MEDIATING EFFECT OF DEBT BEHAVIOUR ON FINANCIAL STRAIN OF MALAYSIAN EMPLOYEES

Husniyah, A.R.,
Amirah Shazana, M.,
Mohd. Fazli, S.
Mohd. Amin, O.

ABSTRACT

Owning a house requires a large sum of money and most individuals will finance its purchase through loans from financial institutions. Due to this, the majority of consumer debt constitutes of home mortgage debt. As home ownership contributes to improving subjective well-being, it may reduce financial strain among homeowners. However, the way they manage their debt may also influence the outcome. The purpose of this study is to identify influential factors on financial strain and the mediating effect of debt behaviour among homeowners. Multi-stage random sampling was used to sample a total of 400 respondents in Peninsula Malaysia. Public sector workers who owned a house are selected as they fulfill the criteria of regular income due to the permanent job status. Departments in urban areas and rural areas were selected from the list of government agencies requiring 50 respondents from each department which were also randomly selected through list of names. The survey utilised a self-administered questionnaire distributed to the respondents at their workplace and 322 completed forms were returned. Hierarchical multiple regressions revealed significant factors that were debt repayment ratio, debt attitude and work-life balance on financial strain of employees. Debt behaviour was found to mediate the influence of low housing debt repayment and debt attitude on financial strain. Thus, debt behaviour was identified as an important factor that affect the influence of both factors on financial strain of employees. Those with lower housing debt repayment ratio depends on the person’s debt behaviour to predict their financial strain. With bad debt behaviour, they would experience high financial strain and vice-versa. Debt attitude was also affected by debt behaviour to predict their financial strain. As supported by the Resource Management Model, debt attitude acts as a demand which is an input that will go through a throughput leading towards an output. While those with higher housing debt repayment ratio would be directly influencing their financial strain. Hence, managing debt well should be the focus of these employees as it leads to financial strain. This may impact their job performance as it can spill-out to their workplace.

Key words: debt repayment ratio, debt attitude, work-life balance, debt behaviour, financial strain

INTRODUCTION

Asset ownership particularly homeownership discourages bankruptcy significantly where a debtor without home ownership is seven times more likely to be charged for bankruptcy as compared to an ordinary home owner (Guven & Sorensen, 2012). Concurrently, Scanlon and Adams (2008) stated that those owning a home, married or older individuals and high income earners are less potentially to file for bankruptcy. Hence, it is important to view home ownership as a factor that is likely will avoid the individual from bankruptcy. Many researchers argued that home ownership do brings benefits to an individual’s subjective well-being such as higher level of confidence, personal security and self-esteem (Guven & Sorenson, 2012; Wei & Shang-Jin, 2011). Sherraden (1991) earlier contended that owning an asset may contribute to personal security, provide a greater sense of control, well-being and increase social status.

Since owning a house requires a large sum of money, most individuals will finance the purchase of it through bank or other financial institutions’ loan. In conjunction to this, the majority of consumer debt constitutes of home mortgage debt (Hurst & Lusardi, 2004). However, this debt burden on the consumer, due to its’ benefits mentioned earlier and of the rising house value or appreciate in value, should be seen separately from loans or credit used for purchasing depreciate value things. Home loan is commonly known as mortgage-loan as the loan can be secured by the property which is the house in this case. Other loans or credit such as personal loan, hire-purchase, installment loan or credit card falls under the non-mortgage loan or debt. As home ownership contributes to improving subjective well-being, it may reduce financial strain among homeowners. Financial strain is the anxiety, pressure, or stress associated from personal or family financial difficulties. Financial strain is composed of the cognitive, emotional, and behavioral response to the experience of financial hardship. With increasing consumer debt, the prevalence of financial strain is likely to be great. Thus, the type of debt possessed by the individuals either the mortgage or the non-mortgage debts may differentiate the outcome of financial strain among them.

Negative consequences are reported across studies. It was found that economic pressure and financial strain increase conflict and hostility whilst reducing warmth and supportiveness among married couples (Story & Bradbury, 2004). In the long run, effective communicators may have better marital outcomes than their less skilled counterparts. Negative elements in couple communication changes most closely with spouses’ reports of stress arising outside the relationship, indexed with self-reports of financial strain and stressful events arising in the past nine months. Apart from that, individuals whom struggling with financial stress tend to involve in unhealthy activities such as abuse drugs and smoking more often which lead to a negative impact to their health. Other consequences reported for individuals experiencing financial distress or strain are the inability to follow recommended health maintenance practices such as eating a healthy diet and receiving periodic screening exams (O’Neill, Xiao, Sorhaindo, & Garman, 2005).
As the impact of financial strain are associated with negative events, it is critical to assess the predictors influencing it. Since home ownership contributes to improving subjective well-being, it may reduce financial strain among homeowners. However, the way they manage their debt may also influence the outcome. Hence, the purpose of this study is to identify influential factors on financial strain and the mediating effect of debt behaviour among homeowners. It focused on consumers’ having a steady income in the long run with the ability to make loan repayment according to the Permanent Income Hypothesis.

LITERATURE REVIEW

Newlywed couples in Ireland were found to experience fairly high levels of stress with an average financial strain score of 12.99 (SD = 5.24) out of a maximum of 21 and an average of 4.12 (SD = 2.79) stressful events occurring in the past 9 months was reported. Overall, the couples surveyed reported a wide range of stressors with diverse backgrounds (Hughes, & Duffy, 2005).

According to Del-Rio and Young (2005), which examined the attitudes toward unsecured debt related to household finances and other characteristics based on the British Household Panel Survey (BHPS), found that the main factors causing debt problems are the unsecured debt-income ratio, the level of mortgage income gearing, the level of financial wealth of households, their health, ethnicity and marital status. In addition to that, they also found that household with youngest age group reported to have heavy burden for debt repayment as compared with household with older age group. Other than that, a study which investigated the relationship between multiple indices of financial debt with psychological and general health has found that high financial debt relative to available assets is associated with higher perceived stress and depression, worse self-reported general health, and higher diastolic blood pressure (Sweet, Nandi, Adam, & McDade, 2013).

In addition to that, Manturuk, Riley, and Ratcliffe (2012) which have tested whether owning a home affected either the degree to which lower-income household’s experienced financial hardship or the extent to which they perceived they were financially stressed found that both renters and owners experienced similar levels of financial hardship. However, the homeowners were less psychologically stressed and reported feeling more satisfied with their financial situation. According to Schwartz (2012), the increasing individuation of risk in the economies forced people to rely more on homeownership as a substitute for social risk-sharing mechanisms. The individual efforts to replace public cash and public services with homeownership pushed home prices up to clearly unsustainable levels.

Other than that, a research by Fornero, Monticone, and Trucchi (2011) that determined the effect of financial literacy on household attitudes with respect to the most common family debts which is the house mortgage, found that the more financially literate individuals are, the more likely they are to shop around and compare mortgages for better economic conditions as compared to the less financially literate, who tend to take on mortgages from the first financial intermediary they contact. Individuals are more prepared to diversify risks by better connecting their risk exposure with different types of mortgage and they are less likely to experience delays in repayments.

Daipura and Kakar (2013) defined work-life balance as the state of achieving a balance between work and life that requires pleasant feelings with both commitments. Work-life balance is the balanced combination between various aspects of life with both the work life and the personal life compliments each other (Abendroth & Dulk, 2011). A study on Australians measured the relationships between job demands such as work-family conflict, burnout, work engagement and presenteeism (McGregor, Magee, Caputi, & Iversen, 2016). Higher job demands (work-family conflict) and lower job resources (leadership only) were found to be indirectly related to presenteeism through increased burnout. Competitiveness and globalisation lead to work life balance being considered by organisations (Ghalawat and Sukhija, 2012) while McShane and Glionov (2010) found that work life balance affected the conflicts between workplace and non-work activities of employees.

METHODOLOGY

This study is a quantitative and a cross-sectional survey with the aid of a set of questionnaire where the unit of analysis is the individual with a steady or regular income working in Malaysia. The decision to limit the target population to this type of worker will result in excluding the factor of irregularity in income as a variable. This study was conducted among public sector workers who are homeowners in urban and rural areas in Malaysia.

Multi-stage random sampling was used to sample a total of 400 respondents in Peninsula Malaysia. With a 1.4 million civil servants under the Public Services Department (Human Resource Management Information System (HRMIS) (2013), a sample size of 384 is required to reach 95% confidence level that the sample estimation is within ±5% of the true population value. The sample size was determined using the formula by Dillman, Stern, & Smyth (2007) which considers the sampling error, target population size and variation responses. In the first stage, four states were randomly selected from the states in Peninsula Malaysia with a target of 100 respondents each. At the second stage of random sampling, public sector departments situated in urban and rural areas based on a list of the departments from the public sector websites were selected. Public sector workers are selected as they fulfill the criteria of regular income due to the permanent job status. Eight departments in urban areas and eight departments in rural areas were selected from the list requiring 25 respondents from each department which are also randomly selected through list of names.

The items to measure the variables were adapted from previous studies. For financial strain, items assessed the degree of difficulty the individual has had fulfilling financial obligations. Debt attitude which is the psychological inclination conveyed when valuing debt with some degree of agreement and disagreement adapted the measurement by Norvilitis, Szablcki, & Wilson (2003). In measuring work-life balance, the Work-life and Life-work Conflict Scales developed by Netemeyer, Boles,
and McMurrin (1996) was referred to. Debt behavior measurement is adapted from Hira (2012) and it is defined as how good a household or individual manages debt.

Departments selected were contacted to ask for their cooperation. Researchers discussed with liaison officers in the selected department regarding the data collection process. The distribution of self-administered questionnaires resulted in 322 completed forms which were further used for imputing data. Data collected undergo the cleaning process and were analysed using SPSS version 25. Validation of the measurements were based on content validity and face validity; and the reliability of the measurements were assessed using Cronbach Alpha statistic. Content validity of the measurements were confirmed by using established measurements from past studies. While face validity for measurements were assessed during the pilot study. Multiple regression will be used to identify the significant influences of factors on financial strain among consumers.

RESULTS AND DISCUSSION

Assessing Model Fit
Two models were regressed with financial strain as the dependent variable. The first model included the housing debt repayment ratios of between 20 to 40 percent and more than 40 percent, debt attitude and work-life balance. The second model was introduced the mediating variable of debt behaviour. The hierarchical regression models were valid models justified by significant F-statistics based on the ANOVA tables output. The final model had a highly significant F statistic (F = 101.899; p = .000). In addition, there was no issue of multi-collinearity for the independent variables based on tolerance and VIF values that is far from the border 0.1 for tolerance and less than 10 for VIF. The fitness of the models was determined and found that the final model as displayed in Table 2 was able to explain 62.8 percent of the variation in financial strain using the coefficient analysis of determination (R square). The ability of the independent variables in the model are considered moderate in influencing financial strain.

Predictors for Financial Strain of Employees
Both housing debt to repayment ratios of 20 to 40 percent and more than 40 percent in Model 1 as shown in Table 3 displayed positive and significant results towards financial strain (b = 1.436; p =0.031; b = 2.411; p = 0.014 respectively). Among these homeowners, those that are paying a high debt load of housing loan which are more than 20 percent of their disposable incomes would be experiencing higher financial strain.

Debt attitude (b = 0.437; p = .000) and work-life balance (b = 0.325; p = .000) both influenced highly and significantly on financial strain. Those that are inclined towards debt and have high tendency towards incurring debt, they would most probably feel financially strain. The same trend was revealed by work-life balance variable. The work-life balance was measured in such a way that higher score would reflect less imbalance between work and life. With a positive influence on financial strain, this work-life balance showed that with an imbalance of work and life of the employees, this contributes to their financial strain. Debt attitude is a more influential factor on financial strain as compared to work-life balance or the housing debt repayment ratio based on the higher beta value for debt attitude. Debt attitude is reflecting their inclination towards debt for example they feel it is a good idea to have something now and pay for it later. This tendency towards having debt may contribute to their financial strain.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.393b</td>
<td>.154</td>
<td>.144</td>
<td>5.37334</td>
</tr>
<tr>
<td>2</td>
<td>.793c</td>
<td>.628</td>
<td>.622</td>
<td>3.56933</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), housing debt repayment ratio (20-40%), (more than 40%), debt attitude, work-life balance
b. Predictors: (Constant), housing debt repayment ratio (20-40%), (more than 40%), debt attitude, work-life balance, debt behaviour

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstd. Coeff.</th>
<th>Std. Error</th>
<th>Std. Coeff.</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>3.147</td>
<td>1.241</td>
<td>.122</td>
<td>2.537</td>
<td>.012</td>
</tr>
<tr>
<td>Housing Debt Repayment Ratio (20 to 40%)</td>
<td>.1436</td>
<td>.662</td>
<td>.122</td>
<td>2.169*</td>
<td>.031</td>
</tr>
<tr>
<td>Housing Debt Repayment Ratio (more than 40%)</td>
<td>2.411</td>
<td>.973</td>
<td>.140</td>
<td>2.478*</td>
<td>.014</td>
</tr>
<tr>
<td>Debt Attitude</td>
<td>.437</td>
<td>.098</td>
<td>.243</td>
<td>4.456**</td>
<td>.000</td>
</tr>
<tr>
<td>Work-life Balance</td>
<td>.325</td>
<td>.088</td>
<td>.203</td>
<td>3.689***</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.516</td>
<td>.843</td>
<td>.612</td>
<td>.541</td>
<td></td>
</tr>
<tr>
<td>Housing Debt Repayment Ratio (20 to 40%)</td>
<td>.418</td>
<td>.447</td>
<td>.035</td>
<td>.935</td>
<td>.350</td>
</tr>
<tr>
<td>Housing Debt Repayment Ratio (more than 40%)</td>
<td>1.647</td>
<td>.653</td>
<td>.096</td>
<td>2.520*</td>
<td>.012</td>
</tr>
<tr>
<td>Debt Attitude</td>
<td>.010</td>
<td>.069</td>
<td>.006</td>
<td>.143</td>
<td>.886</td>
</tr>
</tbody>
</table>
Model 2 displayed the results of significant predictors of housing debt repayment of more than 40 percent (b = 1.647; p = 0.012), work-life balance (b = 0.126; p = 0.036) and debt behaviour (b = 0.990; p = 0.000) on financial strain of homeowners among the employees. Based on beta values, debt behaviour has the highest beta value thus it is the most influential factor on financial strain as compared to the housing debt to repayment ratio or work-life balance. The activities regarding debt performed by the employees owning houses are found to be important in affecting financial strain. Such activities as measured for debt behaviour are for example they took on more debt to get nicer things, getting new credit to pay off old ones and making purchases on credit hoping that they will have the money later. All these debt behaviours contributed highly to their financial strain.

In the second model when introducing debt behaviour, the housing debt repayment ratio (20 to 40%) and debt attitude which were earlier found as significant predictors on financial strain, they became insignificant in influencing financial strain. Thus, debt behaviour was found to mediate the influence of low housing debt repayment (20 to 40%) and debt attitude on financial strain. Hence, debt behaviour was identified as an important factor that affect the influence of both factors on financial strain of employees.

With specific debt behaviour, their debt attitude and the low housing debt repayment will only be affecting financial strain through their debt behaviour. The low housing debt repayment of between 20 to 40 percent of income may have not much effect on financial strain of employees as the debt burden is considerably lower than high housing debt repayment of more than 40 percent of income. In this situation, the debt behaviour is critical in leading to financial strain. If the employees are involved in good debt behaviour, it will not result in financial strain. However, with involving in bad debt behaviour such as not paying debt on time or as scheduled, this may lead to experiencing financial strain among them.

**CONCLUSION AND IMPLICATION**

Hierarchical multiple regressions revealed significant factors that were debt repayment ratio, debt attitude and work-life balance on financial strain of employees. Debt behaviour was found to mediate the influence of low housing debt repayment and debt attitude on financial strain. Thus, debt behaviour was identified as an important factor that affect the influence of both factors on financial strain of employees. Those with lower housing debt repayment ratio depends on the person’s debt behaviour to predict their financial strain. With bad debt behaviour, they would experience high financial strain and vice-versa. Debt attitude was also affected by debt behaviour to predict their financial strain. As supported by the Resource Management Model, debt attitude acts as a demand which is an input that will go through a throughput leading towards an output. While those with higher housing debt repayment ratio, this would be directly influencing their financial strain. Hence, managing debt well should be the focus of these employees as it leads to financial strain. This may impact their job performance as it can spill-out to their work place.

Intervention programs could therefore be developed at work-place by employers as an innovative way to curb the issue of rising financial strain. This step will enhance the quality of personal and financial factors of the employees. The outcome of less financial strain will lead to a better work and life among the employees thus focusing more on their job rather than their problem on finances. Employers should show support in reducing financial strain among employees to enhance employees’ good personal qualities.

**Acknowledgement:** This study was funded through Putra Grant Scheme offered by Universiti Putra Malaysia.

**REFERENCES**


Husniyah, A.R.,
Faculty of Human Ecology,
Universiti Putra Malaysia, 43400 UPM Serdang, Selangor
Email: husniyah@upm.edu.my

Amirah Shazana, M.
Faculty of Human Ecology,
Universiti Putra Malaysia, 43400 UPM Serdang, Selangor
Email: amirahshazana90@gmail.com

Mohd. Fazli, S.
Faculty of Human Ecology,
Universiti Putra Malaysia, 43400 UPM Serdang, Selangor
Email: fazli@upm.edu.my

Mohd. Amim, O.
Faculty of Human Ecology,
Universiti Putra Malaysia, 43400 UPM Serdang, Selangor
Email: mohdamim@gmail.com