

Does Social Capital Reduce Poverty? A Case Study of Rural Households in Terengganu, Malaysia

Roslan Abdul-Hakim

Corresponding Author Department of Economics, College of Arts and Sciences Universiti Utara Malaysia 06010 UUM Sintok, Kedah Darul Aman Malaysia
E-mail: ahroslan@uum.edu.my

Nor Azam Abdul-Razak

Department of Economics, College of Arts and Sciences Universiti Utara Malaysia 06010 UUM Sintok, Kedah Darul Aman Malaysia

Russayani Ismail

Department of Economics, College of Arts and Sciences Universiti Utara Malaysia 06010 UUM Sintok, Kedah Darul Aman Malaysia

Abstract

In this study, the relationship between social capital and poverty is examined. The data employed are primary data, collected from a sample of 2500 households in rural Terengganu, Malaysia. Information on household demographic characteristics, income, human capital, physical assets (capital) and social capital is collected. Social capital covers six dimensions: i) groups and networks, ii) trust and solidarity, iii) collective action and cooperation, iv) information and communication, v) social cohesion and inclusion, and vi) empowerment and political action. Social capital index for each household, in the scale of 1 to 10, is calculated by applying a linear transformation technique. The analysis in this study is based on logit model estimation. Interestingly, the results show that social capital plays an important role in poverty alleviation, consistent with the evidence in the recent literature. Other factors that are found to be important include human capital, physical capital, the age and gender of the head of the household, as well as the size of the household.

Keywords: Social capital; poverty; logit model; Malaysia

I. Introduction

Reducing poverty has been widely acknowledged as one of the main goals of development. In Malaysia, the emphasis on reducing poverty has been specifically spelled out and documented in various government development policies, i.e. New Economic Policy (1971-1990), National Development Policy (1991 -2000) and National Vision Policy (2001 -2010). In fact, reducing poverty is regarded as a national agenda in Malaysia. As a result of various efforts to reduce poverty, the incidence of poverty in Malaysia fell significantly. The overall poverty rate in Malaysia has significantly declined from 52.4% in 1970 to 5.7% in 2004. Nevertheless, poverty in Malaysia is still a rural phenomenon. Poverty incidence in the rural areas is found to be notably higher than the urban areas. In 2004, the poverty rate in the rural areas is 11.9%, while the urban poverty rate is only 2.5% (Malaysia, 1971 and 2006).

Generally speaking, the strategy to reduce poverty in Malaysia consists of three main elements (Shireen, 1998). The first element is to increase the income and productivity of the poor. This was to

be achieved by expanding their productive capital as well as increasing their efficiency and productivity such as by adopting modern techniques, replanting and redevelopment of crops, irrigation, introduction of new crops, and improved marketing, credit, financial and technical assistance. Second, to encourage inter-sectoral mobility of the poor out of low productivity sector to higher productivity and value added sector, such as from agriculture to industrial sector. In this regard, this strategy is achieved through sustaining high economic growth, where new employment opportunities will be created. The government also provides the necessary education, training, financial and technical skills. Finally, to improve the quality of life of the poor by provision of social services such as housing, health, education and public utilities.

Thus, in the past, the strategies to reduce poverty are generally macro in nature. Besides, assistance to the poor is focused on improving the physical and human capital of the poor to enable them to expand their economic activities, increase productivity and hence, income. It appears that another important form of capital, i.e. social capital, is neglected in the poverty alleviation strategy. This is unfortunate since a growing body of recent literature has demonstrated that social capital, which is generally characterised by trust, social ties, and networks, is important for the advancement in material gain and welfare. It is an essential form of capital, such that it plays an important role in affecting the well-being of households as well as the level of development of communities and nations. In fact, it has been suggested that social capital is an important determinant of poverty (Yusuf, 2008; Grootaert, 2001). Besides, Isham et al. (2002) argued that communities that are endowed with a higher stock of social capital are in a better position to tackle the problems of poverty and vulnerability. Furthermore, Rupasingha and Goetz (2007) also demonstrated that social capital is vital in poverty alleviation, and that strategies such as improving the educational level of the poor and the creation of new jobs do not necessarily guarantee a reduction in poverty. These efforts must be complemented with the development of social capital if the strategy is to be effective. In another study, Narayan and Pritchett (1999) have found that household's social capital endowment not only has strong effects on welfare, but also found that the magnitude of the effect is notably larger than that of the household's education and physical assets. Similar to the findings of Narayan and Pritchett (1999), Grootaert (1999) also found that social capital is not only important, but has greater influence on economic well being than human capital and other forms of capital. Besides the positive impact on poverty, social capital is also found to be positively associated with other broad development objectives. For instance, Xiaojie, Rehnberg, and Qingyue (2009), demonstrated that social capital is helpful in improving health conditions. Putnam (1993) on the other hand provided the evidence that communities with high levels of social capital, i.e. what he calls 'civic engagement', is found to be more prosperous than communities with low levels of social capital. Besides, he also showed that the levels of social capital were strongly correlated with a number of social consequences such as lower levels of violent crime, lower mortality levels, and better educational outcomes (Putnam, 2000).

Basically, the underlying assumption of social capital is that, socialising is potentially good and beneficial. The involvement and participation of individual in groups, i.e. having social ties and relation with others in society, can have positive socioeconomic consequences not only to the individuals, but also to the community at large. Therefore, social capital constitutes an important form of capital, which is vital for the material advancement and welfare. The lack of social capital can have the opposite outcome. The recognition of social capital in influencing the economic well being has major implications for development policy and strategy, particularly with regards to alleviating poverty. This leads to the argument advanced in this study: the key for reducing poverty further in Malaysia, particularly rural poverty, requires measures to be taken at the micro, i.e. individual or household level. The basis of this view is that poverty eradication measures at the macro level might no longer be as effective as in the past. The reason for this is that poverty incidence now is relatively low and the poor are found to be scattered throughout the places. Hence, poverty reduction measures at the macro level would probably never reach the intended poor groups. It is believed that a new strategy is needed to tackle the current problem of poverty. The measures taken should be at the micro level, i.e.

targeted at specific poor households. In this regard, it is foreseen that the potential of encouraging the accumulation of social capital among the poor individual or household is one of the possible new strategies to reduce poverty.

The argument above however, entails investigation on the impact of social capital on alleviating poverty, particularly in Malaysia, where evidence on the relationship between social capital and poverty is still lacking. An understanding of the determinants of poverty, particularly on the role of social capital, is necessary for effective public intervention to further reduce poverty. The main question asked is whether social capital really reduces poverty. This study attempts to provide the answer to this question and hence, to ascertain whether there is evidence that lends support to the contention. Towards this end, this paper investigates factors affecting the likelihood of poverty among rural households. The focus of the investigation is on the question of whether social capital at the household level reduces the probability of the household being poor. Here, the empirical evidence is provided by estimating a logit model using primary data gathered from rural households in Terengganu, Malaysia.

This paper is organised into four sections as follows. Section I provides the introduction, Section II discusses the sources of data, measures of poverty and social capital as well as the model for estimation in the study. Section III discusses the results, while Section IV concludes.

II. Data and Method

The Data

The data used in this study are primary data gathered through a survey carried out between April 15 and May 18 2009 in Terengganu, Malaysia. Terengganu is located in the eastern part of Peninsular Malaysia. The area of this study covers about three quarter of the total area of the state of Terengganu (Figure 1), consisting of three districts, namely Dungun, Kemaman and Hulu Terengganu. The total population in these three districts is about 416,600, while the estimated number of households is around 90,565 (Table 1). The sample of the study consists of 2500 households which were selected through a stratified random sampling method. This constitutes about 3% of the estimated total households in these three districts. However, due to missing values, only 2268 households can be used in the analysis.

Figure 1: Map of Terengganu



Table 1: Sample of the study by districts (number of households)

District	Total Population*	Estimated Number of Households**	Sample	Percentage
Dungun	164,000	35652	985	39.4
Kemaman	176,400	38348	1058	42.3
Hulu Terengganu	76,200	16565	457	18.3
TOTAL	416600	90565	2500	100.0
Terengganu	1,094,300	237891		

*Source: Malaysia. Department of Statistics.State/District Data Bank 2008

**Authors' own estimation, assuming average household in Terengganu consists of 4.6 family members.

Measures of Poverty

Here, the poor and the non-poor in the sample of the study are segregated by employing poverty line income. In Malaysia, the incidence of poverty among households is normally calculated by the well-known method of Head Count Ratio. Calculating poverty in this method requires one to define poverty line income, an income level that is considered as necessary for individual households to meet their daily basic needs such as food, shelter and clothing. The official poverty line income for Terengganu is readily available from the government document. There are two measures of poverty – gross and per capita poverty line income. Gross poverty line income is poverty line calculated for each household, while per capita poverty line income takes into account the household size. The gross and per capita poverty line income in Terengganu is given in Table 2.

Table 2: Poverty Line Income for Terengganu, Malaysia, 2004.

Poverty Line Income	Income Level
Gross	RM734
Per Capita	RM148

Source: Malaysia: Ninth Malaysia Plan, 2006-2010.

Therefore, for the purpose of the analysis, a household is defined as poor if the income received by the household is less than RM734 or the per capita income of the household is less than RM148 per month. Both definitions of poverty, i.e. gross and per capita poverty line income, are employed to investigate whether the poverty definition used has any influence on the results.

Measures of Social Capital

In the literature, there is a disagreement on what constitutes social capital. In fact, there is also a disagreement on how social capital should be measured. Following Grootaert et al. (2004), social capital is viewed to constitute six dimensions or components. These six components are: i) groups and networks, ii) trust and solidarity, iii) collective action and cooperation, iv) information and communication, v) social cohesion and inclusion, and vi) empowerment and political action. Table 2 shows the dimensions of social capital and the related items used for capturing each dimension.

Table 2: Social capital dimensions and related indicators

Dimension of Social Capital	Items
Groups and networks	(i) Membership in formal or informal organisation or association. (ii) Ability to get support from those other than family members and relatives in case of hardship.
Trust and solidarity	(i) Most people in the community can be trusted (ii) Most people in the community always help each other.
Collective action and cooperation	(i) More than half of the community contribute time or money towards common development goals. (ii) High likelihood that people in the community cooperate to solve common problems.
Information and communication	(i) Frequently listen to radio. (ii) Frequently read newspapers. (iii) Frequently watch television.
Social cohesion and inclusion	(i) Strong feeling of togetherness within the community. (ii) Feeling safe from crime and violence when alone at home.
Empowerment and political action	(i) Have control in making decisions that affect everyday activities. (ii) Vote in the last general election (2008).

All of the items representing each domain are in the form of “yes” or “no” answer. A value of 1 is designated to “yes” answer, while the value of 0 is given to “no” answer. In order to derive the social capital index for each individual household, the percentage of “yes” answer is calculated. This percentage is then transformed into a scale of 1 to 10 by applying a linear transformation, as follows:

$$Y = h(x) = 1 + (9/100)*x$$

where, x is the raw score (percentage of “yes” answer) and Y is the (social capital) index score.

The Logit Model

In estimating the effects of various factors on the probability of a rural household being poor, a binary choice model based on the maximum likelihood method is employed. A dummy dependent variable which takes the value of 1 and 0 is used. The value of 1 is assigned to a poor household, i.e. if the income of the household is less than the specified poverty line income. On the other hand, the value of 0 is assigned to a non-poor household, i.e. if the income of the household is equal to or more than the specified poverty line income. The logit model used in this study is specified as follows:

Latent variable specification:

$$Y_i^* = \beta X_i + u_i \tag{2}$$

where:

$$Y_i = 1 \text{ (poor) if } Y_i^* > 0$$

$$Y_i = 0 \text{ (non-poor) if } Y_i^* < 0$$

β = vector of parameters

X_i = vector of independent variables

u_i = error term

The error term, u_i , is assumed to be logistically distributed. The probability of household i being poor or otherwise, is postulated to depend on the demographic characteristics of the head of the household, the household’s characteristics, as well as the physical, human and social capital of the household. The demographic characteristics of the household head are characteristics such as the age, gender and marital status, while the household’s characteristics are characteristics such as the household size, number of dependents, and remittance.

Thus, the probability of household i being poor could be written as follows:

$$\Pr(Y_i = 1|x_i) = F(x_i'\beta) = \frac{\exp(x_i'\beta)}{1 + \exp(x_i'\beta)}, \tag{3}$$

where

$$x_i' = [SOCC_i \text{ HUMC}_i \text{ PHYC}_i \text{ AGE}_i \text{ GEN}_i \text{ MARTST}_i \text{ HHSIZE}_i \text{ DEPEND}_i \text{ REMITT}_i]$$

Equation (3) is estimated to examine the probability of the rural household being poor. The variables used in the estimation are explained and summarised in Table 3.

It is worth to note that the sign of the estimated parameter is already sufficient to conclude whether the independent variable has a positive or negative impact on the dependent variable (Wooldridge, 2002). In addition, the magnitude of the impact of the independent variables on the dependent variable could be figured out by looking at their marginal effects and also their odds ratio.

Table 3: Description of variables

Variables	Definition
Dependent Variable	
POOR	(Binary) Yes = 1, No = 0 (Using Gross Poverty Line Income)
Independent Variable	
AGE (Age)	(Continuous) Age of the head of household
GEN (Gender)	(Dummy) Male = 1, Female = 0
MARST (Marital status)	(Dummy) Married = 1, Single or Divorced = 0
HHSIZE (Household size)	(Continuous) Household size
DEPEND (Dependency)	(Continuous) Number of dependents
REMITT (Remittance)	(Continuous) Total value of remittance by children not living together (RM/Month)
PHYC (Physical Capital)	(Continuous) Value of physical assets (RM)
HUMC (Education)	(Continuous) Number of years of education of the head of household
SOCC (Social capital)	(Continuous) Index of household social capital

Here, it is hypothesized that SOCC, HUMC, PHYC, and REMITT would have a negative relationship with the probability of being poor. This is due to the fact that these variables are expected to contribute to an increase in household income, thereby leads to a decline in poverty.¹ On the other hand, it is expected that DEPEND would have a positive relationship with the likelihood of being poor, for obvious reason. However, the effects of AGE, HHSIZE, GEN and MARST on the probability of being poor cannot be determined *a priori*.

III. The Findings

The results of the study are shown in Table 4 – Table 6. In general, Table 4 indicates that these variables – SOCC, HUMC, PHYC, AGE, GEN and HHSIZE are significant in explaining the probability of household being poor. On the other hand, MARST, DEPEND and REMITT are found to be insignificant.

¹ SOCC, HUMC, and PHYC are regarded as capital owned by the household. The difference between the three types of capital is that social capital is a form of “capital” acquired through social interactions, while human capital is acquired through investment in education and training, and physical capital is acquired through investment in assets.

Table 4: Estimated Coefficients/Parameters

	Coef.	Std. Err	z	P> z 	[95% Conf. Interval]	
Constant	-2.5204	0.8465	-2.98	0.003	-4.1795	-0.8613
SOCC	-0.2022	0.0489	-4.14	0.000	-0.2979	-0.1064
HUMC	-0.1145	0.0224	-5.10	0.000	-0.1585	-0.0705
PHYC	0.0000	0.0000	-7.85	0.000	0.0000	0.0000
AGE	0.0483	0.0077	6.28	0.000	0.0332	0.0634
GEN	1.4336	0.3478	4.12	0.000	0.7520	2.1152
MARST	0.2127	0.3030	0.70	0.483	-0.3811	0.8065
HHSIZE	-0.1110	0.0336	-3.30	0.001	-0.1769	-0.0452
DEPEND	-0.0463	0.0404	-1.15	0.252	-0.1256	0.0329
REMITT	-0.0005	0.0004	-1.15	0.252	-0.0013	0.0003

Number of obs = 2268
 LR chi2(9) = 363.83
 Prob > chi2 = 0.0000
 Pseudo R2 = 0.2166
 Log likelihood = -657.89153

Table 5: Marginal Effects of Explanatory Variables on the Probability of Poverty

	dy/dx	Std. Err	z	P> z 	[95% Conf. Interval]		X
SOCC	-0.01293	0.00318	-4.06	0.000	-0.0192	-0.0067	7.2500
HUMC	-0.00732	0.00146	-5.01	0.000	-0.0102	-0.0045	7.2293
PHYC	0.00000	0.00000	-9.39	0.000	0.0000	0.0000	57917.3000
AGE	0.00309	0.00051	6.11	0.000	0.0021	0.0041	49.8995
GEN	0.09171	0.02302	3.98	0.000	0.0466	0.1368	1.0728
MARST*	0.01276	0.01702	0.75	0.453	-0.0206	0.0461	0.8549
HHSIZE	-0.00710	0.00217	-3.27	0.001	-0.0114	-0.0028	6.8827
DEPEND	-0.00296	0.00259	-1.15	0.252	-0.0080	0.0021	3.9233
REMITT	-0.00003	0.00003	-1.14	0.253	-0.0001	0.0000	94.4004

(*) dy/dx is for discrete change of dummy variable from 0 to 1

Table 6: Odds Ratio of Poverty to Non-poverty

	b	z	P> z 	e^b	e^bStdX	SDofX
SOCC	-0.2022	-4.138	0.000	0.8169	0.7460	1.4495
HUMC	-0.1145	-5.100	0.000	0.8918	0.6530	3.7220
PHYC	0.0000	-7.849	0.000	1.0000	0.3613	63164.7262
AGE	0.0483	6.284	0.000	1.0495	1.7329	11.3816
GEN	1.4336	4.122	0.000	4.1937	1.4512	0.2598
MARST	0.2127	0.702	0.483	1.2370	1.0778	0.3522
HHSIZE	-0.1110	-3.305	0.001	0.8949	0.7399	2.7139
DEPEND	-0.0463	-1.146	0.252	0.9547	0.8993	2.2893
REMITT	-0.0005	-1.146	0.252	0.9995	0.9131	196.2022

b = raw coefficient

z = z-score for test of b=0

P>|z| = p-value for z-test

e^b = exp(b) = factor change in odds for unit increase in X

e^bStdX = exp(b*SD of X) = change in odds for SD increase in X

SDofX = standard deviation of X

The finding of this study shows that, as expected, social capital (SOCC) is an important variable to explain the likelihood of rural household being poor. The estimated coefficient of social capital (SOCC) as shown in Table 4 is -0.2021 and significant at the 1% level. This result implies that,

ceteris paribus, social capital has a negative effect on the probability of being poor. The marginal effect of social capital on the probability of being poor is shown in Table 5, which is -0.0129. This result indicates that, *ceteris paribus*, a unit increase in social capital (SOCC) will decrease the probability of household being poor by about 0.0129. In addition to interpreting the logit results based on the usual marginal effect interpretation, the result could also be interpreted based on the odds ratio. The odds ratio is essentially the ratio of the probability of being poor to the probability of being non-poor.² As shown in Table 6, the coefficient of SOCC for the odds ratio is -0.2022. The odds ratio is the exponent of -0.2022, which is 0.8169 (see the fifth column in Table 6). This implies that, for a unit change in social capital (SOCC), the odds of being poor are expected to change by a factor of 0.8169, *ceteris paribus*. Since the odds are less than one ($0.817 < 1$), this means that the probability of being poor is less than the probability of being non-poor. Alternatively, this could be interpreted as follows: for every unit increase in social capital (SOCC), the odds of being poor are expected to decrease by a factor of 0.817, *ceteris paribus*. Another interpretation is this: for every unit increase in social capital (SOCC), the odds of being poor are expected to decrease by about 18.3% [$100 \times (0.8169 - 1)$], *ceteris paribus*.

Besides, this study also reveals that the level of human capital (HUMC) and physical capital (PHYC) are also significant in explaining the likelihood of being poor. Both variables are found to be significant at the 1% level, and have a negative relationship with the likelihood of being poor. Thus, the results suggest that the higher the level of human capital, the lower is the probability of being poor. Likewise, the higher the level of physical capital, the lower is the probability of being poor, albeit to a lesser extent.

The results of this study also indicate that the characteristics of the head of household, i.e. age (AGE) and gender (GEN), are also important in explaining the likelihood of the household being poor. Both variables have a positive relationship with the probability of being poor and are significant at the 1% level. Thus, the findings suggest that the older the head of household, the higher is the probability of being poor. With regard to gender (GEN), since it is a dummy variable and the finding shows that the estimated coefficient is positive, the result is interpreted as follows: the probability of household being poor is higher if the household is headed by a male than a female. Specifically, the result shows that the probability of being poor is 0.0917 higher for a male headed household than a female. Surprisingly, this finding appears to contradict with the *a priori* expectation. One of the reasons for this observation could be attributed to the uniqueness of the culture among the eastern community of Malaysia. Studies show that women participation and involvement in business activities are relatively higher in the eastern part of Malaysia. Besides, they are also generally more hard working and persistent than their male counterparts. As a result, female headed household might earn relatively higher income. With regard to household's characteristics, this study shows that only one characteristic, i.e. household size, does matter in explaining the likelihood of being poor. The estimated coefficient has a negative sign (-0.1110), implying that the larger the size of household, the lower the probability of being poor.

Table 7 – Table 9 show the results from estimating the relationship using an alternative definition of poverty, i.e. based on per capita income of the household members. It is interesting to find that the results based on the alternative definitions of poverty are quite similar. In particular, SOCC, HUMC, PHYC, AGE, GEN, and HHSIZE are significant in explaining the probability of household being poor, as found earlier. In addition, MARST and DEPEND are also found to be insignificant. The only difference here is remittance (REMITT). Unlike the earlier result, REMITT is now found to be significant. It is remarkable to note that the result on the variable of interest in this study, i.e. social capital (SOCC), is robust to the alternative definitions of poverty. Social capital (SOCC) coefficient has a negative sign and is significant at 1% level, as found earlier. Thus, reestimation of the model with

² Odds Ratio = $\frac{\Pr(y=1|x)}{\Pr(y=0|x)}$.

the alternative definition of poverty also confirms the important role of social capital in determining poverty among rural households.

Table 7: Estimated Coefficients/Parameters

	Coef.	Std. Err	z	P> z 	[95% Conf. Interval]	
Constant	-2.9176	0.6117	-4.77	0.000	-4.1166	-1.7186
SOCC	-0.1177	0.0358	-3.29	0.001	-0.1879	-0.0476
HUMC	-0.0613	0.0164	-3.74	0.000	-0.0934	-0.0292
PHYC	0.0000	0.0000	-9.87	0.000	0.0000	0.0000
AGE	0.0203	0.0059	3.45	0.001	0.0088	0.0319
GEN	0.8398	0.2634	3.19	0.001	0.3235	1.3561
MARST	0.1237	0.1982	0.62	0.532	-0.2646	0.5121
HHSIZE	0.2568	0.0256	10.04	0.000	0.2066	0.3069
DEPEND	0.0055	0.0272	0.20	0.840	-0.0479	0.0589
REMITT	-0.0012	0.0003	-3.69	0.000	-0.0018	-0.0006

Number of obs = 2268
 LR chi2(9) = 401.92
 Prob > chi2 = 0.0000
 Pseudo R2 = 0.1486
 Log likelihood = -1151.3088

Table 8: Marginal Effects of Explanatory Variables on the Probability of Poverty

	dy/dx	Std. Err	z	P> z 	[95% Conf. Interval]		X
SOCC	-0.0216	0.0066	-3.29	0.001	-0.0345	-0.0087	7.2500
HUMC	-0.0113	0.0030	-3.76	0.000	-0.0171	-0.0054	7.2293
PHYC	0.0000	0.0000	-10.34	0.000	0.0000	0.0000	57917.3000
AGE	0.0037	0.0011	3.46	0.001	0.0016	0.0058	49.8995
GEN	0.1541	0.0484	3.18	0.001	0.0592	0.2490	1.0728
MARST*	0.0222	0.0347	0.64	0.523	-0.0458	0.0902	0.8549
HHSIZE	0.0471	0.0047	10.13	0.000	0.0380	0.0562	6.8827
DEPEND	0.0010	0.0050	0.20	0.840	-0.0088	0.0108	3.9233
REMITT	-0.0002	0.0001	-3.70	0.000	-0.0003	-0.0001	94.4004

(*) dy/dx is for discrete change of dummy variable from 0 to 1

Table 9: Odds Ratio of Poverty to Non-poverty

	b	z	P> z 	e^b	e^bStdX	SDofX
SOCC	-0.1177	-3.288	0.001	0.8889	0.8431	1.4495
HUMC	-0.0613	-3.745	0.000	0.9405	0.7959	3.7220
PHYC	0.0000	-9.867	0.000	1.0000	0.5057	63164.7262
AGE	0.0204	3.451	0.001	1.0206	1.2606	11.3816
GEN	0.8398	3.188	0.001	2.3159	1.2438	0.2598
MARST	0.1237	0.624	0.532	1.1317	1.0445	0.3522
HHSIZE	0.2568	10.040	0.000	1.2928	2.0074	2.7139
DEPEND	0.0055	0.202	0.840	1.0055	1.0127	2.2893
REMITT	-0.0012	-3.694	0.000	0.9988	0.7924	196.2022

b = raw coefficient

z = z-score for test of b=0

P>|z| = p-value for z-test

e^b = exp(b) = factor change in odds for unit increase in X

e^bStdX = exp(b*SD of X) = change in odds for SD increase in X

SDofX = standard deviation of X

IV. Conclusion

In the past, when the poverty incidence was high, macro strategies such as sustaining rapid economic growth, reducing unemployment and inflation, provision of basic education and health, and public infrastructure, appear to be effective tools to address the problem of poverty in Malaysia. However, as the poverty incidence has significantly reduced, these macro strategies might no longer be effective. Thus, strategies to reduce poverty should be tailored to specific target groups using a specific measure. As far as poverty eradication strategies are concerned, there is a need to identify factors that are strongly related with poverty. Identifying and understanding the main poverty determinant is also vital to improve the existing strategies so that the strategies will be more effective. It appears that poverty eradication strategies in Malaysia tend to focus more on physical and human capital of the poor, but lacking of emphasis on social capital. Thus, it is believed that social capital should be given more attention in addressing the issue of poverty. The finding of this study provides the evidence that social capital does indeed matter to the effort of eradicating poverty. While physical and human capitals are found to be important determinants of poverty, the results suggest that promoting social capital could further enhance the effectiveness of poverty eradication strategy.

References

- [1] Grootaert, C. (1999). Social capital, household welfare and poverty in Indonesia. Local Level Institutions Study, Working Paper No. 6, Social Development Department, World Bank, Washington D.C.
- [2] Grootaert, C. (2001). Does Social Capital Help The Poor? A Synthesis of Findings from the Local Level Institutions Studies in Bolivia, Burkina Faso and Indonesia. Local Level Institutions Working Paper Series, Working Paper No. 10. The World Bank.
- [3] Grootaert, C. et.al. (2004). Measuring Social Capital: An Integrated Questionnaire. World Bank Working Paper No. 18.
- [4] Isham, J., Kelly, T. and Ramaswamy, S. 2002. Social Capital and well-being in developing countries: an introduction. In *Social Capital and Economic Development – Well-being in Developing Countries*, eds. Isham, J., Kelly, T. and Ramaswamy, S., 3-17. Cheltenham: Edward Elgar.
- [5] Long, J. Scott (1997). Regression Models for Categorical and Limited Dependent Variables. Thousand Oaks, California: Sage.
- [6] Long, J.S., and Freese, J. (2006). *Regression Models for Categorical Dependent Variables Using Stata* (2nd Edition). College Station, Texas: Stata Press.
- [7] Malaysia (1971), Second Malaysia Plan, 1971-1975, Kuala Lumpur: National Printing Department.
- [8] Malaysia (2006), Ninth Malaysia Plan, 2006-2010, Kuala Lumpur: National Printing Department.
- [9] Narayan, D. and Pritchett, L. (1999). Cents and sociability: household income and social capital in rural Tanzania. *Economic Development and Cultural Change*, 47:871–897.
- [10] Putnam, R. (1995) “Bowling Alone: America’s Declining Social Capital.” *Journal of Democracy* 6(1):65-87.
- [11] Putnam, Robert D., Robert Leonardi, and Raffaella Y. Nanetti. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press, 1993.
- [12] Rupasingha, A. and S. J. Goetz. (2007). Social and political forces as determinants of poverty: A spatial analysis. *The Journal of Socio-Economics*, Vol. 36, pp. 650–671.
- [13] Shireen Mardziah Hashim. (1998). *Income Inequality and Poverty in Malaysia*, Rowman & Littlefield Publishers, Inc.

- [14] Xiaojie Sun, Rehnberg, C. and Qingyue Meng. (2009). How are individual-level social capital and poverty associated with health equity? A study from two Chinese cities. *International Journal for Equity in Health*, Vol. 8, No. 2.
- [15] Wooldridge, J.M., (2002). *Econometric Analysis of Cross Section and Panel Data*. Massachusetts: The MIT Press.
- [16] Yusuf, S.A. (2008). Social Capital and Household Welfare in Kwara State, Nigeria. *Journal of Human Ecology*, Vol. 23, No.3, pp. 219-229.