CHAPTER TWO
REVIEW OF LITERATURE

This chapter reviews the literature of related theories, concepts and previous studies and can be divided as follows: (1) the theories of saving behaviors, (2) the determinants of saving, (3) the forms of savings and (4) previously related research.

2.1 THEORIES OF SAVING BEHAVIORS

Three general theories currently exist on the determinants of total consumer spending:

2.1.1 Absolute Income Hypothesis

This theory was first introduced by English economist John Maynard Keynes (1883-1946), and was further developed by the American economist James Tobin (1918-2002), who sharpened the focus of the theory in the 1960's and 70's. The theory is based upon the interaction between income and consumption. The main focus of the theory states that the absolute level of income in a household will determine its consumption and saving levels. The theory states that income and consumption will rise in tandem but not always at the same rate (U Tun Wai, 1972, pp.75-77).

Keynes listed eight topics - precaution, foresight, calculation, improvement, independence, enterprise, pride and avarice – as the main motivations that drove individuals to keep their money in their wallets. In relation to governments and their motives to save, Keynes gave the following four factors - enterprise, liquidity, improvement and prudence.

From Keynes point of view the total amount that someone has saved will decrease if there is a rise in interest rates. This would occur even if the said rate rise causes people to save more, and is caused by incomes falling by a greater percentage than investment.

Keynes theory was developed with an industrial economy in mind. Taking this into account we can see that his system is not really applicable to developing countries. In order for Keynes theory to be effective there has to be

unemployed labour and capital; in most undeveloped countries there may very well be unemployed labour but not really any unemployed capital. The model that would be best suited to developing countries is the more classical approach. As most developing countries have a large foreign trade sector, changes to interest rates and government financial policy occurs within the balance of payments made, and does not have any real effect on the average income. It was admitted by Keynes that for a rapid growth in employment to occur, a higher saving rate was needed.

2.1.2 Relative Income Hypothesis.

The relative income hypothesis was first introduced by Dorothy Brady and Rose Friedman (Robert Ferber, 1962, pp. 23-25). Its underlying assumption is that the saving rate depends not on the level of income but on the relative position of the individual on the income scale:

$$\frac{s}{y} = a + b\frac{y}{\bar{y}}$$

Where s and y represent individual saving and income, respectively, and y represents average income.

James S. Duessenberry (1952) has emphasized that another variant of income to determine savings was the relative level of income between people that determines consumption (and savings) and not the absolute income. Duessenberry assumed that from an aggregate time-series point of view, the relative income hypothesis could be transformed into one expressing the saving rate as a function of the ratio of current income to the highest level previously reached:

$$\frac{S}{Y} = a + b\frac{Y}{Y_0}$$

Where Y represents the highest level of income previously obtained. The implication here is that the saving ratio in the long run is persistent, and independent of the absolute level of income; although in the short run the rate relates on the ratio of current income to previous peak income.

2.1.3 The Permanent Income Hypothesis

This is a theory of consumption that was initiated by the American economist Milton Friedman. The basic idea of the theory is that people will choose how they buy products in relation to long-term income expectations rather then their current income.

It was determined by Friedman that all people will always consume a certain amount of their permanent income; further to this, he saw that low income earners are most likely to spend their income on a regular basis, while higher wage earners varied in how much they spent and how often. Friedman was able to determine this by examining measured income and measured consumption as having both permanent (lower income) and transitory (higher income) elements.

In this model an individual's real wealth, rather than their real disposable income, is what determines consumption. An individual's permanent income is determined by what assets they have. These can be both physical (shares, bonds, property) and human (education and experience) and will influence the individual's level of income. Keeping this in mind, the consumer will then anticipate what there lifetime income will be.

The theory suggests that most people will try to spend in relation to their income; only if there is a change in their income will there be a change in their rate of consumption.

Keeping this in mind, the theory suggests that fluctuating changes in income will not have an effect on individuals spending habits.

For example, if a government was to cut taxes prior to an election consumer habits would not immediately change. If consumers thought the change to be temporary and was being given to increase the governments reputation then consumer habits would not change. If however, it was thought that this was a permanent change and their permanent income was to change, then so would their spending habits.

2.1.4 The Life-Cycle Hypothesis

The life-cycle hypothesis combines ones age with saving behaviour. The theory was conceived by Modiglian, Brumberg and Ando (MBA) (1983), who

determined that an individual's age would help determine their spending habits. One factor of the theory is that a person's income is low at the start and the end of the life cycle. When entering the workforce an individual's income is usually low, and leads to a lower saving rate. As a worker becomes more experienced and their wage increases, so does their saving rate. Retirement brings a lowering in the wage rate and a severe decrease in the saving rate. In this way an individual's saving and consumptions rates are evened out over a lifetime. In this way the theory is similar to Freidman's permanent income hypothesis.

2.2 THE DETERMINANTS OF SAVING

While saving is a personal choice for governments, businesses, and individuals, there are three main factors which will influence the eventual decision to save; ability to save, willingness to save, and opportunity to save (U Tun Wai, 1972, pp. 85-87). Thus each unit's saving can be written as a function of these three factors: for the economy as a whole it would be the sum of the individual units' savings, less whatever duplication occurs, and whatever reductions would take place between "before" and "after" savings due to changes in total income or to other sociological factors. The total savings (net) equation for the economy can be written as

$$S = \phi [A, W, O]$$

Where S is savings, A is ability, W is willingness and O is opportunity. Each of the independent variables of equation 1 would be functions of other economic and non-economic variables. For example, ability to save would depend on such factors as income (Y), structure of population or dependency rates (N) and wealth (K). This may be viewed as

$$A = a (Y, N, K\ldots)$$

The willingness to save would depend on such factors as how much economic inducement is given to the individual through the level of interest rates(i), the stage of life that one individual is at in the life cycle (L), and cultural factors such as the relative position in class or on the social ladder (C). For example, it is well known that there are different savings propensities between agriculturists and urban workers and between professionals and entrepreneurs.This willingness equation may be denoted as

$$W = \beta\ (i, L, C\ldots.)$$

Finally, there is the opportunity principle, which is more closely related to the question of financial intermediation. The opportunity to save depends on such factors as the extent of financial intermediation (F) available to the savings units and on the possibility of using self-generated funds for financing one's own investment (I_r), or, in other words, the marginal efficiency of capital. It is well known that business units retain earnings in order to finance investment, as is also done by agriculturists in the rural areas. Thus, the opportunity equation may be denoted as

$$O = \lambda\ (F, I_r\ldots)$$

In all four equations above, the symbols ϕ , a , β and λ are functional notations. If the nature of each of the functions in equations 2, 3, and 4 can be properly specified and if one could really measure, by the use of suitable proxies, the changes in ability, willingness, and opportunity to save in a given economy over time and also project what changes are likely to occur within the next plan period, then one could perhaps derive an estimating equation or equations (if each of the above equations is rewritten for sectors such as households, businesses, and general government) by substituting the coefficients from equations 2, 3 and 4 in equation 1. It is doubtful, however, whether the present state of knowledge about developing countries would make that possible. All that can be indicated now is the nature of the functions in each of the equations, with some simple statistics of cross-section budget surveys to indicate orders of magnitude and of signs.

One might look at equation 2 and ask what sort of function *a* is likely to be. That ability to save depends on increases in real income that is, money income at constant prices – is self-evident. The statistical data in budget surveys usually show that, at low income levels, there is a negative savings percentage and that as income increases, savings rise.

2.3 THE FORMS OF SAVING

There are many types of saving plans that are provided by almost all of the various financial institutions. Anyone can choose the type of plan that appeals to them. Office workers, for example, can select a type of saving plan to suit their

amount of money, period of time, risk and convenience. The following is a list of some of the different ways to save.

2.3.1 CASH DEPOSIT

Saving your hard earned cash is the easiest way to save your money, and there are a great variety of commercial and non-commercial banks available for this purpose. After depositing money in the bank it will grow in relation to the interest that the bank provides. Depositing and saving money in this way provides the lowest risk and highest security available.

2.3.2 INVESTMENT

Choosing investment as a way to grow money can result in a nice dividend, but is a strategy fraught with danger. Rather than store their hard earned cash or product, an investor will choose to input their capital into a business, or loan it others so that they may gain a higher return, The risk factor in this method is quite high depending on the circumstances.

"EQUITY PRODUCT"

Equity shares are the securities issued by public companies to mobilize funds from the public domain. Shareholders of a company have a direct stake in the issuer company, and are entitled to vote and participate in major decisions at shareholder meetings. The different types of equity shares are listed below.

1) Ordinary Shares: The direct rewards for holding ordinary shares come from receiving profit dividends, capital gains and rights to buy the new shares when the company decides to increase its registered capital.

2) Preferred Shares are another type of equity investment. The main difference between this method and ordinary shares is that holder of preferred shares is entitled to share in company funds before a normal or ordinary shareholder can.

3) Warrants: A warrant holder has the advantage of being able to buy a fixed amount of shares at a predetermined price and time – factors that the holder will know in advance. Warrants are used to entice new investors to the company.

4) Unit Trusts: These shares are issued in units, most often by investment management companies.

5) Non-Voting Depository Receipt (NVDR): This is a new form of equity recently issued as a trading instrument by Thai NVDR. A shareholder investing in NVDR will receive the same benefits as those investing directly into the ordinary shares of a company.

6) Depository Receipt (DR): DR's are issued by Siam DR. As in the case of NVDR those shareholders investing in DR will have the same financial benefits as those investing into the ordinary shares of a company (the Stock Exchange of Thailand). The amount of equity that a shareholder gains over a period of time is dependent on the performance of the company during the period in which the shares are held.

"BOND"

A bond is a contractual agreement that is drawn up between the lender (investor) and the borrower (issuer of shares). The main obligation of the issuing company is to pay their shareholders (lenders/investors) coupon payments until the investment reaches its agreed maturity. As a result a bond investor has a claim to future cash flows from holding the bond. All information relating to the bond, from periodic interest rates, to the redemption of the bond are agreed upon and stated in the buyer prospectus when the bond is issued. After a bond has been auctioned out of the primary market, it can be electronically traded on the secondary market known as the Bond Electronic Exchange (BEX). There are many names by which a bond agreement can be known such as a, debt or fixed income instrument, debenture etc.

The 3 different sources of return associated with bond investing are listed as follows.

1) Interest income:

This is generally meant as the income made from interest or periodic coupon arrangements which are calculated from fixed or non-fixed rate methods. The details of these arrangements are always noted in the prospectus when a bond is issued.

2) Principal repayment:

The earned value of a bond will be given back to the bondholder once it reaches maturity. For a non-amortizing bond, the redemption value is always equal to the face value of the bond, but may not necessarily be equal to the initial purchase price. The redemption value of an amortizing bond may or may not be equivalent to its face value, par value or the initial purchase price of the bond.

3) Capital gain:

Capital gain occurs when the proceeds from the sale of a bond exceed its original cost. For a capital loss the reverse occurs. Capital gain is present when a bond is sold at a profit which can occur during the life of the bond or at its maturity.

"DERIVATIVES"

Derivatives are a form of financial securities and their value is derived from other forms of "underlying" financial security. Stocks, bonds, commodities, currencies, interest rates and market indexes all make up the most frequently used underlying assets.

The Thailand Futures Exchange Plc (TFEX) is entitled by law to trade futures, options, and also options on futures. The underlying products permitted for sale by TFEX are:

1) Equities and other securities indices

2) Debt instruments and interest rates

3) Non-agricultural commodities and other financial indices (e.g., gold, crude oil and foreign currencies

There are 2 main products in the derivatives market under the TFEX and they are as follows;

SET50 Index Futures

The SET50 Index Futures is intended to be a useful hedging tool to manage the equity market risks and to provide investors with alternative investments as another means to profit from the accuracy of their index predictions. It can also be used for adjusting investors' exposure to the equity market. Target users include mutual funds and institutional investors as well as individual retail investors. Trading

in SET50 Index Futures has a substantially lower transaction cost when compared to trading individually in the basket of 50 stocks.

SET50 Index Options

SET50 Index Options are European-style options, settled in cash against the value of the SET50 Index on the last trading day. It is approximately 1/5 the size of SET50 Index Futures. There are SET50 Index put and call options with different exercise prices for various trading strategies.

"BILLS OF EXCHANGE (B/E)"

These provide a quite low risk investment option in the short term and are similar to cheques and promissory notes. This option is offered in non-transferable bills of exchange for Thai currency and is an option only open to Thai residents. A variety of options are available starting from one month and going all the way up to one year. Investors may also choose from 2 main types of bills of exchange:

1. B/E that are sold at a discount rate from the original face value (zero coupon); and

2. B/E's that include a fixed interest rate that will be given by the bank and will be received by the investor at the end term of maturity.

"UNIT TRUST AND MUTUAL FUND"

Unit trusts and mutual funds are most probably the best way to prevent an investor from succumbing to the pitfalls of the financial markets; this is because they provide investors with the means to spread their risk across a range of investments. A Unit Trust or Mutual fund allows an investor to collate their money with other like minded individuals so that a large cooperative fund is formed and then invested in a particular financial portfolio.

Unit Trusts are managed by trained professional financial advisors and have crystal clear, simple objectives. This allows the invested money to gain a nearly guaranteed healthy return. As they can invest in a diverse range of options, Unit Trusts offer good medium to long term financial prospects.

It is possible, of course, for people to build their own portfolios; but this can take time, cost a lot of money, and may not always work out. Many people simply lack the experience to carry out such an exercise which is ultimately better left in the hands of professionals. The other main advantage of combining money in a Unit Trust with others is that it gives the group a wider range of options that may not be available to the individuals when working alone. Unit Trusts or Mutual Funds are simple and effective and can be easily managed by a professional team of financial advisors.

"LIFE INSURANCE"

One other way in which to save money is to invest in a life insurance scheme at a low premium, although this method doesn't always allow the payment of a low premium from the off. The best thing for an investor to do in this case is to choose a plan or policy that best meets their needs. Purchasing a plan with a low premium with little benefits for the investor is simply a waste. Most life insurance companies sell their policies at different rates. Therefore, it is important to choose the right rate class that suits an investor best before choosing an actual company. If a potential investor does not investigate the details of an insurance company and their respective policies carefully, they may find themselves in a world of financial pain down the track. Advice from those close to the industry is essential in avoiding the potential pitfalls associated with insurance companies. The positive points of saving money through investing in life insurance are relative to the investor's retirement, and health benefits. Both of these are areas in which many insurance companies specialize, and insurance companies are probably the best bet if these areas are important to the investor. Keeping all these factors in mind it is still important to thoroughly investigate any policy that is handed out by insurance companies before following through with an investment.

2.4 PREVIOUS RELATED RESEARCH

Voravut Vanitchachavam (1997) studied the determinants of saving in Thailand in his research studies. This research was centered on the contribution of macroeconomic factors at the domestic saving level, rather than microeconomic level

data or socioeconomic factors. The study was classified as having three parts: gross national savings, public savings and aggregate private savings. Government savings and private savings are the main components of domestic savings. For government savings, it is divided into the government expenditure function and the government revenue function. He also noted that the interest rate, the inflation rate, foreign savings, government expenditures, and liquidity constraints were the major determinants of savings besides income.

Panita Montri (2004) conducted her research into the area of saving being the main factor in supporting investment, and expanding the manufacturing of the country during the period 1994-2003. The purpose of this study was to examine household saving behaviors at that time, and to analyze the factors influencing the household saving rate in Thailand. From her research, results have shown that household saving rates had decreased by 30% of the household income in the year 1994, 27.3% in 1998, and 17.3 in 2003.

Robert Ferber (1962) conducted a study that looked into the main empirical research of recent years on household behavior. His emphasis was on empirical work, while principal theoretical developments are also reviewed; this is partly because of their relevance to an understanding of current thinking in the field, and partly to place the empirical studies in the proper perspective. Moreover, this research was focused on spending and saving behavior rather than on the income or other economic or non economic behavior aspects of the consumer. In his research, he determined the 5 aspects as (1) Theories of spending or saving, behavior; (2) Influence of variables other than income on spending and saving; (3) Determinants of asset holdings; (4) Determinants of specific expenditures; (5) Decision Processes. His research mainly focused on the determinants of household behavior, and ignores the two other basic aspects of this subject; namely the effects of household behavior on other sectors of the economy, and the measurement of household behavior.

Malinee Tengumnuay (1981) conducted a study to investigate the impact of some factors on saving behavior in Thailand. These factors include income,

household size, age structure, income source and urban-rural difference. The data was obtained from the survey of the Savings Mobilization Project of 1980 that was undertaken by the Economic Research Department from the Bank of Thailand. The study covered only the Central and Greater Bangkok regions. The data comprised 189 households within municipal areas and 197 households outside municipal areas of the Central Region. For the greater Bangkok region, 647 and 106 households were included.

The above research mainly focuses on the study of saving behavior in the household sector as a family group, and examined factors such as income, household size, expenditure and demographic data to determine saving behaviors. However, this study has only focused on the individual saving behaviors of office workers at private companies to get an idea of what their saving behaviors are, and what factors influence their saving; this is because office workers are often the main person in earning income for the household.

There are many theories to support and to determine saving behaviors such as the theory of Dorothy Brady and Rose Friedman which underlined that the saving rate depends not on the level of income but on the relative position of the individual on the income scale; and the life-cycle hypothesis by Modiglian, Brumberg and Ando (MBA) who proposed that an individual's age would help determine their spending habits. Moreover, there are three main factors which will influence the eventual decision to save; ability to save, willingness to save, and opportunity to save. All these factors will be considered in the analysis of the results of this study.