

A Gender-Based Performance Analysis of Micro & Small Enterprises in Sri Lanka

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Sri Lanka, a small island with a population of 19 million, has been able to achieve high rate of economic growth. Despite these performances, recently the Sri Lankan economy is facing a number of economic problems and challenges. The growth of the GDP is relatively slow, and rarely exceeding around 8 percent per annum even after liberalized economic policies introduced in 1977. The average rate of growth of the GDP is around 4-5 percent after 1977. In 1999, the Sri Lankan economy grew by only 4.2 percent. The per capita income was US \$ 833 in 1999. In addition to the lower level of income, the rapid rise in population has no doubt aggravated the unemployment problem.

ment rate is around 20 percent among youths in the economic structure is also still activities in which most people force is growing at a substantial) than the population as a

The government of Sri Lanka is faced with a challenge of providing long-term sustainable employment and income opportunities for the growing rural labor force. The whole story shows that it is important to shift policy instruments to support labor intensive industries such as Micro and Small Enterprises (MSEs). The promotion of MSEs as a strategy to promote employment in rural areas has received considerable attention in Sri Lanka, as well as in other developing countries. The recent economic turbulence and concerns with growing economic and social inequalities in this small island has stimulated discussions of means and objectives of government policies regarding small businesses (Lakshman, Regnier and Senanayake 1994). The potential contribution of MSEs to generating employment and income in densely populated rural areas in Asia has been documented (Hooley and Muzaffer 1990, Liedholm, McPherson, and Chuta 1994). The development of MSEs is seen as a way of providing aid to the poor and creating job opportunities for the under-employed (Aydalot 1988, Humphrey and Schmitz 1996). In recent years, particularly, women unemployment and under-employment have got considerable attention from policy makers in developing countries.

MICRO- AND SMALL ENTERPRISES IN SRI LANKA

The average annual unemployment recorded high unemployment rates and women. Meanwhile, the based on informal or traditional are employed. Sri Lanka's labor tially faster annual rate (2 per whole (1.2 percent) (World Bank

ABSTRACT

This article is an attempt to examine the micro- and small-scale enterprises in Sri Lanka at two levels: the individual and the enterprise. The specific objectives of this study are: 1. to present a descriptive profile of the enterprises in Sri Lanka by gender; and 2. to determine the factors influencing the performance of female-owned enterprises in Sri Lanka. Such an understanding is crucial to the evolving policy debate involving the MSE sector.

FACTORS AFFECTING PERFORMANCE OF FEMALE-OWNED ENTERPRISES IN DEVELOPING COUNTRIES

The majority of female workers in developing countries has entered the labor force through the MSE sector, primarily because of ease of entry and limited access to other enterprises and employment opportunities. Research in Africa and Asia show that females and males exhibit significantly different priorities in production and consumption. Females contribute larger proportions of their personal income toward household ex-

penditures than males and thus are able to retain less profit for reinvestment (Bruce and Dwyer 1988). Tinker (1987) and Downing (1990) suggest that females have different business strategies and objectives than men. Women's motivation is often household survival, whereas men are more often business-motivated. Therefore, male business owners are more likely to reinvest profits into the business.

Small businesses owned by women represent an increasingly important part of the small business sector. The National Women's Business Council (1996) estimates that women-owned businesses represent one-third of all businesses, and that the number of women-owned firms is growing twice as fast as firms in total. The same study estimates that women-owned businesses employ almost six million people and add jobs much more rapidly than firms on average.

Effective policies and programs to support the development of MSEs depend critically on adequate knowledge of characteristics and constraints of MSEs. Also, given the growth of entrepreneurship among women, it is important to understand the social and economic factors influencing the suc-

cess of female-owned small business. This article is an attempt to examine the micro- and small-scale enterprise at two levels: the individual and the enterprise. The specific objectives of this study are: (1) to present a descriptive profile of enterprises by gender; and (2) to determine the factors influencing the performance of female-owned enterprises in Sri Lanka. Such an understanding is crucial to the evolving policy debate involving the MSE sector.

Prior studies suggest that social structures such as workplace, family, and organized social life affect females' access to entrepreneurial opportunities and may influence performance (Aldrich 1989, Cooper and Gascon 1992). Sekaran and Leong (1992) found that in South America, expectations that women's primary responsibilities are childcare and domestic tasks create a barrier to venture creation and subsequently venture performance. Research also reveals that female enterprises are frequently hindered by a lack of business information, advice, and access to networks and business support systems (Allen and Truman 1993). One reason could well be that, according to prior research, women network less effectively than men (Aldrich 1989, Brush 1992). Prior studies also

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indicate that women-operated enterprises are small, and less profitable than men-operated businesses (Coleman and Carsky 1996b, 1997, Riding and Swift 1990). It is important to note that public policy initiatives designed to increase women's access to information, skill improvement, and funding are underway in many developing countries (Organization for Economic Cooperation and Development (OECD) 1993, Allen and Truman 1993).

Still, the relative impact of the effect of social structures on non-OECD and developing countries differs from that in the United States and Canada where more than 30 percent of small enterprises are female-owned, social networks and support systems are well-developed, and women have access to entrepreneurial training and information resources (OECD 1993, Brush and Hisrich 1991). Furthermore, women from some OECD countries are increasingly accepted as equal in their entrepreneurial endeavors, making it easier for their businesses to succeed.

The differences in social structures across developed and developing countries suggest variation in individual factors affecting the performance of female-owned businesses (Cooper and Gascon 1992, and Kalleberg and Leicht 1991, Vesper 1980). Studies examining the performance of female-owned businesses in non-OECD and developing countries are very limited. Studies of the performance of female entrepreneurs are few (Brush and VanderWerf 1992), with the majority of research not being comparative among groups of females and males. The most comprehensive summary of individual factors influencing performance was noted in a recent literature review by Cooper and Gascon (1992), which examined the factors such as experience, education, occupation of parents, gender, race, age, and entrepreneurial goals. This summary, drawn from previous literature examining performance (Stevenson 1986, Vesper 1980), concluded that successful enterprises are more often started by males who are achievement-motivated, able to manage risk, and engage in systematic planning. However, Kalleberg and Leicht (1991) found that female-owned businesses were just as successful as male-owned businesses. According to Johnson and Storey (1994), female-owned enterprises were smaller and more likely to employ female workers.

It should be noted that although these recent studies add to our understanding of similarities and differences in performance, it is difficult to compare results across studies because performance in entrepreneurial businesses was measured differently. The most frequently used operationalizations of performance include survival, growth in employees, and profitability (Srinivasan, Woo, and Cooper 1994). Kalleberg and Leicht (1991) and Johnson and Storey (1994) examined survival, whereas Chaganti and Parasuraman (1994) examined financial perfor-

mance and documented organizational factors as they related to performance.

HYPOTHESES

Using prior studies as a guide, the following hypotheses were formulated and tested in this study:

Hypothesis 1: The urban-oriented entrepreneurs perform their business better than the rural-oriented entrepreneurs.

Hypothesis 2: The influence of close family ties will have a positive impact on the performance of enterprises.

Hypothesis 3: The influence of close friend ties will have a positive impact on the performance of enterprises.

Hypothesis 4: The per-training skills of an owner have a positive impact on the performance of enterprises.

Hypothesis 5: Differences in business sectors will affect the performance of enterprises.

METHODOLOGY

The data for this study were collected in a selected province (North-western Province) in Sri Lanka. One district (Kurunegala) in the selected province was randomly selected, out of which four villages were identified for the study. The villages were selected to reflect contrasting physical and socio-economic characteristics. A stratified random sample of 50 enterprises in each of the four villages was selected from the list of enterprises provided by the local officials and village leaders. In case of no response from the randomly selected enterprise, the next enterprise from the list was included for the interview. The data were collected via personal interviews with business owners using trained enumerators who collected data from the 200 entrepreneurs in the sample. The survey was conducted in 1998. It was ascertained that the selected enterprises represented diversity in non-farm activities, size and type of enterprises in Sri Lanka. The model below was developed in order to determine factors affecting the performance of the female-owned enterprises in Sri Lanka.

$$PERFORMANCE_j = \alpha_0 + \sum \beta_i DEMO_{ij} + \sum \gamma_i HUMCAP_{ij} + \sum \psi_i FAMTIES_{ij} + \sum \phi_i FRETIES_{ij} + \sum \tau_i ENTERFACTORES_{ij} + e_i \quad (j = 1, 2, 3, \dots, 66)$$

Dependent Variable(s): The dependent variable for this study was business performance. Using the prior studies as a guide, (Donckels and Lambrecht 1995, Hansen 1995, Ostgaard and Birley 1996, Premaratne 2001) pertinent to the measurement of performance, two objectives of measures of growth are included: sales growth and increase in profitability over a three-year period.

Independent Variables: As in the prior studies (Lerner 1997), the independent variables were grouped into five categories: (1) demographic (DEMO): age (years), birth place (urban = 1, rural = 0) and marital status of the owner/manager (married = 1, unmarried = 0); (2) human capital (HUMCAP): whether the owner/manager has had

training (yes = 1, no = 0); education (above A/L = 1, otherwise = 0), and previous experience (yes = 1, no = 1); (3) family ties (FAMTIES): whether the history of the business is the same as family business (yes = 1, no = 0); whether the owner/manager was motivated to enter into business by family members (yes = 1, no = 0); whether family members influence on owner's decision making (for example, consultation with family) (yes = 1, no = 0); and whether family members work in the firm (yes = 1, no = 0); (4) friend ties (FRETIES): the owner/manager was motivated to enter into business by friends (yes = 1, no = 0); and whether friends influence on owner's decision making (for example, consultation with friends) (yes = 1, no = 0); (5) enterprise-related factors (ENTERFACTORES): size (employee_A: less than 3 = 1, otherwise = 0; employee_B: 4 - 15 = 1, otherwise = 0), age of business (years), and industry sector (manufacturing, trade, services).

FINDINGS

The majority (94.0 percent) of all enterprises surveyed operated as sole-proprietorship. These enterprises were small, and they were largely a heterogeneous group, belonging to the so-called 'informal sector'. Table 1 presents the distribution of the enterprises by gender of the operator and by type of enterprise. It shows that 134 enterprises (67 percent) were operated and/or owned by males, compared to 66 enterprises (33 percent) operated by females. Enterprises operated by male entrepreneurs were dominated by the production/manufacturing sector (over 78 percent), whereas female owned/operated enterprises were mainly concentrated in textile/garment and food processing sub-sectors. The distribution of enterprises by sectors varied significantly by gender as indicated by the Chi-Square test (+2 value = 10.071 and p-value = 0.039).

Descriptive Analysis of Important Variables: The survey revealed a significant difference between

certain variables, summarized in Table 2. The average number of workers, including the proprietor, for female-owned enterprises was 2.68 compared to 4.21 workers for male-owned enterprises. The majority of both male-owned (74.2 percent) and female-owned enterprises (79.1 percent) were started with two or fewer workers. Table 2 shows that family members constituted a major share of the total workforce of both male- and female-owned enterprises. The average number of family workers was 1.21 and 1.35 for male- and female-owned enterprises, respectively. Table 2 also shows that male entrepreneurs were younger than their female counterparts. The majority (45.4 percent) of male entrepreneurs had received training compared to only

FEATURE

Table 1
Distribution of Small Enterprises by Gender and Type of Enterprise

Type of Enterprise	Female		Male		Total	
	Number of Firms	Percent	Number of Firms	Percent	Number of Firms	Percent
Manufacturing	14	21.9	50	78.1	64	32.0
Textile and garments	23	46.9	26	53.1	49	24.5
Food Processing	11	44.0	14	56.0	25	12.5
Trade	13	27.1	35	72.9	48	24.0
Service	5	35.7	9	64.3	14	7.0
Total	66	33.0	134	67.0	200	100.0

χ^2 (Chi-square) value = 10.071 and p-value = 0.039 (significant at 95 percent of confidence).

27.3 percent of female entrepreneurs. Similarly, the majority (32.2 percent) of male-business owners have previous work experiences compared to their female counterparts (30.5 percent).

Regression Results: Multiple regression analysis was used to determine the impact of various factors on the performance of female-owned enterprises. The regression results, along with t-statistics and significant p-values, are displayed in Table 3. Both models are statistically significant (*sale*: p-value = 0.026, $R^2 = 0.382$; *profit*: p-value = 0.042, $R^2 = 0.310$). The regression results indicate that the age of the owner/manager inversely affects the performance of female-owned enterprises, implying that businesses operated by younger women performed better than those operated by older ones. The results also substantiate Jovanovic's (1982) learning theory that the age of an enterprise and its growth rate are inversely related. Business family history has a significant positive impact on the performance of female-owned enterprises. Results, as a whole, indicate that the 'family ties' has a significant positive impact on the performance of women-owned enterprises. These findings suggest that the enterprises with a large number of family workers performed better than enterprises with fewer or no family workers. The coefficient of 'motivation by relatives' is positive and significant.

The enterprises belonging to the trade and services sectors showed better performance than the manufacturing sector. On the other hand, the trade sector was found to perform well when the performance was measured in terms of profit, but to perform poorly when the performance was measured in terms of sales.

Overall, the most influential variables in explaining the performance of women-owned businesses were business family history, birth place, per-training, and industry sector. In addition, family ties through business motivation and decision-making have a high influence on female-operated business performance. These factors affecting the performance of female-owned enterprises in Sri Lanka were different from the factors previously observed in developed countries. The most significant variables found to influence the performance of the female-owned enterprises in developed countries were level of education, previous experience, environmental, occupational experience, and skills (Lerner, Brush, and Hisrich 1997).

Table 2
Characteristics of Male- and Female-Operated MSEs in Sri Lanka

Some Characteristics of MSEs	Male	Female
Average number of family workers	1.21	1.35
Average age of entrepreneurs (years)	39.1	40.2
Number of entrepreneurs who had pre-training	45.4	27.3
Number of entrepreneurs who had previous experiences	32.2	30.5
Average age of enterprises (years)	12.3	7.8
Average number of workers	4.21	2.68

opment, and other demographic features. A better understanding of enterprises and entrepreneurs can make a major contribution to the development of improved approaches for promotion of efficient and equitable growth of female-owned MSEs in developing countries like Sri Lanka.

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In brief, the result supports the urbanization hypothesis (hypothesis 1): that the urban-oriented entrepreneurs perform in their businesses better than the rural entrepreneurs. The second hypothesis, that the influence of close family ties has a positive impact on the performance of female entrepreneurs, is also supported by the study. However, the third hypothesis that the influence of close friend ties has a positive impact on the performance of female entrepreneurs, is not supported by the regression results. The reason could be that women networks are less effective than men's (Aldrich 1989, Brush 1992, Coleman 2000). The regression results also support the 4th and the 5th hypotheses.

CONCLUSIONS AND IMPLICATIONS

The survey revealed that businesses operated by female entrepreneurs appear to be concentrated in more traditional and less dynamic markets than businesses operated by men. Female-owned businesses were concentrated in low-income informal sectors, where prospects of growth were limited. Female entrepreneurs are highly motivated by family members.

From a policy viewpoint, the findings shed doubt on the feasibility of drafting a single policy or program to assist all Micro and Small Enterprises (MSEs). Given that the majority of MSEs are female-owned and these enterprises seem to be less oriented toward growth, one common program may not work. To the extent that women do have different objectives than men, programs and policies need to be gender-differentiated. Program assistance must be tailored to reflect such differences. Most of the

research on women-owned enterprises has been conducted in developed countries. This study suggests that theories and results derived from the research in developed countries be examined and tested before they are applied to developing countries due to differences in social and organizational structure, financial institutions, needs and constraints, family, human capital devel-

Table 3
Regression Results of Factors Affecting Performance of the Female-owned Enterprises in Sri Lanka.

Variable	Sales			Profitability		
	BETA	SE	P-value	BETA	SE	P-value
Age	-0.025**	0.012	0.019	-0.019***	0.012	0.043
Birth Place	0.108**	0.092	0.018	0.483	0.313	0.129
Marital status	-0.451	0.304	0.258	-0.227	0.488	0.843
Education	0.048	0.253	0.856	0.557***	0.313	0.081
Business family history	3.272*	1.183	0.003	3.654**	1.658	0.013
Per-training	0.441***	0.248	0.080	0.349	0.303	0.254
Previous Experience	0.113	0.077	0.141	0.134	0.121	0.289
Size (employee) =	0.539	0.419	0.205	1.105**	0.616	0.037
"	0.438	0.403	0.285	1.105**	0.498	0.039
Manufacturing Trade	-0.703***	0.417	0.088	-1.00***	0.581	0.060
"	0.038	0.323	0.913	0.202	0.402	0.517
Age of Enterprise	-0.021	0.020	0.289	-0.056**	0.024	0.022
Family Workers	0.161***	0.108	0.068	0.008	0.255	0.978
Motivation by Relative	0.477**	0.188	0.014	0.073	0.227	0.750
Motivation by Friends	0.100	0.234	0.671	0.374	0.291	0.205
Decision making (relatives)	0.385***	0.206	0.058	0.025	0.257	0.922
Decision making (friends)	0.033	0.218	0.881	0.218	0.288	0.421
Intercept	3.421**	1.340	0.014	4.992*	1.887	0.004
F-value	2.059**		0.028	1.882**		0.042
R ²	0.382			0.310		

N = 66; * p-value < 0.01; ** p-value < 0.05; *** p-value < 0.10.