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DETERMINANTS OF DEBT MANAGEMENT AMONG FRESH GRADUATES

(Penentu Pengurusan Hutang di Kalangan Lepasan Ijazah)

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ABSTRACT

Fresh graduates in Malaysia appear to be overwhelmed by money, falling into debt, and jeopardizing their financial contentment. In this study, we aim to identify the determinant of debt management among fresh graduates and the relationship between debt management and gender, ethnicity, education loan, car, saving ratio, debt to income ratio, and financial skills by using multiple regression analysis. Finding suggests that fresh graduates with good financial skills are more likely to have good debt management, and women are found to manage debt better than men, thus the need to include financial education at the university level to prepare this age group before they enter the job market.

Keywords: debt management; fresh graduate; financial skills

ABSTRAK

Graduan lepasan ijazah di Malaysia masih dibelenggu oleh wang, terjebak dengan hutang sekaligus menjejaskan kepuasan kewangan mereka. Matlamat kajian ini adalah untuk mengenalpasti penentu pengurusan hutang di kalangan graduan lepasan ijazah dan hubungan antara pengurusan hutang dengan jantina, etnik, pinjaman pendidikan, kereta, nisbah hutang kepada pendapatan dan kemahiran kewangan dengan menggunakan analisis regresi berganda. Dapatan kajian mencadangkan bahawa graduan lepasan ijazah dengan kemahiran kewangan yang lebih baik berkemungkinan mempunyai pengurusan hutang yang baik, wanita didapati mampu menguruskan hutang lebih baik dari lelaki, justeru itu, adalah satu keperluan untuk memasukkan pendidikan kewangan di peringkat universiti untuk menyediakan kumpulan umur ini sebelum mereka memasuki pasaran pekerjaan.

Kata kunci: pengurusan hutang; lepasan ijazah; kemahiran kewangan

1. Introduction

Financial management is defined as the ability to manage everyday money, the ability to withstand financial shock, being on pace to reach the objectives, and having the financial flexibility to make decisions that make life more joyful (Consumer Financial Protection Bureau, 2015). Yet, according to Lusardi and Mitchell (2011) and Athey *et al*. (2007), a lack of financial management among fresh graduates is widespread, preventing them from making sensible investments, resulting in debt and failure to survive. Indeed, according to Lusardi *et al*. (2010), financial management among today's fresh graduates will put them in a tough situation once they reach retirement age. According to previous research, people's financial management varies depending on what they value the most. Fresh graduates feel that debt management is highly essential in their period. There are also another factors that need to be considered by the fresh graduates such as an education loan and a car loan. These two are crucial for them. Many fresh graduates which just starting their jobs are likely to have amassed student debt.

Furthermore, banks and financial businesses advertise personal loans to fresh graduates (Noordin *et al.* 2012; Sundarasen *et al.* 2016) in order to help them fulfill their need. As a marketing strategy, fresh graduates are a critical target market category. Banks and financial businesses provide credit and lend goods and services to fresh graduates. Realizing the importance of understanding on financial management among these fresh graduates, several studies have been conducted to find the linkages between financial behaviors among this category of people, for example in Rajna *et al.* (2011), Murthy and Mariadas (2017), Bakar and Bakar (2020), and Latif *et al.* (2020).

From a behavioral viewpoint, Yong *et al*. (2018) examined the association between financial literacy and success in terms of attitude, behavior, and financial knowledge. In this research, young Malaysians who reside in Klang Valley were taking part. A total of 4000 people were expected to visit the malls, with 50 people from each retail complex participating in the survey. From January 1st to April 15th, 2017, 1915 usable questionnaires were given in selected shopping malls, and 47.88 percent of people answered. The importance of financial education cannot be overstated. In the present study, "financial background" and "expectation or experience with financial education programs, sessions, and opportunities" were examined. "Experience and exposure to financial education programs" had the largest factor loading. In light of this, financial literacy should be made more widely available and easily accessible. Education in finance can't be ignored even though the exposure is more important than academics. Benefits such as better financial literacy for children come from parental involvement in their children's lives and a strong sense of community. A lack of financial literacy and poor money management techniques is one of the factor directing Malaysians' poor financial decisions. Young people need to acquire a financial mentality to reap the benefits of financial education.

A study by Phillips *et al.* (2019) found among graduating residents in United State were examined using multivariable logistic regression which showed that no link between people's debt and their desire to seek employment, whether that work is offered by a medical system or not. Residents' decision to work for a hospital or a private practice not owned by a hospital was unaffected by their level of debt. For example, the PSLF program allows family doctors with a lot of debt to engage in private ownership and employment arrangements, which may put them in financial rivalry with hospital systems. The results add to the growing body of data demonstrating the rise of higher education. In many cases, student debt has a negative influence on the nation's healthcare needs by affecting the decisions students make about their future careers. Kiliyanni & Sivaraman (2018) and Dewi & Barlian (2020) also developed a predictive model and study potential risk profiles among youth that may relate to a good understanding of financial literacy.

Undergraduate students in the arts and sciences faculties were surveyed to see whether there was a significant gender gap when it came to financial literacy (Antoni *et al.* 2020). According to their finding, students of business have higher levels of financial literacy. Primary data on students' financial knowledge and comprehension was gathered using a questionnaire with no open-ended questions. The participants in this research were undergraduates from a South African university in the Eastern Cape's Faculty of Arts and Commerce. According to empirical evidence, commerce students have a better grasp of financial concepts. With an 82 percent response rate, only 180 questionnaires could be used for statistical reasons; yet, this was still a significant number. Only 180 people participated in the study. It is recommended that future research use probability sampling as a way to represent the population. Future studies must focus on students' real financial abilities rather than their perceived abilities.

Financial well-being among young workers can be gauged using a variety of variables including financial literacy, different sorts of money attitudes, and debt management, as well as sociodemographic characteristics including the gender of workers and the household income they bring to the table. Multiple regression was then utilized to examine the elements that influence financial well-being. Young people's financial well-being can be predicted by their attitude toward money. The varied financial socialization that men experience as a result of their gender has a substantial impact on their financial well-being, making them an important differentiator in financial behavior. A young worker's ability to achieve financial goals is likely to be improved if he or she has a good grasp of financial concepts. Financial stress among teenagers can be avoided if proper debt management is practiced. While being in debt is not a negative thing, it is a sensible choice for young workers who are just beginning to build up their wealth. The association between young workers' financial well-being and attitudes toward money, financial literacy, and debt management was examined using a multi-stage random sample technique. Multiple regression analysis based on Pearson's correlation coefficients.

The main objective of this study is to determine how fresh graduates in Malaysia manage their finance in debt management. Next, to find out the determinant of debt management among fresh graduates and to find the relationship between the dependent variable (debt management) and the independent variable (gender, ethnicity, education loan, car, saving ratio, debt to income ratio, and financial skills) of the study.

2. Methodology

2.1. *Scope of study*

This study uses a structured questionnaire which was adopted from the articles by Yunus *et al*. (2015). The questionnaire was distributed using remote platforms, i.e. Whatsapp Group, Telegram, and Private Message (PM), and collected using Google Drive. This research is primarily concentrated to determine how fresh graduates manage their finances in debt management. The population for this study is fresh graduates' students from the Business Mathematics program (210 students) in Universiti Utara Malaysia. Based on the calculation of sample size, 136 students were selected as the sample size.

We employ convenience sampling, also known as availability sampling, which is a form of non-probability sampling approach that collects data from people who are readily accessible to participate in the study. There are no inclusion criteria set before the individuals are chosen in convenience sampling. To achieve the objective of the study, multivariate regression analysis was performed to identify the determinants of debt management among fresh graduates. Seven independent variables were included in the model, namely gender, ethnicity, education loan, saving ratio, financial status, debt to income ratio, and financial skills.

2.2. *Data analysis instrument*

The questionnaire was divided into three parts, (i) respondents' backgrounds, (ii) financial skills, and (iii) debt management. In the first section, respondents' backgrounds together with respondents' saving and debt-to-income ratios are included. The second section includes financial skills, while the third section includes assessments for debt management. Five-point scale was used, with 1: being strongly disagree and 5: being strongly agree. Two types of statistical analysis were conducted, namely descriptive statistics and simple regression. A reliability test was used to see the validity of the statements and to find the value of the

Cronbach alpha, and descriptive analysis is used to evaluate the respondent's demographic characteristics and management and financial management skills. Further, simple regression analysis was used to find determinants of debt management among fresh graduates and to assess the extent of the relationship between the study's independent (gender, ethnicity, education loan, saving ratio, financial status, debt to income ratio, and financial skills) and dependent variables (debt management).

3. Results and Discussion

3.1. *Respondent demographic*

Table 1 displays demographic characteristics of the respondents.

Table 1: Demographic characteristics

Characteristics	Percentage	*n*
Gender		
Male	45.6	62
Female	54.4	74
Ethnicity		
Malay	60.3	82
Chinese	22.8	31
Indian	16.9	23
Others	0.0	0
How did you finance your college education?		
Education Loan	45.6	62
Scholarship	23.5	32
Parents	20.6	28
Self-financed	8.8	12
Others	1.5	2
Saving Ratio		
At least 10% savings from income	55.9	76
Less than 10% savings from income	44.1	60
Debt to Income Ratio		
Debt less than 40% of income	64.0	87
Debt more than 40% of income	36.0	49
Car Ownership		
Own a car	52.2	71
Not own a car	47.8	65

There were 136 respondents involved in this study, including 62 men (45.6%) and 74 females (54.5%), majority of them are Malays (60.3%). Most of them were getting education loans (45.6%) followed by scholarships with 32 students (23.5%). Moreover, 76 students (55.9%) were having at least 10% savings from their income and 60 students were having less than 10% of their income. For the debt to income ratio, 64% of students were having their debt less than 40% of their income and the rest of them (49 students) were having debt more than 40% of their income. Most of the students own cars.

3.2. *Reliability test*

The instrument's reliability was tested to assure the internal consistency. Results of the reliability test shows the Cronbach’s alpha values for all the scales (debt management and financial skills) are more than 0.7, indicating that they meet the reliability criteria. Table 2 shows the results of the reliability test.

Table 2: Cronbach's alpha

Variables	Items	Cronbach's Alpha
Debt Management	14	0.978
Financial Skills	6	0.749

3.3. *Descriptive analysis*

Descriptive analysis was used to summarize the demographic characteristics, debt management, and financial skills of the respondent and were analyzed by comparing the mean and standard deviation scores of each variable.

3.3.1. *Section A: Demographic analysis*

From Table 3, we can see the difference between the mean and the standard deviation values of each demographic question.

Table 3: Response on Section A

Item	Mean	Std. Deviation
Q3 [Educational Loan]	1.8971	1.0348
Q4 [Saving Ratio]	0.5588	0.4984
Q5 [Debt to Income Ratio]	0.6397	0.4819
Q6 [Car Ownership]	0.5221	0.5014

Based on the questions, car ownership has the lowest mean among all variables. It shows that 0.5221 value of mean for car ownerships. Followed by saving ratio (0.5588), debt to income ratio (0.6397) and educational loan (1.8971). However, all the questions are in range low for values of the mean. Next, the value of mode for all questions has the same value which is 1. The value of standard deviation is very important in descriptive analysis because that value is related to the mean. The highest value for standard deviation is the educational loan (1.0348). It means the data of education are more spread out. The lowest standard deviations is the value of car ownership (0.5014). Lastly, the standard deviation which is close to zero are saving ratio (0.4984), and debt to income ratio (0.4819).

3.3.2. *Section B: Debt management*

Table 4 illustrates the analysis for 14 items in the debt management section. Notice that in this section, all items produce low mean values that is below 2.7206. The highest mean for debt management is for question, Q7 "I cannot imagine myself without credit card" (2.7206), signaling that many fresh graduates do not agree with this statement, as majority of fresh graduates do not use credit cards after their graduation or while working. The next highest mean among all of the questions is "I will not change my expenditure pattern even though I have to be in debt" (2.6176), meaning that fresh graduates do not like debt.

3.3.3. *Section C: Financial skills*

Table 5 shows results in Section C for six items related to financial skills. Note that the highest mean for this section is at 4.2279, for item "determining financial needs after graduates". Two items shared a similar mean of 4.1324, which are "capable of determining the type and amount of insurance that need to be taken" and "Overseeing self or family spending". Further, items "Preparing spending plan for self or family" (4.1029), "Paying zakat" (4.0147), and lastly (4.0074) "Determining future financial needs (E.g.: education loan, house, car) also showed mean greater than 4 (*Note that 5 represents strongly agree*).

Table 4: Responses on Section B

	Item	Mean	Std. Deviation
Q7	[I cannot imagine myself without a credit card]	2.7206	1.4386
Q8	[I will not change my expenditure pattern even though I have to be in debt.]	2.6176	1.2885
Q9	[I am willing to finish my money for enhancing car accessories instead of repaying my debt/ loan.]	2.5882	1.3849
Q10	[I can have many goods by being in debt.]	2.5000	1.2881
Q11	[I have to take loans to pay costs related to car ownership such as car tax, repair cost, maintenance, and 0.]	2.6103	1.3454
Q12	[I have had problems with loan/ debt repayment in the past 12 months.]	2.5074	1.3878
Q13	[I have to borrow to pay for medical costs.]	2.5294	1.4087
Q14	[I have to take out loans for my family to spend more.]	2.3235	1.2759
Q15	[I do not mind being in debt to go on vacation.]	2.3824	1.3934
Q16	[I have to use credit cards because I have no savings.]	2.5221	1.4193
Q17	[I am willing to owe money every month as long as I can get everything I want.]	2.4779	1.3497
Q18	[I will take loans to buy car equipment.]	2.5735	1.3858
Q19	[I sell jewelry/investment stock to pay for my loans.]	2.4265	1.3201
Q20	[My monthly car installment is overdue.]	2.4485	1.3434

Table 5: Responses on Section C

Item	Mean	Std. Deviation
Q21 [Capable of determining the type and amount of insurance that need to be taken.]	4.1324	0.9174
Q22 [Preparing spending plan for self or family]	4.1029	0.7126
Q23 [Overseeing self or family spending]	4.1324	0.8056
Q24 [Determining future financial needs (E.g.: education loan, house, car)]	4.0074	0.9467
Q25 [Determining financial needs after graduates]	4.2279	0.8774
Q26 [Paying zakat]	4.0147	1.1987

3.4. *Multiple regression analysis*

Multiple regression analysis was performed to identify the determinants of debt management among fresh graduates. There were seven independent factors included in the model which are gender, ethnicity, educational finance, saving ratio, debt to income ratio, car ownership, and financial skills. To determine the determinants, we must first determine which independent variables that have a p-value less than alpha. Gender, ethnicity, educational finance and saving ratio were all not significant debt management determinants with p-values greater than alpha (0.10). With a viewpoint of p-value smaller than alpha, debt to income ratio, car ownership and financial skills were likewise significant drivers of debt management level. The details are shown below.

When it came to the strongest determinant of debt management, car ownership was determined to be the strongest determinant, with the highest beta value (14.1102). Furthermore, financial skills was shown to be a significant determinant of debt management, indicating that those with good financial skills are more likely to have good debt management, this is consistent with the findings in Khalid et al. (2021). Financial status is a crucial factor of debt management, according to Khalid et al. (2021). Debt management is preferable for those who have more assets than liabilities. In addition, the debt-to-income ratio, saving ratio, and car ownership are all important factors in debt management. Individuals with a debt-to-income ratio of less than 40% are expected to have better debt management. Those that save at least 10% of their income have a stronger debt management score, according to the saving ratio. Finally, the data reveal that those who own a car are better at controlling their debt. Aside from that, gender was discovered to be a key predictor of debt management, with women managing debt better than men.

Table 6: ANOVA for determinant of debt management

		Sum of Squares	df	Mean Square	*F*	Sig.
Gender	Between Groups	729.4277	1	729.4277	2.6117	0.1084
	Within Groups	37424.5061	134	279.2874		
	Total	38153.9338	135			
Ethnicity	Between Groups	640.1035	1	640.1035	2.2865	0.1329
	Within Groups	37513.8304	134	279.9540		
	Total	38153.9338	135			
Educational Finance	Between Groups	475.5449	1	475.5449	1.6912	0.1957
	Within Groups	37678.3889	134	281.1820		
	Total	38153.9338	135			
Saving Ratio	Between Groups	434.3294	1	434.3294	1.5430	0.2163
	Within Groups	37719.6044	134	281.4896		
	Total	38153.9338	135			
Debt to Income Ratio	Between Groups	1137.5477	1	1137.5477	4.1179	0.0444*
	Within Groups	37016.3861	134	276.2417		
	Total	38153.9338	135			
Car Ownership	Between Groups	6756.2363	1	6756.2363	28.8344	0.0000*
	Within Groups	31397.6975	134	234.3111		
	Total	38153.9338	135			
Financial Skills	Between Groups	39.5313	1	39.5313	0.1389	0.70099*
	Within Groups	38114.4025	134	284.4358		
	Total	38153.9338	135			

4. Conclusion and Recommendations

The purpose of this study was to investigate the level of debt management and its determinants among fresh graduates. The findings indicate that there are several key factors or determinants of debt management. Debt-to-income ratio, financial skills, gender, and saving ratio are the most important drivers. Overall, the findings indicated that seven independent variables which are models, namely gender, ethnicity, education loan, car ownership, saving ratio, debt to income ratio, and financial skills significantly related to debt management.

On the other hand, employers should also integrate financial facts and knowledge in their employee training. Good debt management will improve their employees' emotional and financial well-being, increasing productivity and eventually benefiting the employers. In addition, universities may explore incorporating personal finance topics into existing courses, such as financial education or entrepreneurship themes. It is also advised that this study be expanded and carried out on university and college students so that the findings can benefit the public and a comparison analysis can be performed.

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