

The Misuse of 1 Malaysia Book Voucher among Undergraduates: A Case Study in Universiti Sains Malaysia

Lim Chee Ann^{a*}, Jata Anak Jang^b

^aSchool of Social Sciences,Universiti Sains Malaysia,Penang

Email: lcann.usoc11@student.usm.my

^bSchool of Social Sciences,Universiti Sains Malaysia,Penang

Email: jatajang@yahoo.com

Abstract

This study discusses the misuse of 1 Malaysia Book Voucher (BB1M) among undergraduates in Universiti Sains Malaysia. The theoretical framework explains the empirical specification of this study. The Logit regression model was used and conducted in this study to estimate the likelihood of misusing the book voucher among undergraduates. The results indicated several methods on misusing BB1M. Among the methods used by undergraduates with regards to misusing the book voucher include exchange BB1M into cash, purchase goods other than books, purchase goods using BB1M for the purpose of resale, exchange BB1M to bookstore vouchers and transfer BB1M to other parties. Additionally, this research also investigates how respondents maximize their utility level by using the BB1M and hence the result of misusing BB1M can be identified from the respondents' responses. The findings of this study showed the variables women, young people and those who use all the BB1M are significant.

Keywords: *BB1M, Utility and Type of Misuse*

1. Introduction

The distribution of 1 Malaysia Book Voucher (BB1M) is one of the initiatives in Malaysia Redistribution Policy. BB1M is another redistribution programs other than Bantuan Rakyat 1 Malaysia (BR1M) specifically for students. Every year, the government of Malaysia allocate large amount of money to subsidise the poor in Malaysia. In 2014, RM 40.5 billion of was allocated for subsidising the poverties. The implementation of BB1M similar to the Supplemental Nutrition Assistance Program (SNAP), also known as the Food Stamp Program implemented in the United States. However, the satisfaction and utility of an individual does not fully depends on financial support. Hence, the policy of BR1M or BB1M does not indicate an efficient allocation. The distribution and use of financial allocation in BB1M raises question of economic models. Therefore, it is important to study the misuse of BB1M in an empirical analysis. This study will investigate the impact of BB1M as well as proposing the appropriate structural changes to achieve the objectives of the program. Models based on theory are formulated to address the issue raised in this program. The government require an efficient distribution system in order to achieve their goal. This was essential to developing a theoretical model of behaviour recipient in making a choice based on this policy. The summary of distribution BB1M as below:-

Table 1: The Distribution of 1 Malaysian Book Voucher

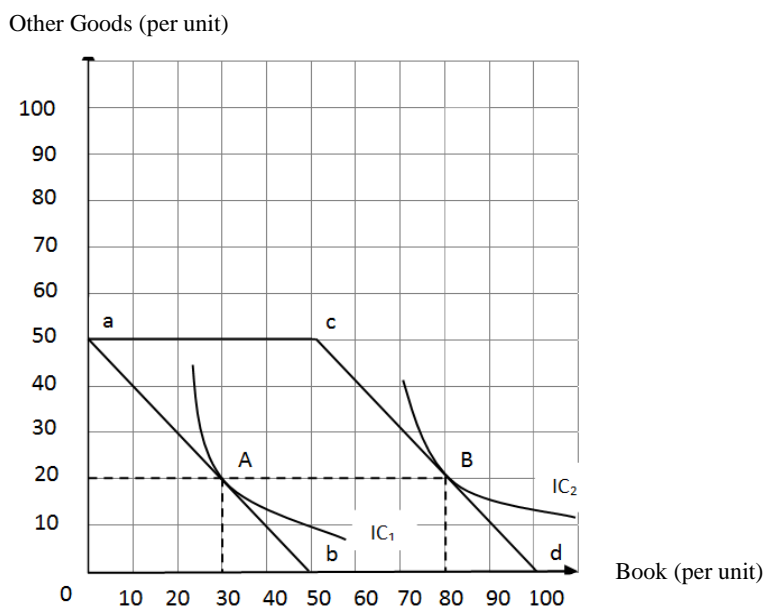
Budget (Year)	Allocation (RM Million)	Rates (RM)	Validity Use (Month)	Target (Million People)
2012	260	200	3	1.3
2013	325	250	5	1.3
2014	325	250	7	1.3

Sources: Ministry Of Finance, Malaysia (2012, 2013, 2014).

1.1 Theory of Consumer Behaviours

The theory explains the behaviour of consumers in paying for goods or services with a limited income. Consumer who attempts to maximize the utility considered a rational consumer (Jamal Ali, 2000: 112-113). In conventional, consumers want to maximize their satisfaction with limited income. This theory assumes that all consumers are rational in making spending decisions. As a rational consumer, consumer always will try to maximize the utility (Mckanzie 1896: 113). Consumer will make decision based on their own thoughts to maximize their utility with regards to income constraint. Results may be influenced by taste, changes in fashion, price, and other income. There are several important concepts explained in this theory which include indifference curve and budget line. The curve shows combination of two goods that give the same level of utility. It shows that a combination of budget line items can be purchased by the consumer with the full utilization of its income. Utilities showed satisfaction obtained from the use of goods (Nicholson, 2000: 56-65). It is calculated in units util. Equilibrium of consumption achieved when the indifference curve is tangent to the budget line. At this point, the slope of indifference curve is equal to the slope of the budget line. Therefore, consumer is consuming a combination of goods that maximizes utility with regards to their budget constraint.

Figure 1. Indifferent Curve Analysis (Case 1)



Assumptions: (1) Consumer as a student who qualify to receive BB1M. He has spent RM 100 for each month. (2) Only 2 items can be spent, which are book (X) and other items (Y). (3) The price of the book is RM 2 per unit and other items RM 2 per unit. (4) The equation is $RM\ 100 = 2X + 2Y$. Refer to figure 1, initially this student has RM 100 to consume every month. His budget constraint is ab. With the amount of RM 100, if he spent all in consume books only, he will gets 50 unit of books. If he spent all in others than books, he will get 50 unit of others goods. Indifference curve is IC_1 with the utility of 100 util.

Equilibrium of consumption achieved at point A when indifference curve (IC_1) tangent with budget constraint (ab). This student maximize his utility with consume 30 unit books and 20 unit other goods. The terms of use the voucher can only be used to buy books only. Therefore, budget line and indifference curve student will be different from the original. There are 4 cases to analyse the use of vouchers.

Case 1, book as a normal good and students spend all the voucher that worth RM 100 to increase the purchase of books without changing the existing expenditure budget constraint will become acd due to the term to use of book voucher. The gradient of the budget line remain the same because the price of both book does not change. In this case, this student has 80 unit of books compare to 30 units before book voucher is given. Utility increase to 200 util with higher indifference curve (IC_2). In this case, student do not misuse the book voucher because he use all the book voucher to purchase book only and his increase the purchasing of books after this policy is implement.

Case 2, books as a normal good and students spend all book vouchers worth RM100 to buy books. Refer to figure 2, all original explanation remain the same. We knew that consumer behaviour is different between each other's. In this case, this student more likely consume others good than book. Which means, point B is not the point that maximize his utility and he have another alternated to maximize his utility. This student use all the voucher(RM100) to consume book(50units) and use existing income(RM 100) to consume others goods. Which means, he increasing the consumption of book from 30 units to 50 units and other goods increase from 20 units to 50 units. Utility of this student also increase to 300util with a higher indifference curve (IC_3). Case 2 allows students achieve a higher utility than case 1. In this case the student is not misused vouchers because he used all the vouchers to buy books only.

Case 1 and Case 2 shows the students can enjoy higher utility after receiving the vouchers. The level of utility either 200 util (case 1) or 300 util (case 2) is depending on the tastes of the student. Let's say the student was a diligent student and loves to read, he will increase the purchase of books without changing existing purchase. This is shown in Figure 1. Furthermore, if the student's lack of interest in reading, then he was going to spend all vouchers for the purchase of books. In fact, students will use the existing monthly income to buy other goods. In both cases above show that students do not have the initiative to misuse vouchers.

Figure 2. Indifferent Curve Analysis (Case 2)

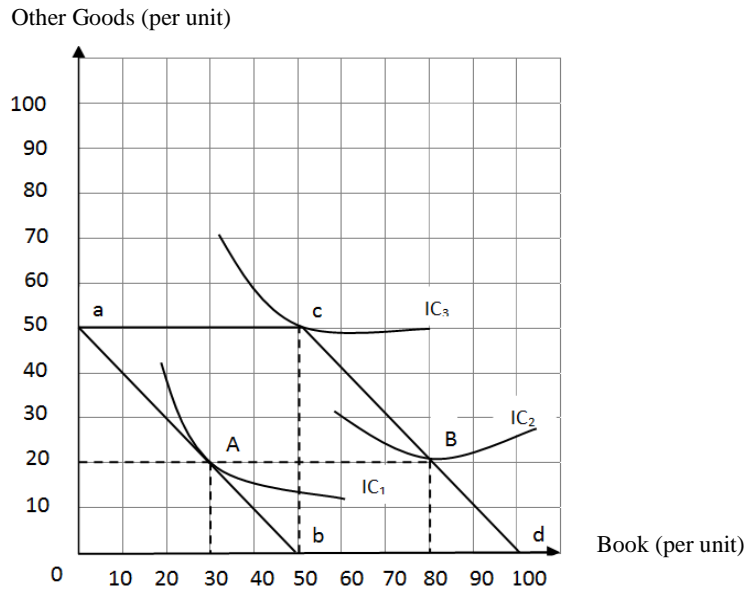
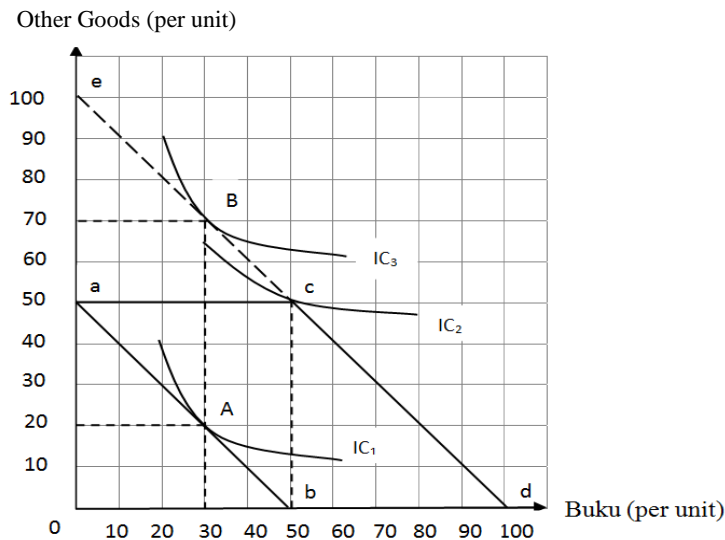


Figure 3. Indifferent Curve Analysis (Case 3)

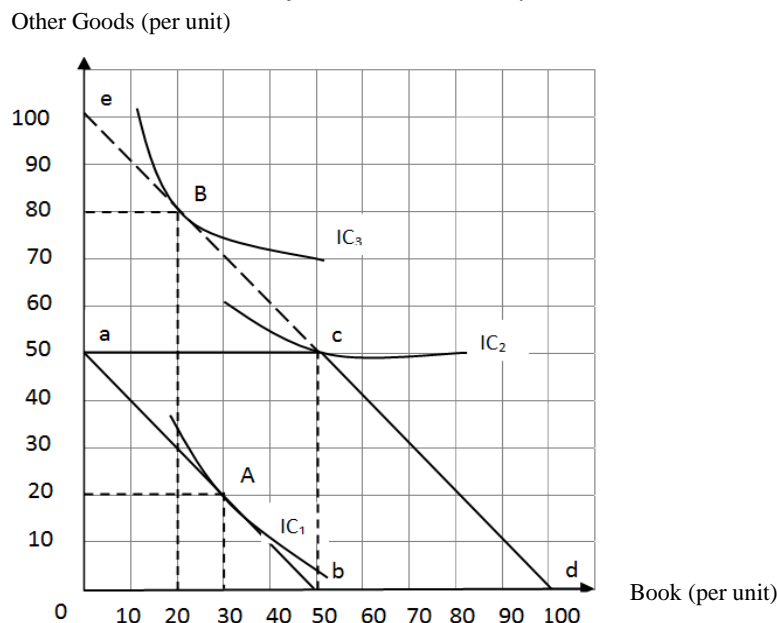


Case 3, books as an inferior goods and student misuse the vouchers by redeemed it to cash. Refer to figure 3, the effect of received of the book voucher book is different from case 1 and case 2. Let's assume that the student has the initiative to redeem vouchers worth RM 100 to cash. Therefore, the budget line will be changed to ecd. It is because, the income of students has increased to RM 200. Students can spend it all on books and other items. When students spend RM 200 to buy books only then he will be 100 units of books. If he spends for all the

other goods, he will get 100 units. In this case, the assumption states that the book is an inferior good. When income increases, the quantity of book will not be increased. These students still spend the amount of 30 units, but other items are 70 units. Indifference curves reached a high of IC_3 with higher utility (400 util). In this case, there was misuse of the vouchers, but the number of book that students consume is not reduced.

Case 4, books as an inferior goods and student misuse the vouchers by redeemed it to cash. With reference to Figure 4, these students abusing all vouchers worth RM 100. Students convert vouchers into cash with the operators who are not responsible. Therefore, student spending is not limited to only the book but also other goods. Budget line same as case 3 (ecd). The assumption that a book as an inferior good. When income increases, the quantity of the book will be reduced. In this case, students reduce their spending on books from 30 units to 20 units. Whereas, spending on other goods rose to 80 units and the student achieve a high level of utility (IC_3). Case 3 and Case 4 shows the students who try to misuse the book voucher. They redeem the vouchers for cash so the consumption is not limited to books only. This has an adverse impact on the policy. For Case 3, the goal of this policy to encourage people read more is still achieved because the number of books that student consume is still remain the same.

Figure 4. Indifferent Curve Analysis (Case 4)



However, this policy objective would not be achieved if people reduce the consumption of books, as shown in the case 4. Students will enjoy a very high utility in cases 3 and 4 compare case 1 and case 2. Practically, for case 3 and case 4, the student will not be able get the budget line as in figure 3 and 4. It is because book store will not allow students to redeem their book voucher to a real value. They will try to bargain with students in order to receive a lower value. For example, book vouchers worth RM 100 can only be redeemed for cash at a value of RM 80 only. Thus, practically the budget line will be on the left of line ecd.

1.2 Theoretical Framework Forecast

Researchers can describe some predictions based on economic theories and previous studies. With reference to economic theory, each student is likely to commit misuse of book vouchers in order to achieve maximum utility. However, there are also students who do not abuse it.

In theory, it is clearly showed that the incentives in the form of cash could maximize students' utilities. Students who misuse the book voucher depend on certain factors such as age, gender and family background. From this theoretical framework, there are three predictions can be concluded. First is age, researchers predict that young people who would prefer to take the risk. The misuse of book vouchers can be classified as a type of risk because these acts have violated the rules. The study predicts that the young people who will be doing the misuse the book vouchers compared with people aged.

The second forecast would be gender. A study conducted by Eckel and Grossman (2002) and Charness and Gneezy (2004) proves that men are more likely to take risk in terms of investing. In fact, women are low risk appetite compared to male. The study predicts that men will tend to abuse than girls. The third prediction is the background of book voucher respondents. The study forecast that the voucher respondents come from high-income families are more likely to commit abuse against those who come from families with middle and low income. The reason is, the group of high-income families can afford to buy books that cost is high and does not need to buy a voucher book. Therefore, these people will try to abuse received book vouchers.

2.0 Insights from the Literature

According to Whitmore (2002) through studies in the United States, the principle *carte blanche* noted that food stamp recipients would be more satisfied if they are given cash instead of an amount equal in food stamps. Review Ohls J. et al. (1992) in California found that cash has little impact on household food expenditure, but has a significant relationship. In the study Charness and Gneezy (2004) in the United States, explaining the difference in making a choice of investment in risky assets. This study examined whether the effect is stronger forecasts for men or women. Eckel and Grossman (2002) who took the survey respondents from educational institution in the United States made the choice to gamble or not based on predictable returns. Grossman found that women are more risk averse. FSP provides an incentive for eligible recipients to defraud or abuse the food stamps. This is because the maximum utility of a pea can be achieved if the amount of cash equal to the value given food stamps to buy other items. In addition, the influence of demographic characteristics on the risk-taking can help the study to know the individual initiatives to achieve maximum utility through fraud. Therefore, empirical studies suggest that we can predict fraud can occur in 1 Malaysia Book Voucher program.

3.0 Data, Methods and Findings

3.1 Data

Given the preliminary nature of the study and the time and resource constraints, no formal sampling methods were adopted to obtain the sample.

Over a two-month period, in late 2015, a total of 400 sample were collected. To the extent that respondents were selected by chance and independently of one another, some element of randomness prevailed. The main characteristics of the sample population are given in Table 1. Although not strictly comparable, the sample appears to have captured the field of study

and sex composition of USM (as reflected by the 2014 census data). However, ethnic composition for Indians and others under-representation of USM population. Aside from collecting the socio-economic data of respondents, respondents were also asked to determine if they understood what misuse of book voucher meant, and whether they misuse it or not. A ‘yes’ answer signified misuse while a ‘no’ indicated not to misuse. About 70.8 per cent of the sample (283 respondents) consisted of misuse while the rest (117) had abstained not misuse.

Table 1. Sample Characteristics Compared to Overall Population

	Sampel	USM Student Population
Male	37.5%	32.5%
Female	62.5%	67.5%
Science Stream	52.2%	51%
Art Stream	47.8%	49%

Notes : Total sampel - 400 students

Sources : 1 - *Student Data & Records Section*, Universiti Sains Malaysia.

2 - Questionnaire

3.2 Methods

The data collected via the survey were used to run a logit regression model of the form:

$$\log[P/(1 - P)] = \beta_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_k X_k + \varepsilon$$

where P is the probability of the respondent having participated in misuse of BB1M in year 2014 over; the Xs are explanatory variables hypothesized to influence the misuse of BB1M; the β s are the coefficients of the explanatory variables; and ε represents the stochastic disturbance term. In the empirical exercise that follows, we only distinguish between misuse and a non-misuse, use to buy the book or otherwise; convert to cash or not; the misuse of BB1M issues is not new since its launch in fact becoming more common. The dependent variable in the equation is dichotomous and measures whether the respondent misuse (value = 1) or not (value = 0). Thus, P / (1 - P) can be interpreted as the ratio of the probability of misuse to probability will not be misused.. In such cases, a binary choice model such as *logit* is more appropriate on several considerations (see Aldrich and Nelson, 1984). Alternatively, it is the odd that respondents involved in the misuse issue. Gender was entered as a dummy (MALE) that was assigned a value of 1 for males and 0 otherwise. Age was entered as two dummies, AGE(19-20) and AGE(21-22) representing the nineteen to twenty, and twenty-one to twenty-two age categories, respectively; the above twenty-three age group was the omitted category. Two separate dummies, MALAY, INDIA and CHINESE represented Malays, Indians and Chinese, respectively, while others was the omitted category. Monthly family main income was measured by two dummies — INCOME (RM 0- RM 2000) representing the RM 0- RM 2000 group and INCOME (RM 2001- RM 4000) representing the RM 2001- RM 4000 group; the >RM 4,000 was the omitted category. Field of study was a dummy (ART STREAM) assigned a value of 1 and 0 otherwise. BB1M consumption was measured as a dummy FULLY USE given a value of 1 and 0 not fully use. Finally, The views of either insufficient or not the amount of BB1M measures as a dummy ENOUGH given a value of 1 for yes and 0 for no.

Table 2 presents the estimated coefficients of the main effects model. They measure the change in the log of the odds of the respondent participating in misuse of BB1M for a (unit) change in the explanatory variable, *ceteris paribus*. It is shown that, 2 variable are

significant. Age group between 19-20 and male are the category that significant at 10% and 1% level respectively. While, AGE (19-20) shows positive correlation in the misuse of BB1M; being MALE shows a negative correlation with misuse of BB1M. By taking the antilog individual coefficients, we obtain the odd individual who misuse the BB1M 2014 to each independent variables, *ceteris paribus*. The coefficients in Table 2 show the log, but the changes show the antilog coefficient odd. MALE significant at the 1% level. However, it showed a negative correlation in this model. Odd man who misuse BB1M was lower by 0427 times compared to women. It is claimed the female more than male do misuse in this model. These findings are inconsistent with the results of previous studies that indicated that male take more risks than female. In fact, independent variables AGE (19-20) showed positive and significant correlation at the significance level of 10%. Odd students ranging in age from 19 to 20 years would be misuse BB1M of 1,947 times compared to students aged 23 years and above. It is clear that younger students are more likely to misuse BB1M.

Table 3 shows the estimated model for the dependent variable of the type of misuse "Convert BB1M into cash". Misuse describe students covert BB1M for cash by unscrupulous operators with a lower value. This test is done to show the change in the log of respondents who use BB1M to redeem cash for one unit change in the independent variables, *ceteris paribus*. The results obtained in this test clearly indicate that there are two categories of independent variables was a significant predictor. Students aged 19-20 years and those who spend BB1M were a significant predictor of the level of 5% and 10%. Both of these predictors showed a positive correlation with the type of misuse. This means these two categories have the potential for misuse.

The overall specification of this model provides estimates of output that is relevant and appropriate. This model produces a correct prediction for 92.3% of the cases in this respondent. It is also supported by the likelihood ratio test rejects the null hypothesis that all coefficients are zero and significant at the 1% level. By taking the antilog individual coefficients, we obtain the effect of each independent variable, *ceteris paribus*, the odd individuals who misuse BB1M 2014 in this type of misuse. The coefficients in Table 3 show the log, but the changes show the antilog coefficient odd. Students aged 19-29 years ranged significant at the 5% significance level and showed a positive correlation in this model. Even these people use BB1M redeem for cash is higher by 3.646 times compared to people aged 23 and over. It is said that young students are more likely to use BB1M to redeem for cash. Moreover, those who fully use BB1M has a significant at 10% level. Odd students who fully use BB1M is more 2.165 times likely to misuse with this method compared with who didn't consume all BB1M.

Variable	Coefficient	Standard Error	z - tests	Probability	Change in Odds (e^{β})
Constant	1.470	.616	5.687	.017	4.348
MALE	-.851***	.251	11.461	.001	.427
MALAY	-.548	.533	1.059	.303	.578
INDIA	-.154	.673	.052	.819	.858
CHINESE	-.262	.566	.215	.643	.770
AGE(19-20)	.667*	.374	3.177	.075	1.947
AGE(21-22)	.384	.273	1.974	.160	1.468
INCOME (RM 0 –RM 2000)	.282	.307	.846	.358	1.326
INCOME (RM 2001- RM 4000)	.319	.329	.942	.332	1.376
ART STREAM	-.242	.252	.925	.336	.785
FULLY USE	.064	.305	.045	.833	1.067
ENOUGH	-.047	.231	.042	.838	.954
Total observations:	400				

Table 2: Impact of the model – General factor of Misuse BB1M

- Notes: 1- Dependent Variable: MISUSE (General Misuse).
 2- ***, **, * significant at the level of 1%, 5% and 10%.
 3- Reference group: Gender (Female), Races (Others), age (23 and above), Income (RM 4001 and above), Field Studies (Science Stream), Fully use (Not Fully Use) and Enough (Not Enough).

Variable	Coefficient	Standard Error	z - tests	Probability	Change in Odds (e^{β})
Constant	-3.494	1.237	7.972	.005	.030
MALE	-.465	.391	1.409	.235	.628
MALAY	.256	1.077	.056	.812	1.291
INDIA	1.581	1.134	1.944	.163	4.860
CHINESE	1.038	1.099	.892	.345	2.825
AGE(19-20)	1.294**	.596	4.711	.030	3.646
AGE(21-22)	.524	.489	1.152	.283	1.689
INCOME (RM 0 –RM 2000)	.323	.546	.350	.554	1.381
INCOME (RM 2001- RM 4000)	-.295	.622	.224	.636	.745
ART STREAM	-.572	.444	1.663	.197	.564
FULLY USE	.772*	.441	3.068	.080	2.165
ENOUGH	.225	.401	.315	.575	1.252
Total observations:	400				

Table 3: Impact of the model – Covert BB1M to Cash

- Notes: 1- Dependent Variable: Covert BB1M to cash.
 2- ***, **, * significant at the level of 1%, 5% and 10%.
 3- Reference group: Gender (Female), Races (Others), age (23 and above), Income (RM 4001 and above), Field Studies (Science Stream), Fully use (Not Fully Use) and Enough (Not Enough).

Table 4 shows the estimated model for the dependent variable of the type of misuse, "Purchases of goods other than books." This test is done to show the change in the log of respondents who use BB1M in this type of misuse for one unit change in the independent variables, ceteris paribus. Results found this test clearly indicates that there is one category of independent variables was a significant predictor. Being male is a significant predictor of the level of 5%. It showed a negative correlation with this type of misuse. The overall specification of this model provides estimates of output that is relevant and appropriate. This model produces a correct prediction for 61.8% of the cases in this respondent. It is also supported by the likelihood ratio test rejects the null hypothesis that all coefficients are zero and significant at the 1% level. By taking the antilog individual coefficients, we obtain the effect of each independent variable, ceteris paribus, the odd individual who misuse in BB1M 2014 for this type of misuse. The coefficient in Table 4 shows the log, but the changes show the antilog coefficient odd. Both men are significant at the level of 5% and showed a negative correlation in this model. Odd man using BB1M for this misuse is lower by 0633 times compared to women. This suggests girls are more likely to misuse it.

Variable	Coefficient	Standard Error	z - tests	Probability	Change in Odds (e^{β})
Constant	1.432	.581	6.079	.014	4.189
MALE	-.458**	.222	4.269	.039	.633
MALAY	-.743	.497	2.240	.134	.475
INDIA	-.458	.606	.570	.450	.633
CHINESE	-.573	.526	1.187	.276	.564
AGE(19-20)	-.115	.337	.116	.734	.892
AGE(21-22)	.011	.252	.002	.964	1.012
INCOME (RM 0 –RM 2000)	-.091	.290	.098	.754	.913
INCOME (RM 2001- RM 4000)	-.019	.311	.004	.951	.981
ART STREAM	.093	.232	.161	.688	1.098
FULLY USE	.037	.279	.018	.894	1.038
ENOUGH	-.016	.213	.006	.939	.984
Total observations:	400				

Table 4: Impact of the model – Purchases of goods other than books

- Notes: 1- Dependent Variable: Purchases of goods other than books.
 2 - ***, **, * significant at the level of 1%, 5% and 10%.
 3- Reference group: Gender (Female), Races (Others), age (23 and above), Income (RM 4001 and above), Field Studies (Science Stream), Fully use (Not Fully Use) and Enough (Not Enough).

In summarize logistic regression tests were conducted on four dependent variables. Which are in general misuse (all kinds of abuse) and 3 different types of misuse. Independent variable male shown significant in 2 models. However, these predictors showed a negative correlation with the dependent variable. This means that the women were more likely to commit misuse of BB1M compared to the male. These results contradict the predictions made in the theoretical framework and also the studies. We assume that women are more likely to commit misuse BB1M to raise money for the women preferred the use of the present. Women are more likely to shop for their beauty needs and follow the latest trends. In addition, according to aspects of science, women have better verbal skills and a good intuitive ability, Connor S. (2013). Forecast and previous studies made clear that male are more likely to commit misuse. This is because men prefer to take the risk. The results in this study contradict the predictions and can be explained from different aspects and possibilities. Another forecast made in researcher states that young people are more likely to commit abuse. This has been proved by tests. Young people are more abusive in general and covert BB1M to cash compared to the old. AGE (19-20) and a significant positive correlation with the two dependent variables. This is most likely because young people are more daring to take risks than people aged.

4.0 Implications for Policy

Theoretically, the provisions of assistance in cash could maximize satisfaction level compared to book voucher which is limited to purchasing books only. Therefore, this study recommended that the parties concerned can make modifications to this initiative (BB1M) so that BB1M can be used to buy books and electronic products which is one of the essential daily accessories for a student. The findings of this survey showed that the majority of students (61.08%) use BB1M to purchase other goods rather than buying academic or non-academic books. In addition, researchers also intend to grant BB1M channelled to low-income groups. With regards to the findings, there is evidence showing that high-income earners often misuse BB1M. Therefore, entitlement to acquire BB1M should be revised so that policy can be distributed to appropriately to those who demand it the most. This is because the existing policy BB1M given to all pre-university students and higher education institutions (HEIs). Provision of assistance through cash transfers to replace BB1M not recommended. This is because due to the theory of consumer behaviour, it is not likely to achieve the main objective BB1M police assistance. Beneficiaries may maximize utility of consumption by increase the purchase of other goods and decrease the purchase of books.

References

- Charness, G. & Gneezy, U. (2011). Strong Evidence for Gender Differences in Experimental Investment. *Journal of Economic and Behaviour Organisation* (forthcoming).
- Connor, Steve. (2013). The Hardwired Difference Between Male And Female Brains. *The Independent*. [Online] 3rd December. Available from: <http://www.independent.co.uk/life-style/the-hardwired-difference-between-male-and-female-brains-could-explain-why-men-are-better-at-map-reading-8978248.html> [Accessed: 14 April 2015].
- Dreber, A. et. Al. (2010). *Dopamine and Risk Preferences in Different Domains*. Harvard University, John F. Kennedy School of Government, Working Paper Series, 10-12.
- Eckel, C. & Grossman, P. (2002). Sex Differences And Statistical Stereotyping In Attitudes Toward Financial Risk. *Evolution and Human Behaviour*. 23(4), 281–295.
- Jamal Ali et al. (2000). *Prinsip Ekonomi*. Sintok, Kedah: Penerbit Universiti Utara Malaysia.
- Ministry of Finance, Malaysia.(2014). *Annual Budget Book 2012*. [Online] Available from: http://www.treasury.gov.my/index.php?option=com_content&view=article&id=2543:ucapan-bajet-2012&catid=256&Itemid=2472&lang=ms [Accessed: 14th October 2015].
- Ministry of Finance, Malaysia.(2014). *Annual Budget Book 2012*. [Online] Available at: http://www.treasury.gov.my/index.php?option=com_content&view=article&id=2426:ucapan-bajet-2013&catid=256&Itemid=2472&lang=ms [Accessed: 14th October 2015].

Ministry of Finance, Malaysia.(2014). *Annual Budget Book 2012*. [Online] Available at: http://www.treasury.gov.my/index.php?option=com_content&view=article&id=2729:ucapan-bajet-2014&catid=256&Itemid=2472&lang=ms [Accessed: 14th October 2015].

Malaysia, Financial Department. (2014). *Pindaan Kepada: Garis Panduan Pemberian Baucar Buku 1 Malaysia Tahun 2014(Kepada Pelajar)*. Kuala Lumpur: Kementerian Pendidikan Malaysia.

Malaysia, Financial Department. (2014). *Pindaan Kepada: Garis Panduan Pemberian Baucar Bagi Pekedai Buku*. Kuala Lumpur: Kementerian Pendidikan Malaysia.

Mckanzie. (1986). *Microeconomy*. Boston: Houghton Mifflin Company.

Moffit, R. (1989). Estimating the Value of an In-Kind Transfer: The Case of Food Stamps. *Econometric Society. Econometrica*, 57(2). pp. 385-409.

Nicholson, W. (2000). *Intermediate Microeconomics and Its Application*. (8th ed.). The Dryden Press.

Ohls, J. & Harold, B. (1993). *The Food Stamp Program: Design Tradeoffs, Policy and Impacts*. Washington: Urban Institute Press.

Student Data & Rekod Section. (2015). *Students Population Data USM Tahun 2014*. Registry, Universiti Sains Malaysia.

Whitmore, D. (2002). *What Are Food Stamps Worth?* New Jersey: Princeton University.