

The Contribution of Zakat as an Income Creating Asset in Selangor and Wilayah Persekutuan, Malaysia

Nor Ghani Md. Nor
Abd. Razak Dan
Mohd Ali Mohd Noor

ABSTRAK

Keperluan menyediakan bantuan modal kepada fakir miskin merupakan perkara yang agak baru bagi pihak pengurusan zakat di beberapa negeri di Malaysia. Penjarahan ke atas skim ini sebahagiannya disebabkan oleh pertambahan jumlah kutipan zakat beberapa tahun kebelakangan ini. Walaupun demikian, kajian literatur menunjukkan tiada usaha dibuat selama ini untuk melihat kejayaan mahupun kegagalan program ini di dalam mewujudkan perniagaan mampu diri. Kajian seperti ini sangat penting memandangkan dana zakat yang terhad haruslah diagihkan secara optimal bagi memaksimumkan manfaat kepada fakir miskin. Secara khususnya, usaha haruslah dibuat bagi menentukan faktor-faktor yang mempengaruhi kejayaan atau kegagalan program untuk memandu agihan dana zakat pada masa hadapan. Kertas ini bertujuan untuk mengenalpasti faktor-faktor kejayaan perusahaan mikro yang telah dibiaya melalui dana zakat. Dengan menggunakan data-data yang diperolehi dari 127 orang responden yang menerima bantuan modal dari pejabat zakat di Selangor dan Wilayah Persekutuan, model regresi logistik telah digunakan untuk menguji pengaruh beberapa faktor ke atas kebarangkalian kejayaan. Faktor tersebut telah dipilih berasaskan teori-teori dan kajian empirik terdahulu mengenai perusahaan mikro yang dibiayai secara konvensional. Keputusan dari analisis ekonometrik menunjukkan faktor gender, umur, bilangan lawatan penyelia projek dan pengalaman lalu adalah signifikan dalam menentukan kejayaan projek yang dijalankan.

ABSTRACT

It was not until recently that the zakat management authorities of several states in Malaysia decided to provide capital assistance to the poor. Foray into the scheme may be partly attributed to the increase in the

amount of zakat collection in recent years. To date, a survey of the literature shows that no attempt has so far been made to look into the success or failure of this program in creating viable business entities. Such a study is crucially important since the limited zakat funds must be optimally distributed to maximize the benefits accruing to the poor and needy. In particular, effort has to be made to determine the factors that influence success or failure of the program to guide the distribution of zakat funds in the future. This paper aims at achieving this objective i.e. determining the success factors of micro enterprises funded by zakat funds. Using data obtained from 127 randomly selected respondents who had received capital assistance from the zakat authorities of the state of Selangor and Wilayah Persekutuan, a logistic regression model is estimated to test the influence of several hypothesized factors on the probability of success. Several of these factors were chosen based on previous theoretical and empirical works on "conventionally" funded micro enterprises. Results of the econometric analysis shows that gender, age, number of supervisory visits and suitability of prior job experience to project undertaken are statistically significant in determining success and achieving the objective of zakat.

INTRODUCTION

Zakat as an instrument of social security in Islam, has played an important role in alleviating poverty since the time of the Prophet Muhammad (p.b.u.h). The potency of zakat as an economic enabling measure is well illustrated in the time of Caliph Umar Abdul Aziz when, after a time, not a single person was poor enough to be deserving of help from the zakat fund even though another possible interpretation of this phenomenon is that the level of economic prosperity achieved by the Caliphate benefited all levels of society such that the previously zakat-deserving population no longer require assistance.

The rich are expected to pay zakat to purify their soul and wealth. For an economically able Muslim, paying zakat is not considered a burden but a duty to the other less fortunate Muslim brothers. The hearts of the poor will also be purified from enmity and jealousy towards the rich. Therefore, both spiritual and material aspects of the haves and the have-nots are expected to be enhanced through the fulfilment of the obligation of zakat.

Unfortunately, the efficiency of zakat's collection and distribution has been a major issue in many Muslim countries, particularly with respect

to the problem of zakat collectibility. For example, from the mid- to the late eighties, it was estimated that about 60% of zakat collected in Pakistan were left idle such that by June 1989 the total bank balance amounted to Rs. 4.387 billion (Khan 1990). At the same time, there exists no effectively organised official system of collecting zakat in the Muslim world with the exception of a few Muslim countries such as Baitulmal in Malaysia, Zakah Collection Committees in Pakistan and Zakah House in Kuwait (Anwar 1992). From the Islamic economics literature point of view, it is quite telling to observe that very little attention has been given to the aspect of zakat distribution (Nik Hassan 1987; Ariff & Osman 1989; Shirazi 1996; and Mohammad Faiz 1991). Available anecdotal evidences show that despite the increase in zakat revenue in some countries, little effort has been directed towards the creation of capital-enabling schemes targeted to providing long-term solutions to the poor zakat recipients.

Zakat assistance for the poor consists of two types; direct assistance to satisfy immediate needs and capital assistance for long term projects. Quite naturally, the first kind of assistance is mainly given to the non-productive poor while the second is given to their able counterparts. This study focuses on the latter scheme. A review of relevant literature shows that no attempt has so far been made to look into the success or failure of this program in creating viable business entities. Such a study is crucially important since the limited zakat funds must be optimally distributed to maximize the benefits accruing to the poor and needy. In particular, effort has to be made to determine the factors that influence the success or failure of the program to guide the distribution of funds in the future. Determining the success factors of micro enterprises funded by zakat funds is the objective of the present study.

This paper is organized as follows. The next section presents a review of the literature on factors affecting the viability of micro enterprises. It is then followed by a section describing the methodology and data used in the study. Results are discussed in the penultimate section and the final section provides a summary.

FACTORS AFFECTING THE VIABILITY OF MICRO ENTERPRISES

There exists a fairly extensive literature on factors that affect the success of small (including micro) businesses. Although this paper deals with a very specific type of micro businesses, i.e. those that were established by poor individuals using initial capital provided by zakat institution, they

may nevertheless still share some common success factors. Factors that have been most often hypothesized and shown to influence the success of small firms are entrepreneur's age, education, prior experience, gender and available financial resources.

The importance of the age factor is well established by several studies including Dunne et al. (1989) who found that owners of surviving companies were almost always younger than those of failures. The age at which owners established or took over their companies was strongly associated with whether their companies eventually survived. Perhaps, the young people are more open to new ideas, more energetic and possibly possess more determination to succeed (Hall 1995). In addition, Bates (1990) also found that though age was an obvious factor, there may be an optimum age at which to run a company. He proposed that the optimum age to be 44–55. When age is viewed as a proxy for business acumen and ability, older entrepreneurs clearly have an advantage because of the possession of greater business knowledge, experience and skills. To the extent that age is expected to be positively correlated with the amount of accumulated human capital, increase in age lessens the probability of companies failing. Evans (1987a), for example found that a one percent change in age leads to a 13 per cent change in the probability of survival and the probability value increases with age more rapidly for larger firms.

The gender of the recipient has also been shown to be an important factor in influencing the success of the micro enterprises. Grameen Bank statistics (2000) shows that in delivering credit, priority has been increasingly assigned to women because they are proved to be not only reliable borrowers but also astute entrepreneurs. Today, over 90 per cent borrowers of this micro credit program are women. This observation is consistent with the result of an earlier study by Pitt and Khandker (1998) that finds that credit provided to women for micro enterprises is more likely to lead to business success than credit provided to men.

The life cycle of the entrepreneurs also affects the organisation of household labour. This is because households pass through general phases such as expansion, dispersal, fission and replacement (Lim 1994). It appears however, that the effect of entrepreneur's life cycle and business success is inextricably linked to variations in potential family resources associated with the cycle. The more sources of income of family members, the less is the probability of business failure. This degree of income pooling and resources sharing phenomenon may also be culture specific. It has often been argued that such behaviour is more commonly observed among members of Chinese families compared to Malays in Malaysia.

One might also expect a strong positive relationship between education level and the probability of business survival. However, Hall (1995) cautioned against a naïve acceptance of the idea by saying that although the importance of education is undeniable, it is the human capital embodied in the education obtained which is more crucial. Useful education is one where it is appropriately suited to the sets of market conditions. Hence, customized training is absolutely essential in enhancing the probability of success even though Jovanovic (1992) once concluded that the education levels, including whether they had attended any sort of training course or not, does contribute towards the success and failure of micro enterprises. It may be safe to conclude that there is a great interdependence between education and training in determining the success of the small firms.

Apart from education and training, there is some evidence that points towards the role of experience in influencing business success (Granger & Stanworth 1989). Findings from past researches show that successful entrepreneurs tend to be better qualified in terms of school and sub-degree qualifications, more likely to have been previously employed in the same sector, more likely to have had management experience and more likely to have been employed in the medium-sized firm. The Boston Consulting Group (1970) observes that "Costs decline by some characteristic amount each time accumulated experience is doubled. . . . the decline goes on in time without limit (in constant dollars). . . The rate of decline is surprisingly consistent even from industry to industry." Storey and Strange (1992) also affirmed that staying in the same sector might benefit performance, but suggested that previous management or ownership experience did not make any difference; if anything the last would appear to have affected performance detrimentally.

Other factors (firm-related) that have been shown to affect success include firm's size, sector, location and age (Storey 1993).

DATA AND METHODOLOGY

Data for this study was collected through a direct interview survey conducted in March-June 2001 involving initially 127 recipients of capital assistance from the zakat fund in the state of Selangor and Wilayah Persekutuan. They were part of the group of respondents chosen by the zakat authorities to be given capital assistance to start projects deemed appropriate to their individual circumstances. The lists of the recipients

were obtained from Majlis Agama Islam Selangor (MAIS) and Majlis Agama Islam Wilayah Persekutuan (MAWIP). In the state of Selangor, the selected recipients consist of 15 individuals from Sepang, 10 from Selayang, 11 from Gombak and 14 from Hulu Langat districts. They represent approximately 50% of the total non-paddy zakat recipients who had received capital assistance for at least two years in the state of Selangor. The rest of the recipients were from Wilayah Persekutuan. Year 2001 recipients were excluded because it was too early to evaluate their performance. Out of the 127 respondents, responses from only 106 were eventually used in the analysis since 21 had been excluded because of incomplete answers.

The respondents were asked to state whether their income had increased, decreased or unchanged, sometime after and because they had received assistance to start a small business project. A project is considered successful if the respondent reported that his or her income had increased and considered a failure otherwise. Apart from the question pertaining to respondents' income, the questionnaire is also designed to obtain respondents' attributes that were hypothesized to influence the probability of business success. Taking cue from past researches (cited above), seven variables were chosen to represent these attributes. They are gender, age, years of schooling, number of supervisory visits since receiving assistance, land ownership status, suitability of prior job experience to project undertaken and amount of capital assistance received. The first three variables were thought to influence the probability of project success for obvious reasons as discussed in the preceding section. Number of supervisory visits is included to capture the effect of continuous supervision on the likelihood of success. Land ownership, on the other hand, acts as a proxy to the availability of additional resources to the recipients. The hypothesis is that the probability of success is expected to be positively correlated to this variable. Suitability of past working experience to project undertaken is expected to affect the outcome of the project since appropriate prior experience is a useful asset for the recipients. Finally, the amount of capital assistance extended is hypothesized to positively influence the likelihood of success, *ceteris paribus*.

A binomial logit model was used to assess the impact of the seven independent variables on project success. The logit model is particularly suited for the current analysis because the dependent variable (success or failure of a project) is a dichotomous variable. In a logistic regression, the probability of a respondent i being successful is given by:

$$P_i = \frac{1}{1 + e^{-z}}$$

Hence the regression model to be estimated is:

$$\begin{aligned} \text{Log}(P_i/(1 - P_i)) = & \beta_0 + \beta_1 \text{Gender}_i + \beta_2 \text{Age}_i + \beta_3 \text{Yrschool}_i \\ & + \beta_4 \text{Supervision}_i + \beta_5 \text{Landownership}_i \\ & + \beta_6 \text{Prevjob}_i + \beta_7 \text{Amountcap}_i \end{aligned}$$

where:

<i>Gender</i>	~	gender dummy; =1 for female, 0 for male
<i>Age</i>	~	age of recipient
<i>Yrschool</i>	~	years of schooling
<i>Supervision</i>	~	number of supervisory visits since receiving assistance
<i>Landownership</i>	~	land ownership dummy; =1 for owning land, 0 otherwise
<i>Prevjob</i>	~	job experience dummy; =1 for similar type before and after receiving assistance, 0 otherwise
<i>Amountcap</i>	~	amount of capital assistance received

The dependent variable takes the value '1' if the respondent reported an increase in monthly income sometime after receiving the capital assistance. It takes the value zero, otherwise. The above model was estimated using the data collected to determine which of the seven independent variables significantly influence likelihood of success of the micro enterprises.

RESULTS AND DISCUSSIONS

It is clear from Table 1 that there is an imbalance in the distribution of respondents who reported that their household income had increased because of the capital assistance (66.98%) and those who did not (33.02%). This imbalance may be taken as an indication that the capital assistance program had been quite successful in improving the economic status of the recipients. It must be mentioned, however, that the imbalance should not be a cause for concern in econometric estimation since the goodness

TABLE 1. Frequency of success and failure

	Frequency	Percentage
Success	71	66.98
Failure	35	33.02
Total	106	100.00

of fit of the logistic model could be determined using a long established modified criterion (Morrison 1969).

The results of the logistic regression estimation are given in Table 2 below. The regression result indicates that four of the seven variables namely, gender, age, number of supervisory visits since receiving assistance, and suitability of prior job experience to project undertaken are significant. The coefficients of two of these variables are significant at the 5% level.

The magnitude of impact is more easily explained by looking at the values of the exponent of the coefficients given in the third column of Table 2. Compared to males, the odds of success is increased by a factor of 3.54 for female recipients. This finding is consistent with the experience of Grameen Bank in administering loans for micro enterprises in Bangladesh. Regression result also shows that the odds of success is increased by a factor of 1.05 for a unit (year) increase in age. This result is also expected since age can be regarded as a proxy for accumulated human capital.

TABLE 2. Binomial logistic regression results

Independent variable	Coefficient	Exp. coefficient	Wald statistics
<i>Constant</i>	-1.745	0.18	0.97
<i>Gender</i>	1.264**	3.54	6.10
<i>Age</i>	0.049*	1.05	2.73
<i>Yrschool</i>	-0.165	0.85	1.63
<i>Supervision</i>	1.674**	5.33	5.22
<i>Landownership</i>	0.295	1.34	0.19
<i>Prevjob</i>	0.855*	2.35	2.93
<i>Amountcap</i>	0.001	1.00	0.17

** Significant at the 5% level

* Significant at the 10% level

The impact of supervision on project success is quite substantial. Each additional supervisory visit by officials from the zakat authority increases the odds of success by a factor of 5.33. An obvious policy implication of this finding is that proper supervision is essential for enhancing the probability of success.

Previous job experience also plays an important role in determining success. The odds of a project becoming successful is increased by a factor of 2.35 for recipients with suitable job experience compared to those without it. This finding implies that careful consideration must be made when deciding upon the type of project that should be undertaken by a recipient.

It is also interesting to note that the years of schooling variable is not significant in determining probability of success. Although, one would expect a positive influence exerted by this variable on the likelihood of success; the result proves otherwise. One possible explanation for this observation is that the amount of human capital acquired through schooling is generally low for the zakat recipients to make any difference on the likelihood of success. If their schooling were sufficient enough to influence the project outcome, they would not have been poor in the first place to be entitled to zakat fund.

Finally, the amount of capital assistance provided appears to make little difference on project outcome. The hypothesis that larger funding, perhaps more than what is required for a project, would enhance the likelihood of success is not supported by the regression result.

Table 3 provides an assessment of the fit of the logit model to observed data. It compares the outcome predicted by the model with the actual (i.e. observed) outcome. The classification rates indicate that the model did significantly better than chance in predicting business success.

TABLE 3. Logistic regression classification table

		Predicted	
		Success	Failure
Observed	Success	62	9
	Failure	22	13

Note: Correct classification (%)

Success = 87.3%; Failure = 37.1%; and Overall = 70.8%

Overall, the model correctly predicted observed outcomes for just over seventy percent of the respondents. Of the 106 respondents analysed, the model is correct in predicting the outcome of 75 of them. Notice also that the model does a better job in predicting successes than failures.

The good predictive power of the model should be cautiously interpreted, however. This is necessary since the observed outcome for success is not the same as those for failure. Therefore, the model is expected to perform better than chance anyway. In other words, a better than 50 percent correct prediction is not a proper way for judging model fit. In the present study, the proportional chance criterion should be applied instead. The formula for computing the criterion is given as:

$$C_{\text{prop}} = p^2 + (1 - p)^2$$

When the formula is applied to the imbalance sample size with proportions 66.98% and 33.02%, the proportional chance criterion result is 55.76% (i.e. $0.6698^2 + [1 - 0.6698]^2$). Nevertheless, the classification table shows that the model's predictive ability is well above the even more stringent proportional chance criterion. The model correctly predicted 70.8% of the time compared to 55.8% hurdle rate of the proportional chance criterion.

SUMMARY

In the quest to enhance the performance of the zakat administration, it is important not to lose sight of the importance of establishing an efficient zakat distribution system. Towards this end, this paper tries to determine factors that may influence the probability of success of projects funded by capital assistance program. Through a binomial logistic regression, it was found that gender, age, number of supervisory visits since receiving assistance and suitability of prior job experience to project undertaken are important determinants of success. Just like any other empirical models, the model estimated in this study is not expected to be capable of identifying all attributes that significantly affect the success of a project. Nevertheless, the result of the logistic regression does indicate several of the more important factors that must be taken into account by the provider of capital assistance in dispensing scarce zakat funds.

REFERENCES

- Ariff, Muhammad & Osman, Jamil. 1989. Eradicating Poverty In Malaysia: The case for Zakat as one of the means-Problems and Prospect. Paper presented at the National Seminar On Islamic Economics, Dec 19-20, Kuala Lumpur.
- Anwar, Muhammad. 1992. Chanelling Zakah Funds Into Long Term Investment. Paper presented at 8th. Expert Level Meeting Of Central Banks, Money Authorities and Islamic Banks, July 27-27 at Kuala Lumpur.
- Bates, T. 1990. Entrepreneur human capital inputs and small business longevity. *Review of Economics and Statistics* 72(4): 551-559.
- Boston Consulting Group. 1970. *Perspectives of Experience*. Boston.
- Coase, R. H. 1937. The nature of the firm. *Economica* 4: 386-405.
- Dunne, T. M. J. Roberts & L. Samuelson. 1989. Pattern of firm entry and exit in US manufacturing industries. *Rand Journal of Economics* 19(4): 495-515.
- Evans, D. S. 1987a. The relationship between firm growth, size and age: estimates for 100 manufacturing industries. *Journal of Industrial Economics* 35(4): 567-582.
- Granger, B. & J. Stanworth. 1989. Who becomes an entrepreneur. *International Small Business Journal* 8(1): 11-22.
- Hair, J. F., R. E. Anderson, R. L. Tatham & W. C. Black. 1992. *Multivariate Data Analysis with Readings*. 3 Ed. New York. New York: Macmillan Publishing Company.
- Jovanovic, B. 1992. Selection and the evolutionary of industry. *Econometrica* 50(3): 649-670.
- Khan, Muhammad Akram. 1990. A comparative study on Zakah systems – its Shariah Administrative and Financial Controls. Paper presented in the Third International Zakah Conference, May 17 at Kuala Lumpur.
- Mohammad, Faiz. 1991. Prospects of Poverty Eradication Through the Existing Zakat System In Pakistan. *The Pakistan Development Review* 30(4) Part II: 1119-1129.
- Morrison, D. G. 1969. On the Interpretation of Discriminant Analysis. *Journal of Marketing Research* 6(2): 156-163.
- Nik Hassan, Nik Mustafa. 1987. Zakat in Malaysia- Present and Future Status. *Journal of Islamic Economics* 1: 47-75.
- Pitt, M. & S. Khandker. 1998. The impact of group based credit programs on poor household in Bangladesh: Does the gender of participants matter? *Journal of Political Economy* 106(5).
- Shirazi, Nasim Shah. 1996. Targeting, Coverage and Contribution of Zakat to Household's Income: The case of Pakistan. *Journal of Economic Cooperation Among Islamic Countries* 17(3-4): 165-186.
- Siddiqi, Muhammad Iqbal. 1981. *Economic Security In Islam*. Trans. Yusof Al-Qardawi. Lahore: Kazi Publications.

Storey, D. & A. Strange. 1992. Entrepreneurship in Cleaveland 1997-1989: A study of the effects of the enterprise culture. Department of Employment Research Series No. 3.

Faculty of Economics
Universiti Kebangsaan Malaysia
43600 UKM Bangi
Selangor Darul Ehsan