



UNIVERSITI PUTRA MALAYSIA

***SELF-ASSESSED BANKRUPTCY PROBABILITY AMONG CIVIL
SERVANTS IN PUTRAJAYA, MALAYSIA***

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By

YASOTHA NAIR A/P TRAMANKUTI

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfilment of the Requirements for the Degree of Doctor of Philosophy**

March 2016

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

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March 2016

Chair : Professor Laily Haji Paim, PhD
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Nowadays, many people are having trouble in stretching out their finances in a growing national economy and gaining in real household income. Mismanagement of financial resources add up to the number of bankruptcy incidents among civil servants in the country. The extent to which poor financial management has contributed to this problem is not empirically assured. Understanding the determining factors related to the bankruptcy among civil servants is crucial to develop appropriate strategies in the government system to promote a better financial standing among civil servants.

This study was primarily aimed to examine the factors predicting self-assessed bankruptcy probability among civil servants in Putrajaya, Malaysia objectively and subjectively. It was also sets out to determine the relationship between self-assessed bankruptcy probability and the level of economic concern on future finance, attitude towards debt and asset ownership which is mediated by financial management practices. The Theory of Reasoned Action (TRA), Theory of Conspicuous Consumption and Family Systems Management Model were used to predict self-assessed bankruptcy probability.

Samples of 399 Malaysian civil servants from Putrajaya were selected through multistage cluster sampling. Data for the research was collected through an electronic survey at five ministries in Putrajaya. They were segregated according to their occupational grade (Management & Professional and Supportive Group). Research instruments had verified adequate levels of internal consistency, reliability, and content validity according to the past researches. The research estimated model was tested by using descriptive analysis, chi square test, independent t-test, binary logistic regression, financial ratios and mediation analysis. Specifically, the mediation approach of Preacher and Hayes (2004; 2008) using bootstrapping was employed to measure the

mediating effect of financial management practices between economic concern on future finance, attitude towards debt and self-assessed bankruptcy probability.

Results of the study revealed that economic concern on future finance, attitude towards debt, asset ownership and financial management practices had a significant effect on self-assessed bankruptcy probability. To illustrate, Putrajaya civil servants had a positive concern on their future finance. Besides that, 87 percent of the civil servants positively had rational attitude towards debt. Subsequently, they also practiced a good level of financial management especially in relation to credit management, cash management, credit planning and general management with the exception for risk management.

Moreover, the role of financial management practices mediating the relationship between the level of attitude towards debt and economic concern on future finance as well as self-assessed bankruptcy probability were also highlighted and discussed. Results also indicated the major predictors that influenced self-assessed bankruptcy probability were age, gender, marital status, number of children, occupational grade, economic concern on future finance, attitude toward debts, financial management practices, asset ownership and liquidity ratio. Apart from that, the findings of financial ratio in this study were considered fairly stable considering 95 percent of the civil servants achieved the minimum requirement by fulfilling only one to three financial ratios. It was also shown that five percent of the civil servants were identified to have self-assessed bankruptcy probability.

The study contributed to the body of knowledge by providing empirical evidence and improved the understanding of self-assessed bankruptcy probability. Consequently, the findings of this study may be used as a basis to improve financial management practices, hence preventing and reducing financial problems and self-assessed bankruptcy among civil servants in Putrajaya, Malaysia.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**PENILAIAN KENDIRI KEBARANGKALIAN KEBANKRAPAN DALAM
KALANGAN PENJAWAT AWAM DI PUTRAJAYA, MALAYSIA**

Oleh

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Pada masa kini, ramai orang menghadapi masalah untuk mencapai matlamat kewangan walaupun terdapat peningkatan dalam pertumbuhan ekonomi negara dan pendapatan sebenar isi rumah. Pengurusan kewangan yang tidak baik menjadi punca insiden muflis atau bankrap dalam kalangan penjawat awam di negara ini. Sejauh manakah masalah ini disebabkan oleh kelemahan pengurusan kewangan masih lagi tidak jelas secara empirikal. Mengenal pasti faktor penentu yang berkaitan dengan kebangkrutan dalam kalangan penjawat awam adalah amat penting untuk mengenalpasti strategi atau jalan penyelesaian yang sesuai dalam sistem kerajaan demi memperbaiki kedudukan kewangan penjawat awam.

Matlamat utama kajian ini adalah untuk mengkaji faktor-faktor yang meramal kebarangkalian kebangkrutan dalam kalangan penjawat awam di Putrajaya, Malaysia secara objektif dan subjektif. Ia juga bertujuan untuk menentukan hubungan antara kebarangkalian kebangkrutan dan tahap keprihatian terhadap kewangan masa hadapan, sikap terhadap hutang dan pemilikan aset melalui mediasi amalan pengurusan kewangan. *Theory of Reasoned Action (TRA)*, *Theory of Conspicuous Consumption* dan *Family Systems Management Model* digunakan untuk meramal kebarangkalian untuk bankrap.

Seramai 399 penjawat awam Malaysia di Putrajaya telah dipilih melalui kaedah persampelan kelompok berperingkat. Data kajian ini dikumpul melalui soal selidik elektronik di lima buah kementerian di Putrajaya. Responden kajian ini di kategorikan mengikut gred pekerjaan masing-masing (Pengurusan & Profesional dan Kumpulan Sokongan). Instrumen kajian yang digunakan telah disahkan dari segi tahap konsistensi dalaman, kebolehpercayaan dan kesahihan kandungan mengikut kajian lepas. Model kajian telah diuji dengan menggunakan analisis deskriptif, ujian khi kuasa dua, ujian-t, regresi logistik binari, nisbah kewangan dan analisis mediasi. Secara khusus, pendekatan mediasi yang diperkenalkan oleh Preacher dan Hayes (2004; 2008) yang

menggunakan kaedah *bootstrapping* telah digunakan untuk mengukur kesan pengantara amalan pengurusan kewangan antara hubungan keprihatian terhadap kewangan masa hadapan, sikap terhadap hutang dan penilaian sendiri terhadap kebarangkalian kebangkrutan.

Keputusan kajian ini menunjukkan bahawa keprihatian terhadap kewangan masa hadapan, sikap terhadap hutang, pemilikan aset dan amalan pengurusan kewangan mempunyai kesan yang signifikan ke atas penilaian sendiri terhadap kebarangkalian kebangkrutan. Sebagai contoh, penjawat awam di Putrajaya, Malaysia mempunyai sikap prihatin dan positif terhadap kewangan masa hadapan mereka. Selain itu, 87 peratus penjawat awam mempunyai sikap rasional yang positif terhadap hutang. Selanjutnya, mereka juga mengamalkan tahap pengurusan kewangan yang baik terutamanya dari segi pengurusan kredit, pengurusan tunai, perancangan kredit, dan pengurusan am kecuali pengurusan risiko.

Selain itu, peranan amalan pengurusan kewangan sebagai faktor mediasi antara hubungan antara tahap sikap terhadap hutang, tahap keprihatian terhadap kewangan masa hadapan dan kebarangkalian kebangkrutan turut dibincang. Keputusan analisis juga menunjukkan bahawa umur, jantina, status perkahwinan, bilangan anak, gred pekerjaan, keprihatian terhadap kewangan masa hadapan, sikap terhadap hutang, amalan pengurusan kewangan, pemilikan aset dan nisbah kewangan menjadi peramal utama yang mempengaruhi penilaian sendiri kebarangkalian kebangkrutan. Selain itu, dapatan kajian berkaitan nisbah kewangan ini dianggap agak baik kerana 95 peratus daripada penjawat awam mencapai tahap minimum dengan memenuhi nisbah kewangan antara satu hingga tiga. Telah juga dibuktikan, bahawa lima peratus daripada penjawat awam telah dikenalpasti mempunyai kebarangkalian kebangkrutan.

Kajian ini menyumbang kepada pengetahuan melalui bukti empirikal dan meningkatkan kefahaman serta kesedaran berkaitan dengan kebarangkalian kebangkrutan. Oleh itu, dapatan kajian ini boleh digunakan sebagai asas untuk meningkatkan amalan pengurusan kewangan dan dengan ini dapat membantu mengelak dan mengurangkan masalah kewangan dan kebangkrutan atau muflis dalam kalangan penjawat awam di Putrajaya, Malaysia.

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LIST OF ABBREVIATIONS

AKPK	Credit Counselling and Debt Management Agency (<i>Agensi Kaunseling dan Pengurusan Kewangan</i>)
ATD	Attitude towards Debt
BP	Bankruptcy Probability
CRRC	Consumer Research and Resource Centre
EC	Economic Concern on Future Finance
FMP	Financial Management Practices
FOMCA	Federation of Malaysian Consumers Associations
IFDFW	InCharge Financial Distress/ Financial Well-being Scale
LML	Licensed Money Lender
SPSS	Statistical Package for Social Science
TRA	Theory of Reasoned Action
URL	Uniform Resource Locator



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CHAPTER 1

1. INTRODUCTION

1.1. Background of Study

The ability to manage money wisely is becoming a challenging task for many middle class families in today's modern world. This not only negatively pressures an individual but also affects their respective families and inadvertently the society. An increase in the number of bankruptcy cases with each passing day reflects the number of vulnerable families that live their lives without a safety net. This issue has become deeply entrenched in the lives of many Malaysians.

Managing finances wisely and ensuring a family lives a conducive lifestyle was primarily the role of the breadwinner in a family back in the day. Conversely, in present times, many experience problems managing their finances despite an economic growth and an increase in real household income. In other words, most of us have developed a means for a better life far beyond those days, however, according to Wilder (1967) the author of *'The Macmillan Guide to Family Finance'* many of us are still confused on how to make use of those means to achieve a prosperous life for our families and ourselves without facing any financial trouble in the future. In this tougher new era, a great number of people have learnt to cope with less money and to set aside a small amount for a rainy day. Nevertheless, the number of families in serious financial difficulty continues to increase. Additionally, many people are frequently challenged to adjust their lifestyles in order to strike a greater balance in life.

Fundamentally, purchasing material possessions seems affordable as soon as an individual steps into the employment world and starts earning money. However, with the passing of time, the risk of spending more than what is earned is made more apparent. This is due to the fact that individuals have learnt about making decisions on what to buy and spend on a daily basis, but not many understand the full impact of their decisions. For instance, due to a wrong decision, there are individuals who are unable to manage their finances consistently. Some are even unable to pay their overflowing credit card bills, loans or even monthly instalments. Thus, they may fall into the debt trap and even put themselves in personal bankruptcy (Razali, 2011).

As Mahatma Gandhi said, *'Earth provides enough to satisfy every man's need, but not every man's greed'* (Gilililand et al., 2014). Although the earth has enough resources to fulfil the basic needs of human beings, our greed often results in unwanted circumstances in our lives. For instance, after falling behind with mortgage payments, debt often becomes a major burden to bear. Furthermore, filing bankruptcy is undesirable to most of individuals. People often wonder 'how' and 'why' they find themselves in this position. Prior research by Zhu (2008) has proven that they are in

this situation due to their own actions, while others are performed against their wishes for various reasons.

Empirical studies in western countries since 30 years ago have proven that many researchers have analysed financial condition of an individual and households in both the objective and subjective context (Prawitz et al., 2006). Zhu (2008) pointed out that some households neglected their financial security and spent beyond their means. Furthermore, many of the households showed signs of financial distress when there was an increase in debt due to sudden economic shock caused by job retrenchment or unexpected medical expenses. Besides that, the rapid growth of credit card usage might also be a warning sign of an economic slowdown, should a household not be able to settle payments and become bankrupt. Hence, this might be a negative indicator of an economic downfall if the number of bankruptcy failures keep increasing (Garner, 1996).

In Malaysia, the younger generation who have just started a career are labelled bankrupts before being able to enjoy a comfortable and stable lifestyle where many live their lives far beyond their means. In 2012, the Consumer Research and Resource Centre (CRRC) carried out a research on 'Financial Behaviours and Financial Habits of Young Workers'. It was reported that almost 47 percent of young Malaysian workers are seriously debt-ridden and proven that 37 percent of these respondents admitted that they spend more than their monthly salary (ERA Consumer Malaysia, 2012). In addition, numerous loans and credit cards offered by financial institutions in today's market provoke Malaysians to spend more than what they have through borrowing (AKPK, 2011).

Apart from that, many individuals find the high cost of living burdensome to manage their money effectively. The Economic Planning Unit (2010) indicated that the monthly gross household expenditure in urban areas increased to RM 4,705 compared to RM 3,357 ten years ago. It provides an overview of the burden and liability faced by Malaysians due to high expenditure which leads to debt burden faced by individuals at a young age due to excessive spending. Federation of Malaysian Consumers Associations (FOMCA) based on a preliminary survey of 100 people found that about 30 percent of their salaries are spent paying outstanding debts every month (ERA Consumer Malaysia, 2012). Besides that, Management Association Complex and Shopping Mall Malaysia reported that every weekend, nearly five million consumers flock to the 300 shopping centres located throughout the state. This attitude and behaviour serves as a shocking exposé as to why Malaysians cannot afford the rising cost of living, especially for those who are new to employment.

According to the Deputy Minister of Finance, Datuk Haji Ahmad bin Haji Maslan (2013), even though Malaysia has experienced rapid economic growth, it holds a higher household debt compared to other ASEAN countries such as Singapore, Indonesia, Philippines, Hong Kong and Japan. The total household debt compared to the gross domestic product was approximately 83 percent. He added that rising household debt was mostly contributed by low-income earners and civil servants (Deputy Minister of Finance, 2013). While additionally, the total unpaid balance for credit cards also increased from RM 1,924 million to RM 12,308 million from 1994 to April 2004 and to an amount of RM 22,810 in year 2008 (Bank Negara Malaysia,

2009). Malaysia Department of Insolvency (2013) indicates that due to these heavy debts, the rate of individuals declared bankrupt in 2012 were 19,575, or 53 people per day in a year, of which 50 percent of them are between the ages of 25 to 44.

The number of individuals who went bankrupt in between 2007 to 2013 were 245,000 mainly due to their failure to settle loans (debt) (Karen, 2013). Almost 0.067 percent of a population of 29.1 million declared bankrupt in a year. Besides that, 80,348 bankruptcy cases were uncovered based on ethnicity by the Malaysian Department of Insolvency whereby they were categorised into four main ethnic groups: Malay, Chinese, Indian and others. The number of bankruptcy cases among the Malays were 31,950, followed by Chinese which was 26,805 cases. Meanwhile the Indians and other ethnic groups charted 7,661 and 13,932 cases respectively (Chong, 2011).

Table 1-1 shows the number of bankruptcies in Malaysia due to hire purchase loan, personal loan, business loan, housing loan, corporate guarantor, credit card debts, social guarantor, income tax debts, student loan and other debts. From 2005 until 2010, 22,545 (24.8%) of bankruptcy cases were caused by the failure to pay hire purchase loans and 10,990 cases (12.09 %) were due to failure to settle personal loans. Statistics show the cases affected by different types of loans. For instance, around 8,155 cases of bankruptcy were recorded because of the failure to pay housing loans. The total cases of bankruptcy recorded between the years 2005 until 2010 were 90,898. The number of bankruptcy cases increased mainly due to hire purchase loan, personal loan, business loan and housing loan in the year 2013.

Table 1-1: Incidence of Bankruptcy from Year 2005 to 2013

Category of Bankruptcy	2005 to 2010		2013
	Number	Percentage (%)	Percentage (%)
Hire Purchase Loan	22,545	24.8	25.7
Personal Loan	10,990	12.09	15.32
Business Loan	9,929	10.92	12.38
Housing Loan	8,155	8.97	16.90
Corporate Guarantor	4,889	5.38	4.51
Credit Card Debts	4,791	5.27	4.17
Social Guarantor	4,396	4.84	5.02
Income Tax Debts	884	0.97	0.85
Education Loan	159	0.18	0.23
Other Debts	24,160	26.58	14.92
Total	90,898	100 %	100%

Source: Department of Insolvency, Malaysia, April 2013

Table 1-2 reflects the severity of the issue of bankruptcy which had occurred within six years in Malaysia where more than 31.80 percent of the bankrupts were aged between 35 to 44 years, followed by 26.22 percent between the ages of 45 to 54 years old.

Table 1-2: Bankruptcy Cases Based on Age from Year 2005 to 2010

Age Group (years)	Years						Total Bankruptcy	(%)
	2005	2006	2007	2008	2009	2010		
Below 25	127	232	119	123	306	304	1,211	1.33
25-34	2,185	2,100	2,183	2,071	3,176	3,959	15,674	17.24
35-44	4,529	4,074	4,317	4,406	5,165	6,417	28,908	31.80
45-54	4,941	3,491	3,476	3,069	3,812	5,047	23,836	26.22
55 and above	2,482	1,719	2,120	963	1,543	2,079	10,906	12.00
No Information	1,604	1,974	1,023	3,223	2,226	313	10,363	11.40
Total	15,868	13,590	13,238	13,855	16,228	18,119	90,898	100.0

Source: Department of Insolvency, Malaysia, 2011

The General Director of the Department of Insolvency Malaysia stated in the Malay Mail Sight, 2009, that there are various factors that lead to this unwanted scenario according to Datuk Abdul Karim Abdul Jalil. However, to date, not many studies have been conducted regarding this subject matter (Shuzen, 2009). Therefore, this particular study in the area of family economics and management was of much importance as it helped to predict the possibility of bankruptcy among civil servants that allows for precautions to be taken as soon as possible in order to overcome or avoid this financial downfall. Besides that, knowledge of this early warning model helped obviate the consequences or reduce the number of these failures. Eventually by doing this, it can serve to preserve many lives and households. It also helped individuals and families calculate their financial risks and precautionary steps were taken to avoid financial instability in the future. Furthermore, making the right decision helped enhance an individual's family life by avoiding a severe financial obligation or even bankruptcy.

1.2. Problem Statement

The mounting debt leading to bankruptcy affecting civil servants in the nation is a cause for concern. Figure 1-1 shows the steady increase in the number of bankruptcy cases over the years.

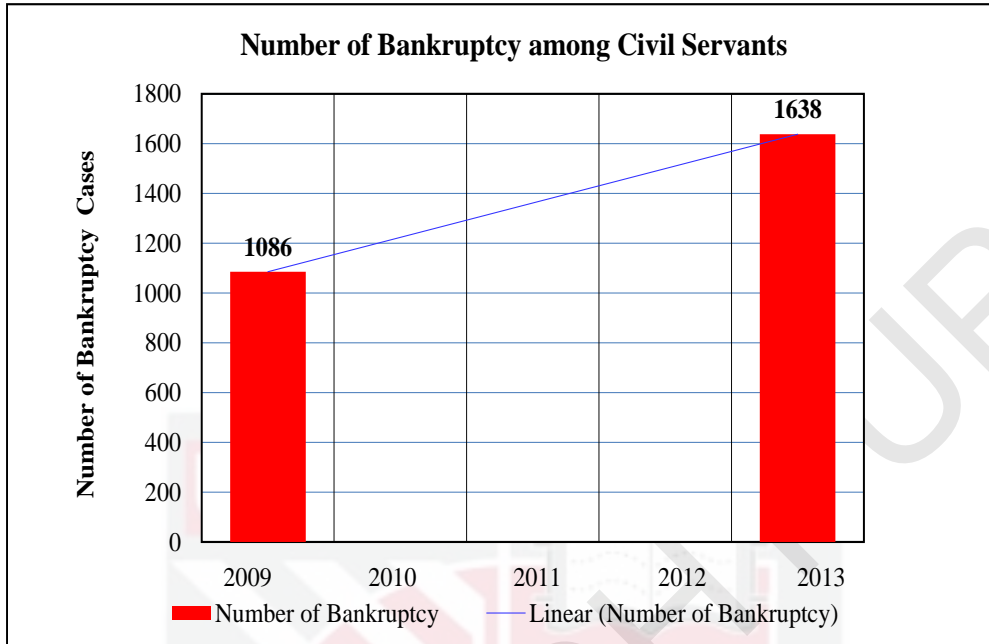


Figure 1-1: Number of Bankruptcy Cases among Civil Servants

Based on a report from the Malaysia Department of Insolvency, 1,086 civil servants were declared bankrupt in 2009. The data revealed that approximately 72.74 percent of them were adult males (Marican et al., 2012). This figure raised to 1,638 till June 2013 (Department of Insolvency, 2013). Despite the fact that the figure makes up only a fraction of the 1.42 million civil servants, it is nonetheless a significantly high number as these civil servants are the highest contributors to our economic development. Logically, they should not land in bankruptcy as they are the largest contributors to the country's economic development. Unfortunately they often go bankrupt due to limited or no exposure to financial management (Bernama, 2013).

The inability to manage finances wisely is a common problem among many in Malaysia. Poor financial management is commonly accompanied by financial problems and will consequently lead to bankruptcy in an individual's life, family and work (Garmen et al., 1999). The knowledge of making decisions on items to purchase and spend on is something that is possessed by a vast majority of people, but not many understand the full impact or indirect consequences of their financial decisions. Even, civil servants are falling deeper into debt and do not hesitate to take loans to finance their wants and needs.

Apart from that, there are many possible factors that can ultimately lead to bankruptcy such as owning a property. However, falling into a bankruptcy trap can increase the tension point. Despite the fact that there are numerous financial education programs specified for Malaysian workers, yet, this crisis is not solved or overcome. In order to understand the scenario better, this research was focused on the probability of the occurrence of bankruptcy among Malaysian civil servants in Putrajaya.

As individuals work hard, they are convinced that they can afford monetary luxuries and develop a mindset that they deserve the best things in life resulting in a fraction of individuals who rely heavily on credit cards to live a lavish lifestyle. They enjoy the attention they receive whenever they drive a luxury car, wear expensive clothing or host a sumptuous wedding dinner or a party on a cruise or in five star hotels. Having the mindset of one only gets one chance to live which is why life is meant to be lived to its fullest leads to extravagant lifestyles despite the fact that it is not within an individual's financial means. Simply put, *'their desire for the lavish life was immeasurable'* (AKPK, 2011).

As quoted by Joyce Diane Brothers, an American psychologist, *'credit buying is much like being drunk. The buzz happens immediately and gives you a lift....The hangover comes the day after'* (quoted in Joseph 2011, p.249). The key aspect discussed in this content is that although borrowing from financial institutions allows an individual to buy a house, vehicles, pay bills or even go on holidays, the fact remains that the money borrowed is not complimentary of accusation. They are asked to pay it back with interest or penalty charges if they exceed the due date (AKPK, 2011). Moreover, there are individuals who prefer a quicker means to make money which is why there are cases of individuals who borrow money from unlicensed money lenders who are more commonly known as *'Loan Sharks'* or *'Ah Long'*. This results in the borrower paying a high interest rate with strict terms and conditions. In the event the borrower fails to do so, they might be threatened with violence by the loan lender (Zakaria et al., 2012; Razali, 2011).

Apart from that, in Malaysia, asset ownership is also one of the reasons of bankruptcy due to hire purchase and housing loan (Department of Insolvency, 2013). Fully comprehending clauses in housing loans is not an effortless task as institutions or banks seldom explain the manner in which interest rates generally work. Moreover, an interest rate is usually billed on the principal amount of a mortgage loan if the initial sum borrowed is not yet repaid. Failure to repay such a huge interest rate and failure to resolve the debt by the borrower will lead to bankruptcy (Ching, 2012). The type of houses and automobiles owned are also one of the signs of fast economic growth that is spreading beyond these boundaries, as well as the lifestyles of Malaysians which can be seen as conspicuous symbols of riches. For a consistent payer, the sum of the outstanding balance will reduce while the equity in their home will increase, while for those who are unable to handle the loan payment of their asset ownership, it will force some of them into bankruptcy (Ching, 2012).

Another essential point is that relevant parties in developed or developing countries are not taking the effort to raise concern and awareness on the risks of poor financial management practices and the consequences of becoming bankrupt. Planning for the future and retirement is also not given much emphasis as priority is given to current spending and short term goals (Twigg, 2012). Moreover, some households have extended their financial commitments too far from the beginning and have ended up with minimal contingency preparation for their future. Next, poor financial management is always accompanied by financial problems and it will lead to a negative consequence such as bankruptcy on an individual's life, family and work (Garman et al., 1999).

In the same way, high level of debt attitude is also an important factor for many who file for bankruptcy (Sullivan, Warren, and Westbrook, 1989). It can also increase tension point, cause mental health problems in the debtors, create family disputes and reduce life satisfaction (Manning, 2000; Ritzer, 1995). Living a luxurious lifestyle by purchasing items well above one's means is a common trait among some individuals where a portion of them become indebted by practicing the behaviour of "spending first and paying later" (Husniyah, 2009; Kim and DeVaney, 2001). Unfortunately they are very reluctant to realise that their attitude may lead to financial crisis and continue to live in denial making their situation worse day by day.

Besides that, the probability to go bankrupt among civil servants in Malaysia is a causal agent of worry. Bankruptcy issues are not only seen under finance and economics but also under the domain of family economics and management. Whenever an individual declares bankruptcy, it not only gives a negative impact to that person but also to their respective families in many ways. Furthermore, bankruptcy can cause serious problems for anyone who lives through it. Subsequently, all those who pass through bankruptcy often ruin their credibility and demean their total net worth in the process.

Likewise, individuals who struggle with financial stress tend to get involved in unhealthy habits or actions such as the abuse drugs and cigarettes which can cause harmful effects to their health. Specifically for civil servants, bankruptcy is not something that should be taken lightly. According to the clause in the Bankruptcy Act 1967, if a civil servant or government employee has been declared bankrupt, the individual cannot do the following: leave Malaysia without a court order, borrow more than RM 1000 without informing their status of bankruptcy to the lender, be an adviser to or be an employee in a registered body and are even not allowed to become a member of any union. In addition, they are not permitted to become a business owner partner or a director of a society without the court's permission. Unfortunately, they are also not allowed to work with their spouse or relatives without permission. Thus this clarifies that an individual struggling to make ends meet can cause emotional struggle within the family or household. Struggling to handle their budget becomes a primary subject in the family (Department of Insolvency, 2011).

Financial pressures caused by mounting debts are surely a struggle for an individual. Bankruptcy cases are more complex in households compared to those who are unmarried or without children. Financial difficulties and relationship problems such as marital crisis are frequently related. Furthermore, studies across the world widely reported the principal movements of family discord are due to the financial issues (Parrotta and Johnson, 1998).

According to Burkett (1989), around 80 percent of young couples around the age of 30 got divorced because they were unable to manage their finances resourcefully which would undoubtedly provoke argument between the married couple. For example, the married couple might blame each other whenever they face financial problems which in turn could lead to a family breakup or even divorce should the argument and problem be prolonged and constant. Sometime, these disputes evoke a strong response that ensues in a decrease in socialising together with friends and family. It might destroy the happiness, well-being and family values of the entire household (Burkett, 1989).

Besides that, financial difficulty has a negative implication on an individual's daily life, including at a one's workplace and within the family. Based on studies by Berry and Williams (1987) and Mugenda et al., (1990), an individual's quality of life can also be affected by financial management apart from financial satisfaction and marital satisfaction. Apparently, the use of overextended credit also leads to bankruptcies. Poor financial decisions can hurt productivity in the workplace (Ansong, 2011; Garman et al., 1996; Joo and Grable, 2000). In addition to "loan sharks" related crime, it reflects an increase in borrowing from illegal financial sources. Banks and credit card companies have reportedly lost tens of billions of dollars (Visa 1997).

According to the Credit Counselling and Debt Management Agency or 'AKPK' (2013), more than 50 percent who sought their assistance were below the age of 40 and faced financial trouble due to low literacy level regarding financial issues. Therefore, this research addressed some of the limitations or gaps from previous studies and the results were noteworthy for theory and practice in the field of family economics and management.

Table 1-3: Number of Bankruptcy among Civil Servants by Grade

Service Group	2005 - 2009	June 2013
Higher Management (Premier C and above)	4	6
Management & Professional (Grade 41-54)	125	262
Supportive Group 1 (Grade 17-40)	402	912
Supportive Group 2 (Grade 1-16)	200	458
Defence / Army	342	-
Non-recognised	13	-
Total	1086	1638

Source: Department of Insolvency Malaysia, April 2013

Table 1-3 portrayed that 1086 civil servants were charged as bankrupts from 2005 till 2009. This is an important revelation as the figure showed an increase in 552 cases in the year 2013. Based on the statistics provided by Department of Insolvency Malaysia (2013), a majority of the civil servants who went bankrupt were from the Supportive Group 1, followed by Supportive Group 2. Likewise, the number of bankruptcy cases among the Management and Professional group also increased from 125 cases to 262 cases between the four years. It can be concluded that the number of bankruptcy cases among Malaysian civil servants be it from the Higher Management Premier, Management and Professional group or Supportive Group all increased dramatically within four years time which motivated the establishment of capital base to carry out this study.

Despite the fact that there are many financial education programs such as forums, talks, seminars, exhibitions and training that focuses on Malaysian workers, yet this problem is still not solved. In order to understand the scenario better, this research focused on the probability of the bankruptcy occurrence among Malaysian civil servants in Putrajaya. Self-assessed bankruptcy probability is a part of the quality of life studies but a limited number of studies was focused on bankruptcy prediction on civil servants in prior studies (Ahmed et al., 2010; Shuzen, 2009). In the past, studies were concentrated in the financial wellbeing among students and not on self-assessed bankruptcy probability among civil servants although it was a critical issue in Malaysia. Furthermore, in Malaysia, very few surveys were conducted on bankruptcy (Hilmy, Mohd, and Fahami, 2013; Elangkovan, 2012; Ahmed, et al., 2010). In conjunction to this, the study was also able to answer the following research questions.

1.3. Research Questions

This study was aimed to determine the relationship between self-assessed bankruptcy probability and the level of economic concern on future finances, attitude towards debt and asset ownership which is mediated by financial management practice. Based on the arguments discussed above, this study attempted to answer the following questions:

1. Are there any associations between the socio-demographic characteristics of civil servants and their level of economic concern on future finance, attitude towards debt and financial management practices?
2. Are there any associations between the asset ownership (home ownership and vehicle ownership) and self-assessed bankruptcy probability of civil servants?
3. Are there any differences in the economic concern on future finance, attitude towards debt and financial management practice scores based on the self-assessed bankruptcy probability of civil servants?
4. What are the associations between the financial ratios met by the civil servants and their socio-demographic characteristics?
5. What are the self-assessed probability of the occurrence of bankruptcy among civil servants due to their level of economic concern on future finance, attitude towards debt, financial management practices, asset ownership, financial ratio and socio-demographic characteristics?
6. Does financial management practice mediate the relationships between economic concern on future finance and attitude towards debt on self-assessed bankruptcy probability among civil servants?

1.4. Research Objectives

The general research objective of this study was to determine the relationship between the level of economic concern on future finance, attitude towards debt, asset ownership and self-assessed bankruptcy probability, which is mediated by financial management practices. Particularly, the objectives of the study were:

1. To determine the associations between the socio-demographic characteristics of civil servants and their level of economic concern on future finance, attitude towards debt and financial management practices.
2. To analyse the association between the asset ownership (home ownership and vehicle ownership) and self-assessed bankruptcy probability of the civil servants.
3. To analyse the differences in the economic concerns on future finance, attitude towards debt, financial management practice scores based on the self-assessed bankruptcy probability of the civil servants.
4. To analyse the associations between the financial ratios met by the civil servants and their socio-demographic characteristics.
5. To predict the self-assessed bankruptcy probability of civil servants based on their level of economic concern on future finance, attitude towards debt, financial management practices, asset ownership, financial ratio and socio-demographic characteristics.
6. To determine the mediating effects of financial management practice on the relationship between economic concern on future finance and attitude towards debt on self-assessed bankruptcy probability among civil servants.

1.5. Research Hypotheses

The research hypotheses of the present study were derived from the above research objectives and are comprised of eight main hypotheses and subordinate hypotheses. The following are the main hypotheses that were tested.

- H1: There is a significant relationship between the level of economic concern on future finance scores and socio-demographic characteristics (age, gender, marital status, number of children and occupational grade) of the civil servants in Putrajaya, Malaysia.
- H2: There is a significant relationship between the level of attitude towards debt scores and socio-demographic characteristics (age, gender, marital status, number of children and occupational grade) of the civil servants in Putrajaya, Malaysia.

- H3: There is a significant relationship between the level of financial management practice scores and socio-demographic characteristics (age, gender, marital status, number of children and occupational grade) of the civil servants in Putrajaya, Malaysia.
- H4: There is a significant relationship between asset ownership (home and vehicle ownership) and self-assessed bankruptcy probability of the civil servants in Putrajaya, Malaysia.
- H5: There are significant differences in economic concern on future finance, attitude towards debt, financial management practice scores between bankrupt and non-bankrupt groups of the civil servants in Putrajaya, Malaysia.
- H6: There are significant relationships between the financial ratios met by the civil servants in Putrajaya, Malaysia (liquidity ratio, solvency ratio and consumer debt ratio) and socio-demographic characteristics (age, gender, marital status, number of children and occupational grade).
- H7: There are significant prediction by asset ownership (home and vehicle ownership), economic concern on future finance, attitude towards debt, financial management practice, financial ratios (liquidity ratio, solvency ratio and consumer debt ratio) and socio-demographic characteristics (age, gender, marital status, number of children and occupational grade) on self-assessed bankruptcy probability of the civil servants in Putrajaya, Malaysia.
- H8: Financial management practice mediates significantly the relationships between economic concern on future finance and attitude towards debt with self-assessed bankruptcy probability of the civil servants in Putrajaya, Malaysia.

1.6. Significance of the Study

This study contributed to the field of family economics and management, finance, economics and human resource by providing empirical evidence concerning factors that predicted self-assessed bankruptcy probability among civil servants. As an academic subject, family economics looks at behaviours and structures within families from an economic perspective. Family economics also refers to the more pragmatic issues of everyday family finance, such as spending, earning, investing, saving and living accommodations, financial management, well being and etcetera (Jennifer, 2013). Thus, this survey also offered benefits to the dynamism of family economy as the body of knowledge.

Specifically, this study attempted to help fill in the gap of prior studies and also contributed to the literature and economics concerns. This is due to the fact that a lack of study on the subject had been practiced in Malaysia on predicting self-assessed bankruptcy probability among civil servants (Shuzen, 2009). In the past, studies were concentrated in the financial wellbeing among students and not on self-assessed bankruptcy probability among civil servants although it is a critical issue in Malaysia.

Furthermore, in Malaysia, very few surveys were conducted on bankruptcy (Hilmy, Mohd, and Fahami, 2013; Elangkovan, 2012; Ahmed, et al., 2010).

There had also been a lack of studies in the West on factors leading to bankruptcy among consumers/ households and not the probability to go bankrupt. Most of the studies on bankruptcy focused on bankruptcy prediction of firms or companies. They were more concerned of the bankruptcy law and financial situation after bankruptcy. Therefore, a great base was found to conduct this study since a lack of previous studies have explored the nexus between the economic concern on future finance, attitude towards debt, financial management practice, asset ownership, financial ratio and self-assessed bankruptcy probability among civil servants in Putrajaya, Malaysia.

The primary benefit in being able to predict the self-assessed possibility of bankruptcy helped individuals avoid becoming bankrupt. Knowledge of this early warning model helped obviate the consequences or reduce the number of these failures among Malaysian civil servants especially in Putrajaya. Application of good financial management practices indirectly contributed to more positive social and economic outcome. Besides that, the handling of financial matters wisely by civil servants not only benefitted themselves, but also their families, the financial industry and the society as a whole. By doing this, it not only helped them promote a better knowledge and understanding of financial management but also enhanced the relationship between family members. In short, it enabled an individual to avoid financial pressures and mounting debts that can often cause family finances to fall apart. Individuals and families with fewer problems promote a better society.

On the other hand, this study also had a significant impact on individuals, financial educators, bankers, government and Credit Counselling and Debt Management Agency (AKPK) by identifying factors that most influence civil servants' self-assessed bankruptcy probability. They also considered the financial needs of civil servants and the importance of financial management practices in order to avoid bankruptcy in the future.

Besides that, financial institutions experienced better loan recovery and was able to cater to suitable financial products tailored to the needs of the public. In addition, they could also decide on the eligibility of applicants for financial needs based on the information from the profile of successful and unsuccessful individuals in managing their financial matters. Furthermore, findings from this study significantly helped the financial educators from both government or non-government organisations to come up and prepare their financial education programs for focus group studies in their respective ministries.

1.7. Limitations of the Study

There were several limitations that must be taken into account when considering the outcome of the study. The primary limitation of this work was the shortcoming of measurements. Considering the lack of past research on self-assessed bankruptcy probability, only limited established measurements by Jariah (2007), Davies and Lea (1995), Porter and Garman (1993), Rajna (2011), Godwin and Carroll (1986) and Titus

et al., (1989) were available. Moreover, the study of self-assessed bankruptcy probability in the Malaysian context was also insufficient. Thus, an attempt to combine, manipulate and also develop an appropriate instrument in the Malaysian context was done. For example, the attitude towards debt, financial management practices and economic concern on future finance was measured by different questions and scales.

The second limitation concerned the accuracy of the answers given by the respondents. Considering the survey involved financial matters, not many respondents were willing to share financial statuses openly. Moreover, the responses were based on the memory of respondents regarding financial matters which lead to a possibility for the respondents to be unable to fully recall financial related decisions and actions taken in the past. For example, they might not have known or been able to recall the details of their assets and debts. Also, data to assess the financial situation of the respondents was self-reported. Since financial matters especially on the estimation amount of assets and debts are regarded as sensitive aspects, honesty played a vital role. Therefore, there was a possibility for all the information to lack accuracy and was solely dependent on their memory and willingness to reveal accurate information pertaining to their financial matters when they answered the questionnaire.

The last limitation pertained to the lack of co-operation offered by certain ministries. For instance, it was rather hard to obtain approval from certain ministries, especially the Ministry of Defence and Ministry of Domestic Trade Cooperatives and Consumerism in allowing their employees' to take part in this study. Therefore, both these ministries were omitted and replaced with new ministries namely the Ministry of Finance and the Ministry of Human Resources. This is because bankruptcy and financial issues are one of the issues that they deem confidential.

1.8. Definitions of Main Terms

1.8.1. Self- Assessment and Bankruptcy Probability

Conceptual: Self-assessment is the process of looking at oneself in order to assess aspects that are important to one's identity. It is one of the motives that drive self-evaluation, along with self-verification and self-enhancement (Sedikides, 1993).

'Bankruptcy' is defined as the condition of a debtor who has been held by judicial process to be insolvent or unable to pay their debts as they fall due out of their assets (Altman, 1968).

Operational: In this study, self-assessment is the process of looking at civil servant's perception on bankruptcy probability by assessing their attitude towards debt, economic concern on future finance and financial management practices.

'Bankruptcy' was defined as the condition of someone (bankrupt) who has been formally declared as one who cannot repay their debts. According to the Malaysia Bankruptcy Act 1967, the minimum

amount of outstanding debt amount to initiate bankruptcy is RM30,000. 'Probability' was a measure or estimation of the likelihood of occurrence of a particular event. The question of self-assessed bankruptcy probability was measured in terms of perception of the respondents by using a six-point Likert scale which was converted to a binary answer format ("bankrupt" and "not bankrupt").

1.8.2. Civil Servant

Conceptual: A civil servant or public servant is a person in the public sector employed for a government department or agency. It consists of 28 schemes of service including the Federal Public Service, the State Public Services, the Joint Public Services, the Education Service, the Judiciary, the Legal Service, the Police and Armed Forces (Syed. H, 2008).

Operational: Civil servant who serves in the public sector employed for a government department or agency and holds a permanent job in the government sector in Putrajaya. Civil servants employed to work in ministries at Putrajaya were eligible respondents of this survey as it serves as the federal administrative centre of Malaysia. Selected respondents were permanent government employees between the ages of 20 to 46 years old and above.

1.8.3. Asset Ownership

Conceptual: The sum value of non-business assets. For example, livestock, the quantity of land, jewellery and so on. It too consists of asset ownership, such as house, shares and more (Landiyanto, 2010). The differences between consumer durable goods and financial assets are that durable goods are not liquid while the financial asset (referring to liquid asset) can be converted into money quickly and with little loss of value.

Operational: Asset ownership in this study was defined as the quantity of resources that they can use to design the future, can be employed to smooth out irregularities in income sources and can provide the owner with a sense of personal security. For instance, number of homeownership, types of homeownership, number of vehicle ownership, and type of vehicle (local/national brand vehicles and imported vehicles).

1.8.4. Economic Concern on Future Finance

Conceptual: The term 'economic' referred to study of scarcity whereby the resources were limited and how the society allocated to attain a maximum benefit. "Concern" was defined as strong involvement or giving importance on particular subject. Meanwhile "finance" referred to a micro level on how an individual handled their personal finance and understood how the financial resources could be best managed for today and in the future (Benjamin, 2005).

Operational: In this study, economic concern on future finance referred to judgment on an individual's concern on future finance, provision of financial emergency, future living, and financial activities. Additionally, it also measured how they perceived their financial / economic stability in the future and how their current credit status will affect their future by using a seven-point Likert scale.

1.8.5. Attitude towards Debt

Conceptual: Davies and Lea (1995) define attitude towards debt as a tolerance of debt. It stands for a higher stage of debt linked to greater tolerance of debt.

Operational: In this study, it was defined as a person's perceptions regarding the ability to think logically about the importance of taking debts as a state of mind, opinions and judge debt tolerance in civil servants and it was measured by using a seven-point Likert scale.

1.8.6. Financial Management Practice

Conceptual: According to Rajna (2011), financial management practices are a set of behaviours regarding planning, implementing and practicing and it involves cash, credit, investments, insurance, retirement planning, estate planning and general management practices.

Operational: Financial management practices in this study was defined as a set of behaviours carried out regarding the preparation, enforcement and valuating which consists of five main components; cash management, credit management, risk management, credit planning and general management. It was measured by using a seven-point Likert scale.

1.8.7. Personal Financial Ratio

Conceptual: According to Griffin (2008), a personal financial ratio is a relative magnitude of selected numerical values of an individual's financial statement. It helps provide a better understanding of their financial standing.

Operational: Personal financial ratios are common tools of managerial decision making and involve the comparison of various figures from the financial statements in order to gain information about an individual's financial standing. It was measured objectively by using the formula of liquidity, solvency and consumer debt ratio to predict self-assessed bankruptcy probability.

1.9. Organisation of the Thesis

The report was organised into five chapters. Firstly, Chapter 1 provided an introduction to the subject. It also discussed the statement of the problem, research questions, objectives, hypotheses and the significance of the study, conceptual and operational definition of concepts. Besides that, the limitations of the study were also discussed in this chapter.

Chapter 2 reviewed past literature and empirical work in the field of finance and bankruptcy. It provided a discussion on how previous empirical studies have dealt with the bankruptcy issue. This research reviewed the theoretical approaches to self-assessed bankruptcy probability and other variables. This chapter, started with the Theory of Reasoned Action, addressed the influence of attitude towards debt in the prediction of self-assessed bankruptcy probability. Secondly, the Theory of Conspicuous Consumption explored the factors which motivate expenditure on luxury asset and in turn how this behaviour affected the consumer as well as the economy, especially when it came to wielding their financial issues. Ultimately, the Family Resource / Systems Management Model was used as the theoretical basis of this study.

Chapter 3 drew the research methodology for the study which included the research design, measurements pertaining to the self-assessed bankruptcy probability and the selected variables used in the study, research instrument, sampling technique, data collection technique, and data analyses techniques.

Chapter 4 provided the findings of the analysis and interpretation. The beginning portion of the analysis described the characteristics of the respondents and the distribution of the survey variables. Adequate analysis was employed for each of the research objectives. In summation, the results of the hypothesis testing and discussion were also presented in this chapter.

Chapter 5 covered the conclusion based on the research objectives and the implications of the study in terms of knowledge contribution, theoretical, practitioners and policy

makers. Recommendations for practice and future research were also discussed in this chapter.

1.10. Chapter Summary

This chapter provided a brief introduction of bankruptcy issues, followed by problem statement, research questions, objectives and hypotheses of the study. Further discussions were organised according to the significance and limitations of the study. The conceptual and operation definition of main terms were also presented and discussed in the chapter.



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