Journal of Science and Technology, Vol. 31, No. 2 (2011), pp 57-67 57

RESEARCH PAPER

MANAGEMENT AND GROWTH PARADOX OF RURAL SMALL-SCALE INDUSTRIAL SECTOR IN GHANA

S. E. Edusah
Bureau of Integrated Rural Development (BIRD), KNUST, Kumasi, Ghana

ABSTRACT
It has been argued that Small Scale Industries (SSIs) scarcely grow rather they stagnate and most of them eventually die off mainly due to poor management. The situation has been blamed on a number of factors and therefore a systematic analysis of the key influential factors will give better understanding of the phenomenon. Data was mainly collected through interviews of owners/managers of small industrial units in the Mfantseman District of Central Region of Ghana. Logistic regression was used to distinguish the factors influencing management and growth of the RSSI sector and to estimate the impact of each explanatory variable in the equations. The study shows that record keeping and banking, which are key ingredients of good management practices are largely influenced by the age of the firm, the type of technology used, how proprietors acquired their skills, the production level and the source of investment capital. Similarly, growth of firm is influenced by the gender of the proprietor, the sources of raw materials and how proprietors acquired their skill.

Keywords: *Rural Small-Scale Industries, firm growth, management, proprietors, workforce*

INTRODUCTION

The importance of small scale industry sector (SSI) has been increasingly recognized in developing countries as a solution to the problem of scarcity of capital, widespread unemployment and poverty (see for example, Romijn 2001 and Junejo, et al 2007). In Ghana Rural Small-Scale Industries (RSSIs) play a very important role in the socio-economic life of majority of the people who live in rural areas where agriculture is the dominant economic activity. Although other sectors of the economy such as mining, manufacturing and services have improved considerably since the beginning of the decade, agriculture still remains the most important economic activity and employs the bulk of the rural workforce. In spite of its importance, agriculture in Ghana remains rainfed. Therefore, the pronounced seasonality of rainfall has significant effects on labour use in that sector which tends to be concentrated in peak periods of the farming cycle i.e. land

preparation, cropping and harvesting (Bagachwa and Steward, 1992). This pattern of labour use in agriculture permits rural dwellers to engage in other economic activities particularly in RSSIs. Consequently, the RSSI sector plays four important roles in the rural economy by:

- providing additional regular employment and income opportunities;
- providing seasonal and part-time employment for farm workers during off-peak farming times of the year;
- increasing incomes of marginal farmers and farm workers; and
- generating linkages, which are the basis for growth in agriculture and in the rural economy.

In order for the RSSI to continue to play these roles there would be the need for proper management of the sector to stimulate growth among the numerous firms operating in the sector. This is because the sector has been described as being characterised by limited specialisation in management. Managerial deficiencies of proprietors manifest in many forms prominent among which are poor or lack of formal record keeping and poor accounting and banking practices. Junejo *et al.* (2007) in their study of SSIs in Sindh, Pakistan reported that 23.25 percent of 83 units sampled did not survive because of lack of good management. The managerial handicap often works against the growth of the firms. Storey (1997) states that there is a numerically dominant group of small firms even if they survive would remain small operations due to their managerial bankruptcy.

While there are enormous amount of literature on the economic and financial performance of the SSI very little academic work could be found on the analysis of the RSSI and the influential factors of the sector. As part of the economic and financial analysis some of the influential factors have been casually discussed by some researchers, (see for example Storey 1997). Rani (1996) for example used a combination of frequency tables and cross-tabulations in her work on women entrepreneurs in India. However, in the real life situation many socio-demographic and socio-economic variables like age, gender, education, marital status, skill acquisition and sources of capital are partially correlated with one another. Consequently, it is often not clear and at times difficult to comprehend from a series of cross-tabulations the magnitude of the influential factors. There is therefore compelling advantage in employing a more sophisticated statistical analysis to estimate the independent effects of the influential factors. Regression techniques are important statistical tools because they estimate the impact of each explanatory variable after allowing for variation that can be attributed to each other factor in the equation.

There are therefore enough reasons to examine the influential factors of the management and the growth of the sector. Two key indicators, record keeping and banking have been used as proxies for good management practices for analysis. Record keeping is a measure of good management practices because it is the systematic procedure by which the records of industry are captured, maintained and disposed off. It ensures the preservation of records for evidential purposes, accurate, efficient updating and timely availability. Similarly banking is a measure of good management practice because it ensures financial discipline, good control of industries and facilitates access to capital for growth.

RESEARCH METHOD

The data used in this study form part of data collected from population of firms in the RSSI sector through the use of a structured questionnaire survey administered in rural settlements in the Mfantseman District in the Central Region of Ghana. A total of 215 proprietors were interviewed. The survey was carried out over a period of six months between March and September 2009. Questions were asked about the characteristics of the proprietor, such as the age, gender, marital status and educational level. At the firm level questions were asked

about the age of the firm, production technology, size of the firm and sources of raw materials. Questions were also asked about the nature of the market such as the source of the market, size of sales, fluctuation of sales and competition.

This paper uses the statistical analysis of the nature and strength of the association and the relationship between variables and explores in more detail the causal and influential factors to gain proper understanding of the management of the RSSI sector. The analysis is quantitative and uses multivariate techniques to incorporate more than a single factor in examining the relationships within the RSSI sector. This is because the relationships are often complex, requiring more than one element for better explanation. In the analysis logistic regression statistical technique which is appropriate for the analysis of association and influential factors has been used and the summary results are presented in Table 3.

In logistic regression, an outcome is coded as a zero-one or yes-no variable. As a result the apparent determinants of that outcome can be measured in terms of the quantitative impact of the outcome event occurring. Although logistic regression is relatively new to researchers linear and multiple regression statistical techniques have been used extensively in a number of industry studies. Harris (1970) suggested the procedure for estimating a single equation of linear regression in investigating hypotheses empirically. Liedholm and Chuta (1996) used the technique in their Sierra Leone study. Gupta (1992) used a number of linear regressions in his work on "rural-urban migration, informal sector and development policies" and Kumar (1992) used linear regression statistical techniques in analysing the determinants of industrial production in India.

Specification of the Models

Logistic regression adopts automatic computation by strength of association and as a result automatically eliminates the more weakly correlated factors. For that reason there is the possibility of falsely eliminating some important factors that may display weak significance levels. For instance, the variables education and age are found not significant in the equations. These were allowed to drop from their equations. Also some thought was given to the sources of initial capital available to proprietors. It is recognised that personal and family capital correlate somehow with each other. For that reason both were tested for the simple reason that they seem to have substantially different additive effects.

In the presentation, comments on various logistic regression equations have been made. In each equation the estimation of the substantive effect of each independent variable on the dependent variables has been made. For zero-one variables like gender, a positive coefficient indicates that the odds increase if that factor is present. In the case of the continuous variables such as age of respondents, age of firm and sales the interpretation is less simple. In the analysis the coefficient (B) shows the size of the effect on the "logit", which is the logarithm of the odds. Consequently, negative effects are interpreted as an inverse effect and positive as direct effect on the equation. It must be noted that the final result is presented as the coefficient $\text{Exp}(B)=e^{B}$. This has been done to avoid the use of the logarithms. In logistic regression, Exp(B) measures the multiplicative effect on the predicted odds. For example there is a positive effect when Exp(B) is greater than one. If it is less than one, there is an inverse or negative effect. It must be emphasised that Exp(B) is always above 0. In the analysis a variable is dropped from the equation if its Exp(B) is not significantly different from 1.

Some technical issues about the models are clarified below to help in their interpretation and understanding as follows:

- Most of the models contain dummy variables and these are coded '0' for no event and '1' for event or '0' for no or '1' for

yes. For example gender is coded 1 = male and 0 = female while competition is coded 1= yes and 0 = no.

- There may be some Interaction effects of some variables in the models but these have not been measured. All variables that did not achieve any significant levels have been dropped from the various equations.

- The significant levels used are 1 per cent, 5 per cent and 10 per cent, which is the cut-off level for the removal of variables from the models.

Management of the RSSI Sector

Record keeping and banking were used as proxies to assess the management practices of proprietors. The reason is that the two variables are good management practices that are easy to assess. Poor record keeping and banking practices among proprietors of RSSIs have often been cited among the major managerial impediments that hinder the development and growth of RSSI sector (Yaffeh, 1992). This has been attributed to a number of factors. A careful study of the influential factors would give better understanding of the phenomenon. Influential factor for keeping or not keeping formal records and poor banking practices may include, sex and age of proprietor, educational level of proprietor, skills, technology, level of sales and age of the firm.

The operation of the RSSI sector is strongly related to gender. This is because male and female proprietors have different capabilities, aspirations and orientation. Tinker (1987) argues that women may have different goals and employ different business strategies to men. It has been recognised that female proprietors are usually found in less productive ventures. This has been attributed to high level of illiteracy and low motivation among them and inadequate access to credit facilities (Storey,1997). As a result, considerable attention has been focused upon the uneven opportunities available to male and female in the sector in recent times. It is of interest to examine whether source of skill acquisition is an important influential factor on management of the RSSIs. This is because skill, management and success of a business are interwoven. The type of technology i.e. minimal or no use of equipment and modern technology – semi-automated or automated equipment (such as mills and extractors) adopted by proprietors is an important factor in the operation of RSSIs. It is asserted that the technological progress of SSIs particularly RSSIs tends to be slower than that of large industries (Chan Onn, 1990). In view of that it is important to assess the impact of technology upon the management of the sector.

To examine the influential factors of record keeping and banking as important managerial skills and practices, two logistic regression models of the following types have been adopted and their relationship estimated as:

1a. Record Keeping Model:

$$a.\ Reck = a + b_1Age + b_2Gend + b_3Agefirm + b_4Edu + b_5Tech + b_6Skill + b_7Sales + b_8Prod + b_9Szf + b_{10}K \quad \text{..... (1a)}$$

1b. Banking Model:

$$b.\ Bank = a + b_1Age + b_2Gend + b_3Agefirm + b_4Edu + b_5Tech + b_6Skill + b_7Sales + b_8Prod + b_9Szf + b_{10}K \quad \text{..... (1b)}$$

Where

Reck = record keeping (yes – 1; no - 0)
Bank = banking (yes – 1; no – 0)
a = constant
Age = log of age of the respondents
Gend = sex of respondents (male -1, female -0)
Agefirm = age of firm
Edu = educational level (primary 9, secondary – 12, tertiary –16)
Skill = skill acquisition (within the RSSI sector – 1, Outside the sector – 0)
Tech = type of technology (traditional – 1, modern – 0)
Sales = log of sales
Prod = production level (all year – 1; seasonal – 0)
SzF = size of firm (number of workers)
K= sources of initial capital of respondents (own funds – 1; others – 0)

Reck =3.30+0.34Agefirm-1.05Tech-1.55Skill-0.36Sales+0.

.99Prod +1.09K …….. (1c)

Bank = 2.46-1.38Gend-1.20Skill+0.54K ……. (1d)

Growth of firms

The growth of a firm may be assessed using different parameters but for the purpose of this paper the following parameters were used; (i) increase in workforce, (ii) increase in sales and (iii) increase in production. In this paper increase in workforce has been used to mean growth of firms. It has been argued that once established SSIs do not grow but stagnate and eventually die off. Storey (1997) argues that there are numerically dominant groups of small businesses, which are small today and even if they survive, are always likely to remain small-scale operations. The situation has been blamed on a number of factors and therefore a careful study of the influential factors of the phenomenon would give a better understanding of SSIs. Influential factors for growth or non-growth among firms in the survey include, age and sex of proprietor, education, type and age of firm.

This will be investigated empirically with a logistic model as:

Growth model:

$$Growth = a + b_1Age + b_2Gend + b_3Edu + {}_4Maris + b_5Agef + b_6Skill + b_7Flsales + b_8SzF + {}_9Rawmat + b_{10}Sale + b_{11}Prod \quad \text{..... (2a)}$$

Where

Growth = growth of firm (increased workforce -1, no increase – 0)
a = constant
Age = log of age of the respondents
Gend = sex of the respondents (male -1, female – 0)
Edu = educational level (primary -1, secondary – 2, tertiary –3)
Maris = marital status (yes-1, no - 0)
Agefirm = age of firm
Skill = skill acquisition (within the RSSI sector – 1, Outside the sector – 0)
Flsales = fluctuation of sales (yes - 1, no- 0)
SzF = size of firm (number of workers)
Rawmat = sources of raw material (local - 1, imported - 0)
Sales = log of sales
Prod = production level (all year – 1, seasonal – 0)

Growth=-2.56+1.12Gend+1.23Rawmat+0.80Skill ….. (2b)

RESULTS AND DISCUSSION

Characteristics of Firms

The study shows that the RSSIs sector covers a wide range of activities and forms a very important part of the rural off farm activities. These activities include (1) crafts, (pottery, woodwork, straw work, leather work, gold and black smithing), (2) artisan (carpentry, tailoring/dress making etc.) and (3) processing (oil extraction, powder making, fish processing, cassava processing, vegetable/fruit processing, brewing etc).

The study revealed that the Processing Industry (PI) sub-sector dominates the RSSI sector activities and accounted for more than half of all firms. The Artisan Industry (AI) and the Craft Industry (CI) sub-sectors followed in that order. The dominance of PI was not unexpected given the economic activities of the study area which is based strongly on farming and fishing. The relatively strong position of AI sub-sector was also expected because the sub-sector serves as a safe haven for school dropouts in the rural areas. The magnitude and the overall distribution of firms under CI, AI and PI sub-sectors categorisation is summarised in Table 1, where they are arranged by gender and industry sub-sector.

The Management and Growth Factors

Discussion of the results of the logistic regression analysis follows from here on. This is to help the understanding and the determination of the factors that best explain the nature of RSSI sub-sectors in the survey. The statistics reported is the wald significant levels. The logistic regressions present the collective impact of independent variables on the dependent variables: 1. Management; and 2. Growth of firms.

The description of the dependent variables and the summaries of the analyses are presented in Tables 2 and 3 respectively. The figures presented in the summary are the wald statistics at 1, 5 and 10 per cent significant levels. The results show in detail how different variables affect the RSSI sector in the study area. In each instance, the results indicate that the equations

Table 1: Magnitude of RSSI Sector by sub-sector activities and by gender of proprietors

Industry Sub-sector		Total	Gender of Proprietors	
	Firm Level Activity		Male	Female
			%	%
Crafts				
	Pottery	7	28.6	71.4
	Woodcarving	7	100	-
	Rattan	9	88.9	11.1
	Leather-work	5	100	-
	Goldsmithing	1	100	-
	Blacksmithing	2	100	-
	Net-making	6	100	-
	Sub Total	37	83.8	16.2
Artisan				
	Carpentry	15	100	-
	Dressmaking	18	-	100
	Tailoring	11	100	-
	Smelting and Foundry	3	100	-
	Block-making	5	80.0	20.0
	Canoe Building	9	100	-
	Shoe Making	2	100	-
	Sub Total	63	69.8	31.2
Processing				
	Cassava Processing	6	16.7	83.3
	Edible Oil Extraction	9	22.2	77.8
	Soap making	7	28.6	71.4
	Grain milling	16	100	-
	Baking/Confectionery	7	-	100
	Food Processing	11	-	100
	Charcoal Production	12	100	-
	Brewing	4	-	100
	Distilling of Alcoholic Beverages	19	95.0	5.0
	Beekeeping and Honey Processing	6	100	-
	Fish Processing	9	-	-
	Talc Extraction and Processing	8	100	-
	Total	**215**	**65.6**	**34.4**

Source: Field Survey (2009)

have provided a reasonably good estimate of the influencing factor for the dependent variables. It is important to note that unlike multiple regression there is no single indicator of strength of overall explanation of the equation in the logistic regression. The regression performed reasonably well than the 50 per cent by just blind guessing. The two models fit the data quite well. This is because the equations achieved goodness of fit of the following levels: (1) the Management models; 1a. Record Keeping – 76 per cent, 1b. Banking – 74 per cent and (2) the Growth model; a. Growth – 68 per cent. The individual equations and influential factors would now be examined in turn.

Table 2: Description of dependent Variables

Measurement	1a. Record Keeping	1b. Banking	2. Growth
Mean	0.64	0.33	0.39
Std. Deviation	0.48	0.47	0.49

Source: Field Survey (2009)

Management of Firms

The results of regressions 1a and 1b show that there is no relationship between gender and record keeping but there is a strong negative relationship between gender and banking at the 1 per cent level. The non-significant relationship between gender and record keeping suggests that gender is not a key influencing factor on record keeping and the negative coefficient is an indication of inverse relation which suggests that female proprietors are more likely to practice banking. The explanation for this may be that male proprietors more than their female counterparts plough back their profit to expand their firms and for housekeeping.

The regression shows that there is a very strong relationship between source of skills, record keeping and banking in the survey. The coefficients are negative and significant at the 1 per cent levels for record keeping and banking respectively. This is an indication that skill acquisition has inverse relationships with record keeping and banking. These suggest that proprietors who acquire their skills outside the RSSI sector, probably through formal education or by working with a medium or large-scale firm are likely to keep record and to operate bank account for their businesses. On the other hand Proprietors who acquired their skills from within the RSSI sector are less likely to keep records and to operate bank account for their businesses. In many senses, this outcome is expected since formal education and prior Medium and Large Scale Industry experience instil the habit of sound business management including record keeping and banking in those who go through them. Proprietors who acquire their skills from within the RSSI resort to informal record keeping which is very unreliable.

The results reveal that there are strong relationships between source of capital, record keeping and banking. The table reveals that source of capital is positively and significantly related to record keeping and banking at 1 and 10 per cent respectively. The positive coefficients suggest that proprietors who started their businesses with their own capital were more likely to keep records and operate bank accounts. This may be due to the fact that self-financed proprietors have better control of their firms and incomes and are able to take decisions about their incomes.

The statistics show that the age of the firm, which represents the experience of proprietors,

Table 3: Logistic Regression for factors influencing the management and growth of RSSI

INDEPENDENT VARIABLES	Management 1a Record Keeping	Management 1b Banking	Growth 2 Growth
1.Characteristics of the Proprietor			
Gender	---	0.25***	3.06***
Age	---	---	---
Education	---	---	---
Marital status	---	---	---
Skill Acquisition	0.21***	0.13***	2.23**
Source of Capital	2.98***	1.72*	---
	---	---	---
2. The Firm			
Age of Firm	1.41**	---	---
Production	2.69**	---	---
Technology	0.35***	---	
Sources of Raw Materials	---	---	3.42***
3. Market			
Source of Market	---	---	---
Sales	0.70***	---	---
Fluctuation	---	---	---
Competition	---	---	---
Constant Term	3.30	2.46	-2.56
Number of Respondents	215	215	215

Source: Field Survey (2009)

Note:
The coefficient reported here are Exp (B), reflecting the multiplicative effect on the predicted odds of the event occurring. Positive factors have coefficients above 1. Inverse factors have coefficients less than 1.
**** = Wald test significance < 1%*
*** = Wald test significance < 5%*
** = Wald test significance < 10%*

is positive and significantly related to record keeping at the 5 per cent confidence level. This suggests that the older the firm or the more experienced the proprietor is the more likely for him or her to keep records. On the other hand, the non-significant level for banking indicates that experience of proprietors is not an influential factor for banking. This is quite worrying

because it was the expectation that older and experienced proprietors would cultivate the habit of banking as a good managerial practice.

The statistics show that production was positively significant to record keeping but non-significant to banking. The positive coefficient suggests that proprietors who operate throughout the year were more likely to keep records. The non-significant coefficient of production for banking suggests that the form of production was not an influential factor on banking by the proprietors.

From regression 1a and 1b, the statistics show that technology was significantly related to record keeping at 1 per cent level but non-significant with banking. The negative coefficient indicates that technology may be inversely related to record keeping and reveals that proprietors who use modern technology (i.e. Proprietors who use powered equipment instead of relying on manpower) were more likely to keep records. The non-significant coefficient of technology to banking suggests that technology, either manpower or powered equipment, was not a key influence on banking.

The statistics show that sales of firms are negative and significantly related to record keeping at the 5 per cent level but non-significant with banking. The negative coefficients are indications that sales were inversely related to record keeping and this suggests that the higher the sales the less likely that the proprietors may keep records. This seems to give credence to the fact that a sizeable number of the respondents in the survey keep informal records. It is also recognised that it is easy to keep informal records of small size of sales than to do so when sales are high. Higher level of activity requires more formal approach to operations and management. The non-significant coefficient of sales to banking is evidence that size of sales does not influence banking. A look at the result of equation 2b shows that gender and growth are positively related. The coefficient shows that gender is positive and significant at 1 per cent levels. This is an indication that gender is a very important influential factor on the growth of firms and suggests that male proprietors were more likely to experience growth in their businesses. This may be due to the fact that male proprietors enter into those businesses that have chances to grow. On the other hand female proprietors were not too keen on the growth of their enterprises rather they were satisfied to generate regular income to supplement the household income (see also Storey, 1997; Baud and Bruijine et al, 1993). Again while male proprietors may concentrate all their efforts on one enterprise the tendency is that female proprietors may dissipate their energy over more than one activity and therefore hinder the growth of any of them. In rural Ghana, households tend to engage simultaneously in survival and income-mobility strategies on a gender basis. As a result of this women generally assume survival strategies with men practising mobility or growth-oriented strategies. Therefore women's low but steady income allows men to seek greater absolute returns at heightened risk (see Schmink, 1984). The growth model would now be analysed.

Growth of Firms

The regression 2b shows that gender, sources of raw materials and skills are the key influential factors of growth of firms. The statistics show that source of skill acquisition is positively and significantly related to growth of firms in the study area. The coefficient is significant at 5 per cent level and this is an indication that sources of skill acquisition are important influential factors in the growth of the RSSI sector. It suggests that proprietors who acquired their skills from within the RSSI sector were more likely to experience growth in their operations. This may be due to the fact that those who acquired their skills from within the RSSI sector may have better understanding of their operations as a result of accumulated knowledge passed on from parents to children or from the master craftsman to the apprentices. There may also be continuity of operations since firms may be passed on from parents to children,

which may be helpful to firm growth.

The regression shows that source of raw materials is positively and significantly related to growth at 1 per cent level of significance. The positive relationship between raw materials and growth suggests that firms that have access to local raw materials are more likely to grow. This may be due to the fact that there are many difficulties associated with purchase and supply of imported raw materials such as high cost and erratic supplies of essential materials. These among other things affect performance and stifle growth of firms that rely on imported materials as inputs.

CONCLUSION

The study shows that the RSSIs sector covers a wide range of activities and forms a very important part of the rural off farm activities in the Mfantseman District. It was apparent from the results that record keeping and banking by proprietors were largely influenced by the age of the firm, the type of technology used, how proprietors acquired their skills and also the production level of the firms and the source of the investment capital. The influential factors for the growth of firms in the study were the gender of the proprietor, the sources of raw material and how proprietors acquired their skill. All the three factors showed a positive relationship with growth of firms. It is recommended that prospective RSSI entrepreneurs attach themselves to old and experienced firms to undergo training to acquire good managerial practices before establishing their own.

REFERENCES

Bagachwa, M. S. D. and Steward, F. (1992). Rural Industries and Rural Linkages in Sub-Saharan Africa in F. Stewart, S. Lall and S. Wangwe, Alternative Development Strategies in Sub-Saharan Africa; Macmillan, London.

Baud, I. S. A. and de Bruijne, G. A. (ed) (1993). Gender, Small-Scale Industry and Development Policy. Exeter, SRP.

Chan Onn, F. (1990). Small and Medium Industries in Malaysia: Economics, Efficiency and Entrepreneurship, *Journal of Development Economics XXVIII-2:153–179*

Gupta M. R. (1992). Rural–Urban Migration, Informal Sector and Development Policies. *Journal of Development Economics, 41:137 –151*

Harris, J. R. (1971). Nigerian Entrepreneurship in industry, in Growth and Development of the Nigerian Economy, ed. Eicher, C. K. and Liedholm C., Michigan State University Press, East Lansing.

Junejo, M. A., lal Rohra, C. and Maitlo, G. M. (2007). Sickness in Small-Scale Industries of Sindh: Causes & Remedies. A Case Study of Larkana Estate Area, *Australian Journal of Basic and Applied Sciences, 1 (4): 860–865.*

Kumar, S. B. (1992). Financial Problems of Small-Scale Industries, Anmol Publications, New Delhi.

Liedholm, C. and Chuta, E. (1997). The Economics of Rural and Urban Small-Scale Industries in Sierra Leone, Michigan State University, Michigan.

Rani, D. Lalitha (1996). Women Entrepreneurs, APH Publishing Corporation, New Delhi

Romijn, H. (2001). Technology Support for Small-scale Industry in Developing Countries: A Review of concepts and Project Practices, *Oxford Development Studies, 29 (1): 58–79*

Schmink, M. (1984) Household Economic Strategies: A Review and Research Agender *Latin America Research Review 19 (3):87–101*

Storey, D. J. (1997). Understanding the Small Business Sector; International Thomson

Tinker, I. (1987). The Human Economy of Micro-Entrepreneurs, Paper presented at the International Seminar on Women in Micro- and Small-Scale Enterprise Development. Ottawa, 25–27 September.

Yaffeh (1992). Financial Analysis for Microenterprises, *Small Enterprise Development 3 (3): 28–36*