PSYCHOGRAPHIC FACTORS: DOES IT INFLUENCE PERSONAL BANKRUPTCY IN MALAYSIA?

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ABSTRACT

Personal debt issues are common affair that occurs in all countries. The number of personal bankruptcy cases doubled in the United States from 200,000 cases to 450,000 cases from 1970 to 1980 (White, 1987). In Malaysia, personal bankruptcy filing has been increasing at an alarming rate where Bank Negara Malaysia (BNM) has announced that there are 251,209 cases as of September 2013 (The Star, 2013) and the record exhibits that bankruptcy cases are becoming more prevalent among younger generation as compared to past years' records. The increase in personal bankruptcy cases has been attributed to corrosion in the credit evaluation process and this directed the banks to be more cautious and has tightened their lending process in loan approval. Hence, the aim of this research is to examine the psychographic factors towards personal bankruptcy in Malaysia. Evidently, the financial numeracy and financial management outcome has significantly influenced personal bankruptcy in Malaysia.

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Keywords: financial numeracy, self-control, learned helplessness, self-regulatory, materialism, risk aversion, deal proneness and self-efficacy.

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INTRODUCTION

In Malaysia, the personal bankruptcy has become a major concern to Bank Negara Malaysia (BNM) due to the increase growth of rate from year to year. Consequently, in order to curb this problem, two agencies namely the Department of Insolvency (MdI); a government agency to facilitate and monitor insolvency and bankruptcy matters in Malaysia and also the Agensi Kauseling dan Pengurusan Kredit (AKPK), set up by Bank Negara Malaysia in April, 2006 are given the responsibility to assist individuals who face difficulties in dealing with the financial and bankruptcy-related matters. Between the two agencies, AKPK plays a major role in providing financial education programme so as to increase financial literacy among these individuals.

The rise of personal bankruptcy cases is likewise equivalent to an increase in non-performing loan amount. The losses from these non-performing loans by the creditors are discharged as part of personal bankruptcy filings. As a result, the lenders raised financial charges and restriction of lending process due to high lending risks which need to be absorbed by them. Kilborn (2005) and Calder (1999) indicated the impact of credit restriction can cause the situation of where “people who had money could easily borrow more, while people without money found it difficult to borrow at all”. Thus, the wealthy people stay to become richer and poor will become poorer. This results to the lesser probability on the opportunities in financing, to accrue their future wealth by increasing fixed assets and other type of lucrative investments.

Personal bankruptcy is primarily ascribable to the inability of an individual in managing his “money matters”. Normally, those who lack financial literacy are those who have low or zero savings also high borrowings. Elliehausen, Lundquist and Staten (2007) address that individual who lack of financial education is more likely to have less financial numeracy and this relates to having poor financial management outcome. Besides, Remund (2010), Huhmann and McQuitty (2009) and White (2007) have highlighted that individual psychographic factors influence their financial management outcome. For instance, an individual with low self-control experiences difficulties in holding his/her savings proportion of impulsive purchases, and those with
low self-efficacy uncover difficulties in justifying their financial abilities in repaying their debts. In addition, the unrealistic personal financial targets, using high risk methods of investment to achieve ‘expected’ return in a short period of time has also led to low or no savings at all. This situation can worsen at times of emergency in the vein of personal accident, or even during retirement. Therefore, individual psychographic factors such as poor financial management and low savings habit can cause individuals to experience personal financial stress. In essence, the objective of this study is to examine the moderating effects of psychographic factors on the association between financial numeracy and financial management outcome.

**Literature Review**

According to Lusardi and Mitchell (2009b) research finding, personal financial literacy is an inference to the individual financial capabilities to manage their retirement planning and financial decisions. However, Yoong, See, and Baronovich (2012) argue that personal financial capabilities in achieving the financial management outcome are subject to financial psychographics assessment in financial decision making. The details discussion of financial psychographics influence on financial management outcome is shown below.

O’Donoghue and Rabin (2000) highlighted that everyone has self-control problems such as individuals tend to behave in one manner but end up behaving in another manner. This is because individuals are likely to pursue immediate gratification with ignorance in the long run leisure. In relation to Richins (1994) comment, those with high materialism are more likely to pursue with the purchase of material goods although they may not need those goods. Similar argument is derived from Fitzmaurice (2008) which points out that individual with high level of materialism has less motivation to control individual’s spending but may lead to increase in the desire of impulsive purchase. Thus, individual with lack of self-control and high in materialism can cause themselves to fall into impulsive purchase and end up with poor financial management outcome. On the other hand, a study from Baumeister (2002) indicated that individual with impulsive purchase on material items are classified as no self-regulatory because their actions are unplanned or spontaneous impulse without carefully considering whether the purchase items match with their long term financial objectives such as amount of savings for retirement budget.

In addition financial psychographics also have influence on individual financial savings and borrowings. Murphy (2013) commented that those individuals found to have low learned helplessness is difficult to improve their future financial position and the situation turn worse if they are also found to be in numerate category. Additionally, Huhmann and McQuitty (2009) claimed that consumers who exhibit deal proneness would easily make deal on the advertising offers without understanding the terms and conditions. As a result, these consumers can easily make wrong financial decisions. On the other hand, Jacobs-Lawson and Hershey (2005) indicated individual with high level of financial risk tolerance are more aggressive in savings profiles and they have better understanding of retirement saving practices as compared to those risk averse individuals. Last but not least, individual level of self-efficacy influences one’s savings and borrowings level through their financial goal setting. Huhmann and McQuitty (2009) pointed that individual with high self-efficacy are more confident in their financial decision-making as compared to those with low self-efficacy. Thus, those numerate individual with low self-efficacy tends to trust or rely on third party’s advice (such as friend, investment website, blogs or unethical financial service providers) because of their lack of confidence in handling their financial matters.

The adapted Huhmann and McQuitty’s (2009) model in this study examines the financial psychographics which moderates between financial numeracy and financial management outcome. Therefore, based on the above discussion, the seven (7) hypotheses for this study are explicated in Figure 1.
Figure 1: Hypotheses Testing

H1: Self-control significantly moderates the financial numeracy and financial management outcome.
H2: Materialism significantly moderates the financial numeracy and financial management outcome.
H3: Regulatory significantly moderates the financial numeracy and financial management outcome.
H4: Learned helplessness significantly moderates the financial numeracy and financial management outcome.
H5: Risk aversion significantly moderates the financial numeracy and financial management outcome.
H6: Deal proneness significantly moderates the financial numeracy and financial management outcome.
H7: Self-efficacy significantly moderates the financial numeracy and financial management outcome.

Methodology

The data were collected by using simple random sampling from the Agensi Kauseling dan Pengurusan Kredit (AKPK) and Department of Insolvency (MdI). A total of seven hundred and twenty (720) questionnaires were distributed to the respondents who visited the departments. However, only three hundred (300) questionnaires (41.7%) response rate were found to be valid and were used for data analysis.

Data Analysis

Based on the three hundred respondents, 69% are male and 31% female. The demographic profile based on ethnic groups shows that 47% are Malays, followed by Chinese (36%), Indians (15%) and others (2%). Also, the highest age group among the respondents confirms 41% are between the ages of 25 and 35, in conjunction with the age group in this research study.

Three constructs, financial numeracy, psychographic profile and financial management outcomes are measured through five-point Likert scale starting from “strongly agree” to “strongly disagree”. Amongst the factors used Table 1 depicts the indicators of each factor and the questions design is applied from previous researchers studied.

Table 1: Measurement of Variables

<table>
<thead>
<tr>
<th>Label</th>
<th>Psychographic Profile</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Self-Control</td>
<td>Ein-Gar, Danit, Goldenberg and Sagiv (2008)</td>
</tr>
<tr>
<td>A2</td>
<td>Materialism</td>
<td>Faber and O’Guinn (1992)</td>
</tr>
<tr>
<td>A3</td>
<td>Regulatory Focus</td>
<td>Higgins, Friedman, Harlow, Chen Idson, Ayduk, and Taylor (2001)</td>
</tr>
<tr>
<td>A4</td>
<td>Learned Helpfulness</td>
<td>Peterson, Christopher, Semmel, Baeyer, Abramson, Metalsky and Seligman (1982)</td>
</tr>
<tr>
<td>A5</td>
<td>Risk Aversion</td>
<td>Danes, Sharon, Catherine Huddleston-Casas, and Laurie Boyce (1999)</td>
</tr>
<tr>
<td>A6</td>
<td>Deal Proneness</td>
<td>Wirtz and Chew (2002)</td>
</tr>
<tr>
<td>A7</td>
<td>Self-Efficacy</td>
<td>Danes, Sharon, Huddleston-Casas and Boyce (1999)</td>
</tr>
<tr>
<td>C1</td>
<td>Borrowing</td>
<td>Chen and Volpe (1998)</td>
</tr>
<tr>
<td>C2</td>
<td>Saving*</td>
<td>Furnham (1999)</td>
</tr>
</tbody>
</table>

Notes: Items were measured using a 5-point Likert scale and * denotes inverted Five-point Likert scale used.
A two-step approach by Anderson and Gerbing (1988) was deployed and 3 CFA models were derived as depicted in Table 2. The overall finding of CFA result shows that the indices were achieved at a desirable level, and it exhibits this data as fit to be proceeded to the 2nd step of SEM; structural equation modelling. Then, SEM was conducted and the result indicates a good fit as the Chi-square scored 1.772 < 3.00. Even though RMSEA (0.060) failed to achieve the required threshold value of 0.05 or below, Hu and Bentler (1999), and Li et al., (2013) highlighted that if the RMSEA scored at 0.6 or below, or ranged between 0.05 and 0.08, it could still be considered acceptable or fair fit for the structural model.

### TABLE 2. MODEL FIT INDICES

<table>
<thead>
<tr>
<th>Fit Measures</th>
<th>Threshold</th>
<th>CFA Result</th>
<th>SEM Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square/df (cmin /df)</td>
<td>&lt; 3</td>
<td>1.546</td>
<td>1.772</td>
</tr>
<tr>
<td>p-Value</td>
<td>&lt; 0.05</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>&gt; 0.90</td>
<td>0.955</td>
<td>0.936</td>
</tr>
<tr>
<td>Root mean square error of approximation (RMSEA)</td>
<td>&lt;0.05 good</td>
<td>0.050</td>
<td>0.060</td>
</tr>
<tr>
<td>PCLOSE</td>
<td>&gt;0.90</td>
<td>0.846</td>
<td>0.924</td>
</tr>
<tr>
<td>Incremental Fit Index (IFI)</td>
<td>&gt;0.90</td>
<td>0.956</td>
<td>0.937</td>
</tr>
</tbody>
</table>

In testing the hypotheses, maximum likelihood estimates (MLE) extraction procedure conducted to examine the psychographics moderation factors and the results are shown in Table 3.

### Table 3. FINDINGS

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>P-Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>0.187</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>0.028 (95% confident level)</td>
<td>Significant</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>-0.833</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>0.646</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>0.215</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Hypothesis 6</td>
<td>0.619</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Hypothesis 7</td>
<td>0.081 (90% confident level)</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The findings found two hypotheses (H2, materialistic value and H7, self-efficacy) significantly influence financial management outcome which indicates a higher level of borrowings and low level of savings. Conversely, the remaining hypotheses (H1, self-control; H3, regulatory; H4, learned helplessness; H5, risk aversion; H6, deal proneness and H7, self-efficacy) show insufficient evidence to prove the moderating effects between the financial numeracy (exogenous) and financial management outcome (endogenous).

### FIGURE 2. MODERATION EFFECT INTERPRETATION

Figure 2 indicates individuals with low materialistic value, are more likely to avoid high borrowing when having high grade financial numeracy. The finding found a positive relationship between financial...
numeracy and financial management outcome. People with high materialistic character would probably end up with high borrowings despite an elevated degree of financial numeracy. Therefore, one could explain that those with high materialistic nature who enjoy acquiring possessions to achieve happiness would lose control with impulsive purchases. The situation would exacerbate for those with low financial numeracy, low financial planning and budgeting even with lower materialistic character. The research study in Fitzmaurice (2008) found a positive relationship between high materialistic character and high borrowings. Noordin et al., (2012) suggested that credit card facilities helped in accelerating impulsive purchases that may end up in outstanding debts. Next, figure 1 also indicates that self-efficacy moderation effect and the result found in individuals with high self-efficacy character were likely to end up with poor financial management outcome (i.e., High borrowing) by having lower levels of financial numeracy. Huhmann and McQuitty (2009) stated that those with high self-efficacy, but low in financial numeracy were likely to be overconfident and making suboptimal financial decisions which could cause a detrimental effect on the financial outcome.

**DISCUSSION AND IMPLICATION**

Grounded along the above determinations, it is clear that only two of the psychographic factors (materialistic value and self-efficacy) are the significant moderating variables between financial numeracy and financial management outcome. Thus, Remund (2010) emphasized that a financial education program can improve personal financial attitude towards their savings habits. A similar argument postulated by Hira (2012) which addressed that financial education can help to improve individual financial knowledge and also assist in shaping individuals’ financial responsible behavior.

In Malaysia, despite AKPK’s effort in providing free financial education program, the majority of attendees is found to be either facing financial stress or likely to be bankrupt. Hence, one of the research implications suggests that Bank Negara Malaysia (BNM) to work closely with AKPK and collaborate with the Ministry of Education to implement the financial planning module into all private and public universities for final year students. The module should contain the basic financial issues based on each stage of the personal financial life cycle in order to meet different requirements. It is significant to educate adults who are planning for the growth of their future wealth such as hire purchase. This is because based on AKPK’s past report; it has indicated that hire purchase was one of the categories with high default payment rate. Thus, through this financial education program, it can improve public’s financial numeracy with better familiarization on financial services and products offered in the market. Further, it can also improve the financial behavior of the public to become more alert on financial budgeting, financial capabilities and financial planning. In conclusion, the implication of these financial education programs can assist to improve a better financial management outcome which refers to high savings and low borrowings. However, all the respective parties, namely the individual, the authorities, the financial institutions and educational institutions (public and private) necessitate cooperation with each other on the successful implementation of the education program in an attempt to curb the personal bankruptcy problem in Malaysia.

The findings of the research study imply an important template for policy recommendations. The first recommendation is to incorporate the educational program on finance with the tertiary educational system for all tertiary students, regardless of their principal subjects in order to improve their financial numeracy. Through this program, those with high self-efficacy will have an opportunity to improve financial knowledge, and for those with low self-efficacy, this will provide a substantial opening to the awareness their financial efficacy level.

Second, Bank Negara will collaborate with AKPK and all the local banks in Malaysia to impose a regulation to the first-time; loan applicants, guarantors and credit card holders to attend the educational programme on finance offered by AKPK before the application could be approved to prevent higher default rate. Also, for those materialistic credit card owners with a continuous of 3 months default payment are expected to be sent to attend debt management and debt re-structuring programme.

**REFERENCES**


The Start Online. Around 60 people below 44 declared bankrupt each day, 2013, retrieved 20 January 2014 from:

