Searching for Bequest Motives and Attitudes to Leaving a Bequest Among Malaysian Muslims

(Mengkaji Motif Wasiat dan Sikap Meninggalkan Wasiat di Kalangan Umat Islam di Malaysia)

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ABSTRACT

This study aims to identify bequest motives and investigate the attitudes to leaving a bequest among Malaysian Muslims. Data are collected by means of questionnaire and analysed with multinomial logit model. Results from this model are compared with the verbatim responses given by respondents. Evidences suggest the co-existences of various bequest motives with no preference in order, namely pure life-cycle, life-cycle with some strategic or exchange features, altruistic and dynastic bequest models. However, the domination of one particular bequest motive over others is solved via analysis carried out on the verbatim responses.

Keywords: bequest motives; faraid; Islamic will; multinomial logit; wasiyyah

ABSTRAK

Kajian ini bertujuan untuk mengenalpasti motif membuat wasiat dan mengkaji tingkahlaku dalam membuat wasiat di kalangan masyarakat Islam di Malaysia. Data dikutip melalui soal-selidik dan dianalisa dengan menggunakan model multinomial logit. Hasil kajian dari model ini dibandingkan dengan respon verbatim yang diberikan oleh responden. Bukti menunjukkan yang wujudnya pelbagai motif membuat wasiat secara bersama dan tiada motif yang boleh dikatakan lebih kuat berbanding dengan yang lain. Motif-motif tersebut adalah kitaran hidup tulen, kitaran hidup dengan ciri-ciri strategik atau pertukaran, altruistik dan dinasti model. Walau bagaimanapun, dominasi motif wasiat tertentu ke atas motif yang lain dikenal pasti melalui analisis yang dijalankan ke atas respon verbatim.

Kata kunci: motif membuat wasiat; faraid; wasiat Islam; multinomial logit; wassiyah

INTRODUCTION

Intergenerational transfer in the form of bequest, from the conventional point of view, is triggered by several bequest motives namely accidental, exchange, strategic, altruistic and dynastics. The accidental bequest is a consequence of the life-cycle model that claims a desire and intention to leave bequests does not exist as the parents accumulate wealth only in provision for their old age. Nevertheless, when there are precautionary savings and deferred consumptions made throughout the lifespan of the parents, children probably end up receiving an inheritance known as an 'unintended, unplanned, involuntary or accidental' bequest (Davies 1981:562). Exchange bequest, on the other hand, is made when parents value services and attention given by their children during their old-age (Pestieau 2000:893; Laitner and Ohlsson 2001:211). A strategic bequest is "bequest-as-exchange model with strategic features" (Menchik and Jianakoplos 1998:54), employed intentionally so that testators would be able to manipulate the behaviour of the beneficiaries through their choice of a rule for dividing their estates. It could be perceived as a threat of

disinheritance in which lesser bequests or no bequest will be rendered to those who give less attention and services to the testators.

As contrast to the life-cycle model, the altruism model informs that a parent is altruistic in the sense of caring about the consumption possibilities of his/her children. This model has one particular distinctive property in which bequests are divided unequally among children with the purposes of ensuring that the children will be equally well off; to equalize opportunities among children with different abilities; or to ensure the children will enjoy the same relative status in life as the parents. Therefore, in the altruism model, more bequests are given to the less able and lower income children (Becker 1974; Barro 1974). Moreover, according to Becker and Tomes (1986:16), the altruism motive can be extended to bequests used to equalize incomes of siblings as well. In addition, charitable bequests made for individuals outside of the family relationship due to concern about others can also be associated with the altruism motive as contended by McGranahan (2000:1274). Bequests with the dynastic motive are manifestations of the individuals' determination in ensuring the perpetuation of the perennial trace, a

financial or industrial dynasty (Pestieau 2000:895). Family heads prefer the unequal bequest division policy so that at least one of their children is more likely to stay or become rich, hence making their succession lines firm. Eldest child normally inherits the most according to this model (Chu 1991:83-84).

Previous studies observe non-Muslims and Muslims behaviours in relation to the bequest motives within the same theoretical foundation. The fact that bequest in Islam is subject to the Islamic inheritance law is not taken into consideration. Therefore, it is the objective of this study to identify the extent to which the bequest motives and attitudes to leaving a bequest among Malaysian Muslims differ from the existing literature review. The other contribution of this paper is that it attempts to engage the Islamic theory of wealth in explaining the Muslim behaviour in regard to bequest. This paper is then divided into six sections. It begins with an introduction containing a brief discussion on the economic theories of bequest transfers. Second section is the literature review and section three discusses methods and data collection employed in this study. Findings are in in the fourth section and they are extended to a depth discussion in the penultimate section. Section six concludes the paper.

LITERATURE REVIEW

There is much debate regarding the bequest motives behind bequests transfers across countries. Some of these studies reveal that there is a mixture of bequest motives with potentially different preference orderings, while others imply a quite similar pattern across countries. A study conducted between the United States and Japan using data of saving motives signifies that the life-cycle model bequest is the dominant model of household behaviour in both countries. Despite this, selfish life-cycle model is far more applicable in Japan than it is in the United State. Other findings show that altruism and dynasty models are far more applicable in the United States than in Japan. These are largely due to the following reasons: saving for the retirement motive in Japan being more than double that in the United States; the saving for the precautionary motive is higher in Japan than it is in the United States; and the proportion of households saving for the bequest motive in the form of the accumulation of financial assets is much smaller in Japan than they in the United States (Horioka et al. 2000:14). Moreover, they also investigate bequest motives using data on bequest transfers, views on bequest motives and views on bequest division. Results show that firstly, life-cycle is the dominant model of household behaviour in both countries; secondly, altruism is far more applicable in the United States when compared to Japan and thirdly, life-cycle and dynasty models are far more applicable in Japan than they are in the United States (Horioka et al. 2000:17-18, 26).

Results from Laitner and Ohlsson (2001) on bequest behaviour in the United States and Sweden also offer some support for a mixture of bequest motives with some families following the altruistic model but others following the egoistic or accidental models. A conclusion from Villanueva (2005) implies that the strength of bequest motives is empirically very weak in three countries, namely the United States, West Germany and the United Kingdom as most elderly people save for precautionary motives. This also explains why involuntary bequests appears to be one of the most important channels of intergenerational transfer in these three countries. An examination of the bequest motive among Germans by Jurges (2001) indicates that pure life-cycle model and life-cycle with bequest motives are operative in the German population. According to explicit data from respondent answers to survey questions on saving motives and bequest intentions, precautionary motive is found to be the most important reason for Germans to hold assets (Jurges 2001: 391 and 401). A study by Light and McGarry (2004) implies that motives for intra-family transfers differ across mothers. Based on mothers' own explanations for their decisions to treat their children unequally, it appears that altruism and exchange bequests for child-provided services are equally prominent motives. Nordblom and Ohlsson (2002) in their empirical analysis find some support for parents having altruistic motive for their bequest transfers. Rowlingson and McKay (2004 and 2005) do not explore bequest motives but they focus on the likelihood of leaving a bequest and attitudes towards it. Their study in 2004 finds most people (41 per cent) stating that they will leave property but spend their savings, 32 per cent say they expect to leave both savings and property and 21 per cent say they expect to give or spend most of it before they die (Rowlingson and McKay, 2004:34). In another study by the same authors a year later, their finding shows that one-quarter of the public (26 per cent) say that are very likely to leave a bequest in the future (Rowlingson and McKay 2005: xi and 35).

A number of competing bequest motives investigated and observed through bequest practice is determined by several factors. Such factors can be pooled together and distinguished into four main categories; firstly, the economic features of the countries; secondly, cultures, tradition, customs and inheritance law; thirdly, the connectivity between bequests and other intergenerational transfer channels, and fourthly, the individual characteristics. The difference between economic features among countries which are closely pertinent to the government sectors and the provision of the public programmes (Villanueva 2005; Lainer and Ohlsson 2001; Horioka et al. 2000) and system of taxation (Lainer and Ohlsson 2001) may contribute to the different patterns of bequest transfers. People act differently towards different policies that have been set up by the government. This is emphasized by Lainer and Ohlsson (2001:212) when they highlight the disparities between

Sweden and the United States with the objective of understanding the reason why inheritance is more widespread in Sweden. Although both have high standards of living, the government sector in Sweden is a considerably larger fraction of the economy. More generous provision of public goods, services and transfers presumably reduce household incentives in Sweden to arrange private insurance including insuring descendants' living standards through private intergenerational transfers. This opinion is similar to that of Horioka et al. (2000:14) in which they assert that Japanese people save more due to the retirement motive when compared to the American people because public and private pensions are less available in Japan.

The presence of the annuity market directly influences bequest practice and determines how strong the bequest motives are. In countries where the elderly have a higher degree of wealth annuitization through the public sector – such as West Germany – or through the private sector – for instance, in the United Kingdom, the expectation to bequeath is weaker than in countries like the United States where less wealth is annuitized. Therefore, the higher the participation in annuity schemes, the weaker the bequest motives and the lower the bequest practice (Villanueva 2005:548). Lillard and Willis (1997:115) describe this as a transmission process as a result of emerging market and developing more sophisticated financial institutions. It implies that the function of family is slowly substituted by safety-net programmes such as the annuity market, public social security, health insurance and unemployment insurance available in the market. Taxation systems bring impacts on bequest and inheritance through several channels. In Sweden, a more onerous tax system with an exemption from paying inheritance taxes for each child also brings similar impacts to the public programmes (Lainer and Ohlsson 2001:212-213).

Different cultures, traditions, customs (Horioka et al. 2000:2) and inheritance laws (Pestieau 2000) play an important role in shaping the bequest transfers. One could possibly relate inheritance laws to traditions and customs in the sense that in some countries, these traditions and customs constitute part of the countries' inheritance laws (Pestieau 2000:899). Equal division and male primogeniture are the inheritance laws that are most commonly cited. It is interesting to explore to what extent such inheritance laws affect the bequests. For instance, in a society where the equal division rule applies, (such as in France and Germany) the full freedom of bequest making is definitely restricted (Pestieau 2000:900). Nordblom and Ohlsson (2002) and Bruce and Waldman (1990) prove that interactions between different channels for transfers determine the size of the transfers and the preference channels of transfer. In particular with the investigation of how the inter vivos can affect the bequest transfers, it can be concluded that there is a tradeoff between inter vivos and bequest transfers. Several studies find that those who have received parental inter vivos gifts are less likely to inherit (Nordblom and Ohlsson 2002:14; Bruce and Waldman 1990:162) which apparently justifies people use of bequests as substitutes (Nordblom and Ohlsson (2002:14).

The influences of the individual's characteristics towards bequest have received attention from several researchers. It is easier to distinguish and discuss all the chosen individual's characteristics by categorizing them as follows: economic factors, sociodemographic factors, health-related factors, religiosity and attitudinal factors. Household income (Kao et al. 1997; Rowlingson and McKay 2005; Jurges 2001); the value of liquid and non-liquid asset holdings; the amount of inheritance ever received; self-employment status (Kao et al. 1997); social class (Rowlingson and McKay 2004 and 2005); having been 'poor when growing up' to capture the effect of parent lifetime resources; lifetime earnings; (Laitner and Ohlsson 2001); lifetime income (Villanueva 2005); individual's income; individual's wealth; variation in children's income (Light and McGarry 2004); housing tenure (Rowlingson and McKay 2004 and 2005; Jurges 2001); and wealth (McGranahan 2000; Jurges 2001) are all widely used as proxies for the economic factors.

Results from Villanueva (2005) indicate that expected bequests vary with cumulated parental earnings in the United States, West Germany and the United Kingdom. The relationship between lifetime income and expected bequests is influenced by the degree of wealth annuitization in that particular country. The higher degree of wealth annuitization among the elderly, the weaker is the relationship between lifetime income and expected bequests (Villanueva 2005:548). Jurges (2001:402) however, finds a very odd result in which income has negative impact on the bequest motive for saving and he cannot locate any justification for this finding. In contrast, Laitner and Ohlsson (2001) find that lifetime earning has a positive effect in the United States and Sweden but the result is not significant for the latter. Extending the analysis, Light and McGarry (2004:1673-1674) determine that an individual's financial status – either income or wealth – has no effect on the probability of intending unequal bequests, while the children's income is positively and significantly associated with the probability of intending unequal transfers. People's expectations of leaving a bequest are found to be positively and significantly related to the household income, liquid assets holdings, value of non-liquid asset holdings, amount of inheritance ever received and self-employment status (Kao et al. 1997:368-369). Rowlingson and McKay (2005:36) also find that those with incomes of less than £100 a week are less likely to leave a bequest, indicating a positive correlation between both variables. Variation across social class shows that people from higher social classes (professional/managerial social classes and clerical workers) are more likely to say they will leave a bequest (Rowlingson and McKay, 2004:36 and 2005:36).

Meanwhile, 'poor when growing up' has a negative relationship with bequests in both Sweden and the United States. Having a father with an elevated occupational status has a positive relationship with bequest in the United States (Laitner and Ohlsson, 2001:222). In relation to housing tenure as independent variable for economic factors, those who are outright owner and have a mortgage (Rowlingson and McKay, 2004:36-37) or are owner-occupiers (Rowlingson and McKay 2005:35) are more likely than others to say that they have something to leave. The same variable is not significant in Jurges (2001:402). McGranahan (2000:1284) shows that wealthier people leave more charitable bequests. In Jurges (2001:402) wealth is also found to positively related to the bequest motive for saving.

In locating the sociodemographic factors influencing the individual's attitudes towards bequest, the following factors are observed from the literature: the socio-demographic characteristics consist of age (Kao et al. 1997; Rowlingson and McKay 2004 and 2005; Jurges 2001), education (Kao et al. 1997; Laitner and Ohlsson 2001; Light and McGarry 2004; Jurges 2001), marital status (Kao et al. 1997; Laitner and Ohlsson, 2001; Light and McGarry 2004; McGranahan 2000; Jurges 2001), race (Kao et al. 1997; Rowlingson and McKay 2004), gender, (Laitner and Ohlsson 2001; Jurges 2001), number of siblings, (Laitner and Ohlsson 2001), number of children under 18 (Kao et al. 1997), number of children (McGranahan, 2000; Villanueva, 2005) or having children (Jurges 2001), having stepchildren or adopted children, having co-resident children (Light and McGarry 2004; Rowlingson and McKay 2004), having grandchildren (Light and McGarry 2004) or number of grandchildren (McGranahan 2000), presence of living parents (Kao et al.1997), number of other close family members, number of other relatives, number of friends, circumstances of will writing (McGranahan 2000) and having an heir (Jurges 2001).

In relation to the age factor, Kao et al. (1997:369), Rowlingson and McKay (2004:35 and 38 and 2005:35) and Jurges (2001:403) find that older people are more likely to leave bequests. Together, education is proved to have a positive and significant effect on intergenerational transfers in which people with higher education tend to leave bequests (Kao et al. 1997:369). Surprisingly, Jurges (2001:402-403) find that years of education have a negative impact on bequest motive for saving. He realizes that his finding is contradictory to existing studies and he cannot provide any justification for this. Furthermore, Laitner and Ohlsson (2001:219-220 and 222-224) find that the parent's education brings a positive effect on bequests in the United States and Sweden, while the child's education is positively significant in the United States, but not in Sweden. Meanwhile, having higher education is associated with higher probabilities of intended unequal bequests but this is not significant (Light and McGarry 2004:1674).

The finding from Kao et al. (1997:369) states that being married is found to be positively and significantly related to the expectation of leaving a bequest. Surprisingly, this variable is negatively significant in Sweden but not significant in the United States (Laitner and Ohlsson 2001:221 & 223). Meanwhile, being a divorced woman is associated with higher probabilities of intended unequal bequests but this result is not significant (Light and McGarry 2004:1674). McGranahan (2000:1282) discovers that having a wife does not influence people to bequeath for charitable purposes. It should be noted that marital status is not found to be significant in Jurges's study (2001:402). Regarding the race factor, being white is found to be positively but not significantly related to the expectation of leaving a bequest (Kao et al. 1997:370). By contrast, Rowlingson and McKay (2005:37-38) find that Black and Asian (Asian people consist of Indian and Pakistani people) people are more likely to leave a bequest than White or other groups of ethnicity. Male and female are found to behave differently towards bequests. Being female is found to be negatively significant in the United States. It may be related to the fact that all of the female respondents in the United States data were single (Laitner and Ohlsson 2001:223).However, Jurges (2001:402) does not find gender to be an influential factor of bequest motive for saving (2001:402).

An enormous finding of the impacts of family features on bequests exists in the literature review. Number of siblings has a negative effect in both Sweden and the United States (Laitner and Ohlsson, 2001:221–223), the anticipation of leaving a bequest is inversely associated with the total number of children under 18 in the household (Kao et al. 1997:369), and number of children is a significant explanatory variable for charity bequest practice in which there is a negative correlation between children and the probability of making a charity bequest (McGranahan 2000:1285). In addition to this, Villanueva (2005:533-534) argues that precautionary savings explain most of the relationship between lifetime income and expected bequests because the presence of the children does not affect the expected bequests in the United States, West Germany and the United Kingdom. Jurges (2001:402), on the other hand finds that having children is positively connected to the bequest motive for saving. In fact his analysis shows that the variable 'children' gives the strongest impact compared to the rest of the variables.

In extending the analysis, Light and McGarry (2004:1670 and 1675) find that having stepchildren, having adopted children and some children having children are strongly and positively associated with higher probabilities of intended unequal bequests. On the contrary, in McGranahan (2000:1282), having grandchildren is found not to be significant in influencing the probability of leaving a charity bequest with the probit model but it shows a significant positive effect with the Tobit model. The significant finding implies that testators

who are more likely to give to individuals outside of their immediate family are also more likely to give to the poor. In reflecting on the children aspects of the issues, Light and McGarry (2004:1674) find mothers with co-resident children are far more likely than others to make unequal transfers but the result is found to be insignificant. Rowlingson and McKay (2004:35-36) determine that the presence of children make people more likely to leave a bequest. Eventhough the empirical result by Kao et al. (1997:370) reveals that the anticipation of leaving a bequest is inversely associated with the presence of living parents the result is also not significant. In extending the model, McGranahan (2000) investigates the impact of family features further. He finds the variable 'the number of other close family members' is positive but insignificant while the variable 'number of other relatives and friends' is found to be positively related to the probability of leaving a charity bequest. Again, this implies the same conclusion as variable 'grandchildren' does (Mc Granahan 2000:1285). McGranahan's (2000) finding is consistent with Rowlingson and McKay (2005: xi and 48) in which they find that people are more likely to leave a bequest to their children, grandparents are more likely to leave a bequest to their grandchildren while older people without children are much more likely to leave a bequest to other family members especially nephews and nieces. Jurges (2001) does not split the variable 'heir' into categories as McGranahan (2000) does, while his finding shows that the variable 'heir' is not significant to the bequest motive for saving.

When and where the will is being written may affect the content of the will according to McGranahan (2000). He (2000:1287) argues that "wills written farther in advance of death are more likely to include donations to the poor" and "those with more time to think about their distribution are more likely to give include the poor". Therefore, it can be concluded that the longer the length of time, the higher the probability of giving. On the other hand, the location the testators live during the will making has a negative effect, which according to him is a surprising and unexpected result. He tests whether testators from Suffolk and Sudbury differ in their attitudes of making charity bequest and finds that testators from Sudbury are more likely to give to the poor than testators from Suffolk. He then justifies his result with three plausible explanations consisting of economy changes, changes in personal wealth and income and religious conflict (McGranahan 2000:1288).

With regard to health factor, disabled people are found to be less likely than the nondisabled to expect to leave bequests (Kao et al. 1997:369). Another empirical result shows that the probability that a mother intends unequal bequests is significantly higher if she is in poor health (Light and McGarry 2004:1670 and 1673). In light of the religiosity factor, McGranahan's study (2000:1281) suggests that religiosity is a significant predictor of charitable giving in which it has a positive effect to the

probability of making a charity bequest. Attitudinal factors according to Kao et al. (1997) reflect an individual's perception towards bequests depending on how people perceive charity work, the importance of leaving bequests and risk-taking level when making a financial investment decision. Kao et al. (1997:369) discover that; firstly, people's expectations of leaving a bequest are found to be positively and significantly related to having a positive attitude towards charitable contributions; secondly, the anticipation of leaving bequests varies significantly and positively according to the level of perceived importance of bequeathing to a respondent and thirdly, the anticipation of leaving a bequest is inversely associated with the extension of risk aversion. The connection between risk taking and leaving a bequest as hypothesized in bequest motive theories is through people's actions when choosing between two options: preserve their resources for future consumption after retirement or for their own financial emergency; or bequeath their resources to their children.

Previous studies discussed above are related to the bequest motives and attitudes to leaving a bequest from the conventional point of view. Due to the absence of the literature review within the same area of research from the Islamic point of view, therefore this paper is an effort to fill the gap.

METHODOLOGY AND DATA COLLECTION

THEORETICAL UNDERPINNINGS: LIFE-CYCLE, ALTRUISM, DYNASTY, ISLAMIC THEORY OF WEALTH

Taking into account the previous studies, this study was based on the life-cycle, altruism and dynasty models. With regard to the life-cycle model, there are three situations that are expected to occur: not leaving a bequest at all, leaving a bequest with exchange motive or leaving a bequest with strategic motive. The selection of the theoretical models was carried out thoroughly. The choice of these three theories and not holding on one particular theory was partly due to the fact that these three dominant models have been discussed extensively in studies of this field. In addition, it is common for previous studies to have either tested several bequest motives or have shown interest only in testing one particular theory. This study, however, was meant to test all the relevant models to explain Malaysian Muslims' behaviour.

However, due to the multicultural nature of Malaysian society, a different contextual form of bequest between Muslims and non-Muslims has directed this research to the cross-examination of the selected theories. As far as the religious factor is concerned, the limitation on the definition of bequest from the Islamic point of view was also taken into consideration. Bequest is known as an Islamic will or *wasiyyah* and it is restricted by two principle rules: the amount allowed to bequeath is limited

up to one-third and it is only allowed to be given to the non-heirs (those who are not entitled to get any shares from *faraid*). At first glance, it seems that none of the theories are relevant with the peculiarities of Muslim people because by definition, children are perceived as not entitled to the bequest while corresponding theories are mainly concerned with the motivation of leaving a bequest to the children. One could argue that a bequest from a Muslim to his/her children is not totally deniable. The altruism model is still applicable for explaining the Muslim attitude of leaving a bequest to their children in the case of giving a bequest to children who are non-Muslims and children who are barred from inheritance due to homicide. The dynastic bequest motive, therefore, can be extended in the situation of leaving bequest to siblings or grandchildren who are excluded from the inheritance by a son. Pertaining to the charity bequest, McGranahan (2000:1274) proposes that charity bequest is partly driven by the altruism mode, and this can be applied to Muslims as well. In addition, the Islamic theory of wealth could be a theoretical foundation, which explains Muslim behaviour towards leaving a bequest out of the one-third portion. If the Islamic theory of wealth is visualized in one's consumption therefore the life-cycle model is assumed to be the least dominant in Muslims lives. In one sense, bequest is not necessarily for the children, but it can be made to poor people and relatives as long as they are not entitled to shares provided by the *faraid*. In conclusion, the selection of the three models was maintained and the Islamic theory of wealth was added as one of the theoretical underpinnings of this research.

MODELLING THE ATTITUDES TO LEAVING A BEQUEST

Multinomial logit model was used to analyse the attitudes of Malaysian Muslims to leaving a bequest. Group 0 ('Would not leave a bequest') is the reference category, and hence the base outcome or comparison group and its coefficients were set to zero. Since there are three outcomes available, only two binary logits need to be estimated. Equation 1 is the logarithm of the ratio of the probability of outcome bequest=1 to that of outcome bequest=0, while equation 2 is the logarithm of the ratio of the probability of outcome bequest=2 to that of outcome bequest=0 (Borooah, 2002:48; Long and Freese, 2001:172-175). We used Stata 10 to run this model.

$$log\left(\frac{Pr(bequest=1)}{Pr(bequest=0)}\right) = \beta_0 + \beta_{11}age + \beta_{12}marital$$
$$+\beta_{13}gender + \beta_{14}ethnic + \beta_{15}edu + \beta_{16}adpchild$$
$$+\beta_{17}gchild + \beta_{18}sibling + \beta_{19}health + \beta_{110}disability$$
$$+\beta_{111}job + \beta_{112}income + \beta_{113}assetvalue$$
$$+\beta_{114}aminherit + \beta_{215}inbeq + \beta_{116}charity$$
$$+\beta_{117}law + \beta_{118}religiosity \qquad (1)$$

$$log\left(\frac{Pr(bequest=1)}{Pr(bequest=0)}\right) = \beta_{20} + \beta_{21}age + \beta_{22}marital$$
$$+\beta_{23}gender + \beta_{24}ethnic + \beta_{25}edu + \beta_{26}adpchild$$
$$+\beta_{27}gchild + \beta_{28}sibling + \beta_{29}health + \beta_{210}disability$$
$$+\beta_{211}job + \beta_{212}income + \beta_{213}assetvalue \qquad (2)$$
$$+\beta_{214}aminherit + \beta_{215}inbeq + \beta_{216}charity$$
$$+\beta_{217}law + \beta_{218}religiosity$$

The construction of the questionnaire with the aim to investigate bequest behaviour and motives benefited from the studies such as Rowlingson and McKay (2005), Kao et al. (1997), Light and McGarry (2004), Villanueva (2005), Horioka et al. (2000) and Laitner and Ohlsson (2001). Table 1 implies explanatory variables used in this model and codifications. Original data gained from the original research question had to be modified and required merging with the aim of reducing the number of empty cells as suggested by Menard (2001:79) because such model is very sensitive to a large number of empty cells. In addition, a multicollinearity problem appeared as another problem that we had to struggle with: several combinations of coding were tried since Stata 10 automatically dropped variables with multicollinearity problems from the model. Hence, following the new coding of the independent variables as listed down in Table 1 successfully solved the multicollinearity problem. For this, each independent variable was split into two categories. The results and model were reviewed again afterwards due to another a new problem found regarding the intercept/constant term. A number of attempts were made to select the best performing and efficient model and in the final model, the variables 'non-Muslim parents' and 'non-Muslim children' were removed. Omitting these two variables did not affect the efficiency of the results as their mean values were statistically insignificant numbers.

DATA COLLECTION

The sample used is representative of a group of civilian Muslims, age 18 and above, who lived in Malaysia when the survey began. Realistically, covering a wide latitude of respondents was difficult to achieve in the presence of the two major obstacles for this study, namely time and funding. As a result, we used a purposive sampling method. It is also due to the requirement of the econometric models used in the research for which it must have enough cases for certain variables in order to avoid the empty cells problem. Data collection for this study took place from April to June 2009 and it was carried out using the Malay version of the questionnaire. Respondents from lower educated backgrounds and from mainly rural areas were less likely to participate in this study. In addition, as expected, finding non-Malay Muslim respondents was extremely difficult. We made contacts with several potential places in getting access to such type of

TABLE 1. Definition and Codifications of Explanatory Variables for the Multinomial Logit Model

Independent variables	Definition
Demographic	
Age	1 if above 40; 0 otherwise
Gender	1 if female; 0 otherwise
Marital status	1 if married; 0 otherwise
Ethnicity	1 if Malay; 0 otherwise
Education	1 if having Diploma/Bachelor/Master or PhD; 0 if vocational/primary school/secondary school
Family	
Adopted children	1 if having adopted children; 0 otherwise
Grandchildren	1 if having grandchildren; 0 otherwise
Sibling	1 if having sibling; 0 otherwise
Economic	
Employment status	1 if working; 0 otherwise
Monthly income	1 if above RM3,000; 0 otherwise
Total asset value	1 if above RM100,000; 0 otherwise
Amount inherited previously	1 if above RM100,000; 0 otherwise
Health	
Health status	1 if fair/poor; 0 if excellent/good
Disability	1 if having disability; 0 otherwise
Attitudinal	
Charity	1 if always, usually or sometimes do this; 0 if rarely or never do this
Importance of bequest	1 if very important, important or fairly important; 0 if not important or not important at all
Religiosity	Mean values (1= not religious at all)
Inheritance law	1 if know the amount allowed to bequeath

respondents, for instance visiting States Islamic Religious Councils, which constantly organize Islamic studies programmes for those who converted to Islam. The researcher tried to get them to participate before or after they attended the religious classes. Such efforts were made, but most of them were reluctant to take part in the questionnaire. In addition, limited time and a language barrier were among problems that the researcher encountered with regards to the respondents from the non-Malay Muslim group. In total, 297 questionnaires were usable for the further analysis.

FINDINGS

PROFILING BEQUEST MAKING

The profile of the sample's regional distribution is shown in Table 2. Respondents were drawn from all states in Peninsular Malaysia which were then divided into four main regions namely West Coast, East Coast, Northern and Southern. It should also be noted that the respondents were mainly from urban and sub-urban sections in Kuala Lumpur and Selangor (about 31.4 per cent of respondents). Findings on making a bequest in the future indicate that the majority of participants opted for 'probably' as an option for future (50.2 per cent).

TABLE 2. Regional Distribution of Respondents

Region	State	Frequency	Percent
West Coast	Kuala Lumpur	45	15.2
	Selangor	48	16.2
	Total	93	31.4
East Coast	Kelantan	27	9.1
	Terengganu	24	8.1
	Pahang	27	9.1
	Total	78	
Northern	Penang	10	3.4
	Kedah	34	11.4
	Perak	18	6.1
	Total	62	20.9
Southern	Negeri Sembilan	11	3.7
	Melaka	9	3.0
	Johor	44	14.8
	Total	64	21.5
TOTAL		297	100

TABLE 3. Profile of Bequest Making Among Respondents

Questions		Frequency	Percent
Do you plan to leave a bequest in the future?	Yes	52	17.5
	Probably	149	50.2
	No	96	32.3
	Total	297	100

This survey specifically asked the participants to state the given types of bequest that they would make in the future as presented in Table 4.

TABLE 4. Types of Bequest Planned to be Made in the Future

Types of bequest planned to be made in the future:	Frequency	Percent
Bequest for charity purpose	167	83.1
Bequest to siblings	81	40.3
Bequest to grandchildren	63	31.3
Bequest to non-Muslim parents	10	5
Bequest to adopted children	9	4.5
Bequest to non-Muslim children	2	1

As far as the future is concerned, a large number of respondents would make a bequest for charity purposes (83.1 per cent); followed by making a bequest to their siblings (40.3 per cent); and grandchildren (31.3 per cent). Leaving a bequest to non-Muslim parents (5 per cent); adopted children (4.5 per cent); and non-Muslim children (1 per cent) were the bottom three. These results are not surprising as most respondents had siblings and grandchildren.

ATTITUDES TO LEAVING A BEQUEST: RESULTS OF THE MULTINOMIAL LOGIT MODEL

The results of the multinomial logit model are presented in Table 5. In the analysis, Group 0 (Would not leave a bequest) was the reference category, base outcome or comparison group and its coefficients were set to zero. There were two results obtained: first was the result for group 1 (Probably leave a bequest) versus the reference category and second was the result for group 2 (Would leave a bequest) versus the reference category. The coefficients of these two outcomes were defined with respect to the probability of the base outcome (Borooah 2002:48; Long and Freese 2001:174-175).

As can be seen, only a few explanatory variables are significant. Variables such as 'education', 'grandchildren' and 'law' could differentiate between categories of 'probably leave a bequest' and 'would not leave a bequest' while other variables did not appear to be able to differentiate between any categories. When comparing categories between 'would leave a bequest' and 'would not leave a bequest', five explanatory variables are significant: 'ethnicity', 'grandchildren', 'employment', 'importance of bequest', and 'religiosity'.

Regular coefficients in multinomial logit, however, do not tell the size of the impact of the explanatory variables. Hence, relative risk ratio is commonly used, as can be seen in Table 5. The interpretations of the results were adapted from , Long and Freese (2001:133), and Borooah (2002:56 and 64).

The relative risk for the variable 'ethnicity' (0.2454143) indicates that Malays that Malays were 0.25 times less likely than non-Malays in choosing 'would leave a bequest' over 'would not leave a bequest'.

The results also show that those who had higher education were more likely to choose 'probably leave a bequest' over 'would not leave a bequest'. The relative risk ratio for education (2.31261) implies those with higher education was 2.3 times higher than those who had lower education to choose 'probably leave a bequest' over 'would not leave a bequest'.

The relative risk ratio for the variable 'law' is 0.4705619, indicating that the ratio of the probability of being in the group of saying 'probably leave a bequest' to the probability of being in the group of saying 'would not leave a bequest' would be lower for those who knew how much the allowable amount to bequeath was than those who did not know.

As can be seen in Table 5, the relative risk ratio for the variable 'grandchildren' (0.500554) shows those who had grandchildren were 0.5 times less likely than those who had no grandchildren to choose 'probably leave a bequest' over 'would not leave a bequest'. While the relative risk ratio for the same variable (0.2953119) indicates that those who had grandchildren were 0.3 times less likely than those who had no grandchildren to choose 'would leave a bequest' over 'would not leave a bequest'.

The relative risk ratio for the variable 'employment' (0.3810782) shows that those who were working were 0.38 times less likely than those who were not working to say they 'would leave a bequest' over 'would not leave a bequest'. In other words, working participants were more likely to be in the position of saying 'would not leave a bequest' rather than 'would leave a bequest'.

In addition, those who were more religious and perceived leaving a bequest as important were more likely to choose 'would leave a bequest' over 'would not to leave a bequest'. Relative risk ratio for the variable 'religiosity' is 7.861229 indicating that one unit change in the variable religiosity made participants 7.86 times higher to say they 'would leave a bequest' over 'would not to leave a bequest'. On the other hand, relative risk ratio for the variable 'importance of bequest' is 17.27138 implying that those who perceived leaving a bequest as important were 17.27 times higher than those who did not perceive leaving a bequest as important to choose 'would leave a bequest' over 'would not to leave a bequest'.

BEQUEST MOTIVES: ANALYSIS FROM THE MULTINOMIAL LOGIT MODEL

Turning to the problem of discriminating bequest motives, this study provided evidence for a mixture of bequest motives in terms of estimated coefficient signs. Life-cycle theory posits the absence of bequest motives and this is portrayed by the negative signs of the significant

TABLE 5. Multinomial Logistic Regression Results for the Attitudes of Leaving a Bequest

	Probably leave a bequest versus Would not leave a bequest	Relative risk ratio	Would leave a bequest versus Would not leave a bequest	Relative risk ratio
Variables				
Intercept	-1.269975		-9.927864	
	(2.022426)		(3.363638)	
Age	0.167283	1.182089	-0.7495225	0.4725922
	(0.369505)	(0.4367877)	(0.4923355)	(0.2326739)
Gender	0.2383812	1.269193	0.1174877	1.124668
	(0.3111873)	(0.3949567)	(0.4165654)	(0.4684976)
Marital status	-0.4381991	0.6451973	-0.565524	0.5680624
	(0.3964619)	(0.2557962)	(0.500802)	(0.2844868)
Ethnicity	-0.2238776	0.799413	-1.404807***	0.2454143
	(0.6837193)	(0.5465741)	(0.8003735)	(0.1964231)
Education	0.8383767**	2.31261	0.3116778	1.365715
	(0.3906875)	(0.9035078)	(0.5190489)	(0.7088727)
Adopted children	-0.2950457	0.7444976	0.5444013	1.723576
	(0.7545687)	(0.5617746)	(1.004702)	(1.731681)
Grandchildren	-0.6920398***	0.500554	-1.219723**	0.2953119
	(0.3938399)	(0.1971381)	(0.5897954)	(0.1741736)
Sibling	0.8222419	2.275596	0.6992068	2.012156
	(0.747987)	(1.702116)	(0.979585)	(1.971078)
Employment status	0.1466029	1.157894	-0.9647506***	0.3810782
	(0.3899693)	(0.4515431)	(0.5386965)	(0.2052855)
Monthly income	-0.3824976	0.6821555	0.5651677	1.759743
	(0.4309031)	(0.2939429)	(0.5714343)	(1.005578)
Total asset value	0.2341375	1.263818	-0.5700551	0.5654943
	(0.3239257)	(0.4093832)	(0.4554313)	(0.2575438)
Amount inherited previously	-0.7721591	0.4620145	-0.7202551	0.4866281
	(0.8701537)	(0.4020236)	(1.27069)	(0.6183535)
Health status	0.6925469	1.9988	0.3017397	1.352209
	(0.4366414)	(0.8727588)	(0.6198639)	(0.8381857)
Disability	-0.9995972	0.3680276	-0.5400429	0.5827233
	(1.132493)	(0.4167889)	(1.475444)	(0.8597759)
Charity	0.6353272	1.88764	-0.0889117	0.9149264
	(0.5468717)	(1.032297)	(0.8060687)	(0.7374935)
Importance of bequest	0.7436736	2.103649	2.849051**	17.27138
	(0.4661761)	(0.980671)	(1.139389)	(19.67882)
Religiosity	0.0651098	1.067276	2.061943*	7.861229
	(0.4098404)	(0.4374129)	(0.6561209)	(5.157917)
Inheritance law	-0.7538277**	0.4705619	-0.3438628	0.7090262
	(0.3449124)	(0.1623027)	(0.4670956)	(0.331183)
Overall model evaluation:				
Log-likelihood	-267.20152	Df	36	
LR Chi-square	69.21	Pseudo R^2	0.1147	
Probability > Chi-square	0.0007	Sample size (n)	297	

Notes: Standard errors are reported in parentheses. Significance levels are: (*) ∂ <0.01 (1%); (**) ∂ <0.05 (5%); (***) ∂ <0.1 (10%)

coefficients and relative risk ratio less than 1 when comparing the probability of respondents choosing between 'probably leave a bequest' or 'would leave a bequest' over 'would not leave a bequest'. The negative signs of the significant coefficients show that respondents were more likely to choose not to leave a bequest or leaving an accidental bequest. It should be noted that, the life-cycle model at the same time posits that people might leave a bequest but with some strategic and exchange features. The existence of these two types of bequest motives is explained together with altruistic and dynastic bequest motives below by contextualising the results. With reference to Table 5 again, the variables age, education and importance of leaving a bequest with positive signs and relative risk ratio larger than 1 could possibly show some supports for altruistic, dynastic, strategic or exchange bequest motives as hypothesized in previous research. However, locating which bequest motive was dominant over others has been solved by means of analysis of the verbatim responses in next sub-section. The religiosity variable with a positive sign also shows some support for having an altruistic bequest motive in the attitude toward leaving a bequest. It should be bear in mind that this model assumes that none of these categories can be substitutes to the others (Borooah 2002:48).

BEQUEST MOTIVES: ANALYSIS FROM VERBATIM RESPONSES

It should be noted that it is possible to determine the bequest motive directly from the types of bequest. With reference to the bequest theories discussed in section one and literature review presented in section two, those who did not plan to make a bequest at all could possibly be driven by the pure life-cycle model (leaving no bequest at all) or leaving an accidental bequest. In addition, the altruism motive could possibly lead respondents to make a charity bequest. While the remaining bequest making could possibly be driven by one or more of the following bequest motives: exchange, strategic, altruism or dynasty.

TABLE 6. Expected Bequest Motives Based on the Types of Bequest According to the Literature Review

Types of bequest	Bequest motives
Bequest for charity purpose	Altruism
Bequest to siblings	Life-cycle, altruism or dynasty
Bequest to grandchildren	Life-cycle, altruism or dynasty
Bequest to non-Muslim parents	Life-cycle, altruism or dynasty
Bequest to adopted children	Life-cycle, altruism or dynasty
Bequest to non-Muslim children	Life-cycle, altruism or dynasty

Table 6 present the expected request motives based on the types of bequest as observed in the literature.

However, determining the bequest motives from the types of the bequests is not visible enough. This survey provided the respondents with a list of possible responses implying specific bequest motives for them to choose. A methodological problem should be noted at this point. In certain cases when participants revealed their preferences, as experienced by Light and McGarry (2004: 1675–1676), this study encountered a problem of identifying the most precise category of bequest motive that each response should be placed in, as a certain inevitable level of ambiguity restricted the analysis. The possibility that the responses could be placed in a different category was unavoidable although each response was classified into the category that appears the most probable based on the researcher's inference.

Tables 7, 8 and 9 present descriptive analysis of the bequest motives. As can be seen from the results, with regards to making a bequest to family members who are excluded by *faraid*, the dynastic motive appeared as the strongest motive (14.4 per cent). Both altruistic and exchange bequest motives appeared to be the second strongest motives cited by respondents (12.8 per cent each) while the strategic bequest motive was the weakest bequest motive (4.7 per cent).

Bequests to adopted children show that none of motives stood out to be dominant over the others. Exchange, strategic or altruistic bequest motives, each was cited once only (0.3 per cent). This study, however, proved that a large number of people make bequests to their adopted children as a sign of their love towards them (2.4 per cent). Lastly, bequest for charity was obviously driven by an altruistic bequest motive (18.5 per cent). In spite of this, the majority of respondents cited they planned to make a bequest for charity to ensure their rewards in the hereafter (52.5 per cent respectively).

DISCUSSION

There is nothing in the evidence suggesting the existence of a single theoretical bequest model being valid in the case of Malaysia. The empirical search for bequest motive models in the Malaysian Muslim community in this study finally reached a conclusion that various models of household behaviour coexisted in the Malaysian Muslim community in a varying degree (with no preference in order), namely pure life-cycle (with no intention of leaving a bequest at all or leaving an accidental bequest or life-cycle with some strategic or exchange features), altruistic and dynastic bequest models. It should be noted that this finding is consistent with some of the previous studies identified in the literature: Horioka et al. (2000), Laitner and Ohlsson (2001) and Light and McGarry (2004).

Locating which type of bequest motive model appeared in the Malaysian Muslim case was carried out

TABLE 7. Motives for Making Bequests to Family Members Who are Excluded by *Faraid*

Motives		Sample of respondents = 297	
		Frequency	Percent
Dynastic	To perpetuate my dynasty/family line	38	12.8
	Because of the blood relationship	1	0.3
	Because of the sibling's relationship	3	1
	To ensure the relationship remains	1	0.3
	Because they are my grandchildren from predeceased children	-	-
Altruism	To make them equally well of	38	12.8
Exchange	As rewards for taking care of me	38	12.8
Strategic	To ensure they will take care of me	14	4.7
Reason unclassified	For rewards in the hereafter	70	23.6
	To help them regardless of their economic status.	59	19.9
	To get approbation from friends/families/public	4	1.3
	Because of love/bonding	1	0.3
	Because they are excluded by *faraid*	1	0.3
	Sharing what we've been given by Allah	1	0.3
	To avoid any disagreement and dissatisfaction in the future	1	0.3
	To ensure the estate distribution will be carried out smoothly	1	0.3

TABLE 8. Motives for Making Bequests to Adopted Children

Motives		Sample of respondents = 297	
		Frequency	Percent
Exchange	As rewards for taking care of me	1	0.3
Strategic	To ensure they will take care of me	1	0.3
Altruism	To help them because they are poor/have low income	1	0.3
Reason unclassified	A sign of my love towards them	7	2.4
	To help them regardless of their economic status.	4	1.3
	For rewards in the hereafter	3	1

TABLE 9. Motives for Making Bequests to Charity

		Sample of respondents = 297	
Motives		Frequency	Percent
Altruism	Because of the altruism motive	55	18.5
Reason unclassified	For rewards in the hereafter	156	52.5
	To get approbation from friends/families/public	3	1
	Because it is my responsibility as a Muslim	2	0.6
	Because of Allah	1	0.3
	Help to upgrade the Muslim society's economy	1	0.3
	Helping each other	1	0.3
	Sharing what we've been given by Allah	1	0.3
	A sincere desire to do it	1	0.3
	To help the needy	1	0.3

by means of interpreting the sign of the coefficient of the variables obtained from regression of the multinomial logit model. However, such efforts to determine which motives of bequest triggered Malaysian Muslims decisions to leave a bequest have met with decidedly mixed results. The only way to determine which motive had dominated over others was examination of verbatim responses and the following conclusions could be derived: Firstly, with regard to the motives for making bequests to family members who are excluded by *faraid*, the dynastic motive was more dominant over other motives. Secondly, in relation to bequest making to adopted children, this study found that exchange, altruistic and strategic bequests were equally prominent motives. The existence of exchange and altruistic bequest motives is similar to the findings established by Light and McGarry (2004) and Nordblom and Ohlsson (2002). Thirdly, making bequests for charity were mostly driven by an altruistic motive, which is in line with McGranahan (2000). Finally, the positive attitude to leaving a bequest also reflected that their attitude to leaving a bequest, to some extent, engaged with the Islamic theory of wealth. This is supported by

the findings obtained from the analysis of the verbatim responses which shows that most respondents would leave a bequest for reasons such as to get rewards in the hereafter, because Allah encourages it and also because it is the responsibility of Muslims to help each other. Unfortunately previous work on this subject matter conducted within Malaysians' circumstances is not available for comparison.

CONCLUSION

Considerable work in this area has been undertaken to investigate this issue. Efforts at data collection and analysis could be perceived as steps towards identifying the most promising methodological approaches to answering issues surrounding bequest within the Malaysian Muslim contextualization. It is hoped that future research could benefit from this study, extend this issue from different perspective and employ different methodology.

REFERENCES

Barro, R. J. 1974. Are Government Bonds Net Wealth? *The Journal of Political Economy* 82(6): 1095-1117.

Becker, G. S & Tomes, N. 1986. Human Capital and the Rise and Fall of Families. *Journal of Labor Economics* 4(3): 1-39.

Becker, G. S. 1974. A Theory of Social Interactions. *The Journal of Political Economy* 82(6): 1063-1093.

Borooah, V. K. 2002. *Logit and Probit: Ordered and Multinomial Models*. Thousand Oaks, California: Sage.

Bruce, N. & Waldman, M. 1990. *The Rotten-Kid Theorem Meets the Samaritan's Dilemma*. The Quarterly Journal of Economics 105(1): 155-165.

Chu, C. C. Y. 1991. Primogeniture. *The Journal of Political Economy* 99(1): 78-99.

Davies, J. B. 1981. Uncertain Lifetime, Consumption, and Dissaving in Retirement. *The Journal of Political Economy* 89(3): 561-577.

Horioka, C. Y., Fujisaki, H., Watanabe, W. & Kouno, T. 2000. Are Americans More Altruistic Than The Japanese? A U.S-Japan Comparison of Saving and Bequest Motives. *International Economic Journal* 14(1): 1-31.

Jurges, H. 2001. Do Germans Save to Leave an Estate? An Examination of the Bequest Motive. *The Scandinavian Journal of Economics* 103(3): 391-414.

Kao, Y. E., Hong, G. S. & Widdows, R. 1997. Bequest Expectations: Evidence From the 1989 Survey of Consumer Finances. *Journal of Family and Economic Issues* 18(4): 357-377.

Laitner, J. & Ohlsson, H. 2001. Bequest Motives: A Comparison of Sweden and the United States. *Journal of Public Economics* 79(1): 205-236.

Light, A. & McGarry, K. 2004. Why Parents Play Favorites: Explanations for Unequal Bequest. *American Economic Review* 94(5): 1669-1681.

Lillard, L. A. and Willis R. J. 1997. Motives for Intergenerational Transfers: Evidence From Malaysia. *Demography* 34(1): 115-134.

Long, J. S. & Freese, J. 2001. *Regression Models for Categorical Dependent Variables Using Stata*. Texas: Stata Press Publication.

McGranahan, L. M. 2000. Charity and the Bequest Motive: Evidence from Seventeenth-Century Wills. *The Journal of Political Economy* 108(6): 1270-1291.

Menchik, P. L. & Jianakoplos, N. A. 1998. Economics of Inheritance. Inheritance and Wealth in America, edited by In R. K. Jr. Miller and S. J. McNamee, 45-59. New York: Plenum Press.

Nordblom, K. & Ohlsson, H. 2002. Bequests, Gifts and Education. Swedish Evidence on Parents' Transfer Behavior. Working Papers in Economics, 69, 1-32. Available at:<URL: http://www.handels.gu.se/epc/data/html/html/PDF/gunwpe0069.pdf>, Access Date: 6th August 20079.

Pestieau, P. 2000. Gifts, Wills and Inheritance Law. In *Encyclopedia of Law and Economics: The Regulation of Contracts*, edited by B. Bouckaert and D. G. Gerrit, Volume 3 888-906. Cheltenham: Edward Egar.

Rowlingson, K. & McKay, S. 2004. Attitudes to Inheritance: A Literature Review and Secondary Analysis of Data. Available at:<URL:http://www.benefits.org.uk/iht1.pdf>, Access Date: 18th August, 2007.

Rowlingson, K. & McKay, S. 2005. *Attitudes to Inheritance in Britain*. Bristol: The Policy Press.

Villanueva, E. 2005. Inter Vivos Transfers and Bequests in Three OECD Countries. *Economic Policy* 20(43): 506-565.

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