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Potentials of Subprime Mortgage in Malaysian Economy

[1]*Sanmugam Annamalah* and [2]*Fouzia Amin*
[1]SEGi University 33-35, Jalan Hang Lekiu, 50100 Kuala Lumpur, Malaysia
[2]International Centre for Education in Islamic Finance (INCEIF) MenaraTunRazak, Jalan Raja Laut, 50350 Kuala Lumpur, Malaysia

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Abstract: This paper examines subprime mortgage market and how it operates and the potential of introducing subprime market in Malaysia with the argument that the financial system is regulated and controlled. The only setback is that it does not offer such product and is largely ignorant to the potentials of such products. The data collected through questionnaires, interviews, national and international databases analysed in qualitative and quantitative manner and found that the demand for subprime mortgage products in Malaysia is high. The financial system in place is a top-down decision structure and consumers vaguely understand it, which impacts their satisfaction with the system giving potential for new product design. The housing markets, consumer behaviour, ethnic racial and religious mix and inflationary pressure are the perfect environment for the introduction of subprime mortgage products. The commercial banks supporting Islamic Banks are the best institutions to support the subprime mortgage products as they have the most experience in both banking system. The population supports the government's policy and is primarily loyal to regulation with higher savings and lower delinquency rates which may provide potential financial institutions desiring to provide less risky subprime mortgage than their counterparts in the USA and Europe. Hence it is recommended that the government should encourage financial and non-financial institutions to introduce similar products, which will provide the greater portion of the population with funds to purchase mortgage related products and hence, giving the economy a boost. The government should also consider empowering an independent body to regulate modern and sophisticated financial system.

Key word: Sub-prime · Malaysia · Economy · Mortgage · Finance

INTRODUCTION

In developed countries as in the USA, almost the entire population deals with banks in order to manage and accumulate wealth and to carry out daily activities. In the century of capitalist and globalisation there is a gap between the rich and the poor. Income is not evenly shared. The inequality has resulted in incapability of high percentage of population to qualify for prime-rate loans. Various groups of people may be discriminated based on a range of criteria. [1] found that the discrimination was based on absence of past relationship with the lending authorities. Among other reasons, income and age [2]and [3], race [4-6] and gender [7] have been found. Also some groups have less information regarding the financing options they are entitled to or are more reluctant to search. [8] found that financial education plays an important role in wealth creation. Does this mean that they cannot obtain financing in order to purchase a home, a car, an education loan or a business venture?

Subprime Mortgage: Financial institutes accumulate the funds from the savers and provide these savings as a loan to investors for generally long-term financial requirements. In the case of mortgage loans, financial institutions require some sort of security that will ensure the repayment of the principal amount as well as charging a premium (e.g. fees and interests). This security is usually credit papers, histories and leveraged assets or incomes. When examining the mortgage market more of the A-rated prime loans are expected to be seen, since they have a less chance of default. The financial institutions giving loans need security that the mortgage loan will be paid back. Financial institutions examine the

Corresponding Author: Sanmugam Annamalah, SEGi University 33-35, Jalan Hang Lekiu, 50100 Kuala Lumpur, Malaysia

credit histories, age and other factors as such to determine this security. Once this is done, the prime loan is given to the individual that fulfils all the requirements which points that the individual will repay the loan.Credit scoring is one of the refined quantitative methods used by lenders. [9], used a combination of loan-to-value ratio and credit scoring of the borrowers to segment them into prime, near-prime and subprime borrowers respectively.

However, with the increasing gap in term of wealth, there are many high percentages of consumers who do not fulfil such criteria; hence, the subprime mortgage products require greater premium to compensate such risk borne by the financial institute. People with higher credit risk need sub-prime mortgage and in turn pay a higher interest rate on their loans. The difference in rates accounts for the extra risk borne by the loan provider. What needs to be assessed is lenders risk involved in the lending as delinquency rates can be as high as 20 times as compared to the prime loans. Therefore, the high delinquency rates as well as average loss rates may result in unmanageable risk by the lender. Hence, it is essential to differentiate between classes of customers in terms of risks. There are three classifications of customers, lower, medium and high risk groups. The lenders' objective is to target the lower and medium risk groups in which the aim is to gain profit through repossession of collateral [10]. "Few Institutions incurred significant financial losses due to poorly structured subprime lending programs. These institutions underestimated the higher default rates an loss-on-default rates involved with subprime lending, as well as the higher overhead costs. Frequent lack of management expertise, business planning processes and risk management processes which is crucial in managing these risks in a safe and sound manner." [11]. Hence, it can be concluded that in order to design subprime finance instruments, the measure of risk and the management of the subprime mortgage are imperative. The loans must have periodical checks and the manager has to take action quickly on the discovery of the likelihood of delinquency[12].

Financial Systems and Subprime Mortgage: When a subprime mortgage product is designed, it has to be intertwined with the financial system and work efficiently. Hence it is very important to find the problems that may occur and solutions that are viable. One of the main factors here is that there are immense amounts of long-term loans involved in a mortgage market and with the introduction of subprime many new risk factors are involved. It should be remembered that subprime is not necessarily for the poor, but discrimination in the USA has designed the USA financial system to care for the poor through the use of the poor. This is an unjust and iniquitous solution, which actually ends with greater problem due to the inherent risks the interest and mortgage payments are greater than from prime mortgages. This is because with the mortgage payments being larger the delinquency risks increase when the mortgagor has less income to start with. One of the central themes noticed is that poor indigenous and the minority are the main consumers of subprime mortgage as they don't or do not want to qualify for the prime loans. However there are different types of subprime products to suit different types of consumers. When designing the subprime product one should keep into consideration that if only consumers with low income are selected either by design or bias there will be less chance of the lender to survive, as this was clearly one of the faults of the USA and UK based subprime markets. Hence the product should be provided to people who are discriminated against for causes mainly other than financial or income constraints.

Relationship Between Subprime Mortgage and Capital Market: In 1990s an increase in the growth of subprime mortgage was due to an increase in access to the capital markets through loan securitisation in USA and other developed nations. According to [13] securitization, also referred to as structured finance, is a financing technique that allows capital markets to take direct ownership of revenue streams by pooling assets and then reselling them to investors. Investors in USA are comfortable with securitised prime and subprime mortgage loans, home loans and automobile loans as securitisation increases liquidity and financial support is provided to industries. Therefore, securitisation increases the flow of funds into the market and promotes competition among the players but a big concern in the market is the degree of competition which will lead to frequent abusive lending practices [14]. By 2000, the proportion of outstanding subprime mortgage loans in the USA that had been securitized was roughly in line with prime mortgage securitization. According to Moody's Investors Service and SMR Research Corporation, about $100 billion, or about 42%, of the roughly $240 billion in subprime mortgage loans outstanding in early 2000 had been securitized [14], not much less than the 53% of conventional prime mortgage loans that had been securitized as of 1998, the latest date for which those data were available [15]. If the subprime mortgage market is linked to the broader capital markets, the changes in subprime mortgage interest rates are expected to be positively correlated with changes in market rates, such as the 10-year Treasury note rate. While the interest rate on the loan is only one part of the overall price of the loan, it is an important element [14].

Sub Prime Mortgage Market in United States

An Analytical Summary of the Model: The analysis of the US scenario as understood and covered in most of the current literature, questions a number of issues in parallel with the subprime mortgage crisis and if we go one step further, it underscores subprime crisis and not the subprime financing per se. The recent literature concludes that the financial crises in US were caused due to a number of other practices when associated with subprime mortgage. [16], link the increase in delinquency rates to a disintermediation-driven increase in loan originations. [17],find that loans that are easier to securitize default more frequently. [18],have shown that lending standards are associated with innovations in credit. We summarize the failure of the American model based on the following arguments:

- The rationale behind subprime mortgages was to increase wealth of the mortgagers in an economy where everyone owns a home. However, the concentration of subprime financing to mortgage segment in United States made it more vulnerable as the lenders were least diversified even within the arena of subprime lending. The segment was risky because mortgage financing does not generate returns for the mortgagers to help them service their debt. As a result the banks' financing on one side and the ability of the borrowers to pay back on the other side were completely detached; mortgage financing does not enable the borrowers to repay.
- Now let us focus from the lenders, who restricted the subprime financing to mortgage segment, to borrowers who bought houses that they could not afford. The only logical explanation that can be drawn here is that the home owners expected the prices of their homes to increase and make a profit from resale. Again the rationale of "increasing the wealth for home owners" was not met as the home owners were also the speculators in the property market. Since speculation returns lemons when the expectations do not happen, it did the same with the tragic burst of the housing bubble.
- Paying back ability of the borrowers further deteriorated as the rates of many flexible rate mortgages were adjusted with the rising interest rates. After September 11, the Federal Reserve tried to ease the interest rate to as low as 1.25% in the week following the attack. When the country was officially out of recession the funds rate was 2%. The subprime borrowers started with relatively lower interest costs; though by August 2005, after a year of tightening the interest rates to 3.50%, federal funds rate was way below the pre September 11 rate of 6% in January 2001[19]. As the interest rates were raising the mortgagers with adjustable rate found themselves with an ever- increasing interest burden. According to [20], very low interest rates by the two largest central banks triggered the crisis by helping to create the subprime asset bubble. They further attributed ineffective and expensive central bank policy responses as the main causes of the crisis.
- Most of the mortgages were securitized and packaged for sales to third parties. The third parties were the normal investors, mutual funds and other financial institutions with the least or no regulations. It gave rise to two problems. Firstly, the problem of adverse selection because the banks did not really evaluate the borrowers as the risk had already been shifted to the final investors or the buyers of mortgage backed securities. Secondly, the subprime mortgage was not confined to the banking industry regulations but other non-banking financial institutions became pertinent players with least or no regulatory obligations, bringing in the problem of moral hazard. Even if the collateral is a real asset, its value can fluctuate and hence monitoring is inevitable. Consequently, the recent subprime crisis can, to some extent, be attributed to the ratification of Federal Services Modernization Act in 1999, also known as Gramm-Leach Biley Act that brought about the deregulation of financial services industry.
- Another issue that demands further research, but is pertinent to our analysis, is the extra premium charged to subprime borrowers over the prime borrowers. To evaluate this phenomenon, we look at [21] two hypotheses to provide reasons for higher interest rates charged on a subprime loan as compared to the prime loan. According to Opportunity Pricing Hypothesis, the lenders are the rent seekers and extract as much interest income as possible from the borrowers. On the contrary,

according to Efficient Pricing Hypothesis, the higher interest rate simply compensates the lenders for the extra risk due to subprime lending. It is undoubtedly expected, based on the principles of risk and return in financial theory that subprime financing will attract lenders' attention if they are covered for the additional risk taken but how much higher does this extra interest income have to be, determines the efficiency and sustainability of the subprime financial system.

Abusive lending practices: The growth of the subprime mortgage has enabled many consumers to obtain loans whom previously had limited access to the credit market. The questions raised and in concern are certain lending practices, which is often referred as predatory lending, that are reportedly occurring in the subprime mortgage market and the effect to the most vulnerable consumers. According to a report by [22], subprime lending was accompanied by a decline in credit standards and excessive risk taking by lenders. What is most concerning in these abusive lending practices are those involved in lower-income groups, which are frequent targets of some subprime lenders, because even though they are in the mid and lower income category, they often have sizeable equity in their homes. Those living in mid and lower income have tendencies to turn to subprime lenders as their credit histories make them too risky for conventional loans and such lenders are in a position to take advantage of the consumers in the weakest bargaining position. Deceptive lending practices in some form are hiding crucial information from consumers and these practices are particularly disturbing because these loans usually required at a time of great need, when borrowers are most vulnerable to practices that can strip them of considerable sums of money and even of their homes.

Sub-Prime Mortgage in Malaysia: A Possibility: Even though the world's criticism and concern about the recent financial meltdown in the United States is at its peak, the potential for exploring subprime mortgage in Malaysia is not hard to justify. If the subprime mortgage can complement the prime mortgage by providing a breadth to the market, it cannot be discarded because of its mishandling in the past. This paper reopens the case and explores its merits and demerits to make more informative conclusions.

For the smooth functioning of an economy, a substantial consumption by its residents is as important as the vibrant financial system that allocates funds to their most productive use. Subprime mortgage leads to an increase in the borrowed or loaned funds and, hence, both the parties owe to the principle. The precursors of subprime mortgage are no different from the micro financing principle with the purpose to provide finance for those who do not qualify under conventional financing. Financial institutions' profitability is likely to increase with the wider range of loans. This would strengthen consumption as well as the financial system. This section provides an analysis of the scope for subprime financing in Malaysia. Once we are convinced that there is a market, we need to provide an intuitive framework that would support its existence. It is evident that the financial system of countries like US is more capitalistic compared to Malaysian financing system. Also it has been observed that programs that require repayments based on trust may work better in Muslim countries. Also if checks are frequent in nature then it is believed that subprime mortgage is workable and it is highly beneficial for the consumer. As the Malaysian Government has been successful in maintaining the economy's balance through the use of many different combinations of Islamic and traditional banking practices it is believed that this niche (the combination of traditional and Islamic banking with the high inflow of capital) gives a different advantage to the Malaysian economy for the initiation of subprime mortgage.

It was also observed that no such financial market (subprime mortgage) existed in Malaysia. As a financial system is an integral part of how the overall economy works, a potential financial system has to take into the account the existing financial system. Similarly the economical projection of a society has great impact on the success of a financial system. The feasibility of introducing the subprime mortgage in Malaysia is the aim of this paper; hence the social system, the economic behaviour and society must be studied.

Culture and ethnicity impacts trust, business etiquette, savings behaviour and discrimination in a financial system. Malaysia is a multi-cultural country that holds both East-Asian financing and cultural systems and regulations and yet follows the Islamic country culture and financing regulations quite successfully. Various cultures and religions co-exist in Malaysia, giving Malaysia a flavour of multi-aestheticism alike the USA. Malay and Chinese are the majority that is reflected in the language and culture of Malaysia. This combination of ethnicity gives Malaysia a combination of Asia's best cultures practices; also the large Chinese and Indian population gives the Malaysian economy the large potential for capital inflow. Chinese and Indian culture is well known for its savings propensity that is also reflected by Malaysia having one of the highest savings rate in the world. The dominating religion is Islam followed by Buddhism, Christianity, Hinduism and other Chinese religions. This fact, obviously, has had a great effect on the financial system in Malaysia as we observe it having Islamic banking practices and has aims to increase such practices. The government also has substantial control and participation in the banking and financing sector, which implies that when a major product as subprime mortgage introduced, the controlling role of the government has to be facilitative with the introduction of new product. The multi-religion and multi-ethnic region has its advantages that it has a variety of resources for new business ideas and a good source of capital. However, it also causes discriminatory behaviour. When lending practices are involved discriminatory behaviour can lead to very inefficient systems that eventually lead to lower social welfare.

The impact of the culture and religion are so substantial in Malaysia that even foreign banks as HSBC are creating Islamic banking products in order to gain market share in Malaysia. Being Islamic banking practices different from the conventional capitalist banking approach, this is another factor we have to consider when analysing the feasibility of the subprime mortgage in Malaysia. As the capitalist banking system is strict when it comes to lending practices, as compared to the Islamic banking practices, perhaps this will be one of the advantages Malaysian financing system can offer to subprime lending that USA and European systems (which are more capitalist in their approach) clearly could not support. Now, to examine the entire financial system in Malaysia, it is important to discuss the combination of commercial banks merchant banks and Islamic banks. The Central Bank (Bank Negara Malaysia), is responsible for maintaining monetary stability and ensuring a sound financial system.

Malaysian economy has been successful in keeping low inflation rates alike the USA economy. Hence the investors in the economy also suffer less from inflationary risk. Malaysia is observed to be doing very well in aspects of GDP per capita. This implies better lifestyles in the future and even suggest a greater portion of the Malaysian population will be able to afford housing in the future and make further investments. Another indicator of wealth circulation and better lifestyle in an economy is the literacy rate and it was found that Malaysia has a high literacy rate which is increasing. However the difference between male and female literacy levels has somewhat increased, nevertheless the total literacy rate is increasing.

Hypothesis:

H1: There is discrimination practices exist in prime loan
H2: There is demand for mortgage loans
H3: Consumers have knowledge in the existing mortgage loan system
H4: There is a demand for subprime loan.
H5: Consumers do not prefer a mortgage loan with higher cost/fees.

RESULTS

Out of 1000 questionnaires which have been distributed, 980 of them collected. The responses are analysed and transformed into frequencies and percentage of responses. Therefore, 980 respondents were used in this study representing educated and mostly working class of individuals whom considered being the potential customers in purchasing property. The sample represents diversity in terms of age, race and occupation. The age group ranging from 21-40 represents the largest portion of the sample size comprising the main working population and the potential consumers of loans. Cronbach Alpha is the set of variables calculated used in the factor analysis to determine the reliability of those questions for measuring a single construct. Cronbach Alpha is used to estimate the proportion of variance that is systematic or consistent in a set of test scores. A reliability coefficient of .70 or higher is considered "acceptable" in most research situations. The Cronbach alpha in Table 1 for a set of scores of the variables used in research model turns out to be 0.865, meaning that the test is 86.5% reliable and by extension that it is 13.5% unreliable.

T-value measures the statistical significance of an independent variable in explaining the dependent variable. It is determined by dividing the estimated regression coefficient by its standard error SB. Therefore, the t-statistic measures how many standard errors the coefficient is away from zero. Generally, any t-value greater than +2 or less than -2 is acceptable. The higher the t-value, the greater the confidence we have in the coefficient as a predictor. Low t-values are indications of low reliability of the predictive power of that coefficient.

Hypothesis 1:

There Is Discrimination Practices Exist in Prime Loan: Do consumers think they are being discriminated against and if there is one single group that thinks so, is it true? Also, is the regulation or the lender the main discriminatory body when it comes to prime lending?

Table 1: Sub-prime mortgage perception

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.865	.867	6

Though it is complex on the primary cause of discrimination but the study reveals that discrimination exists revealed in the t-test. Respondents believe that the regulation or the lender is the main discriminatory body when it comes to prime financing. The respondents point the finger at the practice of banks convincing borrowers to agree to unfair and abusive loan terms or make it difficult for the borrower to defend against. Most likely target of the banks is the less educated, racial minorities and the elderly. This scenario typically occurs on loans backed by collateral, such as house, so that if the borrower defaults on the loan, the banks can perform foreclosure by selling the foreclosed property with profit. Young adults who entered into employment world found it difficult to secure loans as they will not be able to pay higher deposits. They have less-than-equal access to loans in terms of their credit history, income and other financial considerations merit. The result supports the hypothesis and therefore there exists discrimination in prime loan and hence customers seek different forms of loan to facilitate their purchases.

Hypothesis 2:

There is Demand for Mortgage Loans: Since the demand to purchase a house is one the main factors when it comes to financing, a few questions were based particularly on the mortgage aspect. If there are no demands, people have less preference for rented houses or house provided by the government, then there is no need for a new mortgage product as the demand for the product may also be low. To attain such data two questions were asked. Firstly, if they own a house (then it can be confirmed that there is a demand since they already have purchased one) and secondly, if they want to purchase a house. Most of the respondents live in rented houses. Out of 980 respondents, 730 live in rented houses, which is 74.50% of the total respondents. Only 250 respondents (25.50%) live in their own houses. Out of the 730 respondents who live in the rented accommodation, it was found that almost 90% would like to purchase housing at one time or another. Only about 10% didn't want to buy houses and preferred to live in rented accommodation. Since the survey was conducted in 2012 and the country is still recovering from recession, respondents would have felt reluctant to purchase houses and would have responded otherwise.

Hypothesis 3: Consumers have knowledge in the existing mortgage loan system

This question was verbally posed, instead of including it within the questionnaire, as it was expected that with hypothesis 1 and 2, consumers would like to include their thoughts which would provide a deeper look at the issue. It was found that people know about the system and how it works but they have a vague idea as to how the products function and what disadvantages and advantages do they have. It was found that most of the respondents (almost 85%) had little knowledge about the existing system apart from that it was stringent. It was also found that men knew more about 61.7% the system than women 38.3%. The result supports the hypotheses and therefore it is proven that customers have knowledge in existing loan and this would enable customers to compare the existing prime loan and sub-prime loan to facilitate their purchases.

Hypothesis 4:

There Is a Demand for Subprime Loan: It was discovered and confirmed with the lenders that the subprime mortgage was inexistence in Malaysia. Hence, even when the respondents were asked if they preferred subprime financing, the responses were not fruitful; probably consumers were not aware of the term subprime mortgage. So the analysis was based on the indirect questions. It was found that most consumers preferred to pay smaller down payments and larger repayment instalments than the vice versa. Out of 980 respondents, 705 respondents (71.94%) showed their willingness/ preference to pay down payment between RM 10000 to RM 30000 for buying houses. 23.77% respondents preferred to pay down payment between RM 30001 to RM 50000 and 4.29% above RM 50000 for buying houses respectively. Based on the survey, it was observed that although many respondents in the sample did not meet the bank documentation requirement, they were eligible otherwise. It was also found that 73.80% of the respondents in the sample had the necessary required documents for the bank but 83.00% would not want or hesitate to submit the necessary documents and pay more. Hence, respondents who want to purchase houses are willing to pay a little less by way of down payment but more in instalments (e.g. in fees and interest), but they have income and yet still do not meet bank's documentation requirement. Hence, there is a demand for subprime financing products from the consumer. The result supports the hypothesis and therefore there is a demand for sub-prime mortgage in Malaysia and banks should extend their potential to tap this untapped market to increase their revenues.

Hypothesis 5: Consumers whom do not prefer a mortgage loan with higher cost/fees.

Based on the above, it can be concluded that no subprime financing products exist in Malaysia but a demand for it does exist and this consumer base exists because of the regulatory body's strict rules against providing non-residents with prime loans. A number of people would rather pay more than provide more documentation and most respondents have good credit records and therefore it would lead to less bankruptcies and delinquencies record. In addition, obtaining a mortgage loan would be difficult for self-employed people and therefore they would prefer to pay extra fees in order for banks to grant them loans.

CONCLUSION

This study has proposed subprime mortgage as a solution to provide financing to those who would otherwise be deprived, with the focus on Malaysia. It highlights the rationale of subprime mortgage and justifies its presence on the grounds of its conventional purpose and its demand in Malaysian market. The US subprime crises have been discussed in length to evaluate the situation and figure out the actual causes and effects. This analysis helps us to make better decisions and incorporate in our regulatory framework which is what missing in the United States.

The demand for subprime mortgage products is greater in Malaysia as a result of different ethnic and religious groups that coexist in Malaysia. Malaysia's prudent financial system with high GDP and low inflation rate accommodates a better life style. Hence, this will increase the cost of living; the aggregate demand from the housing as well as other business opportunities emerge which would reduce the chances of delinquencies.

It was found that subprime mortgage does not exist in Malaysia. In general, the subprime mortgage is not at par with the prime mortgage and the recent global financial crisis experience allows learning from mistakes done in the past. How is Malaysia going to be a success story? The basic justification is simple. Subprime mortgage provides opportunities for those who would otherwise be denied the mortgage financing. Instead of labelling those people as defaulters, this form of lending allows them to repair their credibility or establish a credit history in subprime mortgage to eventually qualify for the prime loan. Having addressed the need for subprime mortgage, how do we ensure the sustainability of the subprime mortgage in Malaysia and ensure that the system will be able to handle all the parties involved and hence the benefit of overall economy. The subprime mortgage should be extended to all property lending's and should not be restricted to residential houses. The consequences would be two-fold. It helps in lateral diversification of the financial institutions' invested funds. Lenders will not lend to home owners alone but also to business investors. From the borrowers' point of view, apart from boosting the real estate market in terms of mortgage loans, investments will also be made in the business sector, the demand for houses or business premises there by giving the overall economy a haul. In Malaysia, this aspect is particularly important in Malaysia's economy. There is a scope for value creation, if the problems of deficient access to capital for the ordinary and business people are addressed.

As Islamic finance is very prevalent in Malaysia, any principal borrowed will be well understood by people and would be more receptive if the regulatory authorities undertake to implement. The fundamental principal of Islamic Finance prohibits raising debt on debt. This principal would ensure that the problem of securitization that aggravated the subprime crisis in US is automatically avoided. Malaysian banking system is well regulated and the Micro-financing and other SME financing are made by the banking sector. Hence all the banking regulations apply to these loans. If the subprime mortgage were initiated in Malaysia, it would be conducted under the same regulatory framework, since no such novel financing will be made by non-banking institutions with lax rules.

The ex -ante and ex-post review would prevent the problems like moral hazard and agency conflicts.

DISCUSSION

The main reason as to why subprime mortgage does not exist in Malaysia is due to stringent financial system practiced by the Malaysian government. Therefore, there is such products seem to be non-existent in Malaysian market as the government does not encourage, approve or support such practices. The issues to debate are that Malaysia is predominantly associated with Islamic finance unlike USA and Europe which practices conventional method. This might provide an additional benefit for Malaysia if subprime mortgage were to be introduced, since Islamic banking customers uphold the fundamental principles of Shari'ah. Therefore, Islamic banking customers are more prone to repay their loans on time and the probability of default would be low. This would enhance Malaysian economy, as more people would have access to funds. Within the Islamic mortgage system, price squeezes on either side can be controlled whenever identified, that prevents the excessive bargaining power of either party to the contract and eventually discourages any exploitative practices.

The rise in the capital flows over the last decade indicates investor confidence in Malaysian economy and has forecasted/envisages that soaring capital inflows will continue. This also implies that the capital requirement may be financed with foreign capital and the capital gained from any such investments can also be reinvested either in the subprime market or in other investments. It has also been observed that the overall loans provided by the financial institutions for the mortgage and housing market have increased particularly commercial banking in which lending activity has increased. Further, along the similar line, it is also found that Malaysian commercial banks are risk adverse in lending to customers, as they are stringent in credit scoring as the banks are aware of the repayment and delinquency behaviours of their borrowers.

Most of the west coast states in Malaysia have high rental rates and these states also have the most diversified in terms of religion, ethnicity and occupation. Therefore, the attractiveness of high rental rates could induce the public to purchase more assets if the options are available. Hence, subprime mortgages could be one of the deciding factors that would increase the probability of owning assets. It is deeply felt that this research has high potentials and given more time and resources the conclusions can make a difference in the financial system of Malaysia. It is recommended that the government and the financial institutions pursue the path and design and employ subprime mortgage with caution. The bad experience of subprime mortgage in western world should not be used as bench mark to incorporate with the distinct financial system in Malaysia in order to reject such potential as it will generate the possibility of obtaining conflicting results.

Limitations: The large number of respondents and the limitations of time to construct personal savings and inability to interview them personally might lead to respondents making mistakes in responding to certain questions pertaining savings or inappropriate reaction to income, consumption shocks. As the subprime mortgage has not been introduced by banks in Malaysia, respondents are unable to compare clearly the differences between prime and sub-prime mortgage. The result also indicates the limitations in financial literacy which would have led to unfavourable mortgage terms or contracts that contribute to unfavourable mortgage outcomes.

The research also has several suggestions for future research and applications. The finding provides insights of respondents who have difficulties in securing loans as they deemed to be a risky borrower by banks due to the poor bank scores as banks need to screen loan applicants before proceeding further. Financial literacy is very important in present environment of high increase in house prices as the rise in house prices reflected as a giant bubble. As the house price in increasing rapidly, consumers are unable to afford homes from the accumulation of their own funds but to rely on large margin of financing. Therefore consumers would have to work extras to afford such homes and avoid declaring their incomes.

Exploring the hypothesis in more detailed manner requires additional information form data such as house prices, consumers' additional income, undeclared income and demand for houses by foreigners, government policies, inflation rates, consumer purchasing power or parity and cost of living in more detail to perform further research.

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Appendix

Table: 1.1: Respondents Age

Age	Frequency	Percentage (%)
21-30	322	32.9
31-40	376	38.4
41-50	246	25.1
51 +	36	3.7
	980	100.0

Table: 1.2: Ethnic

Race	Frequency	Percentage (%)
Malay	333	33.4
Chinese	378	23.8
Indian	233	38.1
Others	36	4.8
Total	980	100.0

Table: 1.3: Level of Education of the respondents

Education	Frequency	Percentage
Primary/ Secondary	408	41.6
Bachelor Degree	499	50.9
Post Graduate	73	7.4
Total	980	100.0

Table: 1.4: Occupations of the respondents

Occupation	Frequency	Percentage (%)
Labour	198	20.2
Professional	294	30.0
Business	450	45.9
Housewife	38	3.9
Total	980	100.0

Table: 1.5: Residential status

House	Frequency	Percentage
Rent	730	74.5
Own	250	25.5
Total	980	100.0

Table: 1.6: Monthly Incomes of the Respondents

Income	Frequency	Percentage (%)
Below RM 1500	93	9.5
RM 1500-Rm 4500	213	21.7
RM 4501- RM 7000	352	35.9
RM 7001-RM 10000	233	23.8
Above RM 10000	89	9.1
Total	980	100.0

Table 1.7: Intention of the respondents to buy house (out of those who live in rented accommodation)

Frequency		Percentage
Yes	655	89.73
No	75	10.27
Total	730	100.00

Table 1.8: Gender (knowledge about subprime loan)

Gender	Frequency	Percentage
Male	605	61.7
Female	375	38.3
Total	980	100.0

Table 19: Reasonable Down Payment for respondents

Down Payment	Frequency	Percentage
RM10000-30000	705	71.94
RM30001-50000	233	23.77
Above50000	42	4.29
Total	980	100.0

Table 1.10: Eligible respondents to fulfil the Bank Requirement

Frequency		Percentage (%)
Yes	723	73.8
No	257	26.2
Total	980	100.0

Table 1.11: Respondents' reluctances to disclose their social records in terms of down payment

Frequency		Percentage
Yes	167	17.0
No	813	83.0
Total	980	100.0

Table: 1.12: Respondents' Bankruptcy record.

Frequency		Percentage
Yes	213	21.7
No	767	78.3
Total	980	100.0

Table: 1.13: Respondents Delinquency Record

Frequency		Percentage
Yes	35	3.6
No	945	96.4
Total	980	100.0

Table 1.14: Sub-prime mortgage perception

	Benefits	Mean	Standardized Data	*t* statistics	*p-value*
H1	There is discrimination practices exist in prime loan	4.3183	0.7116	2.274	0.0487*
H2	There is demand for mortgage loans	4.1089	0.6901	-0.572	0.5675
H3	Consumers have knowledge in the existing mortgage loan system	3.3702	1.0302	2.011	0.0446*
H4	There is a demand for subprime loan.	4.2657	0.7812	2.478	0.0134*
H5	Consumers do not prefer a mortgage loan with higher cost/fees.	3.7278	1.0786	-1.335	0.1822

*p <.05