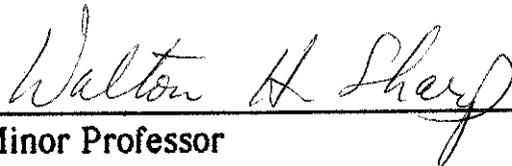


A STUDY ON THE SUCCESSFUL SELF-EMPLOYED  
IN MALAYSIA  
Kalsom Kayat, B.S.

APPROVED:



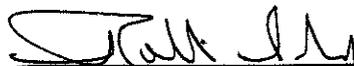
Major Professor



Minor Professor



Chairman, Department of Economics



Dean of the Graduate School

SL

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In a dualistic labor market, self-employment is classified as the informal sector because its members are usually unable to find formal jobs. In big cities throughout the world it has been reported that the urban self-employed are often faced with highly restrictive government regulations in the belief that they do not contribute very much to the output. This thesis studies the factors that can explain the successes of these self-employed such as the extent of their capital, entrepreneurial experience, and education. The discriminant analysis is used throughout the study.

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## CHAPTER I

### INTRODUCTION AND PROBLEM PRESENTATION

#### Overview of the Study

Malaysia, in many respects, exemplifies the phenomena of social and cultural pluralism. It was formed in 1963 when the Federation of Malaya merged with Singapore and the Borneo territories of Sarawak and Sabah, even though it had achieved its independence from the British six years earlier. In 1965, Singapore left the new federation to form an independent republic. Since independence, Malaysia exercises a constitutional monarchy with a parliament modeled upon the British traditions. Malaysia's population of nearly 15 million is made up of 54 percent Malays and other indigenous races, 35 percent Chinese, and 11 percent Indians. This racial structure has a significant impact on the Malaysian economic policy.

In their period of ruling, the British encouraged the migration of Chinese and Indians to Malaysia to work, particularly in tin mining and rubber estates, respectively. At the time of independence, Malaysian, Chinese, and foreigners generally dominated commerce, industry, and large-scale agriculture. The Malays were concentrated in small-scale agriculture and government. While absent in commerce and industry, the Malays were the ones holding the political power. Ongkili illustrates the division of labor:

Except for the work of clearing the forests and bushes on the land, which was given to the Malays or the Sakais who were more

dexterous in the use of the parang, all the work in the mines was done by the Chinese. Differences in race, religion, temperament, language, customs and mining superstitions, obvious economic self-interest, and the social requirements of living together precluded Chinese employers from employing non-Chinese laborers (Ongkili 1967, 3).

These non-indigenous workers soon expanded their economic activities so that by the beginning of the twentieth century they had become the principal owners of commercial tin mining in Malaya. To sum the wealth of the Chinese race in Malaysia, Purcell wrote:

Chinese ownership of tin mines and rubber estates is no real indication of their share of the wealth of the country. Chinese had, for instance, large holdings in European rubber companies. Malaya's important and growing secondary industries were very largely in Chinese hands. The pineapple industry, the creation of the last two decades, is entirely a Chinese enterprise. Canned pineapple in 1983 accounted for 1.2 percent of Malaya's entire export. In Singapore, Penang, Kuala Lumpur, Klang, Ipoh, and elsewhere, the Chinese owned oil mills, biscuit factories, rubber works for the manufacture of shoes and tires, iron foundaries, sawmills, and sauce factories. There were Chinese shipping companies, motor agencies and repair shops. The bulk of the retail trade elsewhere was in Chinese hands. One indication of the wealth of the community is the fact that in 1941 the Malaysian Chinese remitted to China over \$110,000,000 (Purcell 1967, 241-42).

The growth of the rubber industry after 1910 and the development of railways and roads in Malaya necessitated a greatly increased labor force which the Indian immigrants helped to supply. By 1907 the government of the Straits settlements and the Federated Malay States had set up an Indian Immigrant Committee to take charge of Indian labor (Ongkili 1985).

So what role did the Malays play in the Malaysian economy? For a start, most of them felt comfortable staying in the rural area where they grew food and caught fish. When the British came to Malaya, they came for

one reason only; to develop the country so that it could become another English base for its economic power. When they acquired the Malay states, the British realized that development would be seriously hampered because the country was sparsely populated. To solve this problem, they encouraged the absorption of Chinese and Indians into the cities while leaving the Malays in the villages to keep up with their function as the agriculture producer. The Chinese and Indians were exposed to much fortune as better economic activities were available in the cities and this originated inequalities among the different communities.

In the 1960s, inequalities among the races worsened. Malays were hit hard by unfavorable trends in agriculture, notably the sharp drop in rubber prices. Malay frustrations came to a peak in May 1969 when serious race riots broke out. Parliamentary rule was suspended until 1971 and the New Economic Policy (NEP) was born. The policy had two aims: eradication of poverty, irrespective of race, and elimination of the identification of race with economic functions. The key to achieving these aims lies in freeing Malays and other indigenous people, collectively called "bumiputra" (the sons of the soil), from low productivity agriculture and giving them the opportunity to upgrade their productivity or move into other sectors. The overriding objective of the NEP is national unity, and it has been described by the government as a "Charter for Unity". One main cause of national disunity is poverty, particularly among the Malays. The eradication of poverty, therefore, is the fundamental strategy. The second objective of the NEP is to restructure the society and to achieve a better balance in the development of the various economic sectors and occupations. The government attempts to create more Malay entrepreneurs

and professionals by increasing the proportion of Malays attending universities and similar institutions (Milne and Mauzy 1986). To the non-Malays, this action makes NEP a one-sided policy because there are still poor Chinese and poor Indians among them. Furthermore, these individuals were going to lose their share of the market to the "non-business-minded" Malays. There is a possible justification for this fear as described by Carlson:

These objectives are to be achieved by providing [an] initial period of assistance specifically to the Malays and other indigenous groups. This would include scholarships for Malays, a greater participation of Malays in the modern commercial and industrial sectors, a more equitable distribution of income, employment, and ownership, and the modernization of the rural areas. This will be done in the context of an expanding economy, without either jeopardizing the position or prospects of the other races or undertaking a program of nationalization (Carlson 1975, 6).

The NEP and its objectives are facing a high number of challenges and discouraging obstacles. One of the targets of the NEP, initially expressed in the Second Malaysia Plan (1971-1975), was to have an annual growth of 5 percent in external trade, with continued (but probably diminishing) balance of payment surpluses (Carlson 1975). In the 1986-1987 economic report by the Finance Minister, it was reported that there was a surplus in the merchandise account of the balance of payments in 1986 of M\$6,919 million at current prices compared with surplus of M\$8,876 million in 1985. Although the volume of merchandise exported was expected to increase by 10.9%, as a result of higher production of crude petroleum and palm oil, the total value of merchandise exports was envisaged to decline by 11.3 percent to M\$33,338 million. The global

economy does effect the external trade because the decline mentioned above was seen to be due to a 46.5 percent decline in the price of crude petroleum to US\$14.76 per barrel and 57.3 percent decline of crude palm oil to M\$470 per ton. Even though the weighted average import price was expected to decline by 7 percent as a result of lower prices of imported petroleum products and food, the export prices were declining significantly faster than import prices, thus the loss in income, due to the 14 percent deterioration in terms of trade, was estimated as M\$5,540 million.

Another target of the Second Malaysia Plan was to reduce unemployment from 8 percent to 7.3 percent by creation of new jobs at the rate of 3 percent per year. The method was through the NEP, which gives generous help for Malay University students. By December 1986, there were 15,000 graduates waiting for jobs in the civil service, according to the register of the Public Services Department; add to the dismal prospects for students now graduating from universities at home and abroad and the figure for the educated unemployed seems certain to rise to at least 30,000 by the end of 1987 (Malaysia's Lost Generation 1987). This can be considered as a disturbing outcome that came from an ambitious group of politicians. The students who were sponsored by the government to study either abroad or at the local universities were mostly children from poor families. They were sent to study the fields that are mostly non-Malays dominated. They and their families assumed that a university education would admit them into the urban middle class, normally through government employment. The condition in the 1970s and early 1980s, when the Malaysian economy was growing by 7 to 8 percent a year, permitted all new graduates to be hired by the civil service. Furthermore,

private companies which were obliged under the NEP to hire a certain number of bumiputras, were happy to fill in their quota with graduates. But today, the civil service has very few openings available to graduates. The private firms, already filling their quotas, will hire only the best. The rest of the graduates are left either unemployed or underemployed. Unemployment associated with initial entry into the labor market, especially among the young, is much more important in Malaysia than either the classical hard core unemployment or the high turnover unemployment affecting some groups in the United States (Mazumdar 1981). With this problem presently besetting the country, the task of decreasing the gap of wealth between the races in Malaysia seems to be harder than ever before.

The problem of income differentials is seen to be considered as an outcome of a growing mass of urban unemployment which has empirically been found to consist more of Malays than Chinese. Recognizing this ongoing problem, this paper will attempt to study the aspects of self-employment that would help decrease the level of educated unemployment in the country.

### Significance of the Problem

Unemployment is a very common economic issue around the globe and has always been a serious discussion in the study of economic development of the Third World countries. As newly developing nations begin the expansion of their industrial sector, new employment opportunities are created, but technological progress in the agricultural sector does not move as rapidly. This, coupled with stagnating agricultural

productivity, often results in a growing urban and rural employment and underemployment. The most unique aspect of unemployment in Malaysia today is the fact that a large number of the well-educated youth are among those who are unemployed.

The most significant point, however, is that the rate of growth of unemployment was higher than the growth rate of the labor force for the two top educational groups. The unemployment rate for those with no education dropped markedly, although the labor force in this group continued to increase to some extent (Mazumdar 1981, 263).

### Hypotheses to the Study

There are three hypotheses to be tested by this study:

Hypothesis I: Education plays an important role in the success of the Malaysian self-employed.

Hypothesis II: Most successful self-employed have been previously employed.

Hypothesis III: The length of time they invested being employed contributes to the success of the groups being studied.

### Assumptions to the Study

Since this study seeks to explain the role of self-employment in improving the Malaysian economy by reducing the percentage of "educated" unemployed persons, a few assumptions would be necessary. First, it assumes that all the people surveyed have an equal opportunity to start their own businesses. It also assumes that the self-employed believe that being self-employed improves their living standards more than if they were to stay either employed, underemployed, or otherwise employed.

### Limitations of the Study

This study is based on a survey done on twenty-five successful self-employed persons in Kuala Lumpur, the capital of Malaysia. This considerably small sample size is seen to limit the testings of the hypotheses. Difficulties arise in this study in terms of measuring "success". The study would improve if the data on unsuccessful self-employed persons in Malaysia were available. Finally, since the sample is taken only from Kuala Lumpur, the study would be quite limited, but as empirical evidence has shown that almost 65 percent of self-employed are from Kuala Lumpur, the extent of this limitation is minimal.

## CHAPTER II

### SURVEY OF RELATED LITERATURE

A Study of self-employment, earnings, and mobility in the Peninsular Malaysia was undertaken by Dr. David M. Blau (1986). In his article, Blau states three hypotheses of his study:

1. Self-employed in the Peninsular Malaysia earn less than employees of similar characteristics.
2. Mobility occurs from self-employed to wage employed.
3. The recent migrants are more likely to be self-employed than less recent migrants or non-migrants (Blau 1986, 839).

The data used in his study was taken from the 1976-1977 Malaysian Family Life Survey (MFLS) which was undertaken to collect data on economic and biological aspects of fertility topics.

Based on the Harris-Todaro model, rural residents will migrate to urban sectors if the expected value of earnings after migration exceeds the agricultural wage. The expected value of earnings in one period context is the formal sector wage multiplied by the probability of obtaining a formal sector job plus the informal sector wage multiplied by one minus this probability. Blau finds that urban self-employed men, beyond their twenties, earn more than double the average amount earned by employees of the same age group. The reasons for this include the fact that self-employed men work more hours and have better managerial skills.

For the second hypothesis, Blau finds that there is an early peak in the proportion of employees in the male workers; 80 percent in urban areas and 60 percent in rural areas with steady decline after age twenty-seven in

urban areas and age thirty-three in rural areas. As age increases, they are more likely to be self-employed, and by age fifty-one, over one-third are self-employed in urban areas and about 45 percent are self-employed in rural areas. A large majority of other self-employed episodes come at older age and this could be explained by the fact that they grow tired of doing the same job for a long period of time in the formal sector. In rural areas, steady rises in self-employment and declines in working in the family business can be observed. Blau's explanation for this is that the passing down of farms from fathers to sons still takes place in the rural areas of Malaysia.

As for the third hypothesis, the model of rural-urban migration based on the Harris-Todaro model explains that the urban informal sector is explicitly viewed as a "holding tank" for recent migrants awaiting opportunities in a formal job sector. Findings that contradict this explanation show that the young would enter the labor force in the lowest paying and most easily obtainable jobs, predominantly in wage employment. Upward mobility involves leaving wage employment, as they accumulate human and financial capital, and form their own businesses. Recent male migrants are more likely to be employees than are non-migrants, and the proportion of migrants who are self-employed gradually approach and pass the proportion of non-migrants in that status as the number of years elapse since migration rises.

## CHAPTER III

### METHODOLOGY

#### Introduction

The method utilized in the study is the discriminant analysis which is a statistical procedure introduced by Sir Ronald Fisher. One of the purposes of this analysis is to form linear combinations of the independent variables, which are education and job experience, so as to serve as the basis for classifying cases into the two groups. Because of the difficulties in gathering the data on "unsuccessful" business people, this study must be geared away from its original purpose to one that will try to distinguish between the successful Chinese business people from the successful bumiputra business people. These are the two groups that will classify the business people being studied.

#### Data

The questionnaires in the self-employment survey (see Appendix) were intended to examine reasons for self-employment. Among the twenty-five people surveyed, fifteen of them are Chinese by race, eight of them are bumiputras, two of them are neither Chinese nor bumiputras, and none of them is Indian. Of the self-employed, 48 percent hold an MCE (Malaysian Certificate of Education), which is equivalent to the High School Diploma, and 24 percent of them have a university degree. Of the people surveyed, 68 percent have worked somewhere else before they became self-employed, and the majority of them worked with private firms instead of

the government. Of these self-employed people, 64 percent came from middle-income family and 81 percent of them agreed that physical assets did not play an important role in self-employment but that the success of their businesses was based on their experience. Forty-eight percent of them had invested up to five years in their businesses, 20 percent between eleven to fifteen years, and only 4 percent have been in their businesses for more than fifteen years. The more years they invested in their businesses, the more employees they had.

### Assumptions

The linear discriminant function in the discriminant analysis minimizes the probability of misclassification by following two assumptions about the data. The two assumptions are:

1. Each group must be a sample from a multivariate normal population.
2. The population covariance matrices must all be equal.

## CHAPTER IV

### FINDINGS AND ANALYSIS

Two separate discriminant analyses were done in order to test the three hypotheses introduced in the Chapter I. The first analysis was undertaken to distinguish successful Chinese businessmen from successful native-Malaysian businessmen based on three variables, namely educational level, whether the businessmen have previously been employed, and the interaction between the two.

From both analyses, the differences between the groups being studied can be seen in the univariate statistics shown in Tables 1 and 2. These figures contain the mean for the three variables for the Chinese and the Bumiputros, along with the corresponding standard deviations. The last row of each table, labeled "Total," contains the means and the standard deviations calculated when all cases are combined into a single sample. The first table, for example, shows that 38 percent of the successful Chinese businessmen have university degrees and 64 percent of them have worked somewhere else before being self-employed. Variables EDUC and EMPB are coded as 0 or 1: 0 for having a university degree, 1 for not having a university degree, 0 for having previously worked somewhere else, and 1 for not having previously worked somewhere else. When a variable is coded 0 or 1, the mean of the variable is the proportion of cases with a value of 1. Overall, it can be concluded that the Chinese businessmen have higher levels of education than the other group, more of them worked

somewhere else previous to being self-employed, and they have more experience being employed than the native businessmen. In addition, the results also indicate that the variables' means increase when they interact.

Table 1.--Group Means and Standard Deviations: Analysis 1

| Group Means               |          |         |          |
|---------------------------|----------|---------|----------|
| Race                      | EDUC     | EMPB    | EDUCEMPB |
| 1                         | 0.382132 | 0.68118 | 1.70950  |
| 2                         | 0.37041  | 0.67427 | 2.36091  |
| Total                     | 0.40271  | 0.74898 | 7.48093  |
| Group Standard Deviations |          |         |          |
| Race                      | EDUC     | EMPB    | EDUCEMPB |
| 1                         | .35187   | .50709  | 1.05560  |
| 2                         | .51755   | .36355  | .46291   |
| Total                     | .42174   | .47047  | .97397   |

Table 2.--Group Means and Standard Deviations: Analysis 2

| Group Means               |         |         |          |
|---------------------------|---------|---------|----------|
| Race                      | EDUC    | EMPB    | EDUCEMPB |
| 1                         | 0.57485 | 0.63745 | 0.89361  |
| 2                         | 0.43211 | 0.58481 | 0.75247  |
| Total                     | 0.47010 | 0.60091 | 0.64429  |
| Group Standard Deviations |         |         |          |
| Race                      | EDUC    | EMPB    | EDUCEMPB |
| 1                         | .33211  | 1.27764 | 2.66375  |
| 2                         | .54772  | 1.54911 | 2.22860  |
| Total                     | .42174  | 1.34252 | 2.75480  |

Tables 3 and 4 show significance tests from both analyses for the equality of group means for each variable. The significance level for variables EDUCEMPB and EDUCEXP, which stand for the interaction between education and whether the businessmen have previously been

employed, and the interaction between education and the length of employment respectively, are the only ones that are smaller than 0.05. Thus, the hypothesis that all group means are equal can be rejected. Another statistic displayed in Tables 3 and 4 is Wilks' lambda. When variables are considered individually, lambda is the ratio of the within-groups sum of squares to the total sum of squares. A lambda of 1 occurs when all observed group means are equal. Values close to 0 occur when within-groups variability is small compared to the total variability, that is, when most of the total variability is attributable to differences between the means of the groups. Thus, large values of lambda indicate that group means do not appear to be different, while small values indicate that group means do appear to be different. From Table 3, EDUCEMPB is the variable whose means are most different for Chinese and bumiputras, and from Table 4, EDUCEXP is the most different.

Table 3.--Tests for Univariate Equality of Group Means: Analysis 1

| Variable | Wilks' Lambda | F     | Significance |
|----------|---------------|-------|--------------|
| EDUC     | .92213        | 1.773 | .1972        |
| EMPB     | .91897        | 1.852 | .1880        |
| EDUCEMPB | .81937        | 4.629 | .0432        |

In most multivariate analyses, examining the correlation matrix of the predictor variables is critical as to show the interdependencies among the variables. Tables 5 and 6 show the pooled within groups correlation matrix. From the first analysis, Table 5 shows that EDUCEMPB and EMPB have the largest correlation coefficient of 0.76, while EDUCEXP and EXP have the largest correlation coefficient in the second analysis, that is of 0.81.

Table 4.--Tests for Univariate Equality of Group Means: Analysis 2

| Variable | Wilks' Lambda | F     | Significance |
|----------|---------------|-------|--------------|
| EDUC     | .83431        | 4.170 | .0539        |
| EMPB     | .96130        | .8454 | .3683        |
| EDUCEMPB | .82874        | 4.340 | .0496        |

Table 5.--Pooled Within-Groups Correlation Matrix: Analysis 1

|         | EDUC    | EXP     | EDUCEXP |
|---------|---------|---------|---------|
| EDUC    | 1.00000 |         |         |
| EXP     | -.20531 | 1.00000 |         |
| EDUCEXP | .43921  | .76020  | 1.00000 |

One way to evaluate the effectiveness of the discriminant function is by looking into the actual discriminant scores in the groups. Tables 7 and 8 are the analyses of variance tables from both analyses. They are produced from procedure means using the discriminant scores as the dependent variable and the group variable as the independent variable. Eta is the canonical correlation which is a measure of degree of association between the discriminant scores and the groups. A "good" discriminant function is one that has much between-groups variability when compared to within-groups variability. Thus, a "good" discriminant function should have a large ratio of the between-groups sum of squares to the within-groups sum of squares. This ratio is named as the eigenvalue. For example, the eigenvalue from Table 3 is:

$$\text{Eigenvalue} = \frac{\text{between-groups}}{\text{within-groups}} = \frac{12.6}{21.0} = 0.60$$

Table 6.--Pooled Within-Groups Correlation Matrix: Analysis 2

|         | EDUC    | EXP     | EDUCEXP |
|---------|---------|---------|---------|
| EDUC    | 1.00000 |         |         |
| EXP     | -.25311 | 1.00000 |         |
| EDUCEXP | .32521  | .81161  | 1.00000 |

Table 7.--Analyses of Variance Tables From Means for Discriminant Scores: Analysis 1

| Analysis of Variance               |                |      |             |         |       |
|------------------------------------|----------------|------|-------------|---------|-------|
| Source                             | Sum of Squares | D.F. | Mean Square | F       | Sig.  |
| Between Groups                     | 12.6471        | 1    | 12.6471     | 12.6471 | .0395 |
| Within Groups                      | 21.0000        | 21   | 1.0000      |         |       |
| Eta = .4320    Eta Squared = .1866 |                |      |             |         |       |

Table 8.--Analyses of Variance Tables From MEANS for Discriminant Scores: Analysis 2

| Analysis of Variance               |                |      |             |         |       |
|------------------------------------|----------------|------|-------------|---------|-------|
| Source                             | Sum of Squares | D.F. | Mean Square | F       | Sig.  |
| Between Groups                     | 13.8550        | 1    | 13.8550     | 13.8850 | .0192 |
| Within Groups                      | 21.0000        | 21   | 1.0000      |         |       |
| Eta = .4842    Eta Squared = .2344 |                |      |             |         |       |

A test of the null hypothesis that in the populations from which the samples are drawn there is no difference between the group means can be based on Wilks' lambda. Lambda is transformed to a variable which has approximately a chi-square distribution. Table 9 shows that a lambda of

0.8194 is transformed to a chi-square value of 4.084 with 1 degree of freedom. The observed significance level is 0.0433. Thus, it appears unlikely that successful businessmen who are Chinese and those who are natives have the same means on the discriminant function. The same conclusion can be observed from Table 10 where one can find an observed significance level of 0.0497.

Table 9.--Canonical Discriminant Functions: Analysis 1

| Function Eigenvalue | % of Variance | Cumulative % | Canonical Correlation | After Function | Wilks' Lambda | Chisquare | DF | Sig   |
|---------------------|---------------|--------------|-----------------------|----------------|---------------|-----------|----|-------|
| .2204               | 100.00        | 100.00       | .4250                 | 0              | .8194         | 4.084     | 1  | .0433 |

Table 10.--Canonical Discriminant Functions: Analysis 2

| Function Eigenvalue | % of Variance | Cumulative % | Canonical Correlation | After Function | Wilks' Lambda | Chisquare | DF | Sig   |
|---------------------|---------------|--------------|-----------------------|----------------|---------------|-----------|----|-------|
| .2067               | 100.00        | 100.00       | .4138                 | 0              | .8287         | 3.851     | 1  | .0497 |

Overall, while education alone does not seem to explain the difference between successful Chinese businessmen and bumiputra businessmen, it does so when it is being considered together either with the length of employment or with the fact that the businessmen have been employed before being self-employed. This can be observed from Tables 3 and 4

when the significance level of education increases once it interacts with either EXP or EMPB.

As previously indicated, discriminant analysis aims to classify cases into groups. The two assumptions that were introduced in Chapter III serve the purpose of minimizing the probability of misclassification which can occur if the variables from each group are not from multivariate normal distributions or if the covariance matrices for all groups are not equal. In the discriminant analysis that is performed for this research both assumptions do hold. From Tables 5 and 6 interdependencies among the groups can be observed. As the variables are jointly distributed as a multivariate normal, it follows that each is individually distributed normally.

One way to test equality of the group covariance matrices is by looking at the Box's M test which is an output from DISCRIMINANT. Tables 11 and 12 show the significance probability which is based on an F transformation. In the first analysis, the significance level is 0.0302, which indicates that the covariance matrices for the two groups are equal. Unfortunately, the significance level in the second test is 0.6456, which shows that the covariance matrices are not too dissimilar. However, if the covariance matrices are not too dissimilar, the linear discriminant function can still perform very well, especially if the sample size is small.



## CHAPTER V

### CONCLUSION

#### Overview of Problem, Methodology, and Results

The need to write this paper originated from the observed problem which currently is attacking Malaysian economy and disturbing its political world, to some extent. In its effort to boost its economy through the advancement of its trade and technology, the Malaysian government has tried to upgrade the level of education, especially among its native citizens. It is agreed by many that the original motive for such action is to bring the natives' standard of living up so they can compete with the other voices in society, particularly the Chinese. The outcome of this political and economic step does not make everyone happy, mainly because unemployment exceeds the economic growth for the past five years. The problem of the unemployed university graduates appears almost every other day on the media and the government has been good at promising that the economy is improving and the problem solved soon. This paper proposes that self-employment among these intelligent unemployed would help reduce the unemployment problem that is facing the country.

Based on the data collected for this study, it could be seen that education and experience are more important than physical assets in the success of a businessman which is acceptable since the businesses in the survey are mostly low-capital businesses. This paper wants to measure the businesses' success and failure. All the businessmen were successful. It is

obviously difficult to survey those who are not successful and are harder to meet; therefore, this paper tries to explain the differences between the two groups instead. Group one is the successful Chinese and group two is the successful bumiputra. Discriminant analysis that was used in this research classified the cases into the two groups. Given the education level, this analysis shows how experience effects the classification of the cases being studied.

In the analysis, as previously mentioned, the education variable is coded 0 for having a university degree and 1 for not having a university degree. At the same time, the experience variable is coded "0" for being employed before opening their own businesses and "1" for not being employed before opening their own businesses. The interaction term that is used in the analysis further produced two groups of successful businessmen. Group one is the group of businessmen who own a university degree and also have working experience, while group two is the group of businessmen that neither own a degree or have working experience. More successful Chinese are found to be in group one than the successful bumiputra.

Overall, the results of the test using the discriminant method show that those who open their own businesses, no matter if they are Chinese or bumiputras, would be predicted to be successful if they own college degrees and if they have previous experience working somewhere else. This result is consistent with the finding made by Dr. Blau in his study that most immigrants who come to the cities in Malaysia are employed before they start their own businesses.

### Recommendation

Future studies need to be done on the same topic to show how self-employment can really help the government in solving the high unemployment problem in this country. The data used in this study fell short on the number of people that were surveyed. In order to perform more tests about the topic, one does need a larger sample size than just twenty-five. Additionally, other variables should be taken into consideration such as the type of business in which one is engaged and how one person can be successful in his business with the help from the government. Studies should be done on the kinds of situations that would be most favorable for businesses to succeed. Furthermore, since the main problem is to cure unemployment, more research needs to be undertaken for some other ways to solve it, for example, through external trade or by allowing more multinational corporations to open their branches in Malaysia in order to utilize the mass amount of manpower in the country.

Based on the results of this study, the educated, unemployed people should be trained in order for them to get some experience before they start their own businesses. This can be done through government sponsored programs or by allowing the students who are studying abroad to do their practical trainings in the countries in which they are studying. Lastly, to let these educated people remain unemployed would also mean to allow the country to operate its system with a major negative economic externality. If the slow economic growth cannot produce jobs for the existing unemployed, the author strongly believes that self-employment can accelerate the economic growth instead.

## APPENDIX

1. In what kind of business are you engaged?
  - A. Agricultural
  - B. Industrial
  - C. Hotellings
  - D. Food services
  - E. Retailing
  - F. Services
  - G. Others
  
2. Are you a:
  - A. Bumiputra
  - B. Chinese
  - C. Indian
  - D. Other
  
3. How long have you invested in this business?
  - A. 0-5 years
  - B. 6-10 years
  - C. 11-15 years
  - D. More than 15 years
  
4. How many workers are you employing?
  - A. Less than 10
  - B. Between 10 and 20
  - C. Between 20 and 30
  - D. Between 30 and 50
  - E. More than 50
  
5. How old are you?
  - A. Less than 25
  - B. Between 25 and 35
  - C. Between 36 and 45
  - D. More than 45
  
6. What is your level of education?
  - A. University degree
  - B. Trade school certificate
  - C. HSC holder
  - D. MCE holder
  - E. Other

7. Were you employed somewhere else before you started your own business?
- A. Yes
  - B. No
- If yes, please answer questions 8 and 9. If no, please proceed to question 10.
8. Were you employed in
- A. A family business
  - B. A private firm
  - C. A government office
  - D. Other
9. How long were you employed there?
- A. Less than a year
  - B. Between 2 years and 5 years
  - C. Between 6 years and 10 years
  - D. More than 10 years
10. Are you from a
- A. High income family
  - B. Middle income family
  - C. Lower income family
11. Did your physical assets play an important role in your decision to start your own business?
- A. Yes
  - B. No
12. What factor do you think contributes most in the success of today's businesses in Malaysia?
- A. Race
  - B. Capital
  - C. Experience
  - D. Education
  - E. Government aid
  - F. Other

13. Do you think self-employment can help lower the unemployment rate in Malaysia?
- A. Yes
  - B. No

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