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Household Debt and Household Spending Behavior: Evidence from Malaysia

(Hutang Isi Rumah dan Tingkah Laku Perbelanjaan Isi Rumah: Bukti dari Malaysia)

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ABSTRACT

Using data collected from urban households in the Klang Valley, Malaysia, this study examined the impact of household debt on urban household consumption decisions. The findings revealed that household debt does not generally affect consumption decisions, except in the case of expenditure on vacation, which tends to be reduced for households facing high levels of debt. Furthermore, general financial wellness tends to be the main factor affecting consumption rather than debt. Households with poorer financial wellness make more frequent cuts to daily meals, fruit, utility, transportation, clothing, medical care, vacations, and leisure activities. Although the impact of debt on consumption is not extensive, it must be closely monitored to ensure that the risk is contained and that the wellbeing of households is not adversely affected.

Keywords: Household debt; spending cut; investment loan; consumption loan; Malaysia

ABSTRAK

Dengan menggunakan data yang dikumpul adalah daripada isi rumah penduduk bandar di Lembah Klang, Malaysia, kajian ini dilaksanakan untuk meneliti kesan hutang bagi isi rumah dalam membuat keputusan penggunaan isi rumah. Dapatan kajian ini menunjukkan bahawa hutang isi rumah secara amnya tidak mempengaruhi keputusan dalam penggunaan isi rumah, melainkan di dalam kes perbelanjaan percutian, di mana ianya boleh dikurangkan bagi isi rumah yang menghadapi tekanan hutang yang tinggi. Tambahan lagi, kesejahteraan kewangan secara umum adalah menjadi faktor utama yang mempengaruhi penggunaan isi rumah dan bukannya hutang. Isi rumah yang mempunyai kesejahteraan kewangan yang rendah lebih kerap membuat pemotongan kepada makanan harian, buah-buahan, utiliti, pengangkutan,baju, perubatan, percutian dan aktiviti masa lapang. Walaupun kesan hutang terhadap penggunaan adalah tidak meluas, ianya mestilah dipantau dengan teliti untuk memastikan risiko dapat dibendung dan tidak merugikan bagi kesejahteraan perbelanjaan isi rumah.

Kata kunci: hutang isi rumah; potongan perbelanjaan; pinjaman pelaburan; pinjaman penggunaan; Malaysia

INTRODUCTION

For modern economies, credit remains a crucial financial resource to assist households with their consumption expenditure. Available credit enables households to expand their purchasing ability and increase utility. However, credit obtained will rapidly turn from being a financial resource to being a financial burden in the form of debt. The increase in utility through higher current consumption may not prevail indefinitely as portions of a household's future income need to be allocated for debt repayments. The resulting build-up of indebtedness may expose households not only to the higher potential of financial risk (Chichaibelu & Waibel 2017; Iii & Pressman 2019; Son & Park 2019) but also to financial stress (Rani et al. 2017). Indebtedness may also lead to other economic implications such as a reduction of future consumption (Dynan & Edelberg 2013; Kukk 2018), higher potential of late debt repayment (Chantarat et al. 2020), and even foreclosure or bankruptcy (Athreya, et al. 2018; Calem et al. 2017; Moorman & Garasky 2008).

Among the choices faced by debtors suffering repayment stress, cutting consumption could be one coping strategy to relieve the financial burden (Dynan & Edelberg 2013; Kukk 2016). Although empirical studies have long been interested in testing the relationship between debt and consumption, the focus of the literature on the micro-level has been limited in investigating the impact of household debt on the overall level of household consumption expenditure per se (Dynan 2012; Kukk 2018; Nakajima 2020). Less attention has been given to examining the effect of household debt on the consumption of specific goods and services.

Malaysia is a country which has experienced a high pace of household debt increase over the past two decades and the household debt-to-GDP ratio has risen to a historical high in recent years[1]. Consequently, the financial situation for many Malaysian households has already reached a vulnerable level (Rani et al. 2017; Yusof et al., 2015). However, the question of how indebtedness relates to consumption decisions in the case of Malaysians has rarely been examined so far. What types of goods and services may be affected by the choices of indebted Malaysian households also requires investigation. Therefore, this study attempts to extend the literature in this area where by using Malaysian urban household data to investigate the implications of household debt on the consumption of different types of goods and services.

Compared to previous macro-level analyses of debt and consumption (Khan et al. 2016; 2017), a study using household-level data will be better able to identify responses in terms of consumption decisions for indebted households and the potential of those households for applying certain coping and adaptation approaches. Rather than investigating the impact of debt on the overall consumption levels, this study also breaks down consumption into different categories. By doing so, the impact of household debt on the consumption of specific types of goods and services might be properly analyzed. The examination of which goods and services are affected by debt is crucial to understand since it is related to household well-being. Reduction of different types of consumption may result in a reduction of well-being differently (Annink et al. 2016; Noll & Weick 2015; Wu 2019). Furthermore, this research also analyzed whether different types of household debt affects consumption decisions for urban Malaysian households. Existing research on household debt has shown that different types of loans have varying effects on wellbeing (Dynan 2012; Mian et al. 2013). In this regard, this study extends the analysis further to include the effect of debts from secured and unsecured loans separately on consumption behavior.

This paper proceeds with a literature review in the next section, followed by the methodology of this study. The measurement of overall consumption, consumption items, overall household debt, types of household debt, and other variables will be presented in the methodology. The subsequent section consists of a discussion of the empirical analysis and findings, with the conclusion being given in the last section.

THE LITERATURE ON HOUSEHOLD DEBT AND CONSUMPTION

Although households can increase their current consumption using future income through loan borrowing, during the repayment period they have to allocate part of their income to finance their debt obligations and other expenditure. When households become more financially vulnerable due to high debt obligations, other parts of expenditure may be constrained if financial resources are limited.

There are mainly two standard explanations of the relationship between household debt and consumption. The first is the life-cycle/permanent income hypothesis (LCPIH) which predicts that households tend to smooth their consumption by credit and savings when expected permanent income remains the same (Modigliani & Brumberg 1954; Friedman 1957). When households presume their future income is stable, their discretionary consumption will remain constant even though a loan was undertaken. The anticipated debt payment or unanticipated income change will not impact the consumption level as long as the permanent income is unchanged. Households will use their financial resources to buffer the shocks (Agarwal & Qian 2014; Browning & Collado 2001; Hsieh 2003; Jappelli & Pistaferri 2010; Leth-petersen 2010). Mixed results were found in testing this hypothesis. As Jappelli and Pistaferri (2010) reviewed and summarized, consumption tends to change due to unanticipated income shocks rather than as anticipated.

The second explanation examines debt and consumption from the perspective of financial vulnerability. Households with a high level of indebtedness will be led to an increase in their financial vulnerability, exposing them to more financial risks (Chichaibelu & Waibel 2017; Iii & Pressman 2019; Rani et al. 2017; Son & Park 2019). These financial risks may impact consumption in two ways. Firstly, when households face any unexpected negative shock such as job loss, an increase in interest rates, a reduction in housing prices, or recession, a drop in their income or wealth and their ability to service their debt results, which affects their discretionary consumption. They may resort to withdrawing from their savings, borrowing further from financial institutions, borrowing from friends or relatives, delaying household payments, or reducing consumption. Secondly, the hypothesis of precautionary motive states that households cut spending when faced with high leverage. Even in the absence of a negative shock, households may reduce consumption if there are uncertainties about future income. This precaution is taken to self-insure against the potential of financial constraints in the future. They may voluntarily reduce consumption to ensure that they can meet their regular long-term debt repayments.

Aside from the above theoretical arguments, the increasing level of household debt in recent decades has raised research interest in the implications of household debts. However, at the micro-level, most of these studies were in the area of psychology and related fields of studies which focused on the impact of household debt on general psychological wellbeing (Dackehag et al. 2019; Hojman et al. 2016; Turunen & Hiilamo 2014), physiological wellbeing (French & Vigne 2018; Keese & Schmitz 2014; Sweet et al.

2012), and family relationships (Cai et al. 2020; Dew & Dakin 2011; Dew 2007, 2008). Research in the area of economics mainly concentrated on delinquencies and bankruptcies (Athreya et al. 2018; Getter 2003; Gross & Souleles 2002) while the implications of household debt on consumption at the micro-level have received less attention. Studies concerning consumption are limited to investigating the response of aggregate consumption to household indebtedness, especially during and after periods of recession. For instance, Ogawa & Wan (2007) used three waves of Japanese household data to investigate the impact of the accumulation of household debt on consumption during and after the financial bubble during the 1990s. Their study found that while household debt led to a consumption increase during a bubble, it depressed consumption after the bubble had burst. Research by Dynan (2012) examined whether debt contributed to weakness in consumer expenditure between 2007 and 2009 in the U.S. She found that the highly leveraged households had larger declines in expenditure, suggesting that excessive leverage contributes to weakened consumption. Mian, et al. (2013) found similar results examining the consumption reaction after the 2006-2009 housing market collapse in the U.S. Another study by Dynan and Edelberg (2013), which used data from the Survey of Consumer Finances, investigated the relationship between leverage and household spending behavior during 2007-2009 in the U.S. and concluded that households with higher leverage tend to report cutbacks in spending.

Bunn and Rostom (2014), focused instead on the UK's experience of the 2008 recession and found that tighter credit conditions and increased concern over future debt repayment both explained large cuts in household spending. They estimated that debt had led to a reduction of about 2 percent in aggregate private consumption from 2008 to 2012. Brown et al. (2012) examined data from emerging European countries and find that households with foreign currencies dominated by mortgages, which is a riskier situation to be in, had to reduce consumption when shocked by negative income. More current research by Kukk (2016) on the relationship between household indebtedness and consumption used rich panel data of over 100,000 individuals living in Estonia and concluded that the debt burden was stronger during recessions than pre and post-recession periods. The author suggested that household indebtedness may amplify the situation of recession and increase the repayment burden of the household.

Although these studies do provide some insight into the effect of household debt on consumption, there is little analysis of the impact on specific types of items of household consumption when households face financial stress. Kukk (2018) acknowledged this concern but only investigated how debt repayment problems affect overall spending behavior in the short and long run. Naturally, when household debt suppresses consumption, a household typically makes choices as to what consumption needs be reduced. Households not only need to adjust their overall level of consumption but the debt may further force them to forego consumption of certain goods and services. For example, Kalousova and Burgard (2013) found that debtors in South-eastern Michigan U.S. tend to forego medical or dental care. This type of choice of reduction will have a much larger overall impact on a household's wellbeing compared to forgoing goods and services which are considered non-necessities. Additionally, it will be interesting to examine if unsecured debt affects household consumption differently compared to secured debt.

To the best of the authors' knowledge at the time of writing this paper, there has not been any study on Malaysia that specifically investigated the impact of household debt on consumption decisions. Research on Malaysia has generally focused on household balance sheet consumption (Murugasu et al. 2015), consumption patterns (Mien & Said 2018), expenditure patterns on food (Habib et al. 2011; Heng & Guan 2007; Ishida et al. 2003), energy consumption (Ong et al. 2012) and financial vulnerability (Yusof et al. 2015). Khan, et al. (2016) suggested that mortgage debt has an impact in terms of increasing income levels, housing prices, and population growth in the long run. However, the increasing cost of living then contributes to the rising levels of debt. The authors stated that Malaysians tend to use debt as a substitution for income to finance the rising cost of living. Norhana and Hua (2009) argued that the banking sector responds to increasing demand for loans to finance consumption, especially for housing mortgages. Nevertheless, consumption credit may not be able to sustain increases in consumption over a long period as it can only assist a household by redistributing consumption over time (Murugasu et al. 2013).

METHODOLOGY

SAMPLE DATA AND MEASUREMENTS

This paper used cross-sectional data collected from Klang Valley, the largest urban area in Malaysia, and the main economic center of the country. The area is nearly 100 percent urbanized, consisting of 1.6 million households and a population of 6.37 million in 2017. Based on the 2010 census sampling frame of the Department of Statistic Malaysia, 600 households were randomly selected. The survey on these 600 households was conducted between February to August 2017. The respondents were the head of the household or the main financial decision-maker of the household. Two sets of identical bi-lingual questionnaires were prepared using three different languages: Malay, English, and Chinese, due to the multiracial characteristics of the Malaysian society. Each respondent was interviewed or was given the survey to complete. The final sample size was 407, with a response rate of 67.8%.

To measure spending cuts for different items, nine common consumption items were considered. These items were grouped into two due to differences in the frequency of spending on the items. The first group consisted of expenditure on (i) daily meals, (ii) fruits (iii) utilities, and (iv) transportation. Respondents were asked, for example, "In the past 6 months, how many months have you cut spending on ..." for each of these items. The options for the response were "0" to "6" months. Hence, a higher number indicates a more severe cut in spending for that particular item.

The second group represented items which would incur relatively less frequent expenditure than those items in the first group. These items were (i) clothing, (ii) vacations, (iii) medical care, (iv) leisure activities, and (v) child education. Respondents were asked, "In the past 6 months, how often do you cut spending on …." for each of the items. The possible responses were: (1) Never; (2) Rarely; (3) Sometimes; (4) Often; and (5) Always. A larger number would imply a more severe spending cut for that item.

Household indebtedness is measured as a ratio of household debt to income. A variety of ways to measure indebtedness are employed in the recent literature. This study adopted debt to income ratio as a measure as it also reflects, to some extent, potential credit constraints in the future. Firstly, the survey collected the average amount of housing loan, property loan, vehicle loan, personal loan, and other loans (education loan, etc.) which the respondent and his/her spouse/partner pay in a month. Secondly, the number of housing loans and property loans for each household were summed up to generate the amount of secured loan held by each household. Then, the number of unsecured loans of the household was also generated by summing up the number of vehicle loans, personal loans, and other loans the household needed to pay. Finally, after the total of the above loans was accumulated, the debt to income ratio of each loan was calculated by dividing the household income level. The ratio of debt for all of the above loans is the variables of household debt for these analyses.

The measurement of financial wellness applied the strength of subjective measurement of financial wellness (Prawitz et al. 2006). This measurement was based on the financial situation of the households and their ability to pay their financial commitment. The first question was "How is the financial situation of your household at the moment?" Respondents had to reveal his/her expenses in comparison to their income. The answers to the question were labeled on a scale from "1" which indicates "Expenses much higher than income" to "5" for "Expenses much lower than income." If the expenses revealed by the respondents were higher than the income, a lower level of financial wellness was indicated. Similarly, if the expenses revealed were lower than the income, a higher level of financial wellness was indicated. The second question was as follows: "In the past 6 months, which of the following statements best describes how well you and your immediate family have been keeping up with your bills and other financial commitments?" The choices of response provided were labeled either as "3", which indicated "Able to pay all bills and financial commitments without any problem", "2", which indicated "Able to pay all bills and financial commitments, but it is sometimes a struggle" and "1", which indicated "Having a real financial problem and falling behind with bills or credit commitments". Based on the answers from these two questions, the financial wellness index was generated by summing up the scores for both questions. The minimum score was "2", which represented the lowest level of financial wellness and the maximum possible score was "8", which represented the highest level of financial wellness.

Demographic variables and other variables were included in the analysis as control variables. The first was *Household income*, which was the total monthly income of the household. The second was a dummy variable *Male* equals to 1 if the head or financial decision-maker of the household is a male and 0 otherwise. The third was Age which represented the age of the respondent and was measured in years. The variable *education* reflected the highest level of education completed. It is equal to 1 if the respondent had no formal education, 2 if respondent completed primary education, 3 for secondary education, 4 for attaining a diploma at college or vocational level, 5 for a bachelor's or professional degree, 6 for master's degree, and 7 for a Ph.D. Marital status was represented by the dummy variable *Married*, which equalled 1 if the respondent was married, and 0 otherwise. *Employed* was a dummy variable equal to 1 if the respondent was employed, and 0 otherwise. The last control variable was the health of the respondent, which identified specifically minor health conditions.

This study applied ordinary least squared and ordered logistic regression estimation to examine the relationship between household indebtedness and spending cuts for each item. This was due to the ordinal characteristic of the dependent variables. All of the regressions included the same control variables which were *financial wellness, gender, age, education, employment status, household income, marital status*, and *minor health conditions*. There was no change of controlling variable for all of the regressions. This was because the main test variable was between household debt variables with consumption variables.

TABLE 1. Descriptive statistics of demographics

		N (407)	%
Household position	Head	209	51.4
	Spouse/partner	142	34.9
	Others	56	13.8
Marital status	Married/Living together	330	81.1
	Separated/Divorced/ Widowed	12	2.9
	Single	65	16
Gender	Male	214	52.6
	Female	193	47.4
Age (years)	< 25	16	3.9
	25 - 34	110	27.0
	35 - 44	124	30.5
	45 - 54	111	27.3
	55+	46	11.3
Education	<=Secondary	161	39.6
	Diploma	116	28.5
	Bachelors/Professional	91	22.4
	Masters/PhD	39	9.6
Employment status	Not employed	59	14.5
	Employed	348	85.5
Income (RM)	< 1000	1	.2
	1000 - <2000	23	5.7
	2000 - <3000	61	15.0
	3000 - <4000	50	12.3
	4000 - <5000	73	17.9
	5000 - <6000	59	14.5
	6000 - <8000	40	9.8
	6000 - <12000	65	16.0
	12000+	35	8.6

TABLE 2. Summary of financial wellness

Item 1: Financial situation	N = 407	%
Expenses are much higher than income	50	12.3
Expenses are higher than income	87	21.4
Expenses are about the same as income	162	39.8
Expenses are lower than income	95	23.3
Expenses are much lower than income	13	3.2
Item 2: Ability to pay all bills and financial commitments	**N = 407**	**%**
Having real financial problems and falling behind	22	5.4
Sometimes struggling	203	49.9
Without any problems	182	44.7

DESCRIPTIVE STATISTICS

The sample given in Table 1 consists of a total of 407 respondents of which over half were heads of households. The majority of them were married or living with a partner and between the ages of 25 and 54. Slightly more than half were males and about 60 percent of the respondents had at least a diploma or degree. Over 85 percent of them were in employment and 33.2 percent were earning a monthly income of less than RM4000.

The results presented in Table 2 for financial wellness from two measurements showed a less positive situation in general. As for the financial situation, one-third of the respondents' expenses which were greater than their actual income. More worrying still were the results which showed that more than half the respondents reported having struggles or as not even being able to meet their financial commitments at all. Table 3 presents the state of spending cuts that households had to make for various items. In general, a daily meal was relatively less likely to be subjected to spending cuts. Almost half (47%) did not cut back spending on daily meals within the 6 months of the survey. For those who did, on average, the frequency of spending cuts was about 1.47 months out of the 6 months. Comparatively, spending cuts were made more for expenditure on transportation, fruit, and utilities. Over 60 percent of the households reported having to make such cuts and the frequency of cuts to spending was about 1.8 months in the past 6 months, on average.

However, consumption on items such as clothing, vacations, and leisure activities were relatively more affected. About 60 percent of the respondents reported that they sometimes or more often had to make reductions on clothing, vacations, and leisure activity expenditure. On the other hand, expenditure on child education was rarely subjected to spending cuts but on the other hand, although 31.7 percent of the households stated that they did not cut spending on medical care, another 25.6 percent indicated that they sometimes had to do so, while 14 percent often or always had to reduce this type of expenditure. This finding is of great concern since medical care is a basic necessity and reduction in spending on it may have serious implications on the health and wellbeing of those households.

RESULTS AND DISCUSSION

This study examined the effect of household debt on specific household expenditure items in the case of urban households in Malaysia. The overall results in Table 4 reveal that the household debt-to-income ratio has no significant relationship with the frequency of spending cuts on most items of consumption. Whether

TABLE 3. Household Items Spending Cuts

	Months need to cut spending								
Items	0	1	2	3	4	5	6	N	Mean
Meals	47%	15%	12%	13%	5%	3%	6%	407	1.47
Utilities	39%	12%	16%	15%	9%	3%	6%	407	1.74
Fruit	39%	12%	16%	14%	5%	5%	8%	407	1.81
Transportation	35%	15%	15%	16%	5%	5%	8%	407	1.89

	Never	Rarely	Sometimes	Often	Always	N
Clothing	12.0%	21.4%	36.9%	18.4%	11.3%	407
Medical care	31.7%	29.7%	25.6%	9.6%	3.4%	407
Vacations	13.0%	22.56%	27.0%	16.5%	20.9%	407
Leisure Activities	16.2%	25.1%	31.2%	18.9%	8.6%	407
Child Education	60.2%	20.4%	9.9%	4.3%	5.1%	372*

*: 35 respondents did not answer this question due to either not having children or not having children needing education.

under an OLS or an ordered logistic regression model, the household debt-to-income ratio did not show any significant positive relationship with spending cuts on meals, fruit, utilities, transportation, clothes, medical services, leisure activities, and child education. The only impact the household debt had on the Malaysian urban households of this study was spending on vacations. Under the OLS, the 1% increase in the household debt-to-income ratio may lead to a 0.55-unit increase in the frequency of cutting vacations. Under the ordered logistic regression, the odds ratio of cutting spending on vacation is 2.2 ($e^{0.8}$) compared to the lower frequency of a one-unit increase in the household debt ratio. Such results are not consistent with findings in the previous literature which focused on sample data of the UK and US, where a higher leveraged household tends to cut back overall spending (Bunn & Rostom 2014; Dynan & Edelberg 2013; Kukk 2017). Even though the present study analyzed the impact on specific items, the impact of household debt did not appear for most items of consumption. This different result shown in the sample data of Malaysian urban households may mainly be due to two reasons.

Firstly, unlike previous studies which used panel data, this study examined the relationship between household debt and spending cuts only using cross-sectional data. The limitation of cross-sectional data is, of course, not being able to capture dynamic changes of other factors that may influence the relationship. As Nakajima (2020) find that compared to the household with little-to-no debt, the income elasticity of consumption is significantly higher for highly-indebted households when income change is negative. Similar to most past research which used data collected during the 2008 financial crisis, the poor economic environment may amplify the impact of indebtedness due to reduction of income, credit constraint, unemployment, etc. (Bunn & Rostom 2014; Dynan & Edelberg 2013). This is also supported by Kathleen and Geng (2007) who studied U.S. data from a healthier economic period:1992 to 2005 and suggested that the higher sensitivity of consumption to a change in income is not only caused by a high debt-to-service ratio alone.

Secondly, in contrast to the previous literature, this study analyzed the relationship between household debt and consumption expenditure and included a further factor: the financial wellness of the household. When financial wellness is included in the analyses, it has a controlling effect on the impact of debt. Unlike the impact of household debt, the result in Table 4 shows that financial wellness is significantly related to most cuts in consumption. The negative relationship results from both models are quite supportive of the discussion above, in which the financial situation may be the main reason behind any spending cuts made by households. The financial vulnerability hypothesis assumes that indebtedness may have a direct impact on consumption. A highly indebted household may feel the pressure of debt payments and accordingly cope with the financial situation by cutting back consumption. However, the results of this study show that the decision of cutting back consumption is more dependent on general household financial wellness, rather than on the pressure from debt. The effects of consumption may also interact with changes in the financial situation such as changes in income expectations or credit conditions (Bunn & Rostom 2014).

Moreover, regarding the other controlled variables of this study, the results showed that age is also a determinant of spending cut behavior in the case of Malaysian urban households. Younger households tend to cut spending more frequently on utilities, transportation, and medical services compared to older households. This result can be validated from both models. It was also found that the more educated Malaysian urban households tend not to cut spending on

TABLE 4. OLS & Logistic Regression results of debt impact on spending cuts on different items

OLS	Meals	Fruit	Utility	Transportation	Clothes	Medical services	Vacations	Leisure Activities	Child Education
Debt-to-Income Ratio	0.117	0.292	0.053	-0.107	0.125	0.271	0.548*	-0.187	0.339
Financial Wellness	-0.446**	-0.429**	-0.491**	-0.580**	-0.269**	-0.393**	-0.246**	-0.286**	-0.140
Gender	-0.284	-0.335*	-0.160	-0.289	-0.134	-0.058	-0.135	0.141	0.083
Age	-0.020*	-0.013	-0.029**	-0.030**	-0.002	-0.010*	0.004	-0.006	0.004
Education	-0.043	-0.090	-0.142	0.012	-0.006	-0.118*	0.031	-0.106*	-0.147**
Employment	-0.354	-0.140	-0.007	-0.132	0.248	-0.253	-0.162	0.042	0.118
Household Income	-0.001	-0.063	0.013	0.001	-0.024	0.036	0.013	0.048	0.012
Marital Status	-0.029	0.121	0.354	0.312	0.108	-0.219	-0.362*	0.068	0.089
Minor Health Problems	-0.063	-0.023	0.126	0.142	0.094	0.097*	0.135*	0.166**	0.005
Constant	4.521	4.809	4.449	4.632	3.626	4.043	3.526	3.206	2.014
Ordered Logistic									
Debt-to-Income Ratio	0.143	0.324	-0.003	0.008	0.295	0.451	0.800*	-0.307	0.551
Financial Wellness	-0.474**	-0.461**	-0.560**	-0.597**	-0.455**	-0.682**	-0.337**	-0.464**	-0.319*
Gender	-0.204	-0.291	-0.175	-0.225	-0.186	-0.138	-0.161	0.196	0.094
Age	-0.018	-0.012	-0.032**	-0.030**	-0.003	-0.021*	0.005	-0.012	0.005
Education	-0.053	-0.072	-0.156	0.004	-0.028	-0.226**	0.019	-0.169*	-0.259**
Employment	-0.244	-0.082	0.101	0.013	0.372	-0.379	-0.230	-0.007	0.228
Household Income	-0.023	-0.075	0.023	0.005	-0.034	0.066	0.023	0.081*	0.045
Marital Status	-0.124	0.109	0.297	0.221	0.193	-0.326	-0.488	0.119	0.386
Minor Health Problems	-0.037	-0.002	0.143	0.179	0.159	0.202	0.172	0.273	0.022

** p<0.01, * p<0.05

TABLE 5. OLS & Logistic Regression results of different types of debt impact on spending cuts on different items

Models	Variables	Meals	Fruit	Utility	Transportation	Clothes	Medical services	Vacations	Leisure Activities	Child Education
OLS	Investment Loan	-0.326	0.192	0.194	0.047	-0.104	0.310	0.390	-0.211	0.283
	Financial Wellness	-0.460**	-0.439**	-0.489**	-0.573**	-0.278**	-0.399**	-0.264**	-0.282**	-0.151
Ordered Logistic	Investment Loan	-0.428	0.177	0.085	0.212	-0.090	0.405	0.577	-0.406	0.363
	Financial Wellness	-0.490**	-0.473**	-0.558**	-0.593**	-0.471**	-0.699**	-0.357**	-0.458**	-0.339*
OLS	Consumption Loan	0.866	0.656	0.035	-0.235	0.397	0.326	0.783*	-0.131	0.322
	Financial Wellness	-0.424**	-0.423**	-0.493**	-0.582**	-0.263**	-0.397**	-0.249**	-0.281**	-0.147
Ordered Logistic	Consumption Loan	0.938	0.726	0.043	-0.135	0.781	0.694	1.159*	-0.154	0.550
	Financial Wellness	-0.445**	-0.454**	-0.558**	-0.604**	-0.452**	-0.684**	-0.346**	-0.453**	-0.330*

** p<0.01, * p<0.05

medical services, leisure activities, and child education. Inconsistent results appeared for minor health problems. From the OLS, the household head who more frequently experiences minor health problems has a higher frequency of spending cuts on medical services, vacations, and leisure activities. However, such a result did not appear in the ordered logistic model.

Furthermore, the analyses of household consumption were extended to determine the effects of specific debts or loans on spending cuts to household items. For the sake of brevity, the result reported in Table 5 is a condensed version which shows only the estimated coefficients for the debt variable for the regressions on each consumption item. The coefficient estimates of the control variables (except financial wellness) are not reported but the results for these variables are similar to the ones found earlier. Investment loans, which consist of housing loans and loans for commercial properties were found to have no impact on any consumption item. As with the observation above, financial wellness is the main determinant for spending cut behavior rather than the debt itself. Although the literature consistently argued that unsecured consumption loans are more damaging than investment loans, such results are not reflected in the spending cuts described in this study. Consumption loans were only shown to affect spending cuts on vacations. The main determinant of household spending cut decisions for the majority of consumption items was financial wellness rather than the debt itself.

CONCLUSION

The rise of household debt is a phenomenon which not only exists in developed countries but is also on the rise at a fast pace in many developing countries. Malaysia is one of the countries which now typically experiences a high household debt to GDP ratio. This study has focused on the implications of household debt in Malaysia at the household level, particularly on their consumption of different items. Using data collected from Malaysian urban households and controlling for other socio-economic factors, this study found that higher levels of household debt do not lead to significant cuts in household spending. This result for household consumption expenditure is unlike the results of previous studies which generally found a negative impact of indebtedness on consumption spending from data collected during and after periods of recession. A possible reason is that the data for this study is cross-sectional. The limitation of cross-sectional data lies in its inability to capture dynamic changes caused by other factors that may influence the relationship such as economic downturns. However, the positive aspect of this cross-sectional study is its ability to examine the possible crowding-out effect at the stages of high debt to income level. As the result of this study indicate, urban Malaysian households with high levels of debt may not be too concerned about their current or future financial situation and hence may not feel that it is necessary to reduce consumption for precautionary purposes. Households may begin adjusting their consumption only when the financial situation becomes more serious.

It could be said then, in conclusion, that in the urban Malaysian context, even though items of consumption are generally not affected, households make adjustments to spending on some items. Specifically, expenditure on vacations is reduced for households facing high levels of debt. Different types of loans also have little impact on household expenditure on different consumption items; only when it comes to vacations. Compared to secured debt, households with a higher amount of unsecured debt make more frequent cuts to vacations. Lastly, the analysis also reveals that households with poorer financial wellness tend to cut their spending on most of the consumption items. Also, the household heads (or main financial decision-makers) with lower levels of education are more prone to reduce spending on child education. These findings are of concern and indicate, to a certain degree, the poor financial situation such households are in which in terms of overall wellbeing. The findings of this study suggest, then, that household debt, taken in general, does not affect consumption. However, perhaps unsurprisingly, further examination shows that households with poorer financial situations are the ones which are the most affected. More attention, therefore, should be given to these households in terms of both research, community action, and government policy, as their wellbeing is more likely to be impacted.

NOTE

[1] The household debt-to-GDP ratio in Malaysia increased sharply in 2009 and kept increasing until 2015 when it reached its highest level of 89.1% of GDP. This ratio was one of the highest household debt-to-GDP ratios in the world at that time. In recent years, due to control by the Central Bank of Malaysia, the growth of household debt in Malaysia has been slower and the household debt-to-GDP ratio has fallen to 83% in 2018.

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