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Causality of Personal Bankruptcy in Malaysia

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Abstract

The Insolvency department (Mdi) statistical releases indicate total bankruptcy cases as at September 2013 is 251,209 bankrupt filed (The Star, 2013) and recent bankruptcy record exhibits that the declared bankrupt cases are getting younger as comparing to past years record which worries by Bank Negara. The increase in personal bankruptcy case reflects erosion in credit evaluation process and this has lead the banks to be cautious and to tighten their lending process and loan approval. The purpose of this research study is to examine the causality factors towards personal bankruptcy in Malaysia. The concept of financial numeracy has emerged recently in personal financial management to explain the antecedents and consequences of financial numeracy. The result found significant on the mediation factors on financial numeracy and financial management outcome effects towards personal bankruptcy. Hence, the mediation outcome also found support on this research proposed theoretical framework.

Keywords: Personal bankruptcy, Financial numeracy, Financial experience.

1. INTRODUCTION

Personal debts issues are common matters and happen in every country. Excessive debts have led to default payments and ended in personal bankruptcy filing. The number of personal bankruptcy cases doubles in United States from 200,000 cases to 450,000 cases from 1970 to 1980 (White, 2007). Whereas in Malaysia personal bankruptcy filings have accumulated 124,708 cases from year 2005 to 2012 (sources from AKPK), thus this increasing number of personal bankruptcy cases has attributed to erosion in credit evaluation process. In additional this issue has led the bank to be more cautious by tightening the lending process in loan approval as due to the high default debts from previous clients. Besides that, the non-performing loan also decreases in Gross Domestic Product (GDP) and cause into unemployment by limited more investments opportunities.

Hence, the personal bankruptcy filing trend makes Malaysian government become very concerned and an agency - Agensi Kauseling dan Pengurusan Kredit (AKPK) is set up in April 2006 to provide financial education and facilitate debt reschedule plan for those who are facing financial difficulties (likely to be bankrupt). In formed of financial education programme could improve clients' financial literacy and financial capacity in dealing their day to day financial matters. Thus,

accumulates financial experiences and knowledge could improve their level of financial numeracy and they are able independently solve on their own financial matters without seeking help from AKPK.

According to Huhmann and McQuitty (2009), financial numeracy (financial literacy and financial capacity) is directly related to personal bankruptcy because illiteracy individual is difficult to understand the costs and benefits offered in vary financial products which pulled them into wrong financial decision. Further they are likely to facing financial difficult because they have low in ability to solve their own financial matters. Conversely, Remund (2010) comments that those have high level of financial numeracy are found to be well managing money matters and also good handling their own financial behavior. Further, those with high level of financial numeracy are more likely to achieve their financial management outcome (more saving rate and low borrowing rate) as compare to those with low level of financial numeracy (low saving rate and high borrowing rate).

2. Literature Review

2.1. Financial Experience

Personal financial experiences with self-familiarity on financial materials are plays an important role in aiding to improve financial numeracy. Thus, it relate that individual who has financial instruments experience can enhance their level of financial literacy and also able to develop better financial skills in order to use it more efficiently in their financial capacity (Huhmann & McQuitty, 2009). This has proven by Johnson and Russo (1981) research study which found that individual with familiarity on financial products are likely to motivate them in cognitive learning of new products information and at the same time it improve in their product knowledge.

2.2. Financial Numeracy

Based on Huhmann and McQuitty (2009) financial numeracy is the combination of financial literacy and financial capacity. This is because financial literacy refers as knowledge memory-based which represents knowledge accumulated from the past experience whereas the financial capacity is learning-based which refers as internal processes of financial learning ability. It can be explained that individual with experience and learning on financial materials and later convey into knowledge and store into memory. Therefore, from the model form a dotted line to separates financial capacity and financial literacy because it is difficult to distinguish the boundaries of the distinct and named them as financial numeracy.

Financial capacity defines as individual ability to process and comprehend relevant financial information from financial products with the aid from statistical tool. Thus, Willis (2008) refers the financial capacity is self-innate cognitive capacity, where the more financial experiences and practices an individual have, the more he/she can improve financial capacity efficiency and individual ability to receive useful knowledge. Therefore, with accumulated financial knowledge results, more accurate financial literacy and better financial decision making can achieve financial management outcome, thus to understand financial products and experience could gain and improve financial capability.

2.3. Financial Management Outcome

Huhmann and McQuitty (2009) indicate that individual with high level of financial management are likely to end up with positive financial management outcome (high saving and low borrowing), conversely, individual with low level of financial management are likely to end up with negative or poor financial management outcome (high borrowing and low saving). This is because, individual with low level of financial numeracy are unfamiliar of financial knowledge and easy make to wrong financial decision making, thus more likely cause into poor financial management outcome.

2.4. Personal Bankruptcy

Bankruptcy filings are primarily caused by increased portion of individual debts towards their percentage of income (Warren,1998) and this measurement are commonly used to be a measurement by many researcher. But surprisingly, Zywicki (2005) highlighted that debt to income ratio seems illogical as due to mortgages and loan instalments are refer to long term debts but the income measurement will be the short term income. However, Brown and Taylor (2008) proved that those household with high debt ratios are probable have negative net worth and eventually end up with bankruptcy filing with short term periods.

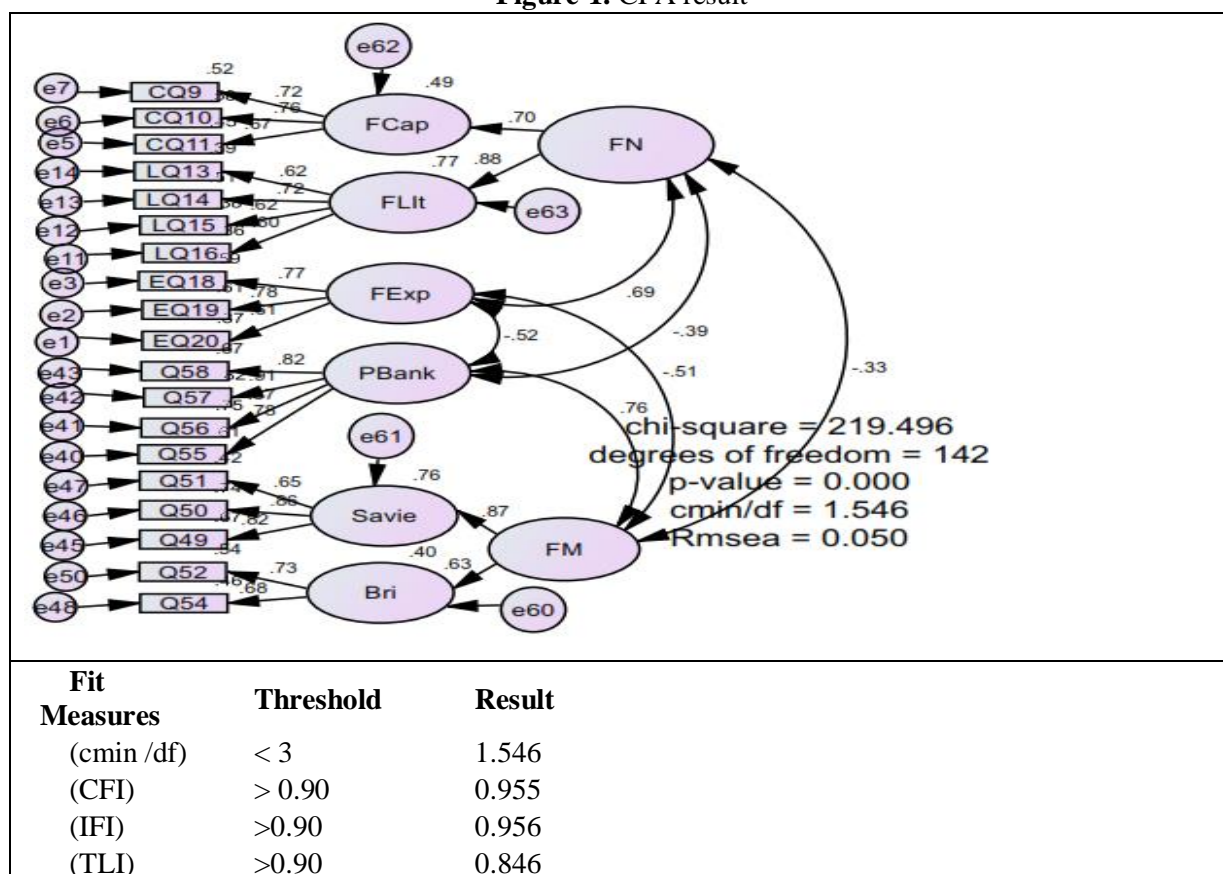
3. Sample Collection and Profile

Data collected through simple random sampling in AKPK and Mdi department. A total 720 questionnaires distributed and 393 completed samples with 93 found invalid samples to be used in data analysis. The return samples were producing about 55% response rate. Demographic profile indicates male were 69% and female were 31%. Besides, ethnic composition showed Malay (47%), Chinese (36%), Indian (15%) and others (2%). Besides, the highest age group among the others found (41%) as between 25-35 age group in this research study.

4. Analysis

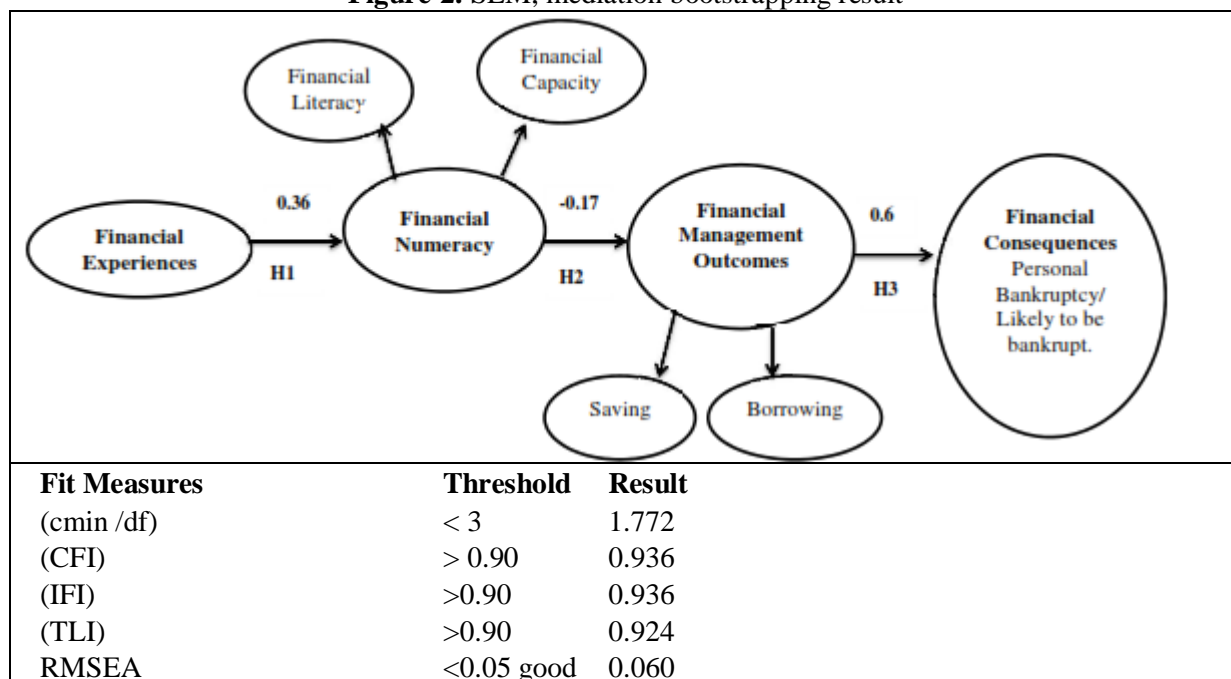
Anderson and Gerbing (1988) studies showed a two step approach to SEM. The first approach, Confirmatory Factor Analysis (CFA) indicates good model fit. The scores were showed in figure 1 and the fit devices were achieved the requirement threshold which except for TLI as the result near to meet required threshold. However, the overall result indicated good fit where RMSEA, cmin/df, CFI and p-value have achieved the desired score.

Figure-1. CFA result



The SEM being the 2nd approach was applied to do mediation test, bootstrapping method was applied for this study (Baron & Kenny, 1986). Figure 2 showed the theoretical testing model and score fit devices. The overall result indicated good model fit where most of the fit devices were achieved the requirement threshold except RMSEA scored at 0.060 which near to requirement 0.050 score. In addition to the structural relationship among the variables and standardized scores were showed in figure 2. The finding explained that financial consequences were predicted by financial experiences, financial numeracy and financial management outcome ($\beta = 0.67$). Further, in order to determine the mediation effect in between the exogenous and endogenous, bootstrapping mediation was applied to measure direct, partial and full mediation effect (Figure 3).

Figure-2. SEM, mediation bootstrapping result



5. Result and Discussion

Figure 3 indicated the hypotheses testing result for direct and indirect effect outcome. Total 3 hypotheses testing finding found significantly influences between the exogenous and endogenous where the p-value score in direct effect indicate H1 ($p = 0.002$), H2 ($p = 0.001$) and H3 ($p = 0.001$). A part from this the outcome also found there is mediation effect for H2 and H3 because the indirect effect for path A and path B found to be significant. In addition, H2 hypothesis indicated partial mediation where the indirect effect (scored for direct path was 0.002, significant), while for the H3 hypothesis indicated full mediation where the indirect effect (scored for direct path was 0.975, insignificant) and further the indirect path for both path A and path B were found significant.

Figure-3. Hypotheses result

Mediation Effect	SEM Mediation - Bootstrap Finding				Result
	Direct Effect	Indirect Effect	Path A	Path B	
H1: Financial Experience significantly influences individual level of financial numeracy	0.002				Direct
H2: Financial numeracy significantly mediates financial experience and financial management outcome.	0.001	0.002	***	0.017	Partially Mediated
H3: Financial management outcome significantly mediates financial numeracy and personal bankruptcy/ likely to be bankrupt.	0.001	0.975	***	***	Fully Mediated

6. Discussion and Implication

The main objective for this study is to determine the casual relation between the financial experiences and personal bankruptcy or likely to be bankrupt. Structural equation model used to

examine the relationship especially the mediation effect of financial numeracy and financial management outcome towards exogenous variable (financial experiences) and endogenous variable (personal bankruptcy). Same relation argument found from this research finding, Huhmann and McQuitty (2009) where individual with low level of financial experiences significantly influences their level of financial numeracy. Further, those with low level of financial numeracy caused to poor financial management outcome (high borrowing) and lastly end up to bankruptcy filing.

From the analysis it is implied that to improve individual financial numeracy could have better financial management outcome and less likely could cause into financial stress and ended to bankruptcy. Thus, financial education programme shall be recommended through different stages to cater different financial goal at different life cycle stages (Thaler, 1990); Leskinen & Raijas, 2006). In addition, Garman, Leech and Grable (1996), and Lusardi and Mitchell (2009) suggests to have a workplace financial education programme in order to improve their worker financial well-being and at the same time it helps to increase their employee productivity.

Finally, similar with other researcher, several limitations need to be considered in this research study. The sample collection had need to be within time frame which lead to have small sample size, and the limitation of the spot place have caused difficult to generalize the Malaysia's population especially samples from east Malaysia.

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