invest in that particular property (Tan, 2008). The ownership of property is highly correlated with the characteristic of property.

2.2.3 Reviews on the Relationship between Social Status and Probability of Property Investment

According to Salmivalli, Lagerspetz, Björkqvist, Österman, and Kaukiainen (1996), social status can be expressed as the position or ranking of a person or group, within the society. Moreover, social status can be defined in two types. Firstly, individual earn their social status by their own achievements (Salmivalli et. al., 1996). Secondly, individual placed in the stratification system by their heritable position. Moreover, researcher Weber (2009) also established the knowledge of status groups. For instance, status groups are communities that are established on proper lifestyles ideas or the integrity given to people by others. However, Tan (2008) indicated that the probability of property investment is highly correlated with the social status of investors. In other word, the higher the social status, the more likely the investor will invest in property. In short, there is positive relationship between social status

and investment decision in property. Refer to figure 2.3 below; the social status can be classified into several types such as position of the social group, the size of family, the planning after retirement, and the level of income.

Figure 2.4 Type of Social Status



Adapted from: Rainwater (1965); Hargitay and Yu (1993); Wray, Alwin, & McCammon (2005); Hollingshead (1975); Robbins (1930); Nilsson (2008); Tan (2008)

The size of family is one of the categories to identify social status of an individual. According to Rainwater (1965), family size is fundamental social group in society usually involving of one or two parents and their children. Tan (2008) show that decision to own a property such as home is associated with the family size. It is because bigger family size could represent social status. For instance, investors will more likely to invest in property if they are in better social status. In short, an individual with the bigger family size will tend to invest in high value of properties.

In addition, Hargitay and Yu (1993) claims that level of an investor in a social group is very important when come to investment decision-making. For instance, Hollingshead (1975) indicates that a social group is known as a group of people normally consists of two or more people who interact with

each other and share similar characteristics and agreement. For example, different level of investor in social group will make different type of investment decision. It is because different social group have different kind of social responsibilities. In short, different level of social group will affect the property investment decision.

Moreover, according to study done by Hollingshead (1975), income level is the factor that determines the social status of an individual. Normally, individual with higher income level always come with high class of social status. It is because, higher income allow consumer to spend more and have higher demand on consumption. Therefore, income level is associated with the social status that will affect the property investment decision. Usually investors are not affordable to invest in any investment media especially property if the income level of investors that is belong to lowest level. However, Robbins (1930) indicates that the investors with higher income level will have higher demand and higher purchasing power, which will lead the investors to invest in property. Hence, the income level is highly related with the property investment decisions because income level can determine the social status of investors (Tan, 2008).

Besides that, according to Hurd (1990), the social status of an individual will affected after retirement. Therefore, the property investment will be affected as well. For instance, the study done by Hurd (1990) concluded that the consumption and savings behavior of individual would be affected after retirement. Therefore, the probability of property investor will be adjusted based one different social status, especially retirement plan. For example, some investors plan to invest in long term investment to earn profit for daily expenses, however, there are some investors plan to invest in short term investment such as stocks market that come with higher risk. Consequently, the decision of property investment is highly associated with the social status of investors (Tan, 2008).

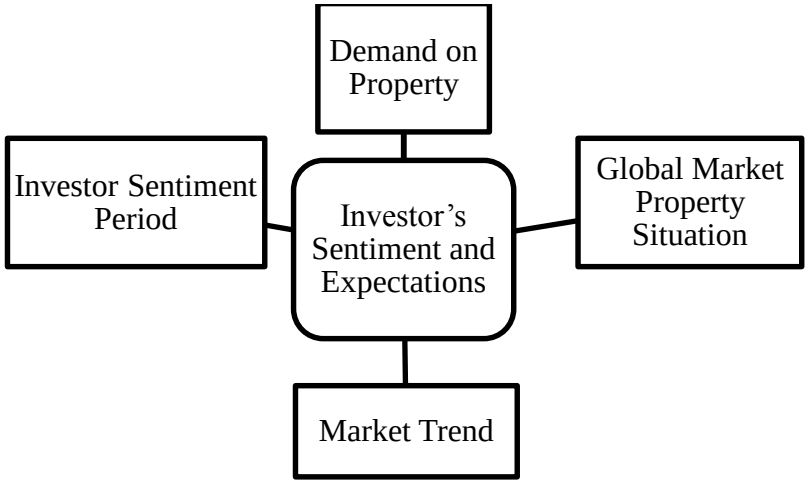
Moreover, the retirement status of an individual is one of the important factors that will affect the social status. It is because Wise (1985) explained that as people getting older, they would like to work less. Hence, retirement is considered as a discrete outcome. However, retirement also has an age, which not only describes retirement but influenced the desire for it as well. Wray, Alwin, and McCammon (2005) explained that the retirement status would affect the social status of an individual due to the health problem, responsibilities of individual, and the point of view of an individual. As people getting older, especially come to retirement conditions, the thinking of an individual will be influenced and affected. However, a retirement state is highly associated with the property investment decision. According to Goldstein, Johnson, and Sharpe (2008), retired investors will invest in the investment media with lower risk and constant return. It is because when an individual who are approaching the age of retirement, their emotion and psychology will be driven by logic. Hence, they will be risk adverse, for instance, as investor approach the period of retirement, investor need to consider whether the current investment strategy makes sense. Bailey, Nofsinger, and O'Neill (2003) claimed that most of the retired folks tend to find a ways to protect and help to finance them with retirement plan. Therefore, the investment decision of a retired investor will be different with investment decision of an ordinary investor. In short, the property investment decision is highly correlated with the retirement plan of investors.

As a conclusion, in the research done by Nilsson (2008), he indicates that investment decision-making will affected by the social status of an investor.

2.2.4 Reviews on the Relationship between Investor's Sentiment and Expectations and Probability of Property Investment

There have several types of investor's sentiment and expectations such as demand on property, global market property situation, market trend and investor sentiment period (Malaysia's Leading Property Site, 2012). Figure 2.4 show that the types of investor's sentiment and expectations which will affect the investor's decision whether to invest in property. Some researchers stated that the property pricing will affect the investor sentiment thus it will lead the decision of investor affected while invest in property (Kumar & Lee, 2006; Seybert & Yang, 2012). According to Yeboah, Ling, and Naranjo (2012) stated that investor sentiment play an important role in pricing of asset, which affect the investor decision. Besides, investor will invest according to the public and private information. Some researchers suggest that investors may produce short-term investment return when under reaction to public information and over reaction to private information. However, the public information is eventually incorporated into asset price in long term (Daniel, Hirshleifer, & Subrahmanyam, 1998). Moreover, Koedijk and Stork (1994) proved that investor psychology will affected the stock market levels.

Figure 2.5 Types of Investor's Sentiment and Expectations



Adapted from: Huerta (2013); Hargitay and Yu (1993); Yu and Yuan (2010); Brown & Cliff (2004, 2005); Cristian (2006); Bordo & Murshi (2000); Tan (2008)

Based on the figure 2.4 above, according to Huerta (2013), there is positive relationship between the demand on property and the investor's sentiment and expectations. When there is optimistic investors demand on property will react under the positive sentiment however there have negative changes in sentiment lead investors do not have confident to invest in the property. The researchers stated that the new property in the market will bring new tenants and buyers, this will lead the demand on property increase.

Moreover, according to Yu and Yuan (2010) examined that there is positive relationship in the low investor sentiment periods but do not have any relation exits in the high investor sentiment period. Besides that, the authors also examined the positive relationship between the conditional variance and market's expected returns which affected by the investor sentiment. Based on the Bergman and Roychowdhury (2008) research, the disclosures from management in the low and high sentiment period reveal efforts to benefit from sentiment-induced biases. Furthermore, the researchers found that there have significant effects on the property price effects with the investor sentiment period, which will affect the investor decision on, invest in property (Baker & Wugler, 2006). These researchers stated that have highly correlated in the low investor sentiment period. Those stock returns and asset values will affect the decision on invest in property, which highly correlated, with investor sentiment period according Brown and Cliff (2004, 2005).

From HomeGuru (2011), they have found through their research that a portion of 39% of respondents is concerned on the external and internal situations that might lead to market volatility. Such situation can be illustrated in the U.S. and Eurozone market, where financial crisis happened and it had led to negative buying sentiments whereby caused the investors adopt a cautious approach when they are making property investment decisions. Therefore, it is evidence that the investors are well-concerned not just with the domestic

market performance but also the global market situation as well whenever they are making investment decisions. This is important because financial crisis is contagious and it can spreads from one country to another (Bordo & Murshi, 2000). According to Cristian (2006), she stated that the capability to know the internal operations of a company's fundamentals together with the ability to predict the direction of the trend are the main characteristic of an investor should possess. This applies similar with properties investment decisions, whereby an investor will look upon the developer's profile and the current market trend in order to justify his or her investment decision. There will be always being a question between the rational theory and the behavioural trends, whereby the investors always seem to follow the trend rather than rational thinking (Cristian, 2006). It shows that investors nowadays are more rely on behavioural trends rather than their own rational thought in which has encourage them to make investment decisions based on the market trend.

2.2.5 Reviews on the Relationship between Economic Effect and Probability of Property Investment

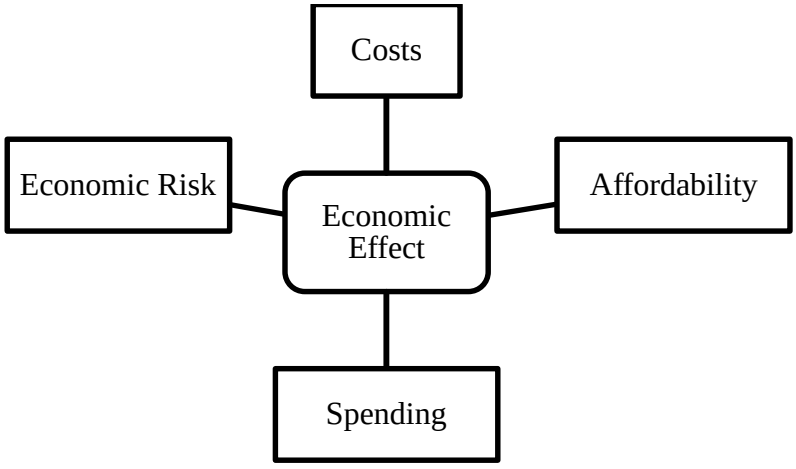
The economic effect refers to the total volume of economic benefit created by different economic events. According to the Federal Preservation Institute National Park Service Department of the Interior (2005), the first round of expenditure is not the last. In addition, the cash flows through many subsequent dealings, in many different markets (Federal Preservation Institute National Park Service Department of the Interior, 2005).

According to Weisbrod and Weisbrod (1997), economic effects may be observed in terms of wealth (including property values), business output (or sales volume), personal income (including wages), jobs or value added (or gross regional product). Moreover, Weisbrod and Weisbrod (1997) also stated that the net economic effect is usually expressed as the growth or reduction of

an area's economy, causing from changes in a facility, program or project. In addition, economic effects are unlike from the judgment of individual user benefits of a particular facility or service, and they are also different from wider social influences (Weisbrod & Weisbrod, 1997).

From the studies of society's or individuals' "willingness to pay" for improving them, there are several types of effects and benefits may be expressed in economic terms but they are not economic effects except insofar as the economic effects influence an area's level of economic event (Weisbrod & Weisbrod, 1997). Based on the research of Weisbrod and Weisbrod (1997), they stated that the economic effects can cause fiscal effects, which are the differences between the government's earnings and expenses. Furthermore, the economic effects on the wealth, personal income or business sales can influence the government earnings by increase or decrease the tax base (Weisbrod & Weisbrod, 1997). The effects of associated population and employment can influence government expenses by changing request for public services (Weisbrod & Weisbrod, 1997). Even though they are interrelated, Weisbrod and Weisbrod (1997) indicated that the fiscal impacts are not alike as economic effects.

Figure 2.6 Economic Effect



Adapted from: Hashim (2010); Hargitay and Yu (1993); Quigley (2002); Weisbrod & Weisbrod (1997); Ibiyemi & Tella (2013); Tan (2008)

Hashim (2010) showed that the study of median and mean property values and loan payments gives evidence on values but does not give a hint of the figure of housing units offered at different values for some states such as Kelantan and Selangor. Besides that, Hashim (2010) also stated that quite a large number of lower income buyers are not affordable to the median priced house, so they will be looking for the house that costs less than the median price. At the same time, these groups of people are also having lesser choices compared to the middle-income people (Hashim, 2010). Moreover, according to the Table 3 provided below, the poverty line in Malaysia in 2004 that has been reviewed and recognized is RM691 earnings every month (Hashim, 2010). With RM691 per month, the individual can only afford for the house, which cost RM32, 800; monthly loan payment of RM207 with 5% interest rate for 20 years and 5% deposit (Hashim, 2010). In addition, the newly high-end built properties are always the most costly section in housing market (Hashim, 2010). These kinds of properties are usually focus on the group of buyers such as foreign investors, wealthy people, corporate entities and company figures (Hashim, 2010). Tan (2008) concluded that the groups of people who have higher income are more affordable to buy property; in contrast, the groups of people who have low income are less affordable to buy property.

Table 2.1: Housing Availability by State

Year	30th Percentile Price			Capital Accumulation RM®		% Sold at Poverty Level®
	Sel.	Kel.	Nation	Financial	Equity	
1995	65,000	31,407	48,760	385	122,240	26
1996	71,094	31,848	51,150	427	126,340	24
1997	83,160	30,522	64,180	448	118,300	18
1998	78,480	25,900	78,018	359	109,682	23
1999	85,762	27,780	47,565	293	107,040	26
2000	94,095	29,815	56,290	310	116,900	21
2001	92,700	24,200	60,780	260	120,372	18
2002	90,650	37,780	59,047	292	120,865	19
2003	92,600	20,220	60,518	291	125,440	19
2004	99,320	18,630	64,231	300	130,930	18
2005	97,150	15,480	66,380	314	135,200	17
2006	105,350	23,670	65,726	347	140,540	17

Note: ® Nation

Adapted from: Property Report Market

Transactional costs include search costs, financing costs, legal and administrative costs and adjustment costs. According to Quigley (2002), the transaction costs that the property purchaser needs to pay are higher. In addition, the brokerage commissions are divided between seller and buyer in U.S. (Quigley, 2002). The buyer's broker commissions are around 3% of the selling price of a property for every transaction (Quigley, 2002). DiPasquale and Wheaton (1996) evaluate that the closing costs are about 1% to 3% of the buying price. Moreover, according to Chambers and Simonson (1989) proposed that the total transaction costs of owning a house is approximately from 6% to 10% of the value of the property. Besides that, Cunningham and Hendershott (1984) stated that the amount is around 12 % of the property value. Potepan (1989) indicated that the individual who has already has property are more likely to invest in makeover of the property as the substitute for paying huge amount of transaction costs. Tan (2008) reviewed that the

higher the transaction costs, the less likely the individual will engage in purchasing the property.

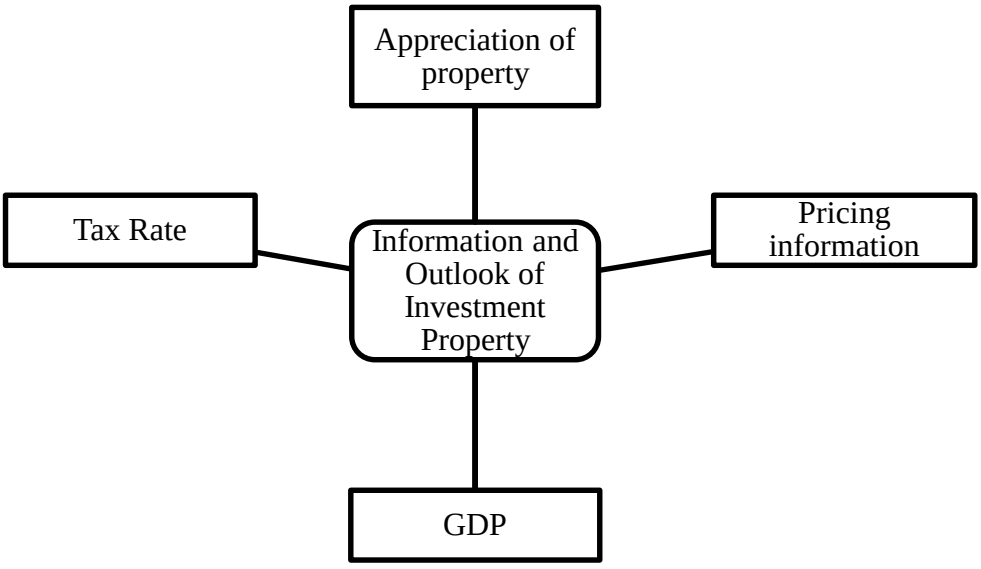
Direct economic effects refer to the changes in local industry event occurring as a result of public policies and programs or public or private business choices (Weisbrod & Weisbrod, 1997). In addition, it was affected by various factors including investment and spending decisions (Weisbrod & Weisbrod, 1997). The researchers also stated that these directly affect the movement of earnings, expenditure and work associated with economic events. Tan (2008) concluded that the decision of buying the properties as investment, the buyers are expecting for the returns, he or she is more likely to buy the particular properties; while the buyers assume that buying the properties as expenses then he or she is less likely to buy the particular property.

According to Ibiyemi and Tella (2013), the economic risks refer to the market demands, potentials of earnings, yields and voids. It has been highlighted that the assets investment may at the risk when the property turns to be unoccupied or invalid, another property investment possibly out-perform the subject property, the principal that the investors invested are not realizable, and the inflation rate that cause the decrease in the value of money in future (Ibiyemi & Tella, 2013). The general rule of investing is "high risks, high return", so it depends on what type of the individual is either risk adverse individual or risk taker individual. Risk adverse individuals are less likely to purchase the property when there is high economic risk; on the other hand, for the risk taker individuals, they are more likely to purchase property in the expectation of having large profits in future. However, according to Tan (2008), the higher the economic risk, the less likely the individual tend to purchase the property.

2.2.5 Reviews on the Relationship between Information & outlook of Investment Property and Probability of Property Investment

Normally, investors base their investing decisions on important and useful information such as economic data, historical data and forecasts. According to Raghubir and Das (1999), information of investment vehicles is one of the major important factors that will influence and affect the investment decision. For example, the information toward the investment will influence the investors' perceptions of future risks and return. Hence, the information and outlook of investment property is vital for investors to consider during the process investment decision-making Hargitay and Yu (1993). For instance, the information about the appreciation of property, the pricing information about the property in future, the information regarding the tax rate of property, and the information about the GDP of a country.

Figure 2.7 Type of Information and Outlook of Investment Property



Adapted from: Hartman (n.d); Hargitay and Yu (1993); (Admin, n.d.); Tan (2008)

According to Hartman (n.d), the information and outlook of investment property such as information about appreciation of property will positively affect the property investment decision. From the perspective of investors, investors will tend to invest in property if they received the news about growth of property in the future. Hence, there is a positive relationship between property investment decisions and the information and outlook of investment property (Tan, 2008). The greater the information and outlook toward the investment property, the higher the possibility of investors invest in that particular property (Admin, n.d.).

Conjointly, the pricing information about the property is important in influencing the property investment decision. For instance, the announcement on pricing information in properties will encourage investors to invest in property (Tan, 2008). It is because those positive announcements will bring advantages to investors; hence, from the perspective of investors, they will tend to invest in that particular property that comes with positive information about the price. In short, there is positive relationship between property investment decision and the pricing information about property (Hartman, n.d.).

Furthermore, information about Gross Domestic Product (GDP) of a country will positively affect the property investment decision. Conjointly, investors will tend to invest in property if I received the information about the increases of GDP in a particular country. Therefore, the positive information about GDP will lead investors to invest in property in that country because investors believe that there is higher potential for the property to grow in the future (Hartman, n.d.)..

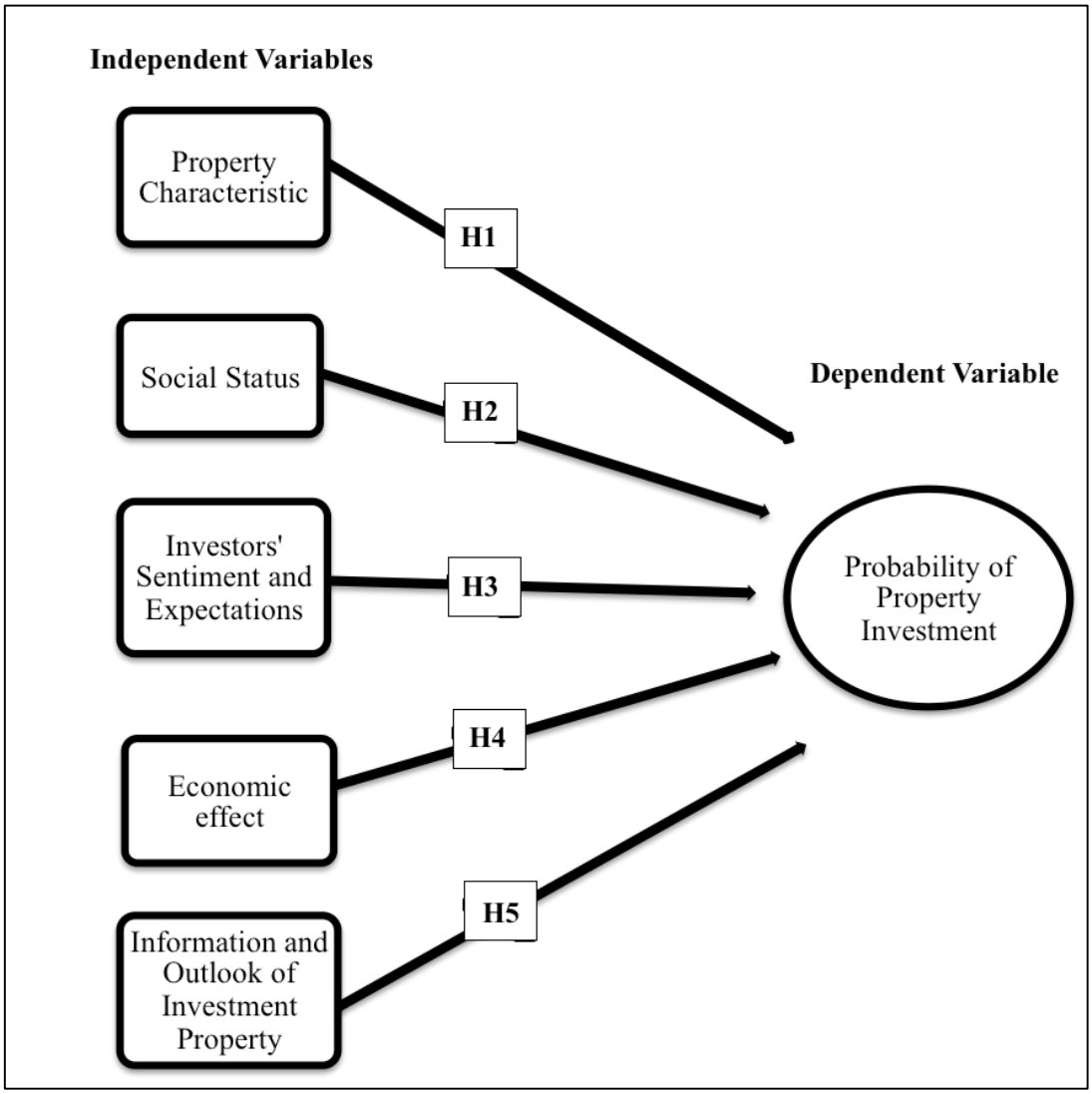
In addition, information about the tax rate of a country is vital to the property investment decision. It is because most of the investors wish to invest in the property with lower tax rate in order to maximize their interest and income. Therefore, the lower the tax rate, the higher the profit for investors that invests

in property. According to the study, there is significant relationship between the information about tax rate and the property investment decision (Admin, n.d.). For instance, if there is government of a country in future will implement lower tax rate, investors will tend to invest property in that country based on the forecast and information. In short, investors will tend to invest in the property if they received any information related with lower tax rate in future (Hartman, n.d.).

Conclusively, the information and outlook is always been an important message for investors to make investment decision. In today's world, everything is driven by information; it is impossible for an individual to make decision without relevance information (Hartman, n.d.). As a conclusion, investors need information and outlook of investment vehicle to make investment decision (Tan, 2008). If Investors receive the greater and more positive information about the investment property, the more likely the investors will invest in property (Admin, n.d.).

2.3 Proposed Conceptual Framework

Figure 2.8: Motives of Property Investment among UTAR Staff



Adapted from: Tan (2008); Hargitay and Yu (1993); Weisbrod and Weisbrod (1997); Yu and Yuan (2010); Nilsson (2008); Raghubir and Das (1999); Huerta (2013); Rohe and Steward (1996)

2.4 Hypotheses Development

The hypotheses of the research are generated in order to test the relationship between independent variable and dependent variable.

H_1: Property Characteristic is significantly related to Probability of property.

H_2: Social Status is significantly related to Probability of property investment.

H_3: Investors' Sentiment and Expectations is significantly related to Probability of property investment.

H_4: Economic Effect is significantly related to Probability of property investment.

H_5: Information and Outlook of Investment Property is significantly related to Probability of property investment.

2.5 Conclusion

In this chapter 2, the relationship between independent variables and dependent variable are extensively discussed according to the past studies and researches. Moreover, the proposed conceptual framework is generated in order to prolong the past study by adding the factor of social status that able to affect property investment decision. Besides that, most of the past studies concluded that the independent variable would positively affect the dependent variable except the social status factor. Conjointly, the finding also provided that all the independent variables are significantly affects the dependent variable. In the next chapter, the hypothesis developed will be tested. Lastly, the methodologies implemented in this research are widely discussed in the following chapter.

CHAPTER 3 METHODOLOGY

3.0 Introduction

In this chapter, the overall research methodology will be outlined in which the mathematical computations for analysis used to examine the research objectives will be explained. This chapter also includes the methodology needed in this research, which consists of research design used, describe on population, sample and sampling procedures, data collection method where the used of pilot test is being brief, variables and measurements used to conduct the survey, explanation on data analysis techniques to run the research objective and lastly the data processing for the results obtained. The research will go through all these procedures in order to provide convincing and reliable results

3.1 Research Design

Based on Yin (1989) reseacrh, the author stated that research design 'deals with a logical problem and not a logistical problem'. The main focus of our research project is to examine the causes that may affect UTAR staffs' decision to invest in property in Kampar area and how significant it is towards their decision making by showing the probability of investing in properties. The study will be using the deductive approach to complete our research project. It is also known as "top-down" approach as well. The reason why of this study chosen to use the deductive approach is because

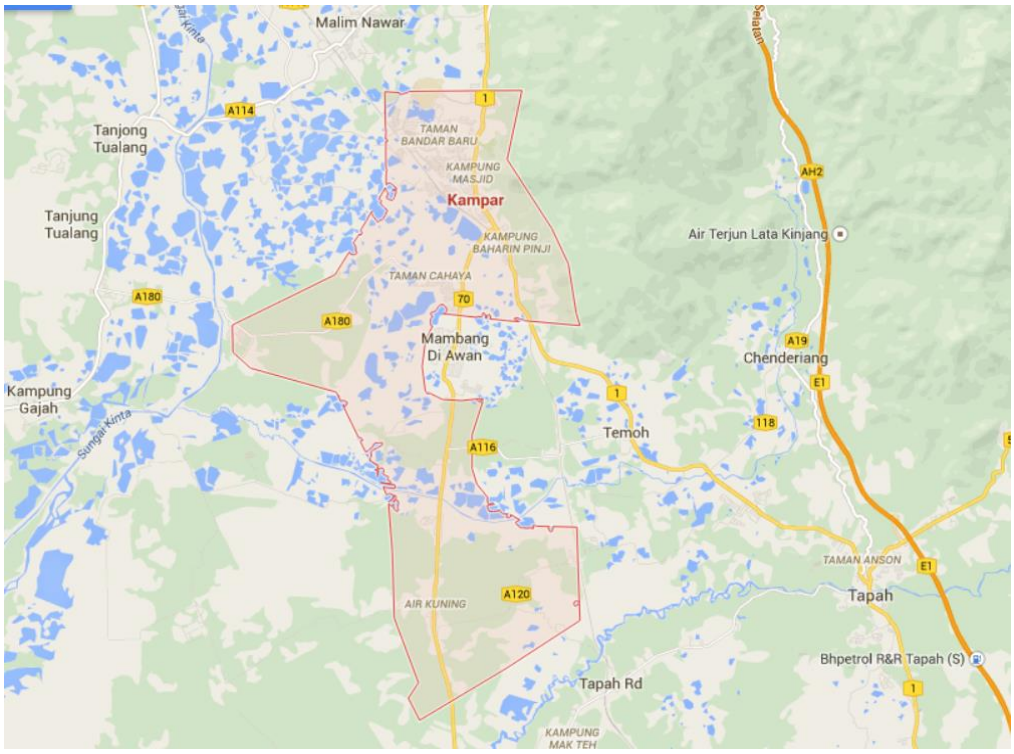
it works from a more general to a more detailed hypotheses in which the study use to test the hypotheses with specific data.

3.2 Population, Sample and Sampling Procedures

3.2.1 Target Population

In the study written by the authors Godwin (1998), in his case, he stated that the target population refers to the group of respondent that a survey is designed to serve. The survey must define its target population clearly and also establish a referral mechanism so that it remain focused by delivering effective services. He also mentioned that the purpose, goals, and objectives of the survey should be the motive behind the selection of a target population. Therefore, the target population in our study is only focused on UTAR's staff in Kampar, Perak campus. As the objective of this research had stated, the main focus of this research is to study the factors that may affect UTAR's staff decision to invest in property. Therefore, the target population is narrowed down to only focus on UTAR's staff in Kampar because the research wants to match with the main focus of this study. Furthermore, the reason why only UTAR's staffs are chosen but not the students is mainly because the study believed that property investment requires individuals with a stable income. A study suggests that wealth, income tilt, and permanent earnings are positively associated with the choice to purchase a home (Henderson & Ioannides 1986). Consequently, it is wiser to narrow down the scope of target respondents so that the study can show better and quality results.

3.2.2 Sampling Location



As stated in target population, our research focused in Kampar, Malaysia. The reason why Kampar is chosen for our research project firstly is because the development in Kampar is expanding and the study believes that it will be targeted investments in near future. Besides that, it is also more convenient for us to complete our project as the researchers are living in this area to complete the research project.

3.2.3 Sampling Elements

The target participants in our research are UTAR staffs. The reason to pick only UTAR staffs and do not include the students is because the result of the survey could be more representative as staffs have higher purchasing power than students.

3.2.4 Sampling Techniques

For the sampling techniques, probability sampling technique is used in this research as the population is known and there is a sampling frame in this study context. According to Marshall, (1996), random or probability samples is the most common approach that used by researchers. Probability samples are used because every participant of the population has an equal chance of selection (Marshall, 1996). Intrinsically, it is an equal probability selection method (EPSEM). There are several strength of simple random sampling which are it does not comprise advanced auxiliary information on the elements in the population and it is usually easier than other probability sampling procedures. In addition, every potential combination of sampling units has an equal and independent chance of selection. Unlike in systematic sampling, the chances of selection are not independent of each other.

Furthermore, statistical procedures required to examine data and figure out errors are much easier than those required of other probability sampling procedures. Moreover, the statistical procedures are used to compute inferential statistics are combined in most statistical software.

3.2.5 Sample Size

The determination of sample size is very important and is considered as a common task for any researhers. Based on Central Limit Theorem (CLT), the larger the sample size is, the sample mean will be normally distributed and there will be no violation of normality for the hypothesis testing. Therefore, in order to produce a quality research, this study will require approximately 300 respondents where all of them are UTAR's staff. Furthermore, Miaoulis & Michener (1976) stated that to there are three criteria normally will be specified in order to define the sample size, which are the level of accuracy, the level of confidence or risk, and the degree of variability in the attributes being.

3.3 Data Collection Method

3.3.1 Pilot Test

Based on Zikmund (2003); Zailinawati, Schatter, and Mazza (2006) studies, pilot testing can be defined as a minor scale to investigate some research techniques before a larger study. Besides, pilot test play an important role in a research project and is conducted to identify problem areas as well as have a better decisions on allocate time and resources. The pilot test is sufficient by distributing 30 questionnaires according to Fink (2003). Hence, pilot test will

be conducted by allocating 30 questionnaires to the staffs of University Tunku Abdul Rahman (UTAR)'s Kampar in order to test the accuracy and dependability of the questionnaires.

Pilot test can act as a trial test before the full-scale quantitative research in order to determine the unforeseen problems that might exist. The feedback from pilot test was conducted by a specific target population which can help to confirm whether the questionnaires are appropriate or necessary. From the pilot test, the questionnaires can be redesigned and restructured according to those unforeseen problems and feedback before distribute to all target respondents.

The normality of the pilot test is examining by Skewness and Kurtosis. Based on the Kline (1998), the Skewness falls within the value of range ±3 and the Kurtosis within the value of range ±10 when the normality assumptions are met. Moreover, to test the reliability of pilot test is through the Cronbach's Alpha where the value is normally falls between 0 and 1.

3.3.1.1 Advantages of Pilot Test

According to Welman and Kruger (1999), pilot test can identify some possible defects in measurement procedures such as instructions, time limits and so on. Besides, the pilot test also can help to manage of independent variables. This characteristic of the pilot test was very useful in the project to gain information and to do pre and post test. Moreover, the pilot test can recognize ambiguous or vague items in questionnaires. It is necessary to point out those unclear items and take action to redesign questionnaires where those unclear items were recognized by target respondents through feedback. Furthermore,

the target respondent for pilot test through questionnaires was categorized as a non-verbal behavior participant. Target respondent may give information and respond on any discomfort or embarrassment wording from the content of questionnaires. These information and responds given may help to make a correction if there is any wording or grammar mistake. In addition, according to Fink and Kosekoff (1985) said that respondents will give few answers and comments on the same question when they found there is failure to answer the question. Thus, the instrument shows unreliable and needs correction.

3.3.1.2 Disadvantages of Pilot Test

According to Thabane, Ma, Chu, Cheng, Ismaili, Rios, Robson, Thabane, Giangregorio, and Goldsmith (2010) stated that the pilot test are not appropriately designed because there are vague analytic plans, unclear feasibility objectives as well as there are ambiguous criteria for success of feasibility. Besides, the researchers mentioned that pilot test is used to collect data for sample size calculations. However, the pilot test is dangerous to use for estimated results because of limited sample size that will lead to unrealistic or biased results. Moreover, the researchers argued that there is misconception about pilot test because this is a small study done by an intern or a student which does not have any funding and can be accomplished quickly. Therefore, the pilot test just have limited resources and simply conducted by student or intern.

3.4 Variables and Measurements

How can the study define the word "Survey"? In general, survey is one of a data collection tool used to collect information from a portion of a population of interest- the size of the sample depending on the objective of the study (Scheuren, 2004). Preferences, opinions, behavior, or factual information, depending on its purpose that may be emphasized on variety types of topics when a survey is been carried out. Surveys can be carried out through questionnaire and the interview. In this research, the study conducted the survey by using questionnaire in advance. Questionnaires are usually paper-and-pencil instruments that require the respondents to complete. A distinction is made between open-ended and closed-ended questions.

Section A in the survey form contain an open-ended question which requires the respondent to formulate his own answer which normally an one word answer, whereas a closed-ended question in Section B requires the respondents to pick an answer from a given number of options.

Section A is the demography data where it focuses on the background and the personal information of respondents while Section B includes dependent and independent variables. The definition and number of items are show in the Table 3.1. Closed-end question are measured using five-point Likert style rating scale. In the research, five-point Likert style rating scale is used to measure the survey respondents' attitude toward the questionnaire. The attitudes vary along a dimension from positive to negative, so that they could then choose the response option that best reflects their position on that dimension (Johns, 2010). This straightforward notion is illustrated below.

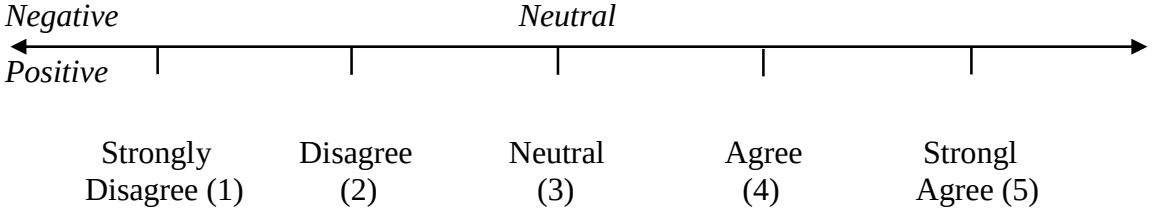


Table 3.1: The definition and number of items of each variable

Variables	Definition	Items
Independent		
Property Characteristics	It is an investment and what causes prices to move in the simplest terms included immobile, durable, illiquid, high transaction cost, consumption and investment good (Wargent, 2013)	4
Social Status	The relative rank that an individual holds in a social group and the specific function expected to perform in that social group (Pujari, n.d.)	4
Investors' Sentiment & Expectations	Investor sentiment is present whenever security prices deviate from present values of future cash flows and they make judgment rely on the information available on market fundamentals (Gallimore, Gray, & Hansz, 2000)	4
Economic effect	An event, policy change, or market trend will have on economic factors such as interest rates, consumer confidence, stock market activity, or unemployment (Investor words, n.d.)	4
Information and outlook toward Investment Property	Investment like gambling, investors must seek a mentor to guide them on property investment venture and get more the market information. For a smart investor, they have acquired a lot of basic, theoretical and practical knowledge on investment (Admin, n.d.)	4
Dependent		
Probability of property investment	Property investment is a big business, if done properly can quickly become more lucrative. Most of the individual invest in property to earn more revenue (French, 2006)	4

Table 3.2: Measurement for Each Variable

Variables		**Measurement**	**Scale of measurement**
Demographic Profiles	Gender	Nominal	-
	Age	Ordinal	-
	Race	Nominal	-
	Religion	Nominal	-
	Experience	Ordinal	-
Independent Variables	Property Characteristics	Interval	5-point Likert Scale
	Social Status		
	Investors' Sentiment and Expectations		
	Economic Effect		
	Information toward Investment Property		
Dependent Variable	Probability of Property Investment		

3.5 Data Analysis Techniques

3.5.1 Descriptive Statistics

Descriptive analysis is applied in this research to interpret the fundamental features of the data. It is amongst the most sophisticated tools in the arsenal of the sensory scientist (Lawless & Heymann, 1998). It is also can be defined as a method to produce detailed information and accurate results. According to Trochim (2006), it also provides simple summaries about the sample surveyed and the measures as well. Descriptive analysis is used to analyse the central tendency which represent value that occurs most frequently, middle value and all data values. Combined with easy graphics analysis, they form the basis of virtually every quantitative analysis of the data that has been provided.

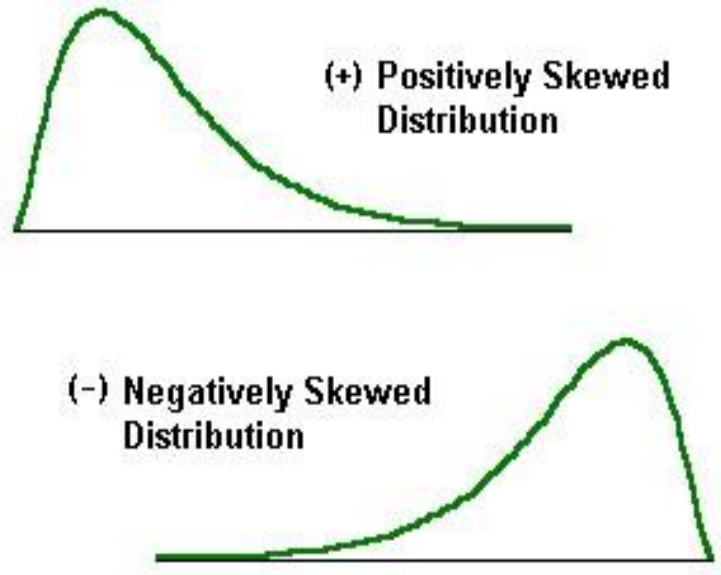
3.5.2 Scale Measurement

3.5.2.1 Normality Test

In any statistical model, it is important that the model is normally distributed regardless of the results. Normality tests are commonly used to determine whether a data set is normally distributed, whereby skewness and kurtosis is a measure of the asymmetry of the probability distribution. The skewness value can be either positive or negative, where it shows the direction of skew, while

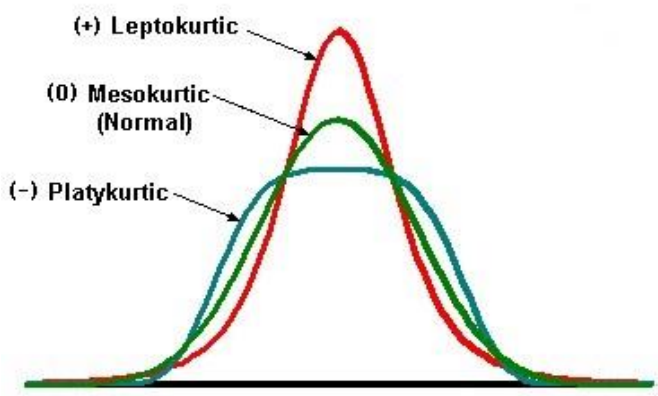
if the model is normal, it will be a normal bell curve in the center. The data is said to be perfectly symmetrical when the value is 0.

Figure 3.1 Normality Test (Skewness)



On the other hand, the kurtosis is the measure of the height and sharpness of the peak (Brown, 2015). When it is in higher values, it indicates a sharper peak where it also mean that more of the variability is due to a few extreme differences from the mean. When a normal distribution has a kurtosis exactly 3, it is called mesokurtic, less than 3 then it is a platykurtic and when it is more than 3, it is called a leptokurtic. A diagram of kurtosis is illustrated below.

Figure 3.2 Normality Test (Kurtosis)



3.5.2.2 Reliability Test

Reliability test provides a measure of the extent towards random measurement of errors and it acts as a precursor to test validity of a research (Wells & Wollack, 2003). It is very common for researchers to use the test to determine the quality of the research so that its results are reliable and precise. There are several methods when it comes to executing a reliability test, one of the most famous index used is the Cronbach's alpha. Its formula can be derived as follow:

$$\hat{\alpha} = \frac{k}{k-1}\left(1 - \frac{\sum_{i=1}^{k} p_i(1-p_i)}{\hat{\sigma}_X^2}\right).$$

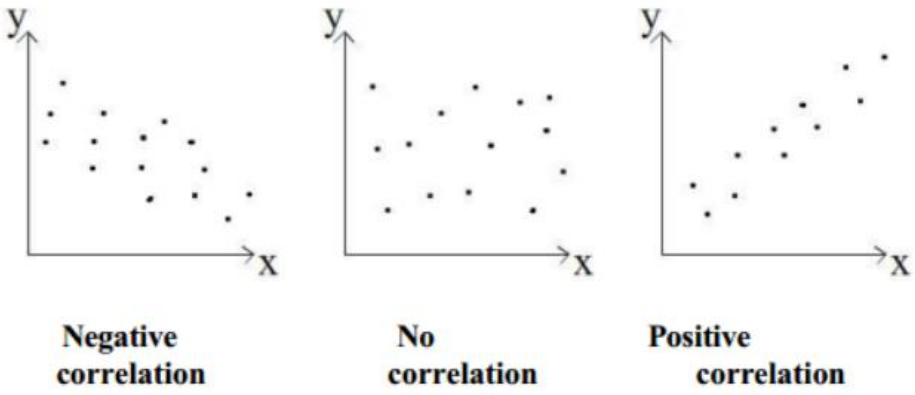
The coefficient of Cronbach's alpha ranges from 0 to 1, where 1 indicates high consistency, therefore it is more preferable. According to Wells & Wollack (2003), he stated that professionally developed high-stakes standardized tests should have at least 0.9 for internal consistency coefficients while 0.8 or 0.85 for lower-stakes standardized tests and lastly it is preferable to have a reliability coefficient of 0.7 for a normal test.

3.5.3 Inferential Statistic

3.5.3.1 Pearson's Correlation Analysis

Pearson's correlation analysis is a measure that is used to examine the specific hypothesis of the linear relationship between two variables. Its values can range from -1 to 1 whereby a -1 in value indicates a perfect negative linear relationship. When the scatter points are close to a straight line, it indicates that the relationship between the variables is strong.

Figure 3.3 Pearson's Correlation Analysis



According to Lane (n.d.), when the relationship between the variables is not linear, the correlation coefficient will not be adequate to represent the strength of the relationship between the variables. A strong correlation coefficient has a value of above 0.6 while a weak one has a value below 0.4. However, if the coefficient of Pearson correlation among the independent variables is 0.90 or above, it is suspect that multicollinearity problem will occur (Belsley, Kuh, & Welsch, 1980).

3.5.3.2 Multiple Linear Regression Analysis

Simple linear regression, polynomial regression, multiple linear regression, logistic regression and nonlinear regression are models used by researchers to check the quality of a product or process in theory and practice (Amiri & Moein, 2013). In order to check whether the model is significant or reliable or not, multiple linear regression analysis is often used to complete the task and it is considered the simplest and accurate indicator. In this research, the multiple linear regression test in conducted in order to test whether there exist positive or negative relationship between the dependent and the explanatory variables. Such model can be illustrated as below.

Y = C + b1X1 + b2X2 + b3X3 + ….

C = Intercept

Y = Dependent variable (Probability of Property Investment)

X1 = Property Characteristic

X2 = Social Status

X3 = Investors' Sentiment and Expectations

X4 = Economic Effect

X5 = Information and Outlook of Investment Property

Multiple correlations are similar to other correlation in which a value of 1.00 indicates that the two independent variables have a perfect relationship (Higgins, 2005). Hence, a perfect relationship means that the variables exist multicollinearity problem, in fact it exist when the indicator is greater than 0.1 or the variance inflation factor is lesser than 10. The presence of multicollinearity problem tends to inflate the variance of coefficient estimates in regression analysis which reduces the reliability of explanatory model (Anlauf, Jensen, Burnett, Steel, & Christiansen, 2011).

3.6 Data Processing

There are four stages such as checking, editing, coding, transcribing to describe data preparation processes and specifying any special or unusual treatments of data before analyzed. All raw data were recorded and amended with errors filtered (Karweit & Meyers, 1983) once the questionnaire survey was completed and data entered into Statistical Analysis Software (SAS) for processing.

3.6.1 Data Checking

Data checking refers to a procedure to ensure that the data and information of the questionnaire is accurate and correct as well as interviewing quality. After the Survey questionnaires were collected back from respondents, the questionnaires will be checked clearly and carefully to determine whether there is any errors or mistakes exist. Those errors or mistakes include incomplete information, unclear questions, grammar mistake and missing answer. Data analysis has difficulty to process due to those defect questionnaires. The data checking is very important to detect and solve problem when it occur, if not it will affect the overall research objective.

3.6.2 Data Editing

Data editing is a procedure that focus on detect and correct errors. After the data checking is done, data editing was carried out to amend those errors that found in questionnaire in order to avoid missing and incomplete information. Due to some technical problems and online data recording problems, the

questionnaire not only will empty and blank but also will consist of more than one incomplete answer. Thus, those incomplete answers should be rejected.

3.6.3 Data Coding

Data coding means a procedure that translate a format into another form by assign a code. Coding scheme is needed to develop every variable or question. At this stage, all the choices in every question are assigned with number by according to ascending order, starting with the value of 1. For example in section A, the age between 20 and 30 is allocated with the value of 1, the age between 31 and 40 is allocated with the value of 2 and lastly the age 41-50 is allocated with the value of 3. Besides that, this questionnaire also used "Likert" scale for the choices of every question by allocated "strongly disagree" with the value of 1, followed by ascending value until 5 for the scale of "strongly agree". The research objective in this project can easily to achieve and interpret clearly when answers are well categorized (Henning, Rensburg, & Smit, 2004).

3.6.4 Data Transcribing

Data transcribing is the procedure whereby all the data were converted into the Microsoft Excel spreadsheet format. The data is run through the Statistical Analysis Software (SAS) for analysis after all choices in the questionnaire were coded with value appropriately.

3.7 Conclusion

In this chapter 3, the research design is broadly discussed to support the research. Moreover, the target population, sampling location, sampling elements, sampling techniques, and sample size is explained specifically in this chapter 3. In this research the target population is set to be UTAR staff, the sampling location is located at Kampar, Perak, Malaysia. However, probability sampling technique is used in this research. The 300-sample size is applied to carry out hypothesis testing by using SAS to run data. Besides that, this chapter also deliberated the method of data collection, such as pilot test. The advantages and disadvantages of pilot have been broadly explained in this chapter as well. In addition, the variables and measurements of this research are justified extensively. Conjointly, in the following part of this chapter, the data analysis techniques are presented noticeably. Lastly, the four stages of data processing are explained in the last part of this chapter. In the following chapter 4, the data collected will be analyze and discuss to outcome major findings.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

This chapter comprises of the overall presentation and interpretation of findings and empirical results. Firstly, in the descriptive analysis, the demographic profile (i.e. gender, age, race, religion, and years of experience in property investment) of the respondents is presented based on frequency and percentage. Besides that, the central tendencies measurement of constructs (i.e. Mean, Standard Deviation, Skewness, and Kurtosis) of each independent variable is presented in the descriptive analysis. Next, this chapter also analyzes the primary survey data that generated by using the SAS software. Hence, the scale measurement is presented in this chapter. The normality test and reliability test are exhibited to analyze the variables. Last but not least, inferential analysis is exhibited in this chapter to investigate the correlation between the variables, to analyze the multiple linear regressions, and to test the hypothesis. In short, the results of this chapter consist of descriptive analysis, scale measurement, and inferential analysis.

4.1 Descriptive Analysis

4.1.1 Demographic Profile of the Respondents

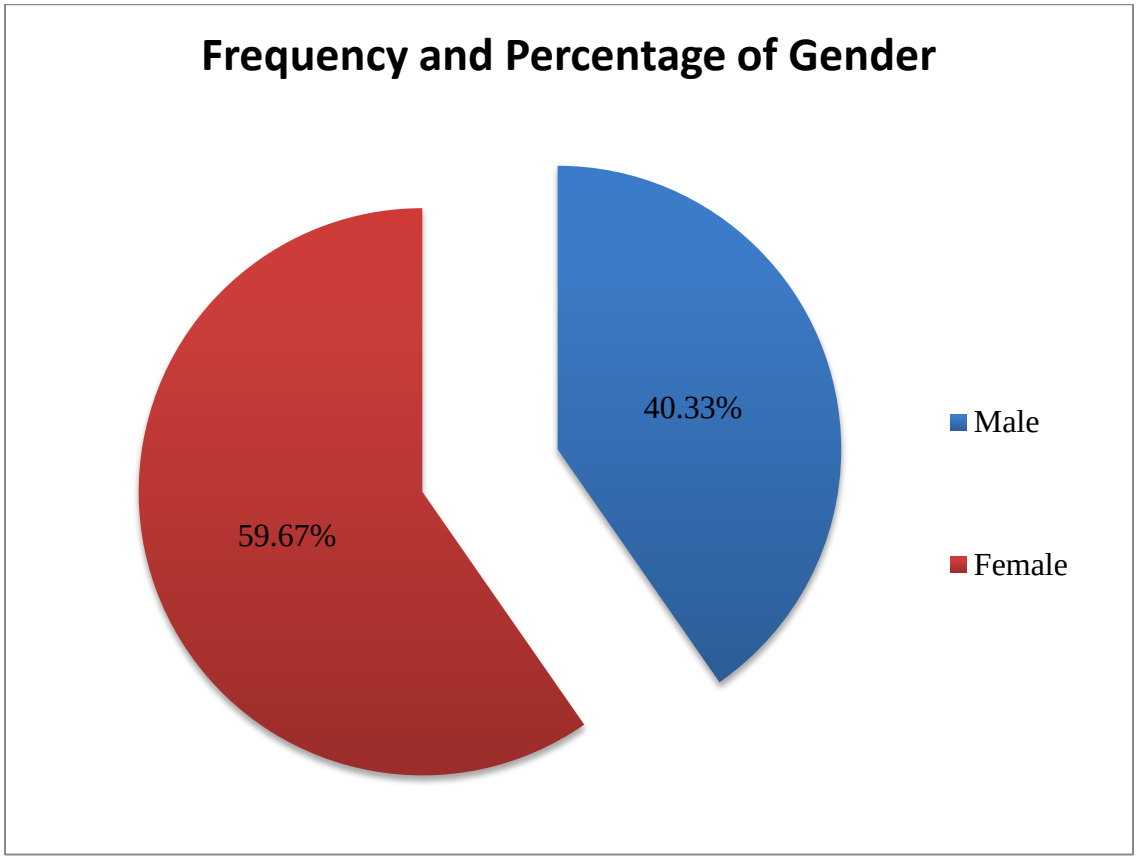
The demographic profile of all respondents are summarize based on the frequency and percentage. For example, gender, age, race, religion, and years of experience in property investment of 200 respondents are summarizing in this analysis. Hence, the percentage and frequency of the demographic profile of 300 respondents are presented in Table 4.1, Table 4.2, Table 4.3, Table 4.4, and Table 4.5.

4.1.1.1 Gender

Table 4.1: Frequency and Percentage of Gender

Gender:	**Frequency**	**Percentage (%)**
Male	121	40.33
Female	179	59.67

Figure 4.1: Frequency and Percentage of Gender



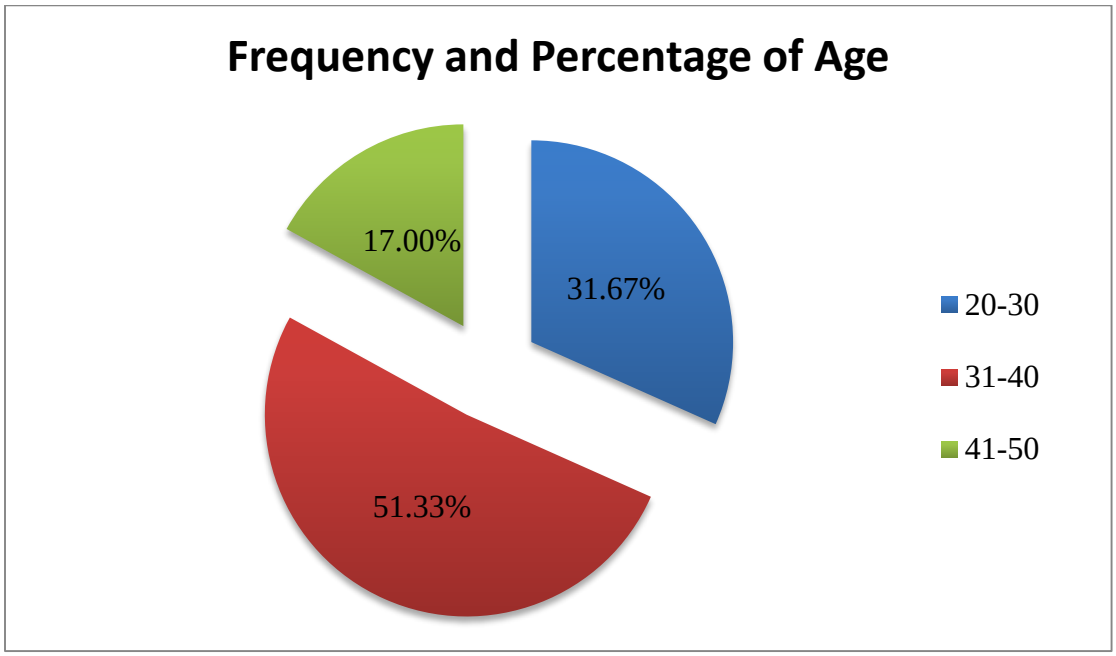
Among all the respondents, there are 121 respondents (40.33%) are male. However, the remaining 179 respondents (59.67%) are female. Hence, from the data, it shows that female respondent is more than male respondent.

4.1.1.2 Age

Table 4.2: Frequency and Percentage of Age

Age:	**Frequency**	**Percentage (%)**
20-30	95	31.67
31-40	154	51.33
41-50	51	17

Figure 4.2: Frequency and Percentage of Age



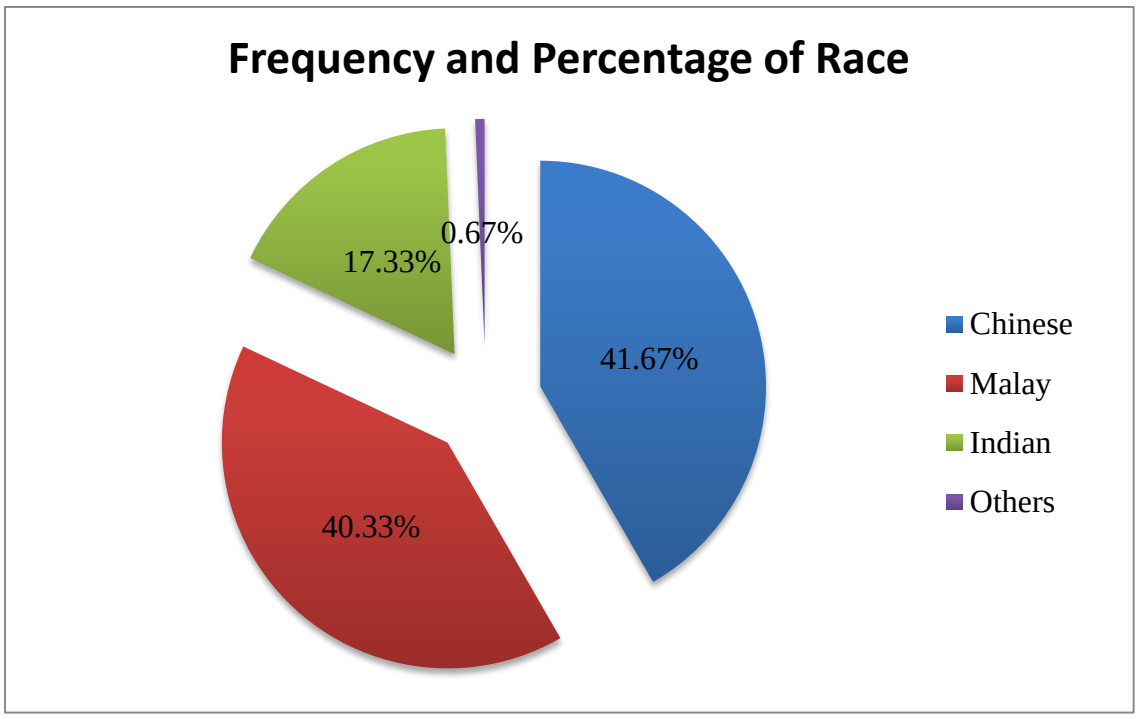
Among all the respondents, there are 95 respondents (31.67%) are between the age of 20 and 30 years old. Besides that, there are 154 respondents (51.33%) are between the age of 31-40 years old, which is the biggest percentage among all. Lastly, the remaining 51 respondents (17%) are age between 41-50 years old.

4.1.1.3 Race

Table 4.3: Frequency and Percentage of race

Race:	**Frequency**	**Percentage (%)**
Chinese	125	41.67
Malay	121	40.33
Indian	52	17.33
Others	2	0.67

Figure 4.3: Frequency and Percentage of Race



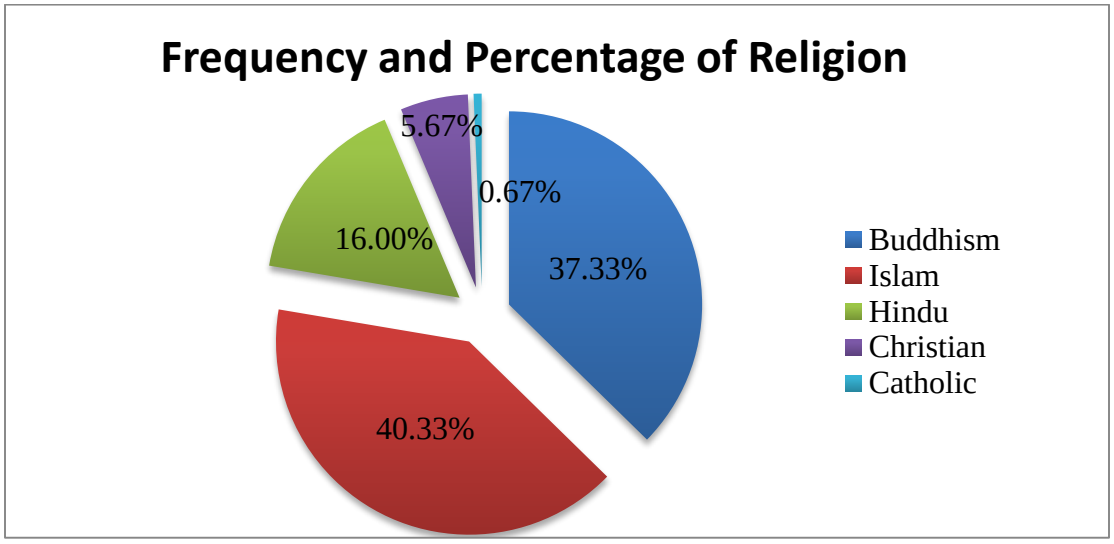
There are 3 major races in Malaysia, which are Chinese, Malay, and Indian. Among all the respondents from UTAR, there are 125 respondents (41.67%) are Chinese. Besides that, there are 121 respondents (40.33%) are Malay. Besides that, there are 52 respondents (17.33%) are India. Lastly, the remaining 2 respondents (0.67%) are others race.

4.1.1.4 Religion

Table 4.4: Frequency and Percentage of Religion

Religion	Frequency	Percentage (%)
Buddhism	112	37.33
Islam	121	40.33
Hindu	48	16
Christian	17	5.67
Catholic	2	0.67

Figure 4.4: Frequency and Percentage of Religion



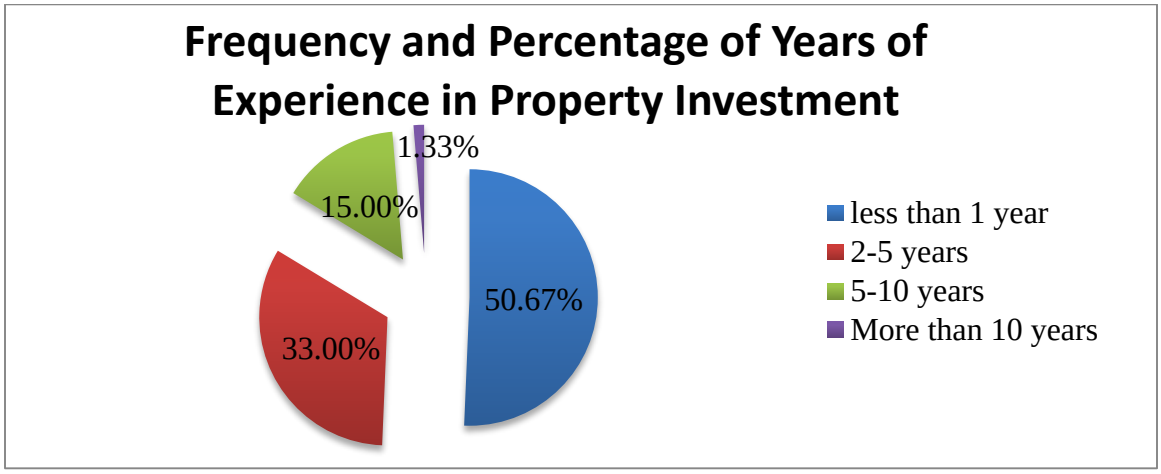
There are 4 major religions in Malaysia, which are Buddhism, Islam, Hindu, Christian, and, Catholic. Among all the 300 respondents from UTAR, there are 112 respondents (37.33%) are Buddhism. Besides that, there are 121 respondents (40.33%) are Islam. Besides that, there are 48 respondents (16%) are Hindu. Moreover, 17 respondents (5.67%) are Christian. Lastly, the remaining 2 respondents (0.67%) are belong to Catholic.

4.1.1.5 Years of Experience in Property Investment

Table 4.5: Frequency and Percentage of Years of Experience in Property Investment

Years of Experience in Property Investment:	**Frequency**	**Percentage (%)**
Less than 1 year	152	50.67
2-5 years	99	33
5-10 years	45	15
More than 10 years	4	1.33

Figure 4.5: Frequency and Percentage of Years of Experience in Property Investment



The data shows that there are 152 respondents (50.67%) have the experience of property investment that less than 1 year. Besides that, there are 99 respondents (33%) have 2 to 5 years of property investment experience. Moreover, there are 45 respondents (15%) have 5 to 10 years of property investment experience. Lastly, the remaining 4 respondents (1.33%) have more than 10 years' experience in property investment. Hence, as a conclusion, most of the respondents are lacked of the experience in property investment.

4.1.2 Central Tendencies Measurement of Construct

4.1.2.1 Property Characteristic

Table 4.6: Descriptive Statistics of Property Characteristic

Variables	Questions	Mean	Standard Deviation	Skewness	Kurtosis
Property Characteristic	C1	4.1133333	1.3808856	-1.4555004	0.6202819
	C2	3.5400000	1.2082769	-0.3176083	-1.0544711
	C3	3.9700000	1.0612197	-0.8020183	-0.2510656
	C4	3.6466667	1.5175084	-0.7909235	-0.9343780

Table 4.6 shows the summary of the statistics of property characteristic. Therefore, the value of mean and standard deviation of all questions of the independent variable, property characteristic are exhibited on the table 4.6 above.

According to table 4.6 above, the questions C1 has the highest mean of 4.1133 and followed by C3 with 3.9700, C4 with 3.6467, and lastly the question C2 with the lowest mean of 3.5400. Since all of the mean of all questions are more than 3.5000, hence it can be conclude that most of the respondents agree that property characteristic will affect the probability of property investment.

However, the highest standard deviation among all the questions is 1.5175, which is question C4. Next is followed by C1 with 1.38089, C2 with 1.2083, and lastly, the lowest standard deviation is 1.0612 from C3.

4.1.2.2 Social Status

Table 4.7: Descriptive Statistics of Social Status

Variables	Questions	Mean	Standard Deviation	Skewness	Kurtosis
Social Status	S1	3.4466667	1.8740854	-0.5053500	-1.6898096
	S2	4.0700000	1.2069060	-1.1808420	0.1102706
	S3	4.0400000	1.0042052	-1.2175495	1.5924902
	S4	3.9500000	1.0219170	-1.0919931	0.5336749

Table 4.7 shows the summary of the statistics of the independent variable, social status. Consequently, the value of mean and standard deviation of all questions of the social status are demonstrated on the table 4.7 above.

According to the result from table 4.7 above, the highest value of the mean value is 4.0700 from the question S2, followed by S3 with the mean value of 4.0400, S4 with the mean value of 3.9500. Lastly, the lowest mean value is 3.4467 from the question S1. From the result above, it can be conclude that most of the respondents agree that social status will affect the probability of property investment since the mean value of the question are more than 3.5000,

Nevertheless, the highest standard deviation among all the questions of social status is 1.8740854, which is question S1, followed by the standard deviation of 1.2069 which is question S2. Next, the following standard deviation is 1.0219 which is from question S4. Last of all, the lowest standard deviation is 1.0042 from the question S3.

4.1.2.3 Investors' Sentiment and Expectations

Table 4.8: Descriptive Statistics of Investors' Sentiment and Expectations

Variables	Questions	Mean	Standard Deviation	Skewness	Kurtosis
Investors' Sentiment and Expectations	IS1	3.8933333	1.0386940	-1.1729780	1.0660719
	IS2	3.6800000	1.3870881	-0.9334588	-0.3882096
	IS3	3.0833333	1.4058129	0.3091412	-1.5282558
	IS4	2.4500000	1.7789648	0.5563137	-1.5603451

The summary of the statistics of the Investors' Sentiment and Expectations is showed on the table 4.8. Thus, table 4.8 above also demonstrated the value of mean and standard deviation of all questions of the Investors' Sentiment and Expectations.

According to table 4.8 above, the questions IS1 has the highest mean of 3.8933 and followed by IS2 with 3.6800, IS3 with 3.0833, and lastly the question IS4 with the lowest mean of 2,450.

On the contrary, the highest standard deviation among all the questions is 1.7790, which is question IS4, followed by IS3 with 1.4058, IS2 with 1.3871, and lastly, the lowest standard deviation is 1.038694 from IS1.

4.1.2.4 Economic Effect

Table 4.9: Descriptive Statistics of Economic Effect

Variables	Questions	Mean	Standard Deviation	Skewness	Kurtosis
Economic Effect	E1	2.4400000	1.0180971	1.4081525	1.1238571
	E2	1.8366667	1.5245995	1.3442456	-0.0645440
	E3	3.5300000	1.2413311	-0.9192370	-0.1849405
	E4	2.0233333	1.5462076	1.1138886	-0.4736815

Table 4.9 indicates the summary of the statistics of Economic Effect. Besides that, the value of mean and standard deviation of all questions of the independent variable are presented on the table 4.9 above.

According to table 4.9 above, the questions E3 has the highest mean of 3.5300 and followed by E1 with 2.4400, E4 with 2.0233. However, E2 is the question with the lowest mean of 1.8367.

On the other hand, the highest standard deviation among all the questions is 1.5462, which is question E4. Next is followed by E2 with 1.5246, E3 with 1.2413, and lastly, the lowest standard deviation is 1.0181 from the question E3.

4.1.2.5 Information and Outlook of Investment Property

Table 4.10: Descriptive Statistics of Information and Outlook of Investment Property

Variables	Questions	Mean	Standard Deviation	Skewness	Kurtosis
Information and Outlook of Investment Property	F1	2.4600000	1.5673508	0.7512941	-1.0766831
	F2	3.7400000	1.3852061	-0.9617483	-0.3033807
	F3	3.6400000	1.7665794	-0.6878010	-1.4118294
	F4	3.4300000	1.5404577	-0.3040817	-1.5278918

Table 4.10 indicates the summary of the statistics of Information and Outlook of Investment Property. Besides that, the value of mean and standard deviation of all questions of the independent variable are presented on the table 4.10 above.

According to table 4.10 above, the questions F2 has the highest mean of 3.7400000 and followed by F3 with 3.6400000, F4 with 3.4300000. However, F1 is the question with the lowest mean of 2.4600000.

On the other hand, the highest standard deviation among all the questions is 1.7665794, which is question F3. Next is followed by F1 with1.5673508, F4 with 1.5404577, and lastly, the lowest standard deviation is 1.3852061 from the question F2.

4.1.2.6 Probability of Property Investment

Table 4.11: Descriptive Statistics of Probability of Property Investment

Variables	Questions	Mean	Standard Deviation	Skewness	Kurtosis
Probability of Property Investment	P1	1.7900000	1.4020649	1.5222048	0.7662983
	P2	2.4666667	1.6302601	0.5027504	-1.4749669
	P3	2.4533333	1.5499991	0.5380575	-1.3546748
	P4	3.4500000	1.6359772	-0.4941894	-1.3891786

According to table 4.11 above, the questions P4 has the highest mean of 3.4500 and followed by P2 with 2.4667, P3 with 2.4533, and lastly the question P1 with the lowest mean of 1.7900.

However, the highest standard deviation among all the questions is 1.6360, which is question P4. Next is followed by P2 with1.6303, P3 with 1.5500, and lastly, the lowest standard deviation is 1.4020 from P1.

4.2 Scale Management

4.2.1 Normality Test (Skewness and Kurtosis Test)

Table 4.12: Skewness and Kurtosis of Dependent and Independent variables

Variables	**Questions**	**Skewness**	**Kurtosis**
Property Characteristics	C1	-1.4555004	0.6202819
	C2	-0.3176083	-1.0544711
	C3	-0.8020183	-0.2510656
	C4	-0.7909235	-0.9343780
Social Status	S1	-0.5053500	-1.6898096
	S2	-1.1808420	0.1102706
	S3	-1.2175495	1.5924902
	S4	-1.0919931	0.5336749
Investors' Sentiment and Expectations	IS1	-1.1729780	1.0660719
	IS2	-0.9334588	-0.3882096
	IS3	0.3091412	-1.5282558
	IS4	0.5563137	-1.5603451
Economic Effect	E1	1.4081525	1.1238571
	E2	1.3442456	-0.0645440
	E3	-0.9192370	-0.1849405

	E4	1.1138886	-0.4736815
Information and Outlook of Investment Property	F1	0.7512941	-1.0766831
	F2	-0.9617483	-0.3033807
	F3	-0.6878010	-1.4118294
	F4	-0.3040817	-1.5278918
Probability of Property Investment	P1	1.5222048	0.7662983
	P2	0.5027504	-1.4749669
	P3	0.5380575	-1.3546748
	P4	-0.4941894	-1.3891786

The multivariate normality is examined using skewness and kurtosis test. Univariate normality is an essential element to examine multivariate normality (Hair, Black, Babin, & Anderson, 2010). As mentioned above, the normality assumption is met when the values of skewness falls within the range of ±3 while the values of kurtosis are within the range of ±10.

From the analysis above shown in the table 4.12 above, the significant values of skewness of the items ranged from -1.4555004, C1 which is the question from variable property characteristics to 1.5222048, P1 which is the question from variable probability of property investment; whereas the values of kurtosis of the items are between -0.1849405, E3 which is the question from variable economic effect to 1.5924902, S3 which is the question from variable social status.

The results for both the skewness and kurtosis test have fulfilled the normality assumption and shown a bell-shaped in all the histogram, consequently, data of this research can be concluded as normally distributed.

4.2.2 Reliability Test

Table 4.13: Cronbach's Alpha of Dependent and Independent Variables

Variables	**Numbers of Questions**	**Cronbach's Alpha**
Property Characteristic	4	0.939851
Social Status	4	0.913877
Investors' Sentiment and Expectations	4	0.899504
Economic Effect	4	0.905142
Information and Outlook of Investment Property	4	0.889593
Probability of Property Investment	4	0.896161

Based on Nunnally (1978), it can be determined that the questions designed are reliable with the Cronbach's Alpha exceeding 0.70. The reliability test is applied in this research in order to fulfill the minimum requirement level of reliability and test the reliability of all the questions of independent and dependent variables.

According to the results generated, the coefficient of the variables ranged from the lowest 0.889593 to the highest Cronbach's Alpha of 0.939851. Since all the Cronbach's Alpha of dependent variable and also the independent variables are above than 0.70, therefore we have sufficient evidence to conclude that the questions of the dependent variable and independent variables designed are considered as reliable.

4.3 Inferential Analysis

4.3.1 Pearson Product Moment Correlation Analysis

Table 4.14: Correlation Matrix

	Property Characteristic	Social Status	Investor Sentiment	Economic Effect	Information & Outlook of Investment Property	Probability of Property Investment
Property Characteristic	1.0000	0.46180 <.0001	0.40226 <.0001	0.40421 <.0001	0.49730 <.0001	0.49549 <.0001
Social Status	0.46180 <.0001	1.0000	0.70087 <.0001	0.64552 <.0001	0.76566 <.0001	0.63614 <.0001
Investors' Sentiment	0.40226 <.0001	0.70087 <.0001	1.0000	0.72817 <.0001	0.87021 <.0001	0.80309 <.0001
Economic Effect	0.40421 <.0001	0.64552 <.0001	0.72817 <.0001	1.0000	0.77519 <.0001	0.83570 <.0001

Information & Outlook of Investment Property	0.49730 <.0001	0.76566 <.0001	0.87021 <.0001	0.7751 9 <.0001	1.0000	0.85711 <.0001
Probability of Property Investment	0.49549 <.0001	0.63614 <.0001	0.80309 <.0001	0.8357 0 <.0001	0.85711 <.0001	1.0000

Multicollinearity problem occur when the coefficient of Pearson correlation among the independent variables is 0.90 or above. (Belsley et.al., 1980; Barkan, 2007). In general, multicollinearity problem happened when several independent variables in a multiple regression model are closely correlated to one another.

According to the result above, the highest Pearson correlation coefficient of the independent variables is 0.87021. Since the result 0.87021 is less than 0.90, this proved that non-existence of multicollinearity problem in this research.

4.3.2 Multicollinearity Test

4.3.2.1 Variance Inflation Factor (VIF) Approach

Table 4.15: Variance Inflation Factor (VIF)

Variables	Parameter Estimate	P-Value	Variance Inflation	Result
Intercept	-0.77322	<.0001	0	low multicollinearity
Property Characteristic	0.17769	0.0003	1.36921	low multicollinearity
Social Status	-0.18629	0.0005	2.53390	low multicollinearity
Investors' Sentiment and Expectations	0.19389	0.0006	4.31638	low multicollinearity
Economic Effect	0.52623	<.0001	2.61725	low multicollinearity
Information and Outlook of Investment Property	0.43061	<.0001	6.09444	low multicollinearity

To further determine the presence of multicollinearity problem, the study conduct the VIF approach. If the value of VIF is greater than 10, the model consists of high or serious multicollinearity problem. On the other hand, if the value of variance inflation factor falls between 1 and 10, its means there is no serious or low multicollinearity in the model. Moreover, if the value of VIF is equal to 1, it can say that there is no multicollinearity in the model.

Thus, table 4.15 above, the value of variance inflation is ranged from 1.3692 to 6.09444. In other word, the result shows that all the independent variables of the probability of property investment model are uncorrelated to each other. Furthermore, the absence of serious multicollinearity suggests that the data collection employed for the study is appropriate (Montgomery, Peck, & Vining, 2012).

4.3.2.2 Tolerance (TOL) Approach

Table 4.16: Tolerance

Variables	Parameter Estimate	P-Value	Tolerance	Result
Intercept	-0.77322	<.0001	.	low multicollinearity
Property Characteristic	0.17769	0.0003	0.73035	low multicollinearity
Social Status	-0.18629	0.0005	0.39465	low multicollinearity
Investors' Sentiment and Expectations	0.19389	0.0006	0.23168	low multicollinearity
Economic Effect	0.52623	<.0001	0.38208	low multicollinearity
Information and Outlook of Investment Property	0.43061	<.0001	0.16408	low multicollinearity

Table 4.16 above show that all the independent variables of the probability of property investment model are uncorrelated to each other and consist of not serious multicollinearity due to the TOL is more than zero and close to one.

4.3.3 Multiple Linear Regression Analysis

4.3.3.1 Model Summary

Table 4.17: Linear Regression Model Result Summary

Dependent Mean	R^2	Adjusted R^2	F Value	Pr>F
2.5400	0.8263	0.8233	279.65	<.0001

Based on the table shown above, the value of F-test statistic value is 279.65 with the p-value of <0.0001.

$$\boldsymbol{P_n} = \hat{\beta}_0 + \hat{\beta}_1 \boldsymbol{C_n} - \hat{\beta}_2 \boldsymbol{S_n} - \hat{\beta}_3 \boldsymbol{IS_n} + \hat{\beta}_4 \boldsymbol{E_n} + \hat{\beta}_5 \boldsymbol{F_n} + \hat{\mu}$$

$$\boldsymbol{P_n} = -0.77322 + 0.17769\,\boldsymbol{C_n} - 0.18629\,\boldsymbol{S_n} + 0.19389\,\boldsymbol{IS_n} + 0.52623\,\boldsymbol{E_n} + 0.43061\,\boldsymbol{F_n} + \hat{\mu}$$

SE= (0.18723) (0.04889) (0.05295) (0.05572) (0.04946) (0.05973)

R^2 = 0.8263 Adjusted R^2 = 0.8233

Where,

P_n : Probability of Property Investment

C_n : Property Characteristic

S_n : Social Status

IS_n : Investors' Sentiment and Expectations

E_n : Economic Effect

F_n : Information and Outlook of Investment Property

4.3.3.2 Model Interpretation

$\hat{\beta}_0$ = -0.77322. When all independent variables such as Property Characteristic (C), Social Status (S), Investors' Sentiment and Expectations (IS), Economic Effect (E), Information and Outlook of Investment Property (F), are set equal to zero, the dependent variable, which is the Probability of Property Investment on average (P), will equal to the -0.77322.

$\hat{\beta}_1$ = 0.17769. If there is 1 unit increase in the Property Characteristic (C), the estimated Probability of Property Investment (P) on average will increase by 0.17769 unit by holding others factor constant.

$\hat{\beta}_2$ = -0.18629. If there is 1 unit increase in the Social Status (S), the estimated Probability of Property Investment (P) on average will decrease by 0.18629 unit by holding others factor constant.

$\hat{\beta}_3$ = 0.19389. If there is 1 unit increase in the Investors' Sentiment and Expectations (IS), the estimated Probability of Property Investment (P) on average will increase by 0.19389 unit by holding others factor constant.

$\hat{\beta}_4$ = 0.52623. If there is 1 unit increase in the Economic Effect (E), the estimated Probability of Property Investment (P) on average will increase by 0.52623 unit by holding others factor constant.

$\hat{\beta}_5$ = 0.43061. If there is 1 unit increase in the Information and Outlook of Investment Property (F), the estimated Probability of Property Investment (P) on average will increase by 0.43061 unit by holding others factor constant.

R^2 = 0.8263. The R-squared of the equation showed that 82.63% of the total variation of the Probability of Property Investment (P) can be explained by the total variation of all independent variables which are Property Characteristic (C), Social Status (S), Investors' Sentiment and Expectations (IS), Economic Effect (E), and Information and Outlook of Investment Property (F).

$\bar{R}^2 =$ 0.8233. The R-squared of the equation showed that 82.33% of the total variation of the Probability of Property Investment (P) can be explained by the total variation of all independent variables which are Property Characteristic (C), Social Status (S), Investors' Sentiment and Expectations (IS), Economic Effect (E), and Information and Outlook of Investment Property (F) after the degree of freedom is taken into account.

4.3.3.3 Hypothesis testing for overall significance of model (P-value statistic Approach)

Table 4.18: F- Test statistic

The overall significance of model: F- Test	
F-statistic = 279.65	Prob. F = <0.0001

H_0: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$

H_1: At least one of the independent variable not equals 0.

Level of significance, 0.05

Decision Rule: Reject H_0 if the p-value lower than significant level (0.05). Otherwise, do not reject H_0

P-value = <0.0001

Decision Making: Reject H_0, since the p-value (<0.0001) lower than significant level (0.05). Hence, do not reject H_0

Conclusion: There is sufficient evidence to shows there is the significance relationship between the all independent variables which Property Characteristic (C), Social Status (S), Investors' Sentiment and Expectations (IS), Economic Effect (E), Information and Outlook of Investment Property (F), and the dependent variable, which is the Probability of Property Investment on average (P),

4.3.3.4 Hypothesis Testing for individual variables (P-value approach)

Result of P-value of each independent variable at significant 5% is stated as below:

Decision rule: Reject H_0 if the p-value < significant level (0.05). Otherwise, do not reject H_0.

Table 4.19: Hypothesis testing for individual variables

Independent Variables	**Hypothesis**	**P-value**	**α**	**Decision Making**	**Conclusion**
Property Characteristic (C)	$H_0 : \beta_1 = 0$ $H_1 : \beta_1 \neq 0$	0.0003	0.05	Reject H_0	β_1 is significant to influence P.
Social Status (S)	$H_0 : \beta_2 = 0$ $H_1 : \beta_2 \neq 0$	0.0005	0.05	Reject H_0	β_2 is significant to influence P.
Investors' Sentiment and Expectations (IS)	$H_0 : \beta_3 = 0$ $H_1 : \beta_3 \neq 0$	0.0006	0.05	Reject H_0	β_3 is significant to influence P.
Economic Effect (E)	$H_0 : \beta_4 = 0$ $H_1 : \beta_4 \neq 0$	<.0001	0.05	Reject H_0	β_4 is significant to influence P.
Information and Outlook of Investment Property (F)	$H_0 : \beta_5 = 0$ $H_1 : \beta_5 \neq 0$	<.0001	0.05	Reject H_0	β_5 is significant to influence P.

Hypothesis 1

H_0: Property Characteristic is not significantly related to Probability of property investment.

H_1: Property Characteristic is significantly related to Probability of property investment

By referring the result that shown above, since the p-value of independent variable, Property Characteristic is 0.0003, which is less than the significance level, 0.05, therefore, there is sufficient evidence to shows there is the significance relationship between Property Characteristic and Probability of property investment.

Hypothesis 2

H_0: Social Status is not significantly related to Probability of property investment.

H_2: Social Status is significantly related to Probability of property investment.

The result that shown above, since the p-value of the independent variable, Social status is 0.0005, which is less than the significance level, 0.05, therefore, there is sufficient evidence to shows there is the significance relationship between Social Status and Probability of property investment.

Hypothesis 3

H_0: Investors' Sentiment and Expectations is not significantly related to Probability of property investment.

H_3: Investors' Sentiment and Expectations is significantly related to Probability of property investment.

By referring the result above, since the p-value of the independent variable, Investors' Sentiment and Expectations is 0.0006, which is less than the significance level, 0.05, therefore, there is sufficient evidence to shows there is the significance relationship between Investors' Sentiment and Expectations and Probability of property investment.

Hypothesis 4

H_0: Economic Effect is not significantly related to Probability of property investment.

H_4: Economic Effect is significantly related to Probability of property investment.

From the result that displayed above, since the p-value of the independent variable, Economic Effect is <.0001, which is less than the significance level, 0.05, therefore, there is sufficient evidence to shows there is the significance relationship Economic Effect and Probability of property investment.

Hypothesis 5

H_0: Information and Outlook of Investment Property is not significantly related to Probability of property investment.

H_5: Information and Outlook of Investment Property is significantly related to Probability of property investment.

Based on the result above, since the p-value of the independent variable, Information and Outlook of Investment Property is <.0001, which is less than the significance level, 0.05, therefore, there is sufficient evidence to shows there is the significance relationship Information and Outlook of Investment Property and Probability of property investment.

4.4 Conclusion

In this chapter 4, the descriptive analysis such as demographic profile of respondents is carrying out through the survey and SAS data generation. Others than the demographic data, the central tendencies measurement of construct for all the independent variables and dependent variable are explained in this chapter. For instance, the mean value, standard deviation, skewness and kurtosis of every independent variable are exhibited in this chapter. Therefore, several test are implemented based on the result from SAS. For example, the data of this research is valid due to normality assumption is fulfilled. Hence, the normality test indicates that the data are normally distributed. Moreover, the reliability test is applied in this research in order to fulfill the minimum requirement level of reliability. Conjointly, the result also proved that there is non-existence of multicollinearity problem in this research. Next, the multiple linear regressions is analyze in this chapter. After analyzing the regression, the model is interpreted based on the result of SAS. Lastly, the hypothesis testing for overall significance of model is tested and the result indicates that the model is significant. Conclusively, every significant of all independent variables are tested and the result showed that all variable are significantly affect the independent variable.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

In this chapter 5, the results generated by SAS will be explained widely. Besides that, the descriptive and inferential analyses that have been described in previous chapter 4 will be summarized in this chapter. Furthermore, chapter 5 will include a significant discussion of major findings on the research objective and hypotheses. Moreover, managerial and theoretical implication, limitation of the study and recommendations for future research will be widely discussed in this chapter.

5.1 Summary of Statistical Analysis

5.1.1 Descriptive Analysis

5.1.1.1 Demographic Profile of the Respondents

Table 5.1: Frequency and Percentage of Demographic Characteristics

Variables	Frequency	Percentage
Gender: Female	179	59.67
Age: 31-40	154	51.33
Race: Chinese	125	41.67
Religion: Islam	121	40.33
Years of experience in property investment: < 1 year	152	50.67

By referring Table 5.1, it shows that there have 179 respondents are females, which stand for 59.67%. Out of the total respondents, 51.33% represent 154 respondents are between age of 31-40. Besides, most of the respondents are Chinese which consists of 125 people (41.67%) and the majority respondents are Islam with 40.33% (121 respondents). 50.67% represents 152 respondents have the years of experience in property investment less than one year.

5.1.1.2 Central Tendencies Measurement of Constructs

Table 5.2: Table of Significant Statistic

Variables	**Questions**	**Mean**
Property Characteristic	C1	4.1133
Social Status	S2	4.0700
Investors' Sentiment and Expectations	IS1	3.8933
Economic Effect	E3	3.5300
Information and Outlook of Investment Property	F2	3.6400

Based on table 5.2 displayed the summary of the question, which highest mean value among all the questions of each independent variable. First and foremost, the highest mean value among all the questions of all independent variables is 4.11 from the first question C1 of property characteristic. However, the second highest value of mean is the question S2 of the independent variable, social status. Next, the following mean value is from question IS1 of investors' sentiment and expectations. Moreover, question F2 of information and outlook of investment property achieved the forth-highest value of mean which is about 3.64. Lastly, the lowest mean value is 3.53, which is from the question E3 of economic effect.

5.1.2 Scale Measurement

Table 5.3: Skewness, Kurtosis, and Cronbach's Alpha of Dependent and Independent variables

Variables	**Questions**	**Skewness**	**Kurtosis**	**Cronbach's Alpha**
Property Characteristics	C1	-1.4555004	0.6202819	0.939851
	C2	-0.3176083	-1.0544711	
	C3	-0.8020183	-0.2510656	
	C4	-0.7909235	-0.9343780	
Social Status	S1	-0.5053500	-1.6898096	0.913877
	S2	-1.1808420	0.1102706	
	S3	-1.2175495	1.5924902	
	S4	-1.0919931	0.5336749	
Investors' Sentiment and Expectations	IS1	-1.1729780	1.0660719	0.899504
	IS2	-0.9334588	-0.3882096	
	IS3	0.3091412	-1.5282558	
	IS4	0.5563137	-1.5603451	
Economic Effect	E1	1.4081525	1.1238571	0.905142
	E2	1.3442456	-0.0645440	
	E3	-0.9192370	-0.1849405	
	E4	1.1138886	-0.4736815	
Information and Outlook of Investment Property	F1	0.7512941	-1.0766831	0.889593
	F2	-0.9617483	-0.3033807	
	F3	-0.6878010	-1.4118294	
	F4	-0.3040817	-1.5278918	
Probability of Property Investment	P1	1.5222048	0.7662983	0.896161
	P2	0.5027504	-1.4749669	
	P3	0.5380575	-1.3546748	
	P4	-0.4941894	-1.3891786	

5.1.2.1 Normality Test

Based on table 5.3 above, it shows the value of Skewness, Kurtosis, and Cronbach's Alpha of dependent and independent variables. The critical values of skewness of all variable are ranged from -1.4555004 (C1) to 1.5222048 (P1). However, the critical value of kurtosis among all questions of all variables are ranged from -1.5603451 (IS4) to 1.5924902 (S3). Therefore, all the variables have fulfilled the assumption of normality test.

5.1.2.2 Reliability Test

In addition, the Cronbach's Alpha coefficients among all variables are ranged from 0.889593 (Information and Outlook of Investment Property) to 0.939851 (Property Characteristics). Consequently, all the variables have fulfilled the minimum requirement level of reliability, which is more than 0.7. Hence, this result indicates that the research is valid and reliable.

5.1.3 Inferential Analysis

5.1.3.1 Pearson Product Moment Correlation Matrix

By referring the result shown on top, the highest Pearson correlation coefficient of the independent variables is 0.87021. Since the result 0.87021 is less than 0.90, this proved that non-existence of multicollinearity problem in this research.

Table 5.4: Correlation Matrix

	Property Characteristic	Social Status	Investor Sentiment	Economic Effect	Information & Outlook of Investment Property	Probability of Property Investment
Property Characteristic	1.0000	0.46180 <.0001	0.40226 <.0001	0.40421 <.0001	0.49730 <.0001	0.49549 <.0001
Social Status	0.46180 <.0001	1.0000	0.70087 <.0001	0.64552 <.0001	0.76566 <.0001	0.63614 <.0001
Investors' Sentiment	0.40226 <.0001	0.70087 <.0001	1.0000	0.72817 <.0001	0.87021 <.0001	0.80309 <.0001
Economic Effect	0.40421 <.0001	0.64552 <.0001	0.72817 <.0001	1.0000	0.77519 <.0001	0.83570 <.0001
Information & Outlook of Investment Property	0.49730 <.0001	0.76566 <.0001	0.87021 <.0001	0.77519 <.0001	1.0000	0.85711 <.0001
Probability of Property Investment	0.49549 <.0001	0.63614 <.0001	0.80309 <.0001	0.83570 <.0001	0.85711 <.0001	1.0000

5.1.3.2 Multiple Linear Regression Analysis

Table 5.5 Summary of Multiple Linear Regression Analysis

Null Hypotheses	**P-value**	**Rejected/Not Rejected**
H_1: Property Characteristic is not significant related to Probability of property investment.	0.0003	Rejected
H_2: Social Status is not significant related to Probability of property investment.	0.0005	Rejected
H_3: Investors' Sentiment and Expectations is not significant related to Probability of property investment.	0.0006	Rejected
H_4: Economic Effect is not significant related to Probability of property investment.	<.0001	Rejected
H_5: Information and Outlook of Investment Property is not significant related to Probability of property investment.	<.0001	Rejected

Table 5-5 described that the null hypotheses for the three independent variables which are property characteristic, social status and investors' sentiment and expectations are rejected since their p-value is lower than significant level of 0.05 which are 0.0003, 0.0005 and 0.0006 respectively. Besides, the null hypotheses of economic effect and information and outlook of investment property also rejected because of their p-value is <.0001 which is less than the significant level 0.05. Thus, it can conclude that all the independent variables are significant related to the probability of property investment.

5.2 Discussion of Major Findings

Table 5.6 Summary of Discussion of Major Findings

Null Hypotheses	**Results of current research**	**Results of Past Studies**
H_1: Property Characteristic is not significant related to Probability of property investment.	Significant	Significant
H_2: Social Status is not significant related to Probability of property investment.	Significant	Significant
H_3: Investors' Sentiment and Expectations is not significant related to Probability of property investment.	Significant	Significant
H_4: Economic Effect is not significant related to Probability of property investment.	Significant	Significant
H_5: Information and Outlook of Investment Property is not significant related to Probability of property investment.	Significant	Significant

5.2.1 Relationship between Property Characteristic and Probability of Property Investment (Independent Variable 1)

H_1: Property Characteristic is significantly related to Probability of property investment.

According to the result generated from SAS, there is important relationship between the property characteristic and probability of property investment because the p-value of independent variable, Property Characteristic is 0.0003, which is less than the significance level, 0.05. Hence, the hypothesis is accepted based on this result. Moreover, since the correlation coefficient value is 0.17769, which meaning that the property characteristic will positively influenced the property investment decision. In short, this result is supported by past studies, which were mentioned in chapter 2 (Hargitay & Yu, 1993; Rohe & Steward, 1996; Tan, 2008).

Based on the study of Hargitay and Yu (1993), they indicate that the investment decision will be strongly affected by the characteristic of property. Moreover, the study also indicates that there is a positive relationship between property characteristic and probability of property investment. For instance, the greater the characteristic of property, the higher the possibility of investors invest in property. In short, Rohe and Steward (1996); Tan (2008) claims that there is a positive relationship between property characteristic and probability of property characteristic.

5.2.2 Relationship between Social Status and Probability of Property Investment (Independent Variable 2)

H_2: Social Status is significantly related to Probability of property investment.

The result generated from SAS indicated that social status is significantly correlated to probability of property investment since the p-value is 0.0005, which is lesser than significant level 0.05. However, the correlation coefficient value is -0.18629, which indicates that social status of individual is negatively associated with the probability of property investment. Consequently, the hypothesis is accepted and proved that the lower the social status, the higher the probability to invest in property. In short, the result is similar to past researchers (Nilsson, 2008) thoroughly discussed in Chapter 2.

According to the study of Nilsson (2008) and Tan (2008), social status is one of the important factors that affect the investment decision of investors. Besides, the study also proved that there is a negative relationship between social status and probability of property investment. For example, the higher the social status, the higher the probability of property investment. It is because, when an investor is in lower social status, the investor will tend to increase profit by investing in property. Therefore, social status will be affected the decision of an investor.

5.2.3 Relationship between Investors' Sentiment and Expectations and Probability of Property Investment (Independent Variable 3)

H_3: Investors' Sentiment and Expectations is significantly related to Probability of property investment.

Based on the result generated by SAS, it indicated that the independent variable, investors' sentiment and expectations are significantly associated with probability of property investment since the p-value is 0.0006, which is lesser than significant value, 0.05. However, the coefficient value is 0.19389, which showed that investors' sentiment and expectation is positively related with the probability of property investment. Therefore, the hypothesis is accepted and proved that the higher the investors' sentiment and expectation, the higher the probability to invest in property. Conclusively, this result is similar to past researchers (Cristian, 2006)) thoroughly discussed in Chapter 2.

According to the study of Cristian (2008), shows that investors nowadays are more rely on behavioural trends rather than their own rational thought in which has encourage them to make investment decisions based on the market trend. Besides, the study also proved that there is a positive relationship between investors' sentiment and expectations and probability of property investment. For example, the higher the investors' sentiment and expectations, the higher the probability of property investment. Therefore, investors' sentiment and expectations will be affected the decision of an investor.

5.2.4 Relationship between Economic Effect and Probability of Property Investment

H_4: Economic Effect is significantly related to Probability of property investment.

Based on the result generated, there is significant relationship between economic effect and probability of property investment as the p-value of economic effect is <.0001 which is smaller than significant level 0.05. The correlation coefficient value is 0.52623 shows that economic effect is positively correlated with probability of property investment. Thus H4 is accepted and shows that the economic effect will influence the decision on invest in the property. The results supported by past studies which were mentioned in Chapter 2 (Hashim, 2010; Tan, 2008).

In the study of Hashim (2010), there are strong connections between economic effect and probability of property investment. Besides, the researcher Tan (2008) also supported this result that better economic will influence the investor to invest in the property. When a country economic is better, the investors will have the decision that tends to invest in property. Thus, the economic effect has a positive relationship towards the probability of property investment.

5.2.5 Relationship between Information and Outlook of Investment Property and Probability of Property Investment

H_5: Information and Outlook of Investment Property is significantly related to Probability of property investment.

The result generated showed that information and outlook of investment property significant related to probability of property investment since the p-value is <.0001, lesser than significant level 0.05. The correlation coefficient value is 0.43061 shows that information and outlook of investment property is positively correlated with the probability of property investment. Therefore, H5 is accepted and shows the greater the information and outlook of investment property, the higher the probability to invest in property. The result are similar to past researchers (Hartman, n.d.; Tan, 2008; Admin, n.d.) thoroughly discussed in Chapter 2.

In the study of Hartman (n.d.) and Tan (2008), there is positive relationship between the information and outlook of investment property and probability of property investment. The investors will tend to invest in property when there is news and announcement of the growth of property. Higher the probability of property investment when the greater and positive information and outlook of investment property according to Admin (n.d.). Therefore, the information and outlook of property investment has positive relationship towards the probability of property investment.

5.3 Implications of the study

The research done on the determinants of property investments have provides a detailed study regarding the factors influencing the probability to invest in property and how significant are them in determining the investor's decision. This study is basically targeted on UTAR's staff on their investment characteristics, in order find out whether the proposed determinants have significant impact on their investment decisions. The major findings in this study may contribute towards the society as well such as local investors, foreign investors as well as the local folks in Kampar in answering their doubts when facing investment decisions.

From this research, it is found that the property characteristics have a major influence when it comes to investment decision making. Properties with higher expected return and capital growth would be more preferable compared to lower ones, mainly because the ultimate goal for an investment is to gain as much profit as possible. Expected return refers to the rentals rate while the capital growth indicates the profit margin of buying and selling. Other than return, the time period taken to profit also plays an important part in determining the property characteristics. From the study, it shows that most of the respondents prefer shorter period to make a profit because they can reinvest the fund in other investments and longer period may have higher risk of losing the investments. Properties with higher marketability also contributes to a better property investments, in which the risk of making a loss and unable to sell is reduced. Therefore, it is more preferable that property acquired better marketability.

Next, the study also shows that social status of an investor has a significant contribution in investment decisions. From the survey, it is found that respondents felt that people with higher position in social group will tend to invest more in properties. Likewise, people with bigger family size will tend to invest in properties with higher value such as a semi-detach or bungalow. So, it is showed that self-esteem and family plays a part in determining the investment decisions. In most cases, the chances of after retirement investment vary depending on the situation of the investors where if they have surplus fund they would invest and vice versa. However, from the survey

results, it shows that the chances of after retirement investment is high, which indicates that most of the investors would invest in property after they had retired. On the other hand, from the survey it shows that respondents will less likely to invest if they are in the lower income group.

The third factor that is highlighted in this study is investors' sentiment and expectations whereby it explains that investors do make decisions based on a few criteria, such as demand of a particular property. Most of the respondents do agree that demand of the property will affect their decision mainly because when the demand is high, the price will appreciate in future. Furthermore, global market properties situation does impact very much on the decision making whereby due to the investors' belief that a country property market situation would influence one and another. The survey also shows that a good market trend will encourage more investors to invest where a good market trend is a sign of healthy economy. During a low investors' sentiment period, it is found out that the respondents would less likely to invest as the risk is higher although there is a higher chance for abnormal returns.

When it comes to investment, the economy effect plays a vital role in determining investors' decision making. According to the research, affordability of income is important when it comes to buying a property because if there is insufficient cash inflow, the investor would not able to pay the installment. Most of the respondents agree that high transaction and information cost would discourage them to invest because there will be higher cost and thus higher risk of incurring losses. Moreover, it is showed that investment in properties is considered as a spending or expenses for the investors. From the economy view, lower economic risk does not significantly encourage people to invest although the chances of loss is low, which mainly reduces the chance to gain abnormal returns.

Last but not least, the research results also show that information towards property investment will affect investment decision just like other factors did. News on the appreciation of property is a key indication in determining the property price in future, and the survey shows that investors agree it will encourage them to invest.

Other than appreciation news, information on lower tax rate also will affect investors' decision. Simply put cost and return to illustrate, the appreciation news signal higher expected return in future while lower tax rate reduced the cost of investment. Country's GDP also will influence investment decisions, and the respondents do agree that increase in GDP will motivate them to invest. A good GDP simply indicates that the overall country economy is stable and there will be lower risk in investments. Nevertheless, positive announcement on pricing in properties also an important information that could positively change investors' investment decisions. It is important to look on the pricing situation as it would vary the returns that will occur in future.

To summarize, this study has showed that the following factors, property characteristics, social status of an investor, investors' sentiment and expectations, economic effect and information towards property investments have significant impact on investors' decision making. The survey can act as a guide in making property investment decisions, whereby investors especially the targeted respondents, UTAR's staffs can refer to the research done before making an investment. This research also provide investors with knowledge about the property investment and encourage investors to make accurate decision based on personal preferences for the purpose of wealth maximization. Subsequently, this will tend to increase the volume of borrowing since investors need fund to invest and banker can reduce the default risk of investors. The developers will also benefit from better understanding of the motives in investing and could come out with better marketing strategy to boost their property sales. In addition, the study also provide a reference towards investment trend in Kampar which has never been done before, and thus the research also wishes to initiates a direction for future study on the related field.

5.4 Limitations of the Study

Limitations are matters and occurrences that may arise in a study which are out of the research's control. After conducted the research, there are several limitations exist in these thesis and limit the extensity to which a study can be further proceed. These limitations have affected the end result and conclusion that has been drawn. No study can avoid from limitations due to the limited access to a portion of people in an organization, certain documents, and certain data. Subsequently, the studies may have to find alternative ways to overcome these limitations in order to obtain a precise and reliable results.

5.4.1 Lack of information

Finding the resources to conduct a research can be troublesome, especially to obtain a better intellectual property. There are several of difficulties faced throughout the research such as cannot make causal inferences from media or in any website, because there are lacks of information is available on the internet. Most of the time, the information is obtained from the journal article and article online. People who writes journal article must possess certain academic qualifications or expert knowledge on the studied field. Articles which involve the behavior of one person, group, or organization towards the property investment in Malaysia are very hard to find since there is lack of research conducted in this field. Hence, with a small piece of information, which make a difficulty in, conducting a good and quality research. Furthermore, the key information regarding the oversupply problem in Kampar is also hard to be found. The lack of data and facts to prove that Kampar is indeed suffering from oversupply problem limits the significance of this study, in which it is hard to provide a convincing impacts and results for the readers of this study.

5.4.2 Questionnaire

Due to the lack of information provided in internet, questionnaire is used to collect more relevant data from society in order to get the data for processing purpose. However, there is a problem when questionnaire is used to collect the date needed. The respond of the survey have problematic for people who struggle with real or perceived time constraints, they feel overworked to complete a survey (Delva, Kirby, Knapper, & Birtwhistle, 2002). When the respondent feel stress and tired, their judgement would not be as precise and this will affect the data collected. As stated by Causse, Dehais, Peran, Sabatini, and Pastor (2013), emotion or stress can jeopardize decision making relevance and congnitive functioning. Besides that, Jeon, Walker and Yim (2014) also mentioned that it is impossible for people to think or perform an action without engaging their emotional system. Thus, not all of the respondents will contribute hundred percent of their knowledge towards the questionnaire provided since they may be facing stress or emotional discomfort at the time when they are filling up the questionnaire. Therefore, the feedback received could be less precise and less significant which in turn tend to have an unideal result.

5.4.3 Scope

The scope of study refers to the parameters under which the study will be operating (Simon & Goes, 2013). The topic of this research is property investment, thus it is advisable that the targeted respondents must have the ability to invest. Due to the financial as well as time constraints, the questionnaires were underpowered and only able distributed to the UTAR academic stuff, thus the results obtained did not reach statistical significance. Besides that, the size, convenience, and homogeneity of the sample limit the generalize ability of this study. The research only covered among the UTAR

staff, in which there are a number of staff that are not interested in the property investment. Since Kampar is emerging market in property investment sector, it attracts not only residents of Kampar, but also investors from different states to invest. Therefore, it is recommend that future study could really capture all the significant investors to contribute their knowledge in obtaining a quality research.

5.5 Recommendations for Future Research

Research recommendations produce a summary what is to be expected from the research and what could future studies practice to produce a better study. It is usually an important part of a project debriefs and the key part of the value is offered to the researchers. It also covers on the limitations of topic chosen and how it will add value in the existing store of knowledge for the study conducted. A well-thought-out set of recommendations makes it more interesting for any organizations or any future researchers as a reference in future practice.

5.5.1 More Variable

Variables are both important and tricky in the research. A variable is the characteristic or attribute of an individual, group, educational system, or the environment that is of interest in research (Korb, 2012). For future practice, the researchers may include more variables when carry out the similar study. However, the variables must be significant and have relevance with the property investment. For instance, habit in reading newspaper can be considered a variable because if a person has habit in reading the newspaper daily, he or she can aware from the market condition and gain more valuable knowledge in property investment, which would encourage their investment decision. In addition, including more variable in the study would provide a more informative research towards the readers and thus extending the significance of the study.

5.5.2 Structured Interview

The future researchers may consider to try other research method of data collection such as interview. Interviews can be used to explore the views,

experiences, belief and motivations of individual participants (Gill, Stewart, Treasure, & Chadwick, 2008). Unlike questionnaire, structured interview is a two way communication in which both parties can gain information from each and another. During the interview session, it is imperative to ask questions that are likely to yield as much information about the study phenomenon as possible and also be able to concern on the purpose and objectives of the research compare to questionnaire. The respondents can also ask questions regarding the topic to clear their doubts when answering the questions. Structured interview also bring variety of benefit for researchers included able to save time, and also able to get the reliable and effective data.

5.5.3 Wider Scope

Problems on limited resources is likely to occur typically in a focus group. For future research, it is suggested that the researchers can expand their scope to numerous stages of people, so the research result may be more accurate and significant. The researchers can collect the data from investors living in different states and also different stages of investors because different people have different perspective towards the property investment. It will be much convincing for future study to capture the significant investors to contribute their feedbacks on the selected topic.

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UNIVERSITI TUNKU ABDUL RAHMAN

Faculty of Business and Finance

BACHELOR OF FINANCE (HONS)

UNDERGRADUATE RESEARCH PROJECT

MOTIVES OF PROPERTY INVESTMENT AMONG UTAR STAFF IN KAMPAR

Survey Questionnaire

The prospect of property sector is growing rapidly in Malaysia. The objective of our research project is to examine the factors affecting properties investment decisions among UTAR's Staffs and how significant it is towards the decisions making by showing the probability of investing in properties.

Kindly fill up all the questions to the best of your knowledge. There are no absolute answers or wrong responses to any of these statements. We guarantee that your survey will be kept completely confidential.

Thank you very much for your kind participation.

Instructions:

1. There are TWO (2) section in this questionnaire. Please answer ALL the questions.
2. Completion of this questionnaire will take you approximately 15 minutes.
3. Please feel free to share your comments in the space provided. The content of the questionnaire will be kept **strictly confidential**.

Section A: Demography Data

Please tick (√) at appropriate answers.

1. What is your gender?

- □ Male
- □ Female

2. What is the range of your current age?

- □ 20-30
- □ 31-40
- □ 41-50

3. What is your race?

- □ Chinese
- □ Malay
- □ Indian
- □ Others

4. What is your religion?

- □ Buddhism
- □ Islam
- □ Hindu
- □ Christian
- □ Catholic

5. Years of experience in property investment:

- Less than 1 year
- 2-5 years
- 5-10 years
- More than 10 years

Section B

Independent Variables

Please tick (√) the number corresponding to your level of agreement with each of the statements below.

1 – Strongly Disagree (SD) 2 – Disagree (D) 3 – Neutral (N) 4 – Agree (A)

5– Strongly Agree (SA)

Property Characteristics

No.	Questions	SD	D	N	A	SA
C1	I will invest in properties with a higher return on investment.	**1**	**2**	**3**	**4**	**5**
C2	I will invest in properties with higher capital growth.	**1**	**2**	**3**	**4**	**5**
C3	I will invest in properties with shorter period to make a profit.	**1**	**2**	**3**	**4**	**5**
C4	I will invest in properties with better marketability.	**1**	**2**	**3**	**4**	**5**

Social Status

No.	Question	SD	D	N	A	SA
S1	I will invest in properties if I am higher position in social group.	**1**	**2**	**3**	**4**	**5**
S2	I will invest in high value of properties if my family size is bigger.	**1**	**2**	**3**	**4**	**5**
S3	I will invest in properties after my retirement.	**1**	**2**	**3**	**4**	**5**
S4	I will invest in properties if I have lower income.	**1**	**2**	**3**	**4**	**5**

Investors' Sentiment and Expectations

No.	Question	SD	D	N	A	SA
IS1	I agree that the demand of a particular property will affects my investing decision.	**1**	**2**	**3**	**4**	**5**
IS2	I will consider the global market properties situation before making investment decision.	**1**	**2**	**3**	**4**	**5**
IS3	I will only invest in properties during a good domestic market trend.	**1**	**2**	**3**	**4**	**5**
IS4	I will invest in properties during a low investor sentiment period.	**1**	**2**	**3**	**4**	**5**

Economic Effect

No.	Question	SD	D	N	A	SA
E1	I will invest in property by looking on affordability of income.	**1**	**2**	**3**	**4**	**5**
E2	I will still invest in properties despite of its high transaction cost and information cost.	**1**	**2**	**3**	**4**	**5**
E3	I agree that investing in property is considered as spending.	**1**	**2**	**3**	**4**	**5**
E4	I will tend to invest in property if there is lower economy risk.	**1**	**2**	**3**	**4**	**5**

Information and outlook of Investment Property

No.	Question	SD	D	N	A	SA
F1	News on the appreciation of property in future will encourage my investing decision.	**1**	**2**	**3**	**4**	**5**
F2	Forecast about lower tax rate in future will affect me to invest in property.	**1**	**2**	**3**	**4**	**5**
F3	Forecast about the increases of country's GDP will encourage me to invest in property.	**1**	**2**	**3**	**4**	**5**
F4	Positive announcement on pricing information in properties will encourage my investing decision.	**1**	**2**	**3**	**4**	**5**

Probability of property investment

No.	Question	SD	D	N	A	SA
P1	I would like to invest in properties if I got the opportunity.	**1**	**2**	**3**	**4**	**5**
P2	I will invest in property at least once in a life time.	**1**	**2**	**3**	**4**	**5**
P3	I will choose to invest in property compare to other investment vehicles.	**1**	**2**	**3**	**4**	**5**
P4	I will invest in more than one property.	**1**	**2**	**3**	**4**	**5**

Thank you very much for your time and cooperation.

Appendix B

Linear Regression Results

The REG Procedure
Model: Linear_Regression_Model
Dependent Variable: Probability_Investment 1=StronglyDisagree,2=Disagree,3=Neutral,4=Agree,5=StronglyAgree

Number of Observations Read	300
Number of Observations Used	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	387.63901	77.52780	279.65	<.0001
Error	294	81.50599	0.27723		
Corrected Total	299	469.14500			

Root MSE	0.52653	R-Square	0.8263
Dependent Mean	2.54000	Adj R-Sq	0.8233
Coeff Var	20.72943		

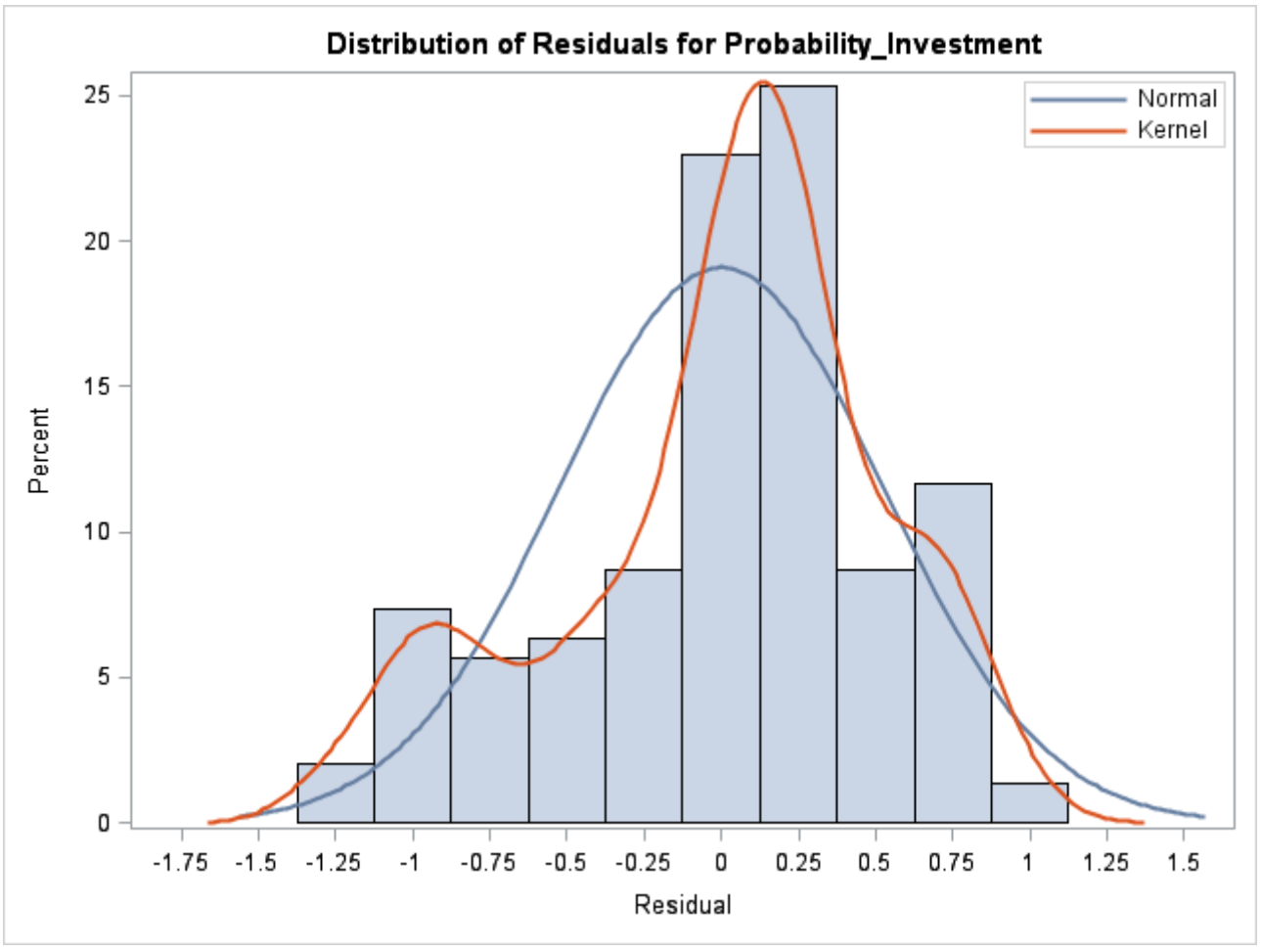
Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Tolerance	Variance Inflation
Intercept	1	-0.77322	0.18723	-4.13	<.0001	0	.	0
Property_Characteristic	1	0.17769	0.04889	3.63	0.0003	0.10338	0.73035	1.36921
Social_Status	1	-0.18629	0.05295	-3.52	0.0005	-0.13614	0.39465	2.53390
Investors_Sentiment	1	0.19389	0.05572	3.48	0.0006	0.17574	0.23168	4.31638
Economic_Effects	1	0.52623	0.04946	10.64	<.0001	0.41845	0.38208	2.61725
Information_of_Property	1	0.43061	0.05973	7.21	<.0001	0.43263	0.16408	6.09444

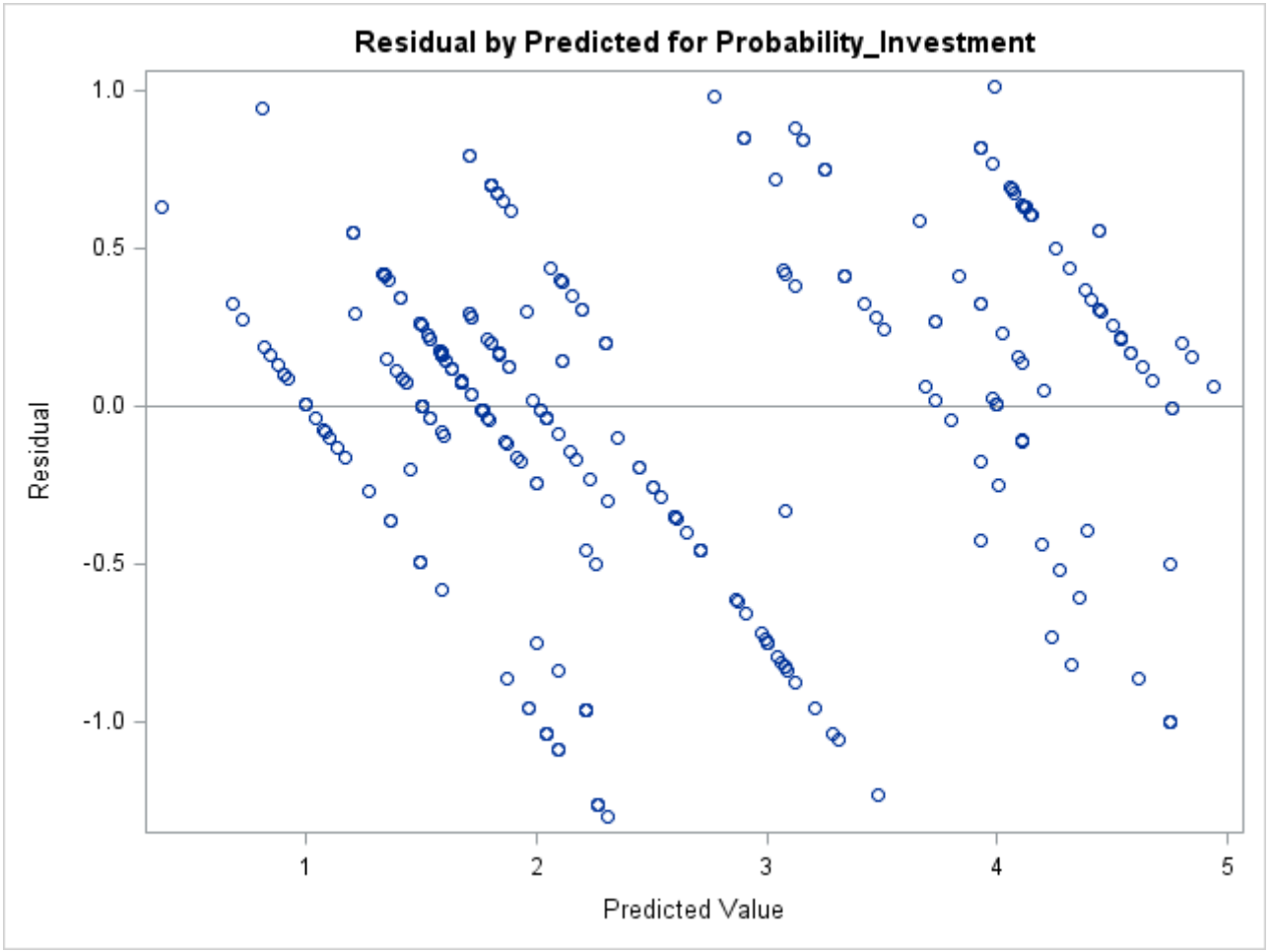
Generated by the SAS System ('Local', W32_7HOME) on February 08, 2015 at 12:42:57 AM

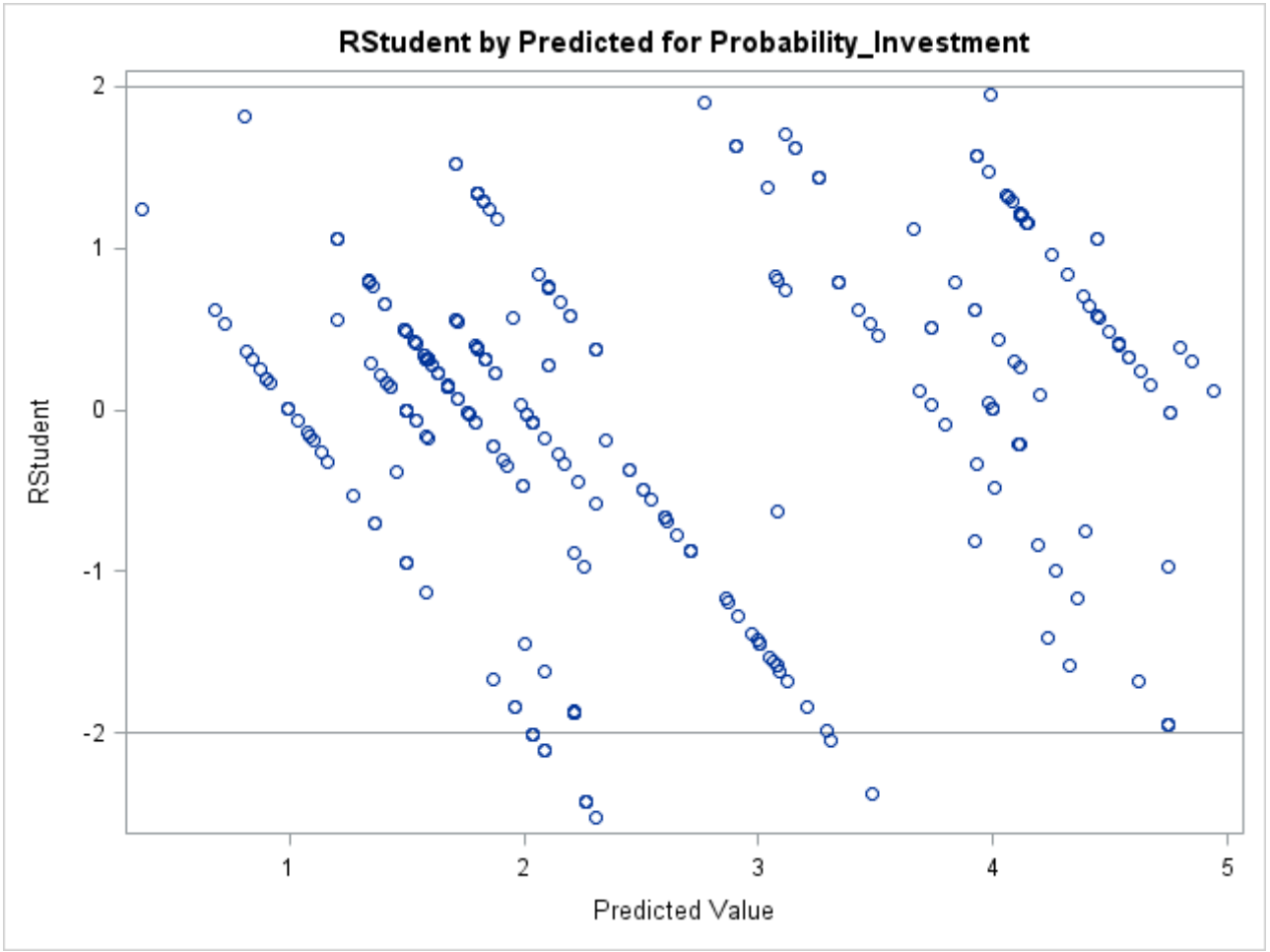
Linear Regression Results

The REG Procedure
Model: Linear_Regression_Model
Dependent Variable: Probability_Investment 1=StronglyDisagree,2=Disagree,3=Neutral,4=Agree,5=StronglyAgree

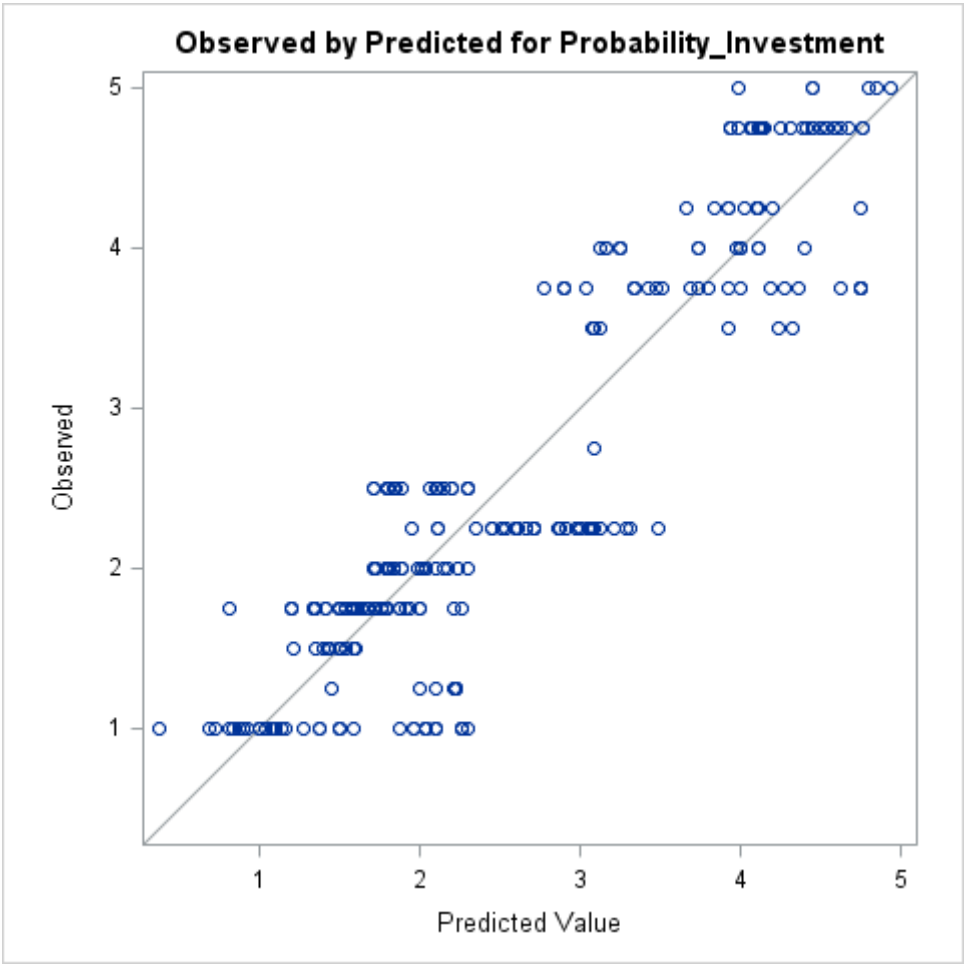


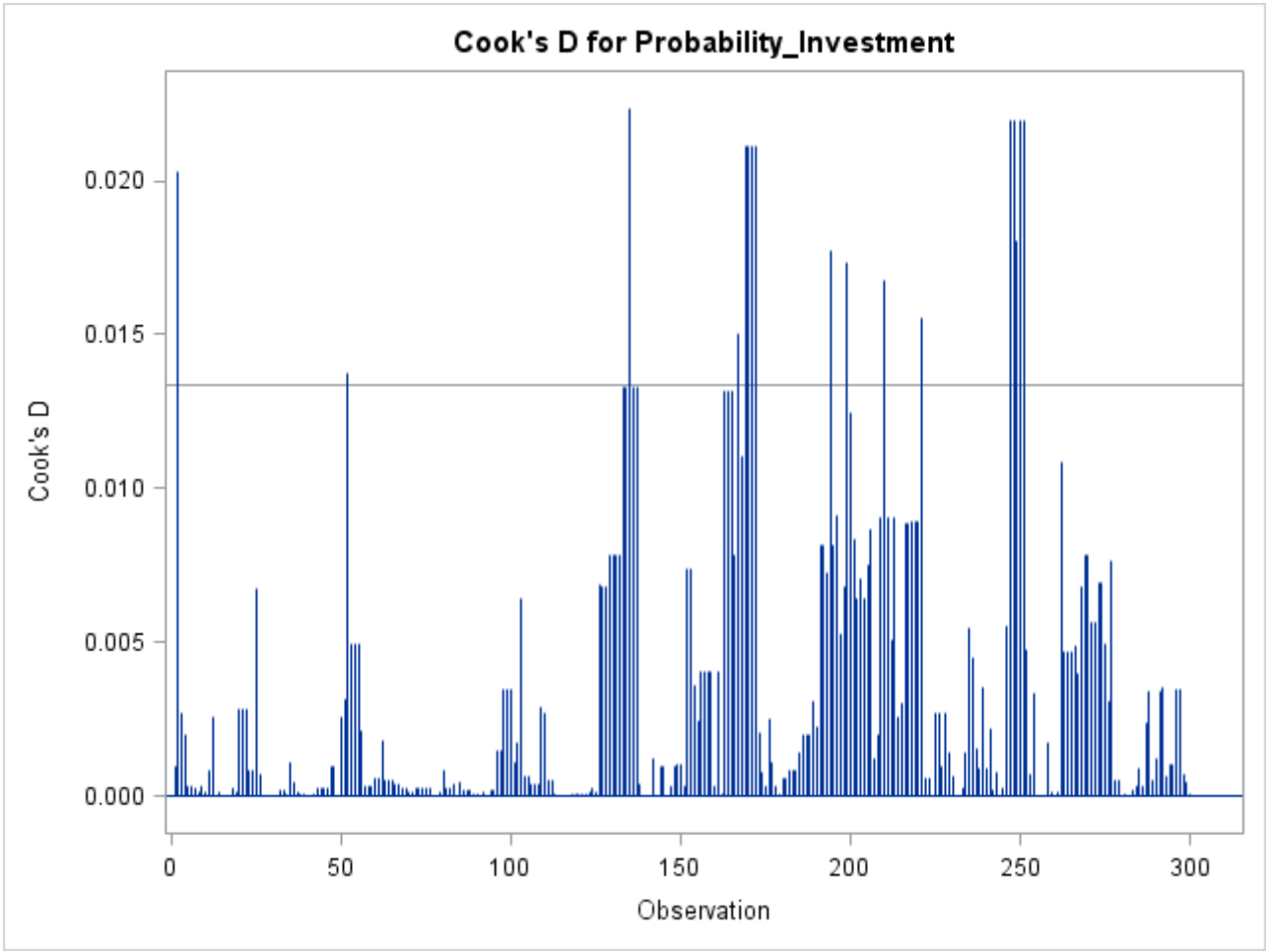
Appendix B


Residual by Predicted for Probability_Investment
Residual
1.0
0.5
0.0
-0.5
-1.0
1
2
3
4
5
Predicted Value

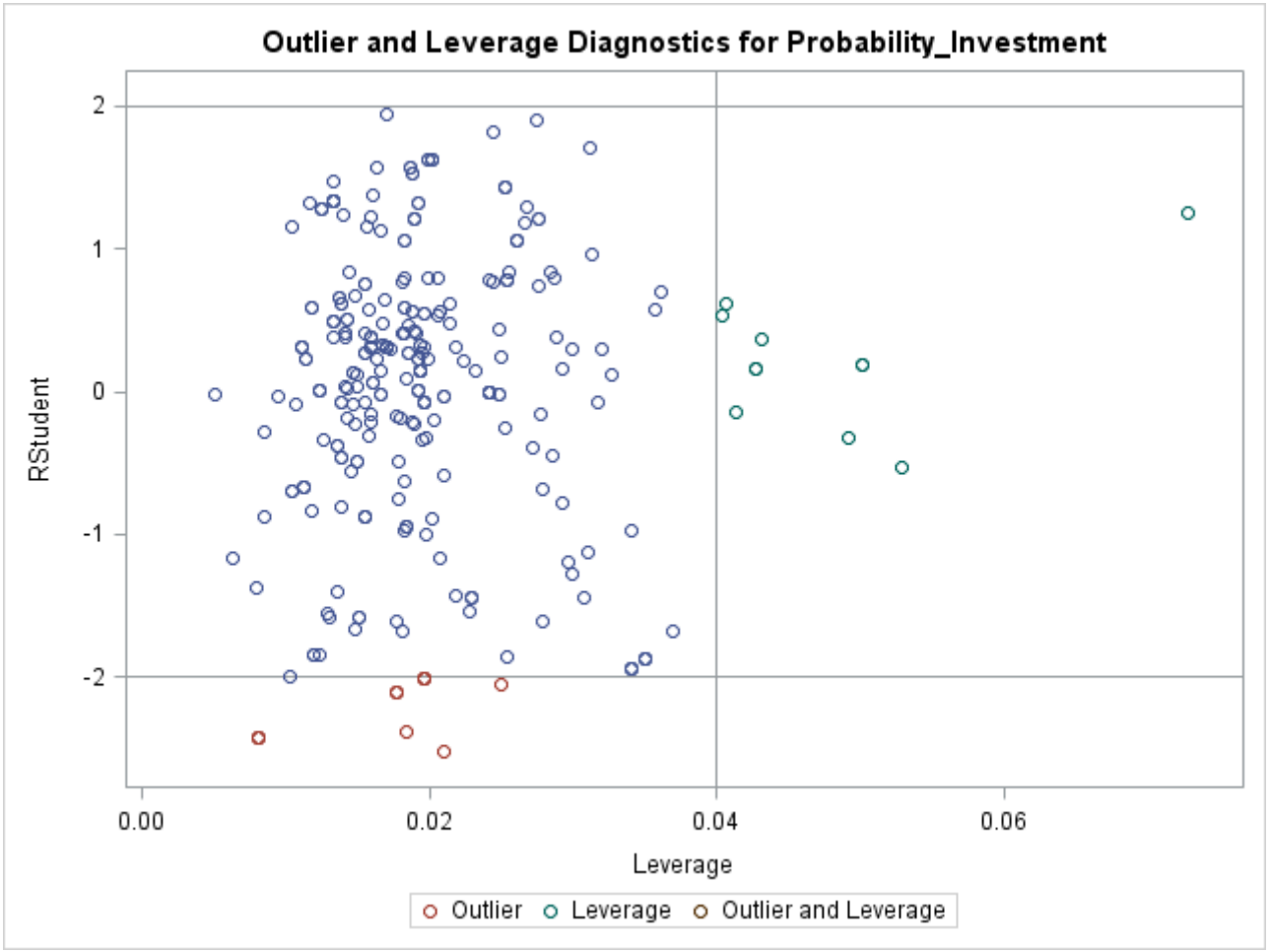

RStudent by Predicted for Probability_Investment
RStudent
2
1
0
-1
-2
1
2
3
4
5
Predicted Value

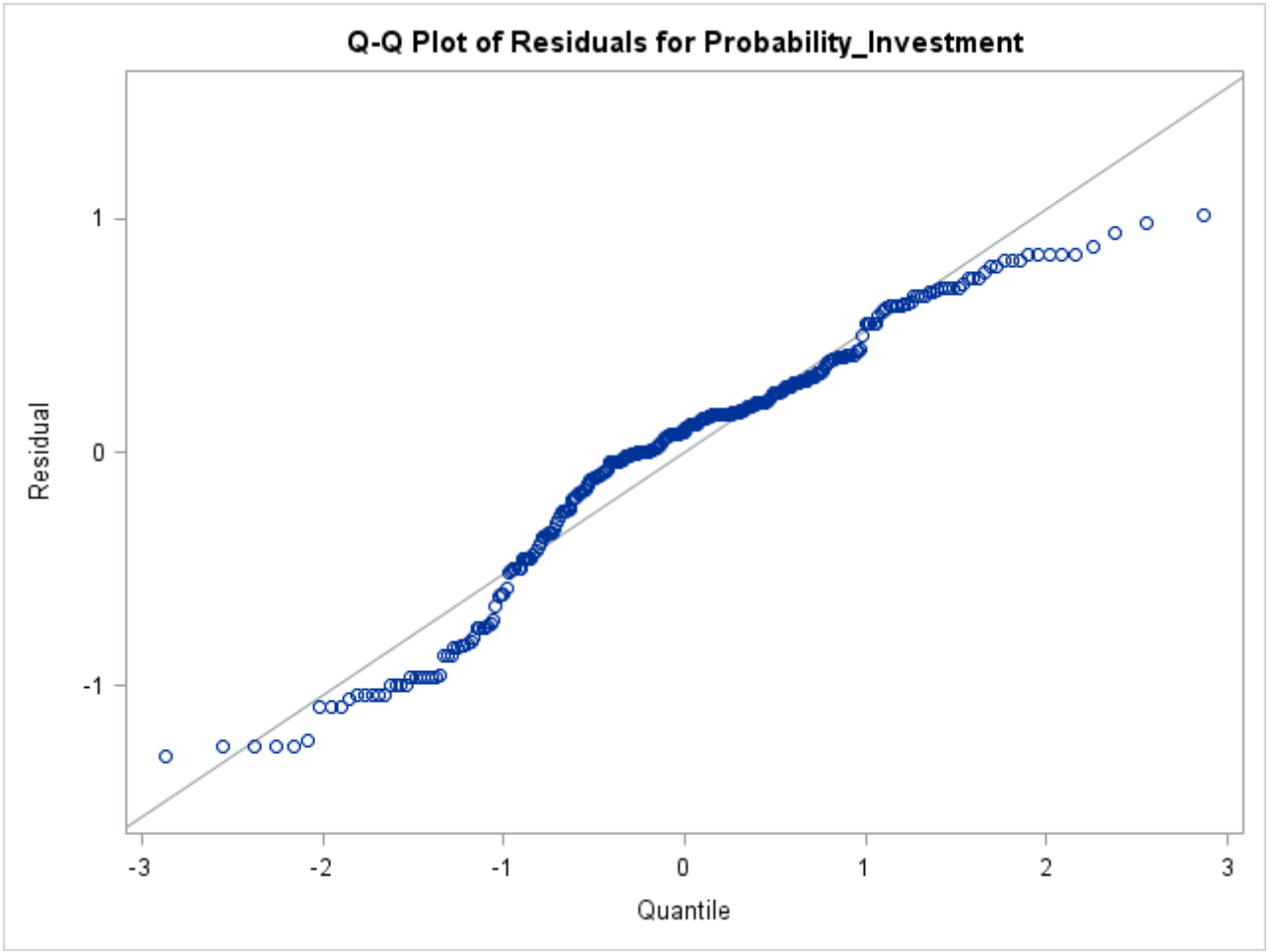
Appendix B


Observed by Predicted for Probability_Investment
Observed
Predicted Value
1
2
3
4
5

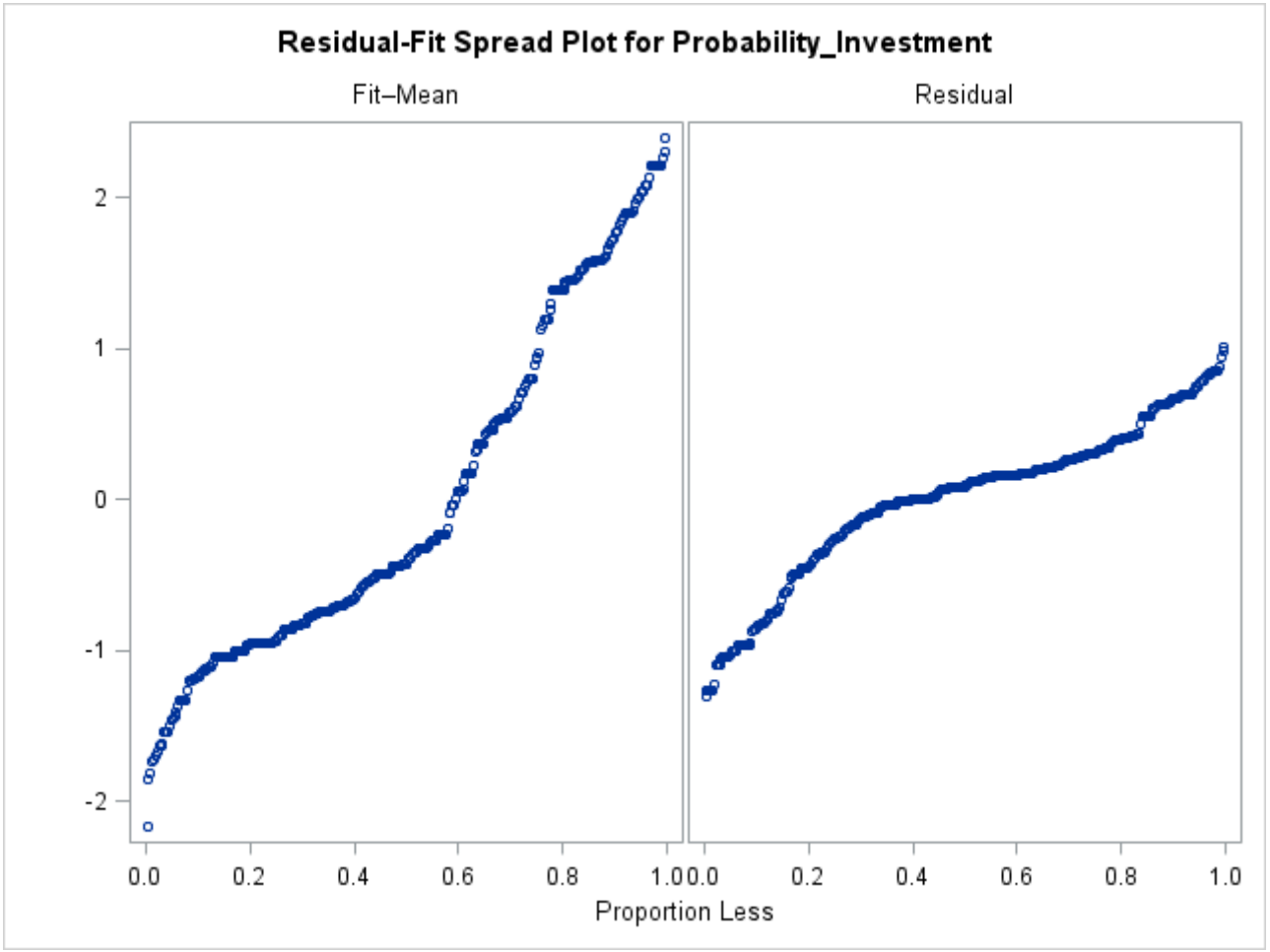

Cook's D for Probability_Investment
Cook's D
Observation
0.000
0.005
0.010
0.015
0.020
0
50
100
150
200
250
300

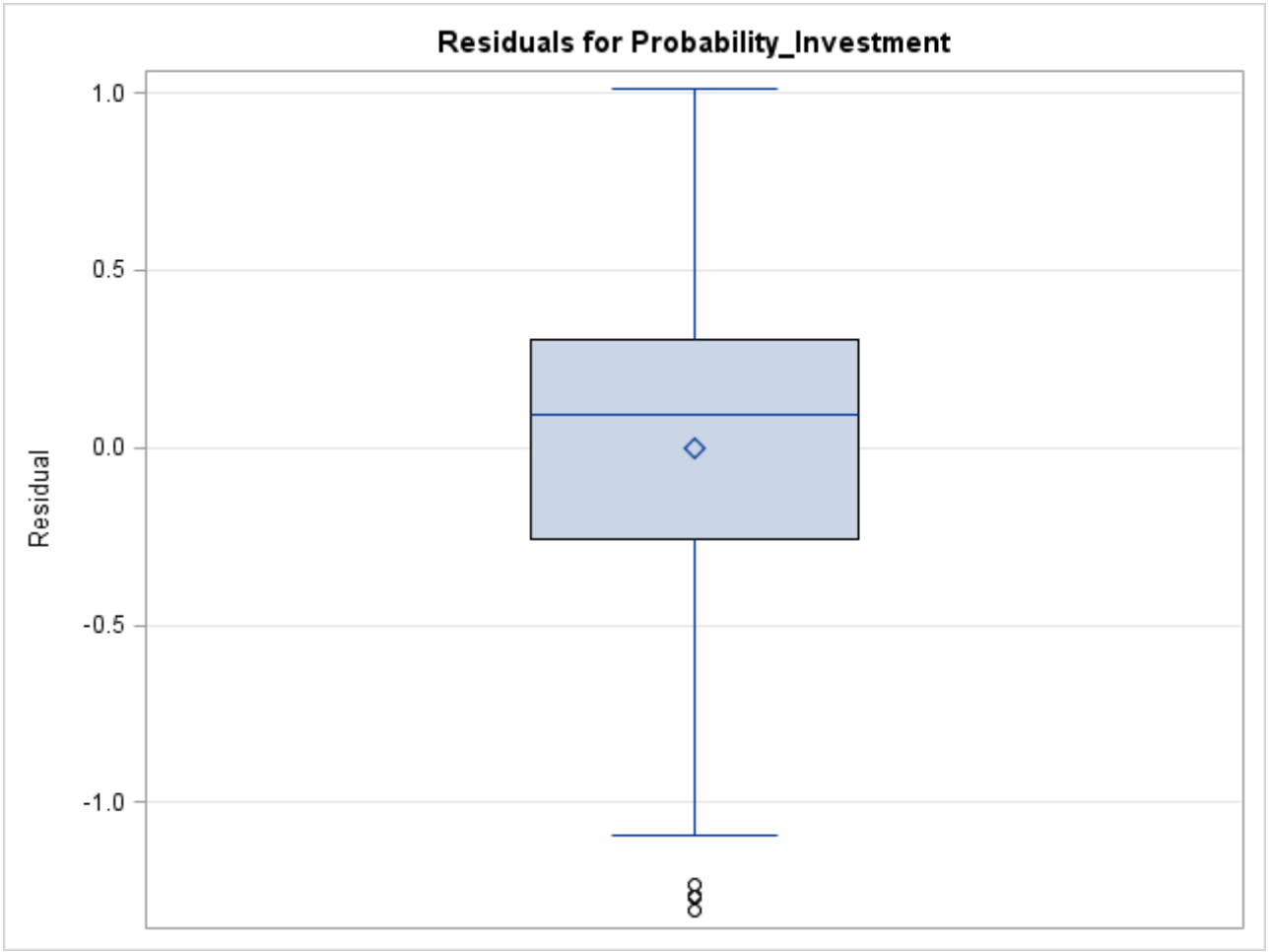
Appendix B


Outlier and Leverage Diagnostics for Probability_Investment
RStudent
2
1
0
-1
-2
0.00
0.02
0.04
0.06
Leverage
Outlier
Leverage
Outlier and Leverage

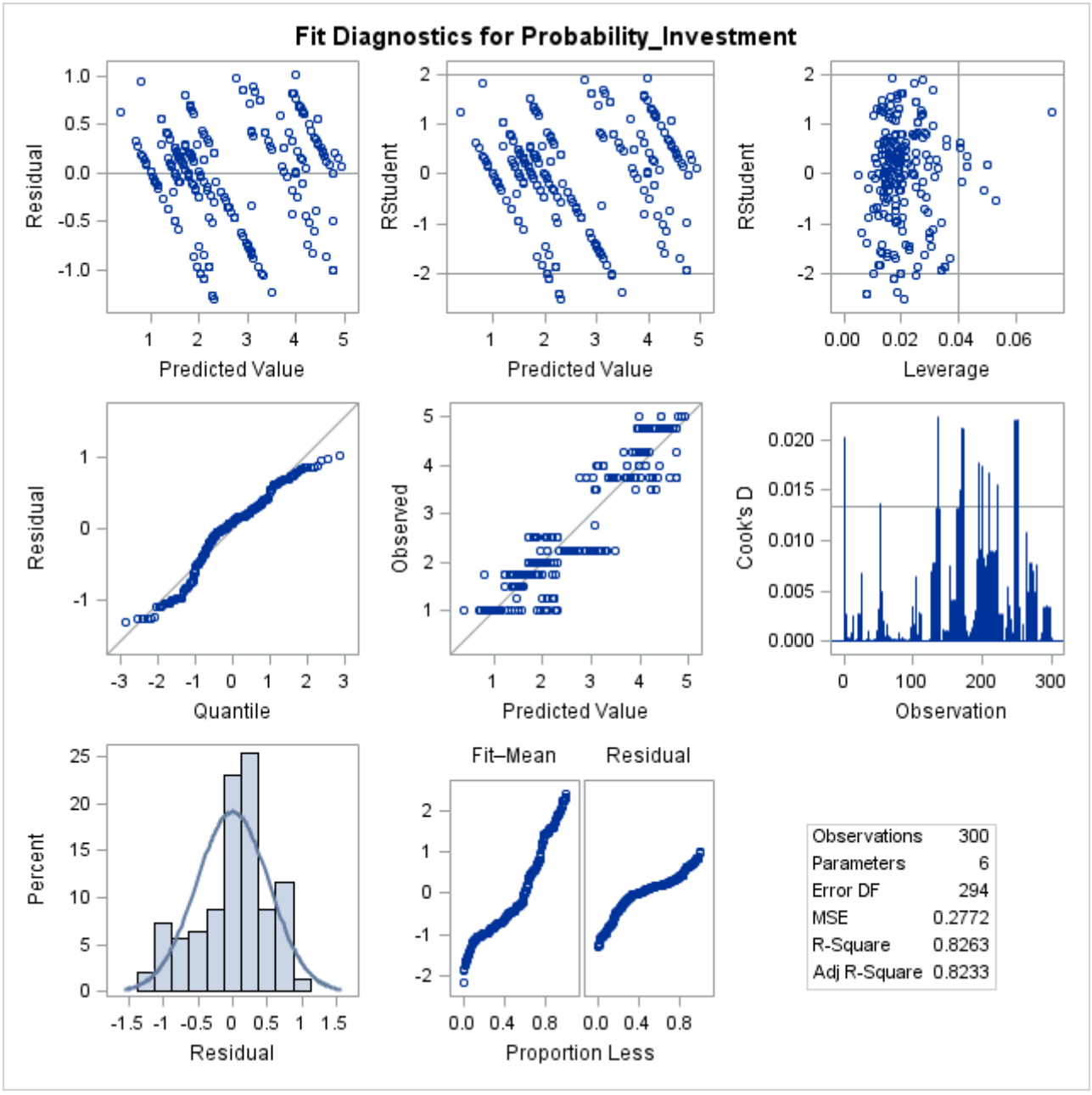

Q-Q Plot of Residuals for Probability_Investment
Residual
1
0
-1
-3
-2
-1
0
1
2
3
Quantile

Appendix B

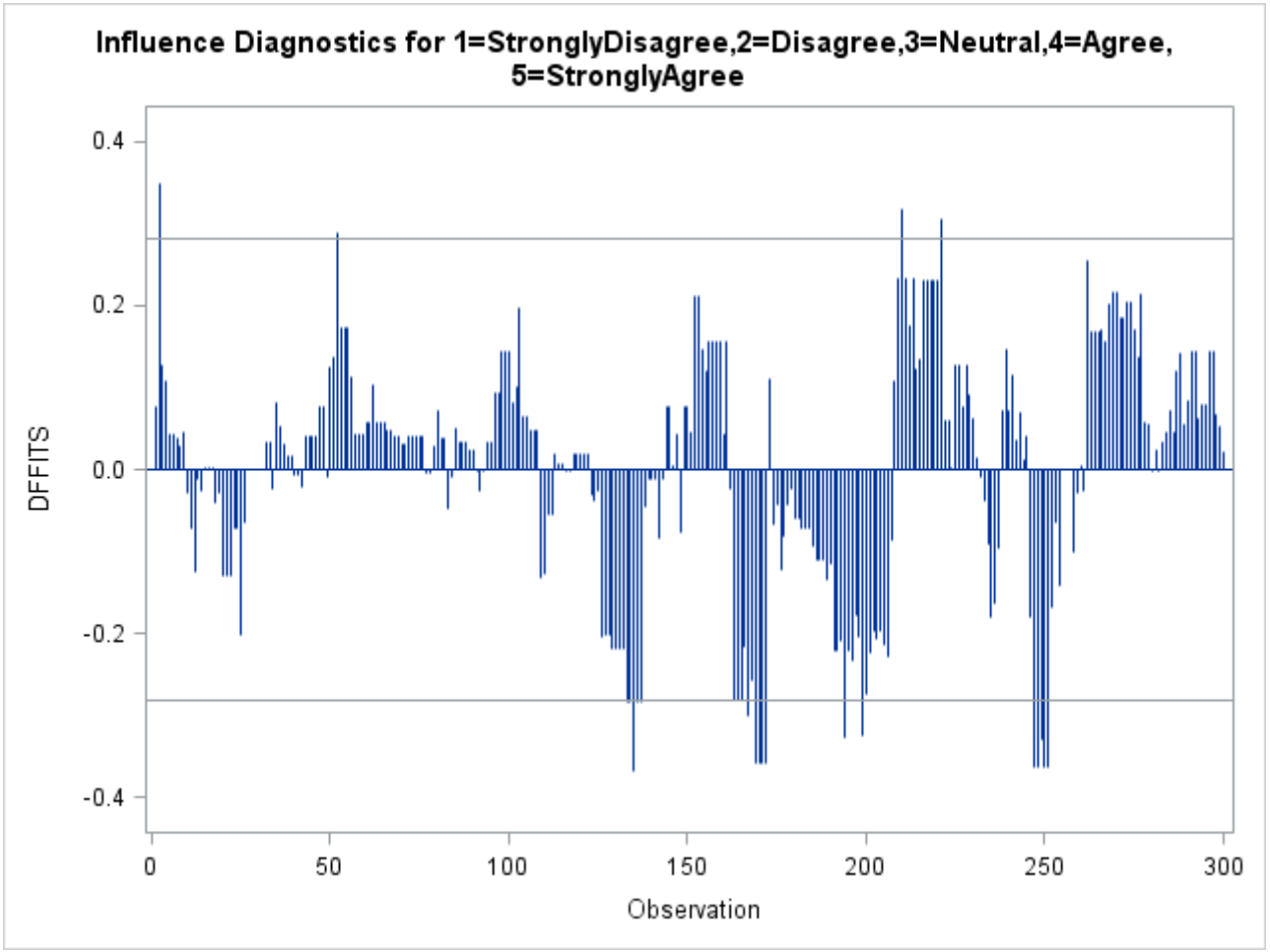

Residual-Fit Spread Plot for Probability_Investment
Fit–Mean
Residual
2
1
0
-1
-2
0.0
0.2
0.4
0.6
0.8
1.0
Proportion Less


Residuals for Probability_Investment
Residual
1.0
0.5
0.0
-0.5
-1.0

Appendix B


Fit Diagnostics for Probability_Investment
Residual
Predicted Value
RStudent
Predicted Value
RStudent
Leverage
Residual
Quantile
Observed
Predicted Value
Cook's D
Observation
Percent
Residual
Fit–Mean
Residual
Proportion Less
Observations 300
Parameters 6
Error DF 294
MSE 0.2772
R-Square 0.8263
Adj R-Square 0.8233

Appendix B


Influence Diagnostics for 1=StronglyDisagree,2=Disagree,3=Neutral,4=Agree, 5=StronglyAgree
DFFITS
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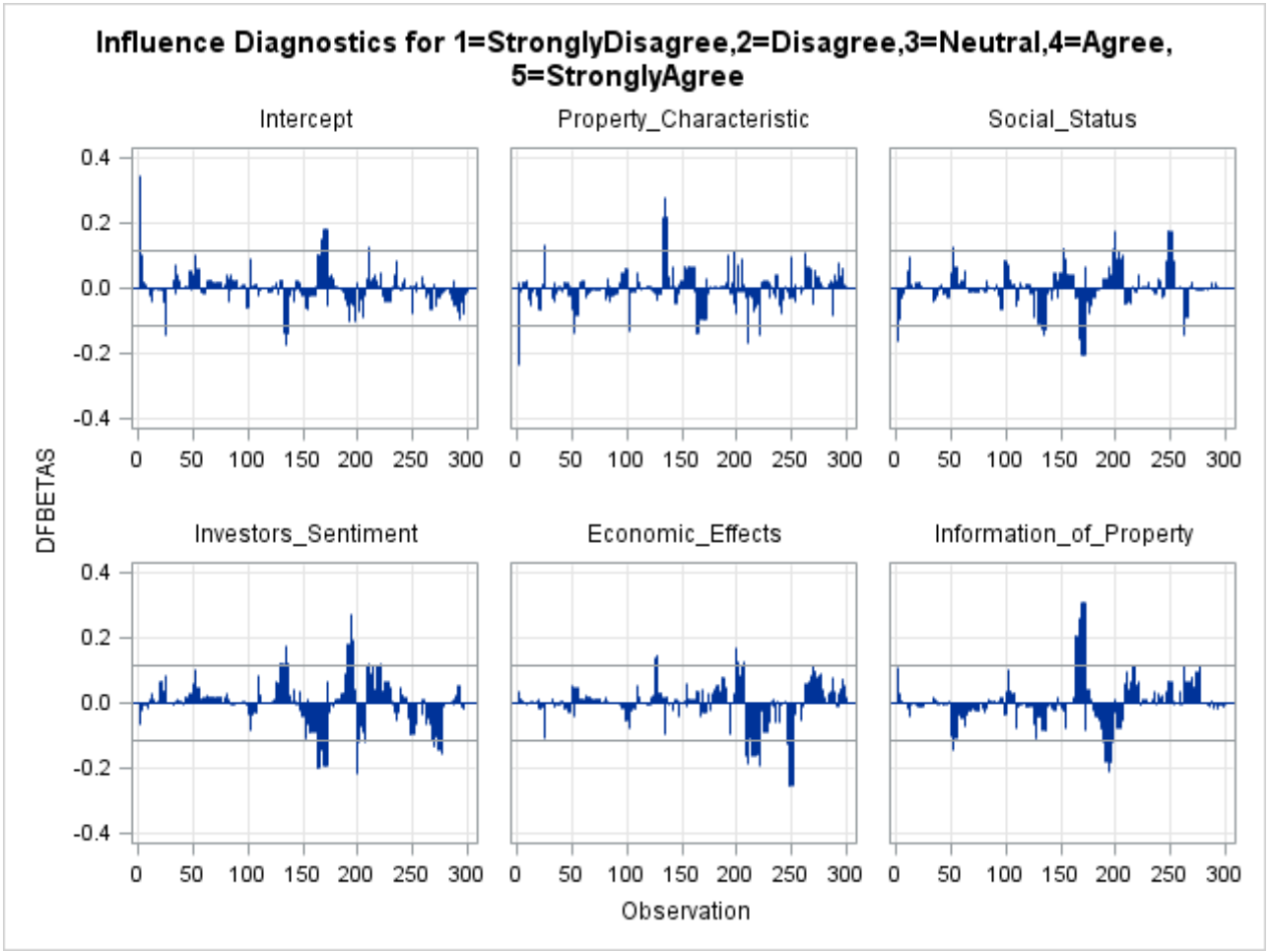
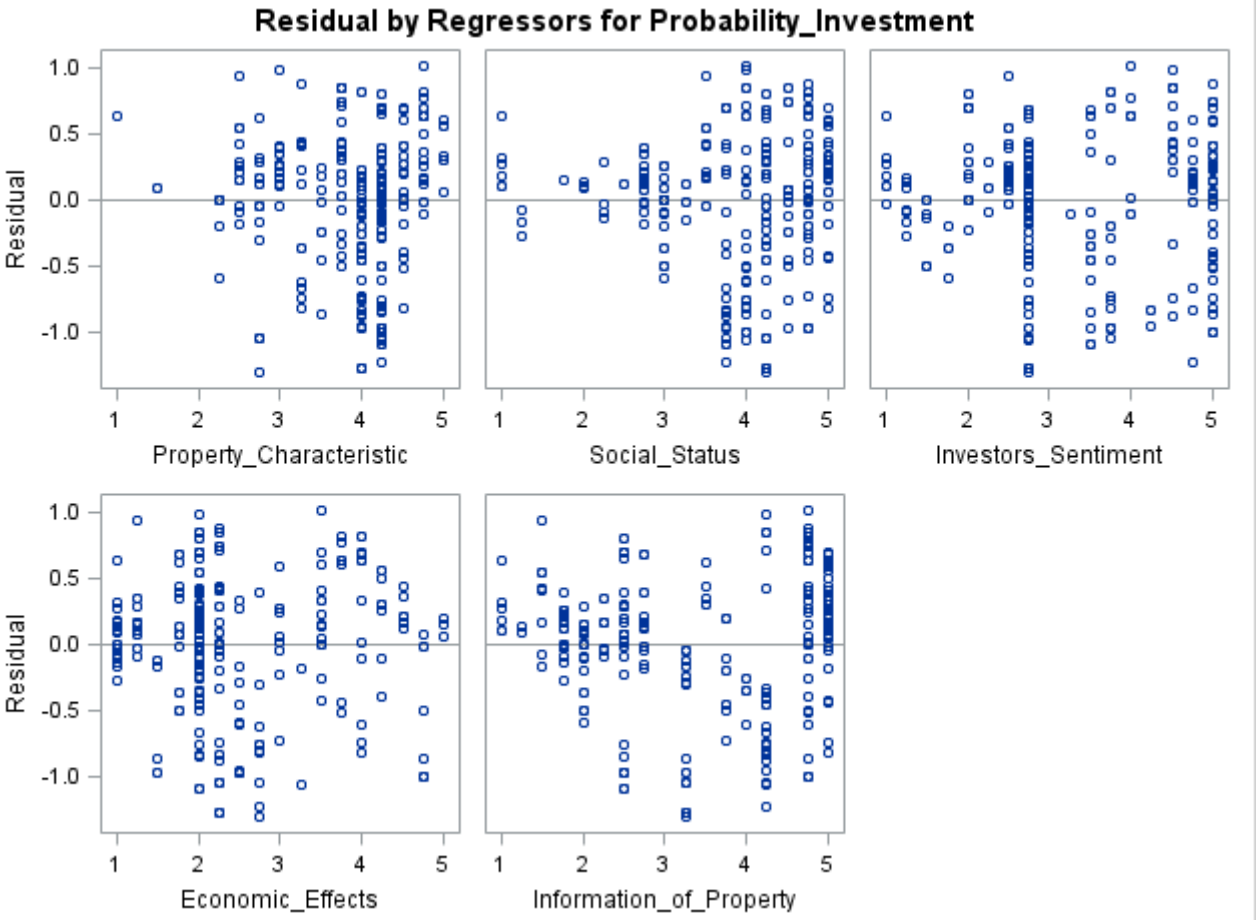
0.2
0.0
-0.2
-0.4
0
50
100
150
200
250
300
Observation


Influence Diagnostics for 1=StronglyDisagree,2=Disagree,3=Neutral,4=Agree, 5=StronglyAgree
Intercept
Property_Characteristic
Social_Status
Investors_Sentiment
Economic_Effects
Information_of_Property
DFBETAS
0.4
0.2
0.0
-0.2
-0.4
0
50
100
150
200
250
300
Observation

Appendix B


Residual by Regressors for Probability_Investment
Residual
1.0
0.5
0.0
-0.5
-1.0
1
2
3
4
5
Property_Characteristic
Social_Status
Investors_Sentiment
Economic_Effects
Information_of_Property

Appendix C

Summary Statistics

Results

The MEANS Procedure

Variable	Mean	Std Dev	Skewness	Kurtosis
C1	4.1133333	1.3808856	-1.4555004	0.6202819
C2	3.5400000	1.2082769	-0.3176083	-1.0544711
C3	3.9700000	1.0612197	-0.8020183	-0.2510656
C4	3.6466667	1.5175084	-0.7909235	-0.9343780
MEAN_CHARACTERISTIC	3.8175000	0.7288159	-0.8851075	0.3631922
S1	3.4466667	1.8740854	-0.5053500	-1.6898096
S2	4.0700000	1.2069060	-1.1808420	0.1102706
S3	4.0400000	1.0042052	-1.2175495	1.5924902
S4	3.9500000	1.0219170	-1.0919931	0.5336749
MEAN_SOCIAL_STATUS	3.8766667	0.9154228	-1.0084265	0.8089088
IS1	3.8933333	1.0386940	-1.1729780	1.0660719
IS2	3.6800000	1.3870881	-0.9334588	-0.3882096
IS3	3.0833333	1.4058129	0.3091412	-1.5282558
IS4	2.4500000	1.7789648	0.5563137	-1.5603451
MEAN_SENTIMENT	3.2766667	1.1353423	0.1396334	-0.9692614
E1	2.4400000	1.0180971	1.4081525	1.1238571
E2	1.8366667	1.5245995	1.3442456	-0.0645440
E3	3.5300000	1.2413311	-0.9192370	-0.1849405
E4	2.0233333	1.5462076	1.1138886	-0.4736815
MEAN_ECONOMIC_EFFECT	2.4575000	0.9960551	0.8816433	-0.0518691
F1	2.4600000	1.5673508	0.7512941	-1.0766831
F2	3.7400000	1.3852061	-0.9617483	-0.3033807
F3	3.6400000	1.7665794	-0.6878010	-1.4118294
F4	3.4300000	1.5404577	-0.3040817	-1.5278918
MEAN_INFORMATION	3.3175000	1.2585103	-0.0097225	-1.4619918
P1	1.7900000	1.4020649	1.5222048	0.7662983
P2	2.4666667	1.6302601	0.5027504	-1.4749669
P3	2.4533333	1.5499991	0.5380575	-1.3546748
P4	3.4500000	1.6359772	-0.4941894	-1.3891786
MEAN_PROBABILITY_INVESTMENT	2.5400000	1.2526160	0.6336218	-0.9515821

Appendix D

Correlation Analysis

The CORR Procedure

6 Variables: Property_Characteristic Social_Status Investors_Sentiment Economic_Effects Information_of_Property Probability_Investment

Simple Statistics

Variable	Mean	Std Dev	Sum	Minimum	Maximum
Property_Characteristic	3.81750	0.72882	1145	1.00000	5.00000
Social_Status	3.87667	0.91542	1163	1.00000	5.00000
Investors_Sentiment	3.27667	1.13534	983.00000	1.00000	5.00000
Economic_Effects	2.45750	0.99606	737.25000	1.00000	5.00000
Information_of_Property	3.31750	1.25851	995.25000	1.00000	5.00000
Probability_Investment	2.54000	1.25262	762.00000	1.00000	5.00000

Cronbach Coefficient Alpha

Variables	Alpha
Raw	0.923214
Standardized	0.920469

Cronbach Coefficient Alpha with Deleted Variable

Deleted Variable	Raw Variables		Standardized Variables	
	Correlation with Total	Alpha	Correlation with Total	Alpha
Property_Characteristic	0.502923	0.939851	0.502639	0.941134
Social_Status	0.750686	0.913877	0.749611	0.909167
Investors_Sentiment	0.848147	0.899504	0.831879	0.897853
Economic_Effects	0.813738	0.905142	0.799191	0.902389
Information_of_Property	0.915955	0.889593	0.907236	0.887187
Probability_Investment	0.875877	0.896161	0.867089	0.892905

Pearson Correlation Coefficients, N = 300
Prob > |r| under H0: Rho=0

	Property_Characteristic	Social_Status	Investors_Sentiment	Economic_Effects	Information_of_Property	Probability_Investment
Property_Characteristic	1.00000	0.46180	0.40226	0.40421	0.49730	0.49549
1=StronglyDisagree,2=Disagree,3=Neutral,4=Agree,5=StronglyAgree		<.0001	<.0001	<.0001	<.0001	<.0001
Social_Status	0.46180	1.00000	0.70087	0.64552	0.76566	0.63614
1=StronglyDisagree,2=Disagree,3=Neutral,4=Agree,5=StronglyAgree	<.0001		<.0001	<.0001	<.0001	<.0001
Investors_Sentiment	0.40226	0.70087	1.00000	0.72817	0.87021	0.80309
1=StronglyDisagree,2=Disagree,3=Neutral,4=Agree,5=StronglyAgree	<.0001	<.0001		<.0001	<.0001	<.0001
Economic_Effects	0.40421	0.64552	0.72817	1.00000	0.77519	0.83570
1=StronglyDisagree,2=Disagree,3=Neutral,4=Agree,5=StronglyAgree	<.0001	<.0001	<.0001		<.0001	<.0001
Information_of_Property	0.49730	0.76566	0.87021	0.77519	1.00000	0.85711
1=StronglyDisagree,2=Disagree,3=Neutral,4=Agree,5=StronglyAgree	<.0001	<.0001	<.0001	<.0001		<.0001
Probability_Investment	0.49549	0.63614	0.80309	0.83570	0.85711	1.00000
1=StronglyDisagree,2=Disagree,3=Neutral,4=Agree,5=StronglyAgree	<.0001	<.0001	<.0001	<.0001	<.0001	