Factors Contributing to Financial Stability of Urban and Rural Families

Husniyah, A. R.[1]* and M. Fazilah, A. S.[2]
[1]Universiti Putra Malaysia, Selangor, Malaysia
[2]Universiti Malaya, Wilayah Persekutuan, Malaysia
*E-mail:husniyah@putra.upm.edu.my

ABSTRACT

Personality and behavioural aspects may shape the perception on the financial stability of families. Depending on their residential areas, factors contributing to their financial stability might differ. This study attempted to determine factors that have impacts on the financial stability of urban and rural families in Malaysia. Micro-data were obtained through questionnaire form and self-administered by the family financial manager. A ratio of 60 to 40 for the urban and rural areas was used in the quota sampling resulting in responses from 800 family financial managers in Peninsular Malaysia. Meanwhile, the results of binary logistic regression on the separate samples of urban and rural residences revealed significant factors. Financial risk tolerance, future time orientation, self-worth, household income, and cash-flow activities were significantly predictive of perceived financial stability. For urban families, financial risk tolerance, future time orientation and self-worth were less likely to predict financial stability. Household income was positively predicting financial stability of rural families. Budgeting aspect of cash-flow positively influenced financial stability of urban families and record-keeping was positively significant in predicting the financial stability of rural families. Thus, urban and rural families differ in terms of the factors which predict families' financial stability. Being informed about the factors contributing to financial well-being for the urban and rural families was found to result in better achieving the goals of financial education programme.

Keywords: Risk tolerance, time orientation, self-worth, urban, rural

INTRODUCTION

A growing national economy and an increase in real family income is being experienced by Malaysia, however, available evidence suggests that more families are suffering from problems in managing their finances. Among other, increases in non-performing loan, credit card debt, and bankruptcy among individuals in Malaysia reflected these problems. Non-performing loan for the consumer product category for finance companies increased from RM14.5 million in 2002 to RM 16.7 million in March 2003 (Bank Negara Malaysia, 2003). Consumers are living on a life style of postponing their payments of purchases of goods and services, hence leading them towards financial difficulties or serious financial problems later.

According to the statistic of Bank Negara Malaysia (2009), 13,852 individuals in Malaysia were declared bankrupt in the year 2008. This was an increase of more than two times in a period of one decade. The total of unpaid balance for credit cards also increased from RM1,924 million to RM12,329 million from 1994 to April 2005 (Bank Negara Malaysia, 2005). The scenario indicated that there might

be a mismanagement of their financial resources. With limited financial resources, it is important for families to manage their financial resources effectively.

Meanwhile, mixed results were found from several studies examining the relationship between financial management behaviour of families with the objective financial well-being and the subjective financial well-being of families. However, this study focused only on the subjective well-being of families. Their attitude and personality, apart from behavioural aspects, may also shape the perception on the financial well-being of families. Depending on their residential areas, factors contributing to the financial stability of families would differ according to their locality. This study was designed to seek answers to the following research questions:

1. Do urban and rural families experience different financial stability?

2. What are the socioeconomic characteristics and personality variables that have the likelihood of predicting financial stability of urban and rural families?

3. Which of the financial management practices dimension contribute more to financial stability of urban and rural families?

Thus, the objectives of the study were as follows:

1. To determine the difference in the financial stability between urban and rural families.

2. To ascertain the influence of the socioeconomic characteristics and personality variables in predicting financial stability of urban and rural families.

3. To identify the relative contribution of financial management practices dimension to financial stability of urban and rural families.

MEASUREMENT OF FINANCIAL STABILITY

Joo (1998), in her review of past research, noted that financial wellness or financial stability is dependent not only on the family's objective financial status but also on the subjective aspect of financial status. On the subjective measurement of financial stability, financial satisfaction was used by Hira and Mugenda (1999) in a study carried out among the residents of USA to represent their financial well-being or financial stability. As stated by Zimmerman (1995), financial satisfaction involves a state of being healthy, happy, and free from financial worry.

Satisfaction with financial stability of dairy farm families in seven aspects of financial satisfaction was studied by Scannell (1990). Those aspects were satisfaction with the present standard of living, emergency savings, past investment and savings, present financial situation, in five years, last year and next year. Meanwhile, Sumarwan and Hira (1992) focused on only one aspect of financial satisfaction concerning the preparation for financial emergencies. Financial satisfaction was used later by Hira and Mugenda (2000) involving five aspects of satisfaction, namely the satisfaction with savings level, debt level, current financial situation, ability to meet long-term goals, and preparedness to meet emergencies. Other researchers who had utilized financial satisfaction to measure financial stability were Hogarth and Anguelov (2004), Joo and Grable (2004), Kim, Garman and Sorhaindo (2003), and Xiao, Sorhaindo and Garman (2004).

FACTORS CONTRIBUTING TO FINANCIAL STABILITY

Socioeconomic Characteristics

Families' background has an impact on their financial stability. Joo and Grable (2004) reported that socioeconomic characteristics were significantly correlated with financial stability. The results from the path analysis suggested that older consumers, live longer in certain residence, has lower credit card debt, perceive a more secured retirement, and have a better family relationship were found to be associated with financial satisfaction. However, income was not found to be significantly related with financial satisfaction.

A local study on the savings behaviour by Ariffin, Wook, Ismadi, Mohd Saladin and Nor Ghani (2002), using household micro-data in the state of Malacca, revealed that consumer savings were positively related with age, disposable income and ethnicity group. In particular, the Malay respondents had mean savings that were significantly higher than that of other ethnics. Meanwhile, household size, level of education, and residential area were found to be negatively associated with the level of savings. The mean savings of households were significantly higher for the rural areas as compared to those in the urban.

Personality and Behavioural Variables

Risk-tolerance, as an attitudinal construct, was studied by Hariharan, Chapman and Domian (2000). Risk tolerant individuals preferred investing in high risk retirement investments as compared to those who were risk averse. Thus, they would more likely to remain financially independent when once they retire. Joo and Grable (2004) determined that financial risk tolerance, along with education, financial knowledge, financial solvency, financial behaviours, and financial stress level, had direct effects on financial satisfaction. As for the negative relationship of financial risk tolerance, they argued that individuals with higher levels of financial risk tolerance might have increased their financial expectations. Thus, these highly risk tolerant persons would find that their current level of living was inadequate as compared to their standard of living. That brings to a lower level of financial satisfaction among them.

A few studies have demonstrated that personality variables, such as future orientation, predicted the tendency to plan and save. For instance, Hershey and Mowen (2000) found that among individuals aged 35 to 88 years old, future time orientation was positively associated with self-reported financial preparedness for retirement. Lusardi (1999) reported that pre-retirees, with a short planning horizon or more current-oriented, had not only a lower average net worth, but they alos expected to receive less in the way of income from personal savings in retirement.

Future time orientation refers to individuals' psychological attribute regarding their perception of the future and the flow of time (Cottle, 1976; Das, 1993). It was a measure of the extent to which individuals focused on the future, rather than the present or past. Jacobs-Lawson and Hershey (2005) explored the extent to which individuals' future-time perspective influences retirement savings practices. The study on young working adults revealed that future time perspective was associated with more aggressive savings profiles.

Another personality variable, that is self-worth, was defined by Hira and Mugenda (1999) as an evaluation one makes of the self-concept descriptions and the degree to which one is satisfied. A few studies conducted in the financial management field have focused on self-worth. Among other, the studies on self-worth by Grable and Joo (2001) and Hira and Mugenda (1999) found that self-worth had significant relationships with financial belief, financial behaviour and financial satisfaction.

Financial management practices were found consistently in past research to be affecting perceived financial stability of families. For instance, Mugenda, Hira and Fanslow (1990), in assessing the causal relationship among money management practices and satisfaction with financial status, concluded that net worth, savings, monthly debt payments, and absence of financial difficulties were the main determinants of managers' satisfaction with financial status. Meanwhile, stressor events associated with high levels of credit card debt and poor financial behaviours can increase financial stress. High levels of financial stress would negatively affect perceived financial well-being and health (Weisman, 2002).

Kim, Garman, and Sorhaindo (2003) pointed out that financial stressor events and financial behaviours were significant variables in explaining financial well-being. Those who experienced more financial stressor events had lower levels of financial well-being than others. Those who practiced more positive financial

behaviours had higher levels of financial well-being than others. Sumarwan and Hira (1992), who focused on the satisfaction with the preparation for financial emergencies, found that financial well-being was affected by monthly saving, and the number of insurance types apart from the household income and managerial behaviour index. These practices involved the savings and risk practices dimensions.

A study looking at the effect of financial planning on financial satisfaction by MacEwen, Barling, Kelloway, and Higginbottom (1995) revealed that participants' own financial planning for retirement had a specific effect on their expectations for financial well-being. Similarly, parents' financial planning affected their satisfaction with finances. In determining the effect of financial management practices on subjective financial well-being, Joo and Grable (2004) found that financial knowledge, financial solvency, and financial behaviours exhibited positive direct effects on financial satisfaction. Higher levels of financial knowledge, solvency, and the practice of better financial behaviours led to higher levels of financial satisfaction. Financial behaviours thus had a positive indirect effect on financial satisfaction. The single most influential determinant of financial satisfaction was an individual's financial behaviour.

Xiao, Sorhaindo, and Garman (2004) revealed that three financial behaviours increased financial satisfaction, and these were: 1) having developed a plan for my financial future, 2) started or increased my savings, and 3) reduced some of my personal debts. They also found that two financial behaviours, namely having participated in flexible spending program and contributed to my employer's retirement plan were negatively associated with financial satisfaction. Hence, financial behaviours were significant variables in explaining financial well-being. Meanwhile, those who practiced more positive financial behaviours had higher levels of financial well-being than others. The positive significant practices covered dimensions such as financial planning, savings, and credit. Practices found to be negatively associated with subjective financial stability fall under the cash-flow and savings dimensions.

Keeping written records for farm families was the only financial management practice that was significantly related to financial well-being as found by Scannel (1990). The result indicated that record-keeping done by rural families was associated with financial stability.

In summary, this section presented results of past research that are related to the influence of socioeconomic characteristics such as age, income, household size, and ethnicity on financial stability of families. Other factors studied were personality and behavioural variables that were found to contribute significantly to financial stability of families. However, most of the past research reviewed revealed the influence of financial behaviour as a whole. However, studies focusing on the effects of the financial behaviour components, namely credit, investment, and risk management, are scarce. Hence, this study was looking at the effects of the financial behaviour components, instead of using the composite index of financial behaviour.

METHODOLOGY

Sampling and Data Collection

Self-administered questionnaire form was responded by the family financial manager of the families. A family financial manager was identified as those who were involved in the financial management of the family either the wife or the husband or both. The respondents need to be currently married with at least a child. Quota sampling was selected for the sampling since the study involved the urban and rural areas that have certain proportions and could thus increase the representativeness of the population. A ratio of 60 to 40 for the residential areas of urban and rural, respectively (Economic Planning Unit, 2006), was employed. Thus, four regions in Peninsular Malaysia that comprised of the northern, central, eastern, and southern regions were included in the 2007 study

having the responses from 800 family financial managers. For the sampling in each region, one state was chosen, resulted in selecting four states namely Perak, Selangor, Negeri Sembilan, and Pahang.

Urban families were identified from their residential areas that were managed by municipal and city councils. Rural families were determined by their residential areas that were managed by the district council (Population and Housing Census of Malaysia, 2001). For each of the states selected, public and private sector offices were identified from the telephone directory. The government departments and private companies identified were sent letters requesting for the permission to collect data at their premises. The permissions sought through letters handed personally to the officer in charge were followed by phone calls. The departments and companies in each state were targeted a total of 200 respondents with a break-down of 60 to 40 representing the urban and rural residential areas. The questionnaire forms were sent to officers in charge in distributing the self-administered forms to the respondents.

Measurement of the Variables

The financial stability of the families as the dependent variable was measured by subjective financial well-being, namely the Malaysian Personal Financial Well-being (MPFW) scale, developed by Garman and Jariah in 2006 (Jariah, 2007). This scale was based the Personal Financial Well-being Scale by on Garman *et al*. (2004). The twelve questions were on attitude, behaviour, control and confidence, with a 10-point scale of measurement. The higher scale reflects a better financial stability.

The independent variables were socioeconomic characteristics, attitudinal and personality variables, and financial management practices. Information on the socioeconomic characteristics of the respondents and the families were gathered, such as the residential area, ethnicity, as well as household income, length of marriage, working experience, and home ownership. The attitudinal variable, that

was financial risk tolerance, was adopted a six-item measurement by Grable (2000).

Personality variable, i.e. the future time orientation of the respondents, was measured using the adapted Future Time Perspective Scale developed by Hershey and Mowen (2000). The construct that consisted of four items was a general measure of the personality dimension which measured the extent to which individuals enjoy and thinking about and planning for the future. Hira and Mugenda's (1999) scale was used for measuring self-worth of the financial manager. The four-item scale looked into the perception of the respondents on themselves in general.

The financial management practices were measured using the items from several authors and researchers. Several aspects of financial practices were included, and these include financial planning, cash-flow management, credit management, investment and savings, and risk management. The specific financial planning items were gathered from the financial goals described by Kapoor, Dlabay and Hughes (2001). Meanwhile, the eleven items of cash-flow management were adapted from Hilgert and Hogarth (2003), O'Neill (2002) and Xiao *et al*. (2004). Credit management used modified items from Hogarth and Anguelov (2004), and Porter and Garman (2003) that resulted in three items.

Investment and savings measurement of eight items were adapted from Hilgert and Hogarth (2003), Hogarth and Anguelov (2004) and Porter and Garman (2003). For the risk management aspect, the four items were adapted from Porter and Garman (2003). The measurement of the above constructs used a 7-point scale, ranging from 1 = "Never" to 7 = "Very often".

Analysis of Data

The data were analysed descriptively to obtain the socioeconomic background of the families. The factor analysis and reliability test were applied to the scale measurements. Cross-tabulation was carried out to determine the associations of the groups of families based

on their financial stability with regard to their residential areas.

Binary logistic regressions were applied to determine the factors contributing to the financial stability of the urban and rural families. Families having scored more than the mean of the samples (mean = 6.21) for the average score of the Malaysian Personal Financial Well-being and those who fulfilled any one of the three selected financial ratios were classified as financially stable. Those who scored otherwise were classified as less financially stable. This similar identification of financially well group was used by Baek and DeVaney (2004).

RESULTS AND DISCUSSION

Profile of the Respondents

The socioeconomic profiles of the total sample and the urban and rural sub-samples are presented in Table 1. Most of the urban and rural respondents aged between 30 to 40 years old, with an average of 37.3 years old. Meanwhile, the urban respondents were younger on the average as compared to rural respondents. More of the rural respondents as compared to urban respondents were found to be older than 40 years.

Slightly more than half of the respondents were males and possessed education at the secondary level. The rural male respondents slightly exceeded the urban male respondents. Most of the urban respondents achieved the tertiary level of education and the rural family financial managers obtained secondary level of education. Almost two-third of the rural respondents had secondary level of education as compared to the urban respondents of less than half. Nearly half of the urban respondents possessed tertiary education as compared to only one third of the rural respondents. Thus, most of the urban respondents achieved higher education level than rural respondents.

On the average, the rural family financial managers' working experience was slightly higher than the urban family financial managers. More of the rural financial managers have been

working for over ten years as compared to the urban financial managers. Only one-third of the urban respondents exceeded the ten years working experience as compared to half of the rural respondents. As for their marriage, on the average, the rural families have been married for a longer duration of time as compared to the urban families in the samples. Only one-third of the urban families have been married for more than ten years as compared to rural families that were almost half of them.

In terms of the monthly household income, almost half of the respondents were earning more than the national average household income of RM3, 965 for the urban area (Economic Planning Unit, 2006). The average household income for the sample was RM5, 705, that was higher than the average income of the Malaysian population. Almost two-third of the urban samples had an above average household income as compared to the rural samples with only one-third of the rural families. Thus, more of the urban families obtained higher than average household income as compared to rural families. All the families had a household income above the poverty line of RM687 for the urban area and RM698 for the rural area (Economic Planning Unit, 2006). Hence, none of the families in the samples were living in poverty.

The average household size of the samples was 4.6 and was representative of the population. About half of the samples were above the average household size of 4.5 (Economic Planning Unit, 2006). More than half of the rural families exceeded the average household size as compared to the urban families that were slightly less than half of the samples. Almost three quarter of the families in the samples owned at least a house. Slightly more of the urban families were homeowners as compared to the rural families.

In conclusion, the findings on the profiles of respondents revealed that more urban respondents were younger males, possessed tertiary education level, had working a experience of less than ten years, and have bee married for less than ten years. More of the respondents' families earned household income higher than RM4, 000, with

TABLE 1
Profile of the respondents

Socioeconomic characteristics		Full sample frequency (%) (n = 800)	Urban frequency (%) (n = 480)	Rural frequency (%) (n = 320)
Age (years old)	Less than 30	148 (18.5)	100 (20.8)	48 (15.0)
	30 to less than 40	343 (42.9)	218 (45.4)	125 (39.1)
	40 to less than 50	242 (30.3)	128 (26.7)	114 (35.6)
	More and equal to 50	67 (8.4)	34 (7.1)	33 (10.3)
	Mean age	37.3	36.3	38.3
Sex	Male	465 (58.1)	276 (57.5)	189 (59.1)
	Female	335 (41.9)	204 (42.5)	131 (40.9)
Educational level	Primary	29 (3.6)	8 (1.7)	31 (6.6)
	Certificate	434 (54.3)	736 (49.1)	188 (61.8)
	Diploma	144 (18.0)	94 (19.6)	50 (15.6)
	Degree/Professional	193 (24.2)	142 (29.6)	51 (16.0)
	Mean education years	16.6	19.9	13.2
Working experience (years)	0 to 5	142 (17.8)	102 (21.3)	40 (12.5)
	6 to 10	280 (35.0)	165 (34.4)	115 (35.9)
	11 to 15	149 (18.6)	84 (17.5)	65 (20.3)
	16 to 20	118 (14.8)	67 (14.0)	51 (15.9)
	More than 20	111 (13.9)	62 (12.9)	49 (15.3)
	Mean working years	12.6	12.0	13.2
Length of marriage (years)	0 to 5	261 (32.6)	172 (35.8)	89 (27.8)
	6 to 10	236 (29.5)	150 (31.3)	86 (26.9)
	11 to 15	136 (17.0)	78 (16.3)	58 (18.1)
	More than 15	167 (29.0)	80 (16.6)	87 (27.2)
	Mean years of marriage	10.6	9.6	11.5
Household income (RM)	Less than RM2,000	95 (11.9)	40 (8.3)	55 (17.2)
	RM2,000 to less than RM4,000	316 (39.5)	167 (34.8)	149 (46.6)
	RM4,000 to less than RM6,000	159 (19.9)	109 (22.7)	50 (15.6)
	RM6,000 to less than RM8,000	91 (11.4)	59 (12.3)	32 (10.0)
	More and equal to RM8,000	139 (17.4)	105 (21.9)	34 (10.6)
	Mean household income	5,705	6,297	4,816
Household size	Less than 5 persons	396 (49.5)	260 (54.2)	136 (42.5)
	More and equal to 5 persons	404 (50.5)	220 (45.8)	184 (57.5)
	Mean household size	4.6	4.2	4.8
Home ownership	Owner	571 (71.4)	347 (72.3)	224 (70.0)

lower household size and owning a house. As for the rural respondents, more of them were younger males, possessed secondary level of education, had working experience of more than ten years, but being married for less than ten years. More of them had household income lower than RM4, 000, with higher household size and had home ownership.

Construct Validity and Reliability

Financial management practices

Financial management practices construct was developed by combining selected items from the previous research (Hilgert and Hogarth, 2003; Hogarth and Anguelov, 2004; Kapoor *et al*., 2001; O'Neill, 2002; Xiao *et al*., 2004;

Porter and Garman, 2003) resulted in 36 items. The construct composed of six conceptual dimensions, including financial planning, cash-flow, credit, savings, investment, and risk. Construct validity, was determined for the financial management practices construct. Meanwhile, the factor analysis was performed to verify the conceptual dimensions of the construct and resulted in seven factors having eigenvalues greater than 1, with factor loadings between 0.423 and 0.872. The Kaiser Meyer-Olkin (KMO) analysis resulted in an adequate measure of sampling, with a high value of 0.944. The Bartlett's test was significant ($\chi^2 = 19012.0$, df = 630, p = 0.000), suggesting that the items were appropriate for the factor analysis. The result from the factor analysis on the financial management practices construct portrayed the importance of the dimensions extracted in managing financial matters. The seven factors extracted from the factor analysis for the financial management practices were financial planning, cash-flow 'record-keeping', cash-flow 'budgeting', credit, investment, and risk.

Malaysian Personal Financial Well-being

The Malaysian Personal Financial Well-being scale was applied the exploratory factor analysis and this resulted in only one clean factor structure with an eigenvalue of more than 1.0. The items for the factor extracted through the principal component analysis had high factor loadings between 0.746 and 0.888. The KMO for this construct was 0.958, indicating the sampling adequacy and items in this construct were appropriate for the factor analysis as the Bartlett's test was significant (approximate χ^2 = 8612.325, df = 66, p = 0.000). This twelve-item factor represented 68 percent of the total variance explained and all the items were retained as the corrected item-total correlations between 0.702 and 0.860.

Reliability of the constructs

The reliability test results with the Cronbach's alpha values for the constructs were high, as shown in Table 2. The alpha values for the future time orientation, financial risk tolerance and self-worth constructs were between 0.802 and 0.896. The seven dimensions of the financial

TABLE 2
Reliability coefficients for constructs

Constructs	Number of items	Cronbach's alpha
Personality		
Future time orientation	4	0.802
Financial risk tolerance	6	0.808
Self-worth	4	0.896
Financial Management Practices		
Financial planning	10	0.909
Cash-flow 'record-keeping'	4	0.813
Cash-flow 'budgeting'	7	0.917
Credit	3	0.825
Savings	4	0.817
Investment	4	0.834
Risk	4	0.841
Financial Well-being		
Malaysian personal financial well-being	12	0.956

TABLE 3
Malaysian personal financial well-being

Malaysian personal financial well-being	Full sample	Urban	Rural
	Frequency (%) N = 800	Frequency (%) N = 480	Frequency (%) N = 320
1 to 4 (lowest to poor)	160 (20.0)	81 (16.9)	79 (24.7)
5 to 10 (average to highest)	640 (80.0)	399 (83.1)	241 (75.3)

management practices extracted from the factor analysis showed high Cronbach's alpha values between 0.813 and 0.917. The Malaysian Personal Financial Well-being also had high alpha value of 0.956. Thus, high reliability was displayed by each of the constructs including the financial management practices dimensions.

Financial stability of urban and rural families

Table 3 displays the Malaysian Personal Financial Well-being for the sample and also for the urban and rural families. Most of the urban families had average to highest financial well-being state as compared to the rural families and most of the rural families had lower financial well-being state as compared to the urban families. This subjective evaluation of financial stability showed that the urban families were more financially stable as compared to the rural families.

Factors contributing to financial stability

Table 4 gives the results from the binary logistic regression with selected socioeconomic characteristics, financial risk tolerance, future time orientation, self-worth, and financial management practices as the independent variables in determining their contribution to financial stability. The model for the urban families was found to be fit (Omnibus test, Chi-square = 141.903; sig. = 0.000; Nagelkerke R^2 = 0.342; classification = 69.8%), and this was similar for the model for the rural families (Omnibus test, Chi-square = 116.754; sig. = 0.000; Nagelkerke R^2 = 0.408; classification

= 74.7%). Meanwhile, the variances in the financial well-being of the urban and rural families were 34.2 percent and 40.8 percent, as explained by the factors in the respective models.

For the urban residence, none of the socio-economic characteristics was found to be significantly predicting financial stability of family. For the rural residence, however, significant effect was found for the household income. Families earning high household income were four times more likely to perceive themselves as financially stable as compared to those with low household income. Hence, after controlling for psychological variables and financial management practices, only one socioeconomic characteristic namely household income was found to be significant predictor of rural families' financial stability. This is in contrast with the result found in a study by Joo and Grable (2004).

The cost of living for the urban families was apparently higher than the rural families, thus earning high income by the urban families might not result in good financial well-being as compared to the rural families. This scenario explains the difference in the likelihood of predicting financial stability by the household income of the families.

Among the psychological constructs, financial risk tolerance, future time orientation, and self-worth of family financial manager emerged as significant predictors for financial stability of urban families. However, these variables were negatively predicting financial stability. The results for the financial risk tolerance are consistent with the findings by Joo and Grable (2004). However, for future time orientation and self-worth, the results

TABLE 4
Binary logistic regression for financial stability

Constructs	Urban			Rural		
	B (S. E.)	Wald (Sig.)	Odd Ratio	B (S. E.)	Wald (Sig.)	Odd Ratio
Ethnicity		3.622 (0.164)			1.056 (0.590)	
Ethnicity (Chinese)	0.366 (0.285)	1.665 (0.198)	1.442	0.146 (0.344)	0.180 (0.672)	1.157
Ethnicity (Indian)	-0.410 (0.375)	1.199 (0.274)	0.664	-0.409 (0.511)	0.641 (0.423)	0.664
Respondent's education level	0.044 (0.050)	0.774 (0.379)	1.045	0.000 (0.068))	0.000 (0.995)	1.000
Respondent's working experience	-0.012 (0.026)	0.221 (0.638)	0.988	-0.003 (0.032)	0.008 (0.930)	0.997
Household income	0.644 (0.473)	1.850 (0.174)	1.904	1.436 (0.650)	4.884* (0.027)	4.202
Home ownership	0.070 (0.256)	0.075 (0.785)	1.072	-0.267 (0.329)	0.658 (0.417)	0.766
Respondent's age	0.011 (0.027)	0.171 (0.679)	1.011	-0.039 (0.033)	1.437 (0.231)	0.962
Family financial manager	0.288 (0.220)	1.722 (0.189)	1.334	0.149 (0.286)	0.269 (0.604)	1.160
Financial risk tolerance	-0.053 (0.021)	6.732** (0.009)	0.948	0.017 (0.024)	0.524 (0.469)	1.017
Future time orientation	-0.062 (0.025)	5.960* (0.015)	0.940	-0.008 (0.030)	0.073 (0.787)	0.992
Self-worth	-0.646 (0.143)	20.433** (0.000)	0.524	-0.566 (0.187)	9.160** (0.002)	0.568
Financial planning	-0.004 (0.015)	0.085 (0.771)	0.996	0.017 (0.022)	0.632 (0.427)	1.017
Cash-flow 'Record-keeping'	0.027 (0.033)	0.687 (0.407)	1.028	0.103 (0.044)	5.480* (0.019)	1.108
Cash-flow 'Budgeting'	0.082 (0.023)	12.842** (0.000)	1.085	0.042 (0.032)	1.697 (0.193)	1.043
Credit	-0.033 (0.040)	0.706 (0.401)	0.967	-0.027 (0.056)	0.233 (0.629)	0.973
Savings	-0.294 (0.214)	1.895 (0.169)	0.745	0.081 (0.270)	0.091 (0.763)	1.085
Investment	0.339 (0.612)	0.307 (0.579)	1.404	1.110 (0.765)	2.102 (0.147)	3.033
Risk	0.035 (0.025)	2.023 (0.155)	1.036	0.032 (0.028)	1.281 (0.258)	1.033
Constant	-1.264 (2.305)	0.301 (0.583)	0.283	-7.366 (2.857)	6.649 (0.010)	0.001

Categorical variables: ethnicity (relative to Malay), home ownership (relative to no ownership)

contradict with the study by Jacobs-Lawson and Hershey (2005) and, Hira and Mugenda (1999), respectively.

Family financial managers with high financial risk tolerance were five percent less likely to predict financial stability than those having low financial risk tolerance, while future time orientated financial manager predicted six percent less likely to be financially stable than those current-oriented financial manager. Self-worth was also predicted in the same direction, but with higher probability, i.e. 48 percent less likely to be financially stable as compared to the families with low self-worth financial managers. Thus, with more financial risk tolerant, future-oriented, and high self-worth family financial manager, the likelihood to be financially instable is higher.

As for the rural families, only self-worth was significantly predicting financial stability. It was also negatively predicting financial stability as found for the urban families. In other words, families with high self-worth family financial manager were 43 percent less likely to predict financial stability as compared to those with low self-worth family financial managers.

Since financial risk tolerant individuals were those who were able to accept high risks in financial matters, they tended to be involved in high risk financial activities, such as investing in risky investment. Therefore, they would perceive themselves as financially instable due to the risks faced. On the contrary, future-oriented individuals tended to make long-term investments. They were faced with uncertainties of the return and safety of the principal or capital they invested. Due to these risks, they would also perceive themselves as financially instable.

As stated by Hira and Mugenda (1999), self-worth is an evaluation that one makes of the self-concept descriptions and the degree to which one is satisfied. Thus, for higher self-worth financial managers, the satisfaction degree related to self-concept was also higher. A certain level of financial stability was perceived differently by high self-worth financial manager as

compared to low self-worth financial managers. Consequently, high self-worth individual would perceive their financial stability as low whilst low self-worth individual would perceive the same situation as high.

To conclude, the significant predictors for the financial stability of the urban families were financial risk tolerance, future time orientation, and self-worth of family financial manager whilst for rural families, whereas only one significant predictor was found that was self-worth, after controlling for socioeconomic characteristics and financial management practices.

The dimensions of the financial management practices that contributed significantly to financial stability of urban families after controlling for socioeconomic characteristics, psychological variables, and other financial practices was cash-flow 'budgeting'. Engaging in this financial activity emerged as activities that would predict good financial stability for the urban families. This dimension of financial practice predicted 11 percent more likely for the urban families to be financially stable as compared to those who were not doing any budgeting. Other financial management practices such as financial planning, cash-flow 'record-keeping', savings, investment, credit practices and risk practices were not found to be significantly associated to financial stability of urban families.

As for the rural families, cash-flow 'record-keeping' was the only financial management practices that predicted the likelihood to be financially stable with 8 percent more than those who did not do record-keeping. The results are consistent with that by Scannel (1990) who carried out a study on rural families. Other financial management practices were not significantly predicting the financial stability of the families.

In comparison, only cash-flow practices, such as budgeting, had the tendency to predict financial stability of the urban families, while cash-flow 'record-keeping' could predict the financial stability of the rural families.

These results suggest that after controlling the socioeconomic characteristics and psychological variables, financially stable urban families did budgeting while the rural families, on the other hand, did record-keeping.

Thus, the findings from the binary logistic regression revealed factors contributing to the financial stability of the urban and rural families. Such significant factors were household income, financial risk tolerance, future time orientation, and self-worth of the family financial manager, and cash-flow practice. In particular, household income was the significant positive factor predicting financial stability of rural families only. Financial risk tolerance and future time orientation were the significant negative factors predicting the financial stability of the urban families only.

Meanwhile, the factor contributing significantly to the financial instability of families that was found for both urban and rural families was self-worth of the family financial manager. Budgeting by the urban families contributed to their financial stability as compared to the rural families. With more complex choices of goods and services, as compared to the rural families, doing budgeting enabled them to make sufficient allocation to the goods and services needed. The rural families, on the other hand, did record-keeping regarding their financial affairs. In particular, record-keeping enabled the rural families to keep track of their income and expenses, and thus they closely followed their expenditure. This would assist in controlling the rural families' expenses. Looking across residential areas, record-keeping practice was a stronger predictor of the families' financial stability as compared to budgeting.

LIMITATIONS AND RECOMMENDATIONS

The survey was based on the self-reported responses by the family financial managers. As a result, these could result in bias responses, especially in families having both husband and wife equally taking care of the financial matters. Moreover, the measurement of the financial well-being looked at the perception of the responded family financial managers on their family's financial stability. Thus, the perception may vary between husband and wife.

Objective measure of financial stability, such as financial ratios and comparison of the results with the subjective measures should be used for any future studies on financial stability of families. Meanwhile, a comparison of perception on financial stability could also be done between the different cultures, preferably with a larger sample to determine consistency with the results obtained in this study.

CONCLUSIONS

The financial stability of families determined from subjective measure of Malaysian Personal Financial Well-being indicated that urban families had better financial situation than rural families. Based on the results from the binary logistic regression on separate samples of the urban and rural residences, several significant factors predicting financial stability of urban and rural families were revealed.

In addition, different significant factors were also obtained for the urban and rural residences. Household income of the rural families predicted their financial stability. On the contrary, financial risk tolerance, future time orientation, and self-worth of financial manager were more likely to predict the urban families' financial instability, whereas this was only financial managers' self-worth for the rural families.

Financially stable urban families were those doing budgeting whereas financially stable rural families were those who frequently involved in cash-flow activities specifically doing record-keeping. Record-keeping practice predicted the families to be more financially stable as compared to budgeting.

Being informed about the factors contributing to the financial well-being of different residential areas might help certain families to be financially stable. In particular, financial educators would benefit from the factors identified as this would assist them in developing better financial education programmes based

on the residential areas of families. The results would also enhance the financial planners' ability on how to serve their clients better. As a whole, financially stable families contributed to good well-being of the families and a better community in the long run.

REFERENCES

Ariffin, M. S., Wook, E., Ismadi, I., Mohd Saladin, A. R. and Nor Ghani, M. N. (2002). Gelagat tabungan pengguna Malaysia: Kajian kes di Negeri Melaka. *Malaysian Consumer and Family Economics*, *5*, 42 - 53.

Baek, E. and DeVaney, S. A. (2004). Assessing the baby boomers' financial wellness using financial ratios & a subjective measure. *Family and Consumer Sciences Research Journal*, *3*(4), 321-348.

Bank Negara Malaysia. (2003). *Statistics on Non-performing Loan*. Kuala Lumpur: Bank Negara Malaysia.

Bank Negara Malaysia. (2005). *Credit Card Operation in Malaysia*. Kuala Lumpur: Department of Statistic.

Bank Negara Malaysia. (2009). *Individual Bankruptcy in Malaysia*. Kuala Lumpur: Department of Statistic.

Cottle, T. J. (1976). *Perceiving Time: A Psychological Investigation with Men and Women*. New York: Wiley.

Das, T. K. (1993). Time in management and organisational studies. *Time and Society*, *2*, 267-274.

Economic Planning Unit. (2006). *Ninth Malaysian Plan 2006-2010*. Kuala Lumpur: Department of Prime Minister.

Garman, E. T., Sorhaindo, B., Kim, J., Xiao, J. J., Bailey, W. and Prawitz, A. D. (2004). The development of the beta version of the In-charge financial distress scale. *Consumer Interests Annual*, *50*, 134 -144.

Grable, J. E. (2000). Financial risk tolerance and additional factors that affect risk taking in everyday money. *Journal of Business and Psychology*, *14*(4), 625-630.

Grable, J. E. and Joo, S. (2001). A subsequent study of the relationships between self-worth and financial beliefs, behaviour, and satisfaction. *Journal of Family and Consumer Sciences*, *93*(5), 25-31.

Hariharan, G., Chapman, K. S. and Domian, D. L. (2000). Risk tolerance and asset allocation for investors nearing retirement. *Financial Services Review*, *9*, 159-170.

Hershey, D. A. and Mowen, J. C. (2000). Psychological determinants of financial preparedness for retirement. *The Gerontologist*, *40*, 687-697.

Hilgert, M. A. and Hogarth, J. M. (2003). Household financial management: The connection between knowledge and behaviour. *Federal Reserve Bulletin*, *88*, 309-322.

Hira, T. K. and Mugenda, O. M. (1999). The relationships between self-worth and financial beliefs, behavior and satisfaction. *Journal of Family & Consumer Sciences*, *91*(4), 76-83.

Hira, T. K. and Mugenda, O. (2000). Gender differences in financial perceptions, behaviours and satisfaction. *Journal of Financial Planning*, *13*(2), 86-72.

Hogarth, J. M. and Anguelov, C. E. (2004). Are families who use e-banking better financial managers? *National Endowment for Financial Education*, *19*, 1-34.

Jacobs-Lawson, J. M. and Hershey, D. A. (2005). Influence of future time perspective, financial knowledge, and financial risk tolerance on retirement saving behaviours. *Financial Services Review*, *14*, 331-344.

Jariah, M. (2007). Testing of Malaysia's financial well-being scale. Paper presented in the *Seventh Biennial Conference 2007 ACFEA*, 4 – 7 July 2007, Putrajaya.

Joo, S. (1998). Personal financial wellness and worker job productivity. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg.

Joo, S. and Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*, *25*, 25-50.

Kapoor, J. R., Dlabay, L. R. and Hughes, R. J. (2001). *Personal Finance.* Singapore: McGraw-Hill.

Kim, J., Garman, E. T. and Sorhaindo, B. (2003). Relationships among credit counseling clients' financial stability, financial behaviours, financial stressor events, and health. *Financial Counselling and Planning*, *14*(2), 75-87.

Lusardi, A. (1999). Information, expectations, and savings for retirement. In H. J. Aaron (Ed.), *Behavioural dimensions of retirement*. Washington. D.C.: Brookings Institution Press.

MacEwen, K. E., Barling, J., Kelloway, E. K. and Higginbottom, S. F. (1995). Predicting retirement anxiety: The roles of parental socialization and personal planning. *The Journal of Social Psychology*, *135*(2), 203-209.

Mugenda, O. M., Hira, T. K. and Fanslow, A. M. (1990). Assessing the causal relationship among communication, money management practices, satisfaction with financial status, and satisfaction with quality of life. *Lifestyles: Family and Economic Issues*, *11*, 343-360.

O'Neill, B. (2002). Twelve key components of financial wellness. *Journal of Family and Consumer Sciences*, *94*(4), 53-58.

Population and Housing Census of Malaysia. (2001). *Population Distribution by Local Authority Areas and Mukims.* Putrajaya: Department of Statistics Malaysia.

Porter, N. M. and Garman, E. T. (1993). Testing a conceptual model of financial well-being. *Financial Counseling and Planning*, *4*, 135-165.

Prawitz, A. D., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J. and Drentea, P. (2006). InCharge financial distress/financial well-being scale: Development, administration and score interpretation. *Financial Counselling and Planning*, *17*(1), 34-50.

Scannell, E. (1990). Dairy farm families' financial management. *Financial Counseling and Planning*, *1*, 133-146.

Sumarwan, U. and Hira, T. K. (1992). Credit, saving, and insurance practices influencing satisfaction with preparation of financial emergencies. *Family and Consumer Sciences Research Journal*, *21*, 206-227.

Weisman, R. (2002). *Personal Financial Stress, Depression & Workplace Performance: Developing Employer-Credit Union Partnerships*. Madison, WS: Filene Research Institute.

Xiao, J. J., Sorhaindo, B. and Garman, E. T. (2004). Financial behaviours of consumers in credit counseling. *Consumer Interest Annual*, *50*, 131-133.

Zimmerman, G. C. (1995). Implementing the single banking market in Europe. *Economic Review Federal Reserve Bank of San Francisco*, 35-51.