

**Department of Economics and Marketing
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**Degree of Entrepreneurship:
An Econometric Analysis Using
the Ordinal Probit Model**

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Abstract

The purpose of this paper is to develop an ordinal probit model of entrepreneurship which would enable us to calibrate the degree of entrepreneurship of an individual in appropriate samples and to perform multivariate analysis on the determinants of entrepreneurship. In addition, sensitivity analysis could be performed on the significant influences to provide policy-makers with useful information in designing and implementing policies to promote enterprise development. As an illustration, the model is estimated using a sample of 500 adult Singaporeans in full-time employment. The significant socio-demographic characteristics found were, in descending order of importance, presence of role model in the family, sibling rank, gender, education and number of children.

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Contents

List of Tables	(i)
1. Introduction	1
2. The Model	2
3. Socio-Demographic Determinants of Entrepreneurship	5
4. Sample and Analysis	8
5. Results	9
6. Sensitivity Analysis	11
7. Concluding Remarks	12
References	14

List of Tables

1.	Characteristics of Respondents	17
2.	Estimation Results	19
3.	Marginal Changes in Regressors	19

1. Introduction

As a result of several recessions in the last two decades, policy-makers in many countries are promoting self-employment and small business start-ups as a means of creating employment. An individual who chooses to become self-employed reduces the unemployment rate not only by gaining employment for himself/herself but also by hiring any additional workers for his/her business. To this end, valuable resources have been channelled into entrepreneurial training, research and development and as incentives to encourage new business start-ups (Rees & Shah, 1986; Gill, 1988; de Wit & van Winden, 1989; Long, 1982; Moore, 1983; Blau, 1985; Dalton & Makepeace, 1990).

With the increased emphasis on entrepreneurship, a broader and firmer foundation on entrepreneurial studies is needed. Since research in entrepreneurship is still in its early stages, a diversity of methodologies and the construction of partial theory are needed rather than the pursuit of a complete theory (Churchill, 1989). Currently, empirical knowledge appears to be inadequate for building robust theories of entrepreneurship and research tends to be qualitative and less concerned with statistical rigor (Bygrave, 1989). By complementing field research, multivariate statistical models with good predictive powers, however, will contribute significantly to the advancement of the theory and practice of entrepreneurship. It will also contribute toward the charge of increasing the rigor and sophistication of entrepreneurship research (Smith et al, 1989) and increasing the diversity of methodologies.

To this end, this paper develops an ordinal probit model of entrepreneurship that will enable us to calibrate the level of entrepreneurship of individuals in appropriate samples. In addition, the model also enables us to perform multivariate analysis on the determinants of entrepreneurship and to compute the relevant elasticities with respect to these determinants. This information will be valuable to policy makers in targeting the appropriate population, prioritizing programs, and in designing their strategies in promoting entrepreneurship.

As an illustration, the model is estimated using a random sample of 500 adults in full time employment to investigate the socio-demographic determinants of entrepreneurship. Although the influences considered have been studied previously, relatively little is known about the Singapore labor force and their entrepreneurial intensities. As a newly industrialised nation with a fairly impressive economic growth over the last two decades, Singapore is often cited as a growth model. However, in 1985, Singapore experienced a recession and recorded a negative growth rate of -1.6 percent (Department of Statistics, 1986). In a review of the economy, an over-dependence on foreign multinational corporations was cited as one of the inherent weaknesses of the economy (Lim, 1988) and the promotion of local enterprises was viewed as a critical element of Singapore's economic future (Economic Committee, 1986). The overall strategy called for the creation of a pro-enterprise environment, providing assistance for undertakings in self-help and use of incentives and assistance to accelerate enterprise growth (Foo, 1990). Therefore, besides contributing towards the general understanding of the field, the results of this study will also provide policy makers with valuable information in developing their strategies.

2. The Model

The meaning of entrepreneurship and the definition of an entrepreneur is not well-defined in the literature. One common definition of an entrepreneur is a person who undertakes *to start* and conduct an enterprise or business, assuming full control and risk while another defines an entrepreneur as an organizer of an economic venture, especially one who organises, owns, manages, and assumes the risk of a business (Brockhaus, 1982). Although both these definitions categorise a business owner as an entrepreneur, the first version requires, in addition, that the entrepreneur starts his/her own business. Owing partially to the innovative task of creating a new business, this attribute received the highest ranking in a survey on the meaning of entrepreneurship conducted by Gartner (1990). An owner who started his/her business could thus be considered to be more entrepreneurial than a non-starter.

J.S. Mill (1848), who is widely credited with bringing entrepreneurship into general use among economists, believes that risk-bearing distinguishes the entrepreneur from the manager. The level of entrepreneurship, according to Mill, is thus closely associated with the level of risk-bearing. Starting a new venture involves a greater risk than being self-employed in an existing business. From Mill's concept of entrepreneurship, a person who starts his/her own business (starter) is thus considered to be relatively more entrepreneurial than a self-employed person who does not start his/her own business (non-starter). Furthermore, any self-employed person is considered to be more entrepreneurial than a paid-employee because the former bears more of the risk of the business.

In a recent paper, Cooper and Dunkelberg (1986) introduced and analysed the key concept of the "degree of entrepreneurship" by examining business ownership through starting, inheriting, purchasing and being promoted or bought in. Page test was applied to individual factors that were hypothesised to influence entrepreneurial intensity and the order of the intensity in different owners was tested. The authors concluded that entrepreneurial intensity seemed to be greater for starters than non-starters, and amongst non-starters, greater for those who purchased firms than for inheritors, and least for those promoted or bought in to become owner-managers.

Cooper and Dunkelberg (1986) argued that the different ways of becoming an owner exhibited different "degrees of entrepreneurship" of the owners. Starting a business required the innovative task of conceiving and shaping a business, and of taking the initiative to create something where nothing had existed before. It also involved personal risk-taking and would be regarded, by almost any definition, as being an entrepreneurial act.

The authors also claimed that purchasing a business involved risk-taking and required initiative in finding and negotiating the purchase of a suitable business while inheriting or being bought-in involved less risk-taking. Depending on the extent to which these owners (non-starters) plan changes or desire growth, there may be little need for creativity, to the visualisation of an opportunity, or the bringing together of resources.

Though the idea of these non-starters having to bear less risk is reasonable, the purchaser need not have to find and negotiate the purchase of suitable business as the reverse may well be true. Therefore, although it is quite clear that starters should be considered more entrepreneurial than non-starters, the exact ranking among the non-starters may not be as evident. Unfortunately, owing to the paucity of data available, the latter rankings could not be modelled and analysed in this study because purchasers, inheritors and bought-ins were grouped together in one category. It should be stressed, however, that the methodology introduced below could easily be extended to explicitly incorporate the more refined categories.

Following the above discussion, we now assume that, *ceteris paribus*, individuals with lower levels of entrepreneurship are more likely to engage in paid-employment whereas individuals with higher levels of entrepreneurship, above a certain unknown threshold, m , are more likely to start their own business (starters). Individuals who are in self-employment but do not start the businesses themselves (non-starters) are considered to have intermediate levels of entrepreneurship.

The *ceteris paribus* assumption should also be highlighted because it could be argued that an owner who started a small business which remained as a small business might not be as entrepreneurial as a non-starter who expanded his/her current business into new areas. Albeit a little restrictive, this problem is not significant in this study since the self-employed, starters and non-starters, in the sample are mainly small business owners.

In short, the three alternative employment statuses, y , of an individual can be assumed to be manifestations of the level of entrepreneurship, y^* , which is unobservable or latent.

[1]	Paid Employment:	$y = 0$	if	$y^* \leq 0$
	Non-Starters:	$y = 1$	if	$0 < y^* \leq \mu$
	Starters:	$y = 2$	if	$y^* > \mu$

An ordinal discrete choice framework can thus be used to estimate the level of entrepreneurship. An individual's level of entrepreneurship, y^* , is dependent on, among

other factors, his/her personal and family characteristics, previous work experience and presence of entrepreneurial role models; thus giving the empirical relationship

$$[2] \quad y^* = \beta'x + \varepsilon$$

where x is a vector of determinants;

β is a vector of parameters to be estimated.

If we assume further that the unobservable influences or the error term ε is normally distributed, then the above model can be estimated using the ordinal probit analysis (Greene, 1990). Specifically, we can estimate the following probabilities;

$$[3] \quad \begin{array}{ll} \text{Paid Employment:} & P(y=0) = \Phi(-\beta'x) \\ \text{Self-Employment:} & P(y=1) = \Phi(\mu-\beta'x) - \Phi(-\beta'x) \\ \text{New Venture:} & P(y=2) = 1 - \Phi(\mu-\beta'x) \end{array}$$

where x is a vector of determinants;

μ and β are a parameter and a vector of parameters to be estimated;

Φ is the cumulative standard normal distribution.

The above model can be estimated using the maximum likelihood procedure which yields estimates with the usual desired properties. Having estimated the parameters, β , the unobservable level of entrepreneurship, y^* , can then be calculated, given the vector of determinants, x . Therefore, the model could be used to calibrate the degree of entrepreneurship of individuals in an appropriate sample.

3. Socio-Demographic Determinants of Entrepreneurship

Although both the psychological nature and the socio-demographic characteristics of entrepreneurs are widely studied in the literature, the latter is selected in this exploratory

analysis to illustrate the model developed due to its ease in identification, verification and segmentation in the population, which provides an added advantage to policy-makers.

One of the most widely studied characteristics of an entrepreneur is age. Liles (1974) suggested that individuals between the ages of 25 and 40 were more likely than others to start a new business venture because they had obtained sufficient experience, competence and self-confidence but not yet incurred financial and family obligations or a position of prestige and responsibility in a large company. This view is supported by, among others, Shapero (1971), Mayer and Goldstein (1961), Cooper (1973) and Howell (1972). Furthermore, a period of paid employment may be required before the individual can accumulate the capital needed for the new business venture (Creigh et al, 1986). In addition, self-employment is viewed by some individuals as a mid-career alternative to retirement (Weinrauch, 1980 and Quinn, 1980). Therefore, all else held constant, age is expected to increase the level of entrepreneurship in our model.

The gender of an individual is another widely studied determinant of entrepreneurship. de Wit and van Winden (1989) suggested that the negative and significant impact found in their study, of being female on the probability of becoming self-employed was partly due to direct choice and partly to the fact that they expected to earn more as an employee than being self-employed. The first view was shared by other researchers like Welsch and Young (1984), Hisrich (1986) and Cromie (1987) who asserted that the self-employment sector was traditionally thought to be the domain of the male gender whereas the latter explanation was supported by Dolton and Makepeace (1990). Being male then is expected to be positively correlated to the level of entrepreneurship.

The Chinese in Southeast Asia have traditionally been considered as the more entrepreneurial ethnic group (Kets de Vries, 1977 and Loh & Lee, 1993). In addition, several studies have shown that minority races in a country are less likely to embark on self-employment (Rees and Shah, 1986 and Gill, 1988). Furthermore, Cooper et al. (1988) found that minority entrepreneurs started firms which were less likely to survive because they were less able to assemble resources. As the Chinese is the major ethnic group in Singapore, being a Chinese is expected to increase the degree of entrepreneurship.

The marital status of the individual is another widely studied characteristic. Supported by empirical evidence from the United Kingdom, Rees and Shah (1986) argued that a married man would be more prepared to take risks and that family support may make self-employment less demanding than it would be otherwise. This finding was reinforced by Dolton and Makepeace (1990) and de Wit and van Winden (1989) utilising data from the United Kingdom and the Netherlands respectively. If these hypotheses are true, then being married will increase a person's level of entrepreneurship.

A person's educational background affects the knowledge he/she has on different career choices and also the opportunity and degree of financial support available. This hypothesis is supported by findings of Howell (1972) and Douglas (1976) that the average entrepreneur has more education than the general public. On the other hand, Brockhaus and Nord (1979) found that, although entrepreneurs were more educated than the "average person," their level of education was lower than managers. This lower level of education may have limited their ability to obtain more challenging jobs or gain promotion to more desirable positions and this lack of opportunities, in turn, may have contributed to their decisions to start their own businesses. In the Singapore context, it is believed that the latter influences will dominate, resulting in a negative correlation between education and entrepreneurship levels.

Dolton and Makepeace (1990) hypothesised that increase in family responsibility, widely modelled by the number of children or number of dependents, reduces the probability of an individual choosing self-employment since it increases the cost of business failure. Their hypothesis, however, was not supported by their empirical evidence. On the other hand, Rees and Shah (1989) argued that family support may make self-employment less demanding than it would otherwise be and hence increases the probability that the individual will select self-employment; a hypothesis that was supported empirically by Gill (1988) and Dolton and Makepeace (1990). Therefore, a positive correlation should be found in our model if this is also true in Singapore.

The presence of role models has been consistently found and argued to favour self-employment, especially new business start-ups. (Watkins & Watkins, 1984; Cooper & Dunkelberg, 1987; Hakim, 1988 and de Wit & van Winden, 1989). In addition to being role models, family members and other closely related friends and relatives who have started their own businesses may be more willing and able to provide the support and encouragement for the individual to venture into his/her own business. Therefore, the presence of role models should increase the entrepreneurial intensity of the individual.

The work experience of an individual is expected to be another important determinant. Operative knowledge of the businesses and a good network which are essential to new ventures are mainly acquired through practical experience in the business. In addition, employees of entrepreneurs may be encouraged by their employers' enterprising spirit and success to venture into business themselves (Cooper, 1971; Shapero, 1971; de Wit & van Winden, 1989 and Dolton & Makepeace, 1990). The degree of entrepreneurship, as defined in our model, is thus expected to be positively correlated to work experience.

4. Sample and Analysis

A sample of 500 adult Singaporeans above the age of 16 and engaged in full-time employment were interviewed by trained staff from a professional survey company at eight shopping malls across the island. The survey was conducted in the early evenings on weekdays and in the afternoons and early evenings on weekends during the month of October, 1991. It gathered, among other information, data on the respondents and their employment status.

For the purpose of this study, respondents are classified under three categories by employment: paid employees, non-starters and starters. Employees are people who work for either public or private organisations which do not belong to either themselves or their families. A non-starter is a business owner who did not start the company but become an owner either through purchasing, inheriting or being bought-in. A starter, on the other hand, is a person who started his/her own business venture. A profile of the respondents, categorised by their employment status, is presented in Table 1. Of the 500 full-time

workers in our sample, 408 (81.6%) were employees, 79 (15.8%) were non-starters and 13 (2.6%) were starters.

As evident in Table 1, with the exception of ethnicity, most of the hypothesised influences were found to be significant in determining the respondents' degree of entrepreneurship and career choices. In addition, difference in education level among the categories of employment was significant up to secondary education but not beyond. Furthermore, preliminary inferences suggested that the effects of these influences on the degree of entrepreneurship and career choice were as hypothesised and consistent with most previous findings.

5. Results

Table 2 shows the estimation results of the ordinal probit model which is a more rigorous multivariate analysis. In general, the model fits well with a highly significant chi-squared statistic. The interpretation of the estimated coefficients of an ordinal probit model is somewhat intricate. Broadly speaking, a statistically significant positive coefficient would indicate that an increase in the independent variable would increase the level of entrepreneurship, resulting in a reduction in the probability of the individual engaging in paid-employment and an increase in the probability of him/her starting a new business.

In this regard, males were found to be significantly more entrepreneurial than females and being the eldest sibling increased the probability of an individual starting a new venture. Together with the sample statistics shown in Table 1, these results provided some corroboration for the hypothesis that Singaporean families, being mostly Asians, tended to hand-over any family business and to lend more support to the eldest son to pursue his own business. This traditional bias has to be addressed to promote more entrepreneurship and to increase the efficiency of resource allocation. If continued unchecked, this problem will exacerbate with increasing participation of females in the labor force, lured by better government incentives such as tax rebates on maids and child-care subsidies for working mothers. Fortunately, there has been gradual improvements in attitudes and successful

businesswomen are being featured regularly in the local media to promote entrepreneurship among females.

Consistent with the evidence in Table 1, ethnic differences were again found to be insignificant in determining the entrepreneurship of an individual, dispelling the myth that the Chinese were more entrepreneurial than other races in Singapore. One possible reason for the misconception may be due to the observation that the majority of self-employed in Singapore were Chinese without careful comparison with the paid-employment sector (Straits Times, 8/26/93).

In contrast, the age and the number of years of work experience of the individual, which was found to be an important factor in the univariate analysis, was found to be insignificant in the multivariate analysis. This difference may, in part, be explained by the dominance of the "eldest male" syndrome. Having included these variables in the model, the effect of age on entrepreneurship is then moderated.

The education level of an individual was found to have a significant influence on entrepreneurial career decision. In particular, the group of individuals with secondary education or less was found to be more entrepreneurial than the others. This result, though contrary to previous findings, is not surprising in the local context as most of the self-employed individuals sampled are working in small businesses where a high level of formal education is not as essential. In addition, individuals with lower education would experience more difficulty in securing a high paying job and thus would have a lower "opportunity cost" of seeking self-employment. Furthermore, individuals who have family businesses to rely on for employment may not perceive a need for higher education. Another plausible reason may be the lower overall education level of individuals in a higher age group. The general education level of the population has increased significantly over the last few decades. Since the average age of an employee is 10 years younger than those in self-employment, the overall education level of the latter is expected to be lower.

In addition to strengthening the enterprising spirit of these individuals, more effort should also be directed at increasing the entrepreneurial inclinations of the more highly educated

labor force. As noted by Chew (1988), Singapore's problem is not lack of entrepreneurs per se but the lack of industrial entrepreneurs. The Economic Development Board (1989) recommended nurturing a core of high calibre entrepreneurs for creating technology intensive and high value-added enterprises. This objective may be difficult to achieve if the highly educated are not entrepreneurially inclined.

Consistent with the findings of Rees and Shah (1986), family support, in general, was found to increase the level of entrepreneurship. In particular, the number of children and the presence of an entrepreneurial role model in the family have significant positive impact on an individual's entrepreneurial career decision. On the other hand, the marital status of the individual, the number of dependents and the presence of non-family role models have only minimal, albeit positive, effects on entrepreneurship.

6. Sensitivity Analysis

The identification of significant determinants of entrepreneurial intensity provides useful information to policy makers in segmenting the population when designing and implementing programs and strategies to enhance enterprise development. It will be even more useful if these attributes could be ranked, in some order, to assist policy-makers in prioritizing the various programs and their target population. One common method is to conduct a sensitivity analysis of the determinants.

Unlike the standard regression model, the marginal effects of a change in the regressors on the probabilities of choosing each category of career cannot be inferred directly from the estimated coefficients in an ordinal probit model. Furthermore, the effects of a change in the regressors on the probability of an intermediate choice, self-employed in our model, cannot be inferred by the sign of the estimated coefficients. Greene (1990), however, provides a simple method of computing the marginal effects of a change in the regressors on the probabilities of obtaining each category of the dependent variable.

Table 3 reports the calculated change in the respective probabilities due to a change in the regressors that are found to be statistically significant. Note that the sum of the marginal

effects is zero because the probabilities have to sum to one. Since most of significant variables, except the number of children, are indicator or dummy variables, the changes in the probabilities are the differences in the respective probabilities, given by equations (3), when these variables assume their two values (0 & 1) with other variables held at their simple means. The marginal effects on the choice probabilities of having an additional child are also reported in Table 3. Coincidentally, an increase in any of the significant variables increases the probability of an individual choosing self-employment or new business start-ups but reduces the probability of him/her choosing paid-employment.

The largest impact on career distribution is the presence of family role model which increases the probability of starting a new business by 18.83% and reduces the probability of salaried employment by 29.14%. This group of people should be the prime target, in terms of effectiveness, for any promotional activities to encourage enterprise development. The next two most influential factors that can be used to segment the population are the individual's sibling rank (eldest child) and gender (male). A male in the sample will, in general, be 8.5% more likely to start a business than a female, whereas being the eldest child reduces the probability of salaried employment by 21.57%. In addition, individuals who have only secondary or lower education will be 12.12% less likely to engage in paid-employment and each increase in the number of children will diminish the chances of salaried employment by almost 7%.

7. Concluding Remarks

The focus and the development of entrepreneurship studies has thus far been more qualitative than quantitative in nature, with less emphasis on sophisticated statistical analyses (Bygrave, 1989). By complementing field studies, quantitative empirical models, however, will contribute significantly to the theory and practice of entrepreneurship. This paper develops an ordinal probit model of entrepreneurship that will enable us to calibrate the level of entrepreneurship of individuals in appropriate samples. In addition, the model also enables us to perform multivariate analysis on the determinants of entrepreneurship and to compute the relevant elasticities with respect to these determinants. This

information will be valuable to policy makers in targeting the appropriate population, prioritizing programs, and in designing their strategies in promoting entrepreneurship.

As an illustration, the model is estimated using a random sample of 500 adult Singaporeans engaged in full-time employment to investigate the socio-demographic determinants. Similar to previous findings in the literature, the presence of entrepreneurial role models in an individual's family, the individual's sibling rank, gender, level of education and number of children are found to be significant determinants. On the other hand, in contrast to previous studies, age, ethnicity, years of working experience, marital status, number of dependents and the presence of non-family entrepreneurial role models are found to have only minimal influences.

Policies promoting enterprise development in Singapore should be designed with the appropriate targets or segments of the population to achieve higher effectiveness; in particular, males who are the eldest sibling and who have family members operating their own businesses. On the other hand, for a more efficient allocation of resources and a better long-term strategy, policy-makers should also be concerned about promoting entrepreneurship among the females who are increasingly going into the workforce and those with higher education to improve the quality and scope of new enterprises.

It should be noted that only socio-demographic variables were analysed in this study which, though eases segmentation, is nevertheless rather restrictive. A more complete study that includes other important determinants like attitudes and motivations of individuals, career and incubator organisations, economic, political, and cultural environments should be conducted to provide better insight into the process of enterprise development.

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Table 1
Characteristics of Respondents

Social & Demographic Variables @	Overall (n=500) (100%)	Employees (n=408) (81.6%)	Non-Starters (n=79) (15.8%)	Starters (n=13) (2.6%)	Groups with different different means (t-tests & a=0.05)	Probability that all means are equal (Anova & F-value)
Age	31.61 9.69	29.73 8.77	41.05 8.74	33.15 9.82	Emp-NS, NS-S	0.0001
Male	0.6460 0.4787	0.6054 0.4894	0.8481 0.3612	0.6923 0.4804	Emp-NS	0.0002
Chinese	0.7660 0.4238	0.7769 0.4168	0.7342 0.4446	0.6154 0.5064		0.3078
Married	0.5360 0.4992	0.4657 0.4994	0.8734 0.3346	0.6923 0.4804	Emp-NS	0.0001
No. of Children	1.0540 1.4506	0.7475 1.1363	2.5569 1.8862	1.5385 1.5064	Emp-NS, Emp-S, NS-S	0.0001
No. of Dependents	1.0880 1.1166	0.9828 1.0589	1.6013 1.2152	1.2692 1.4378	Emp-NS	0.0001
Eldest Among Siblings	0.2680 0.4434	0.2304 0.4216	0.4304 0.4983	0.4615 0.5189	Emp-NS	0.0003
Any Family Member Owned Business	0.2700 0.4444	0.2525 0.4349	0.2658 0.4446	0.8462 0.3755	Emp-S, NS-S	0.0001

Close Friend/Relative	0.7060	0.6814	0.8228	0.7692	Emp-NS	0.0362
Owned Business	0.4560	0.4665	0.3843	0.4385		
Years of Experience	9.1400	8.0392	14.4620	11.3462	Emp-NS	0.0001
	6.4648	5.9958	6.0137	7.1163		
Education:						
Primary School or Less	0.0500	0.0319	0.1392	0.0769	Emp-NS	0.0003
	0.2182	0.1759	0.3484	0.2774		
'O' Level or Less	0.5800	0.5564	0.6835	0.6923	Emp-NS	0.0788
	0.4941	0.4974	0.4681	0.4804		
'A' Level or Less	0.7920	0.7819	0.8481	0.7692		0.4071
	0.4062	0.4134	0.3612	0.4385		

@ Means are reported in the first row and standard deviations are reported in the second row.

Table 2
Estimation Results

Number of Observations:	500
Log-Likelihood at Convergence:	-212.97
Initial Log-Likelihood:	-276.18
Chi-Squared (df = 11):	126.41
Significance Level:	0.3217E-13

Dependent Variable: Entrepreneurial Career Choice
(Paid-Employees = 0, Non-Starters = 1 and Starters = 2).

<u>Variable</u>	<u>Coefficient</u>	<u>Std Error</u>	<u>T-Ratio</u>
Constant **	-2.9995	0.5371	-5.585
Male **	0.4710	0.1942	2.426
Eldest Sibling **	0.5686	0.1595	3.564
Chinese	-0.2472	0.1773	-1.394
Age	0.0157	0.0183	0.859
Yrs Wk	0.0197	0.0234	0.840
'O' Level Education or Less *	0.3072	0.1625	1.891
Married	0.2676	0.2121	1.262
Number of Children **	0.1771	0.0842	2.104
Number of Dependents	0.0402	0.0728	0.552
Family Member Own Business **	0.7878	0.2042	3.857
Close Friend/Relative Own Business	0.1240	0.2040	0.608
m **	1.3371	0.1580	8.462

Note: ** denotes significant at 95% level of confidence
* denotes significant at 90% level of confidence

Table 3
Marginal Effects of Changes in Regressors

<u>Regressors</u>	<u>Prob(Emp)</u>	<u>Prob(NS)</u>	<u>Prob(Starters)</u>
Family Member Own Business	-0.2914	0.1031	0.1883
Eldest	-0.2157	0.0864	0.1293
Male	-0.1857	0.1006	0.0851
'O' Level Education or Less	-0.1212	0.0627	0.0585
Number of Children	-0.0699	0.0353	0.0346