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Evaluating the Relationship between Small Enterprise Performance and Poverty Reduction in Ghana

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Abstract
Poverty is established as pandemic in Africa, and Ghana in particular. Among the various factors that have been identified as causes of poverty in Ghana is low income level. This research is therefore based on the general proposition that Poverty in Ghana is a result of low incomes earned from small scale enterprises where the poor are employed. It pursued the conception that increasing performance of SMEs could help reduce poverty. Sample was taken from owners of small scale enterprises in poverty endemic zones in the Greater Accra Region of Ghana. Respondents were interviewed with structured and unstructured questionnaire. Ordinary Least Square Regression statistics were used to confirm the negative relationship between performance of SMEs and reduction in poverty.
Keywords: Ghana, Poverty, Small Scale Enterprise.

1. Introduction

Even though poverty is said to be decreasing in Ghana, inequality has been increasing particularly since 1998 (GLSS V, 2007). Thus, poverty is still a major developmental issue that must be tackled in Ghana. Poverty is endemic in most areas in Ghana, especially in the rural communities, and among women and children (NDPC, 2004). Poverty in the country is characterized by low income; lack of basic needs such as good housing, health, education, entertainment etc. (GPRS 1, 2004). Using the upper poverty line of GHC 370.90, the proportion of the Ghanaian population classified as poor is 28.5%. That is, about 6,178,000 individuals in Ghana have been classified as poor (GLSS 3&4 as cited in IAE 2005). Poverty in Ghana has important dimensions that require focused attention. Four out of the ten regions in Ghana had more than 30% of their population living in poverty as at 2006; the worst affected being the Upper East, Upper West and Northern Regions with incidence of poverty above 50% (GLSS, 2007). Other studies have shown also that women experience greater poverty, have heavier time burdens, lower rates of utilization of productive resources and lower literacy rates (GPRS II, 2004).

The poor are not idling; they are engaged in some small scale, low-income yielding enterprises such as food preparation, basketry, bakery, weaving, tailoring and hairdressing, petty trading, carpentry, masonry etc. (NBSSI, 2005). If the poor are not idle but are engaged in small scale enterprises and yet continue to live in poverty, then is it not because they do not earn enough income from the small scale businesses they are engaged in? If their businesses develop, will it not earn them increasing income to cater for their basic needs? Moreover, if small scale businesses in Ghana are dominated by women, and poverty in Ghana is also prevalent among women (GSS, 2006), then, is the under developed SMEs not the cause of poverty in Ghana? Is poverty negatively correlated with the development and growth of small scale enterprises in Ghana? These questions form the basis for this empirical investigation.

This study therefore finds out whether poverty in Ghana is largely the result of lower incomes earned in the small scale businesses which engage most of the poor. It assesses the poverty characteristics of the households of Small Enterprise, and finds out whether the poverty status of the Operators of these Small Scale Enterprises can be explained by the performance of the businesses they engage in.

1.1. Measurement Issues

Measuring the relationship between SMEs and poverty reduction has proved difficult due to unavailability of data on such ventures (SMEs) and the differences in definition of the key variables (SMEs and Poverty). In view of this, most researches on the relationship between poverty and SME growth have tended to be theoretical in orientation without any empirical tests. Few others have used econometric model to establish the relationships among SMEs, economic growth and poverty reduction. For instance, Gebremarian, et al, (2004, as cited in Agyapong, 2010), used Ordinary Least Square and the Two-Stage Least Squares techniques to establish the relationship between SMEs, economic growth and poverty reduction. Similarly, Beck and Demirque-Kunt (2004) used econometric analysis to find the relationship between SMEs, growth and poverty reduction. The only methodological problems reported by these two works were the choice of indicators in the measurement of the key variables (Agyapong, 2010).

Most experts argue that the level of consumption is a more valid and reliable measure of poverty than income (Ravallion, 2010; GSS, 2003), since consumption reflects the actual ability of individuals to meet basic needs. Moreover, significant income, particularly in rural areas, may not be monetized to the extent that households' consume their own production and/ or exchange it for other goods and services. Finally, consumption may be

easier to estimate (and, therefore accurate) than income which tends to be subject to greater volatility over the course of the year (Haughton and Khandker, 2009).

1.2. Relationship between Poverty and Small Enterprise Development

Central to the problem of poverty is the availability of work. Work allows people to produce for themselves (i.e. food) and earn the money needed to buy goods and services. It is also from work that wealth is created which, through taxation, allows the government to fund pro-poor services such as health care, clean water and education. For many poor people, work means being the owner of, or an employee in, a micro or small enterprise. The poor often work alone, as the owner, manager and sole employee of their enterprise, or they involve their family members, casual labourers and permanent workers (ILO, 2006). In many cases, the poor opt to work for themselves because they have little choice – either adequate paid employment is not available, or they may not have afforded the requisite educational level to qualify for the paid employment. They therefore, attempt to work out of poverty by working for themselves. Thus, small enterprises create and sustain the jobs necessary for the poor to work and earn the income needed to purchase goods and services.

Small enterprise development contributes to poverty reduction when it creates employment either through the startup of new enterprises or the expansion of existing ones. Job creation provides income to the poor. Poverty, following the broad definition, is also reduced when the condition of work and representation are improved. The comparatively high share of employment of SMEs shows that they play a major role in income generation for broad – and above all often less privileged – sections of the population. This is why the development of the SME sector in developing countries increasingly figures as a central element in poverty reduction strategies. The more SMEs provide poor sections of the population with employment, income opportunities, and goods and services, the greater their contribution to poverty. Experience has shown that promoting small scale enterprises reduces poverty through increasing and sustaining income, human resource development and improved lobbying and problem solving capacity (Eggenberger-Argote, 2005).

For majority of towns and rural areas in Ghana, it is the activities of small firms: mainly peasant farmers, fishermen and fishmongers, market women, seamstresses, and the like that help alleviate poverty by generating income, creating jobs, allowing children to go to school, enabling families to obtain health care and empowering people to make the choices that best serve their needs (Beck et. al. 2004).

2. Methodology

A collation of socio-economic data from secondary sources was made to provide adequate background information on poverty and occupational characteristics of the people and the communities. In this regard, relevant data from the Ghana Living Standard Survey (GLSS5, 2008), the Population and Housing Census (2010), National Industrial Census (2006), Pattern and Trends of poverty in Ghana (2003) and other published literature from independent sources were reviewed to assess the employment, income and poverty status of the people.

For primary data on the issues raised, a face-to-face structured survey technique was used. Stratified random sampling was used to allocate the sample size of 500 among the selected communities. In the chosen communities, clusters were selected that could represent the communities and then a simple random sample was used to select small businesses whose owners were interviewed. Pearson Correlation and Ordinary Least Square linear regression analysis were used to test the relationships between the data on poverty characteristics of the respondents' households and the growth of the small scale enterprises they are engaged in.

The Model

The study tested the following hypothesis:

H0: There is a statistically significant inverse relationship between the Performance of Small Scale Enterprises and the Poverty status of the Owners' Household.

Household Expenditure of the small enterprises' owners is used as an indicator of Poverty status, and Sales turnover of the enterprise as a measure of its Performance.

$$\text{Mathematically} \quad P = \alpha - \beta SSE_p \dots\dots\dots\dots (\text{eq } 1)$$
$$\beta < 0$$

"P" stands for the Poverty level of the Small Enterprise owner, which is measured by their annual household expenditure on consumption of basic needs. The higher the expenditure, the lower the "P" (poverty); and the lower the expenditure, the higher the "P". Thus, Poverty is inversely related to the household's annual consumption expenditure on basic needs.

SSEp stands for the performance of small enterprise, which is measured by the sales revenue of the business. Higher sales revenue is interpreted as high performance (SSEp) and lower sales revenue is interpreted as low performance (SSEp).

In this study, sales have been used as a measure of performance instead of profits. This is because the respondents were able to indicate their sales figures more comfortably than their profits. Even though we could calculate their net profits from the income and expenditure values, given the poor quality and in some cases

virtual absence of records keeping, sales becomes the readily reliable performance indicator from the data.
In relating small enterprise owners' consumption expenditure directly to sales revenue of their businesses, the equation becomes:

$$Y = \alpha + \beta X \ldots\ldots\ldots (eq.2)$$
$$\beta > 0$$

Where Y is the Household expenditure of the small enterprise owners', and X, the sales revenue of the Small Enterprise.

3. Discussion of Results

3.1. Poverty Characteristics of Small Scale Enterprise Operators in Accra

In this study, poverty was measured by individual's consumption expenditure on basic needs such as food, clothing, housing and utilities, health and education. Thus, the 'basic needs' approach is adopted. The study uses the poverty line of US $1.25 set by the World Bank for developing countries (Ravallion, 2010) as the lower poverty line; and US $2.00 (the median poverty line measured by the World Bank) as the upper poverty line. We are of the opinion that these international measures will better capture the current real standard of living of the poor in Accra than the GHS 288, and GHS387 poverty lines set by Ghana Statistical Service (2006) using 2005 Accra prices. Again, this will allow international comparison on the issues of poverty raised in this study.
Given the fact that this study found an average of four (4) people in the household of the respondents, and dollar to cedi ratio of 1:2 (October, 2012, Accra Exchange Rate), the conversion of US $1.25 and US $2.00 by 4 people in a household by 365 days in a year works out to GHS3650 and GHS5840 respectively for lower and upper poverty lines. Based on these poverty lines, tables 4.8 and 4.9 show relative poverty among the households of the 500 owners of small enterprises interviewed.

Table 4.1. Relative Poverty of Respondents at US $1.25 per Person per Day Poverty Line

Relative Poverty	Frequency	Percentage	Cumulative Percent
POOR	102	20.4	20.4
NOT POOR	398	79.6	100.0
Total	500	100.0	100.0

Source: survey data, 2012

The tables below indicate that over 45% of the owners of small enterprises interviewed on the average cannot provide Ghs4.00 (US $2x2) to pay for the basic needs of each member of their households in a day. What is more worrying is that over 20% cannot afford even Ghs2.50 to provide for the basic needs of each member of their households. This means that 20% of the respondents fall below the lower poverty line of US $1.25 a day and as much as 45% fall below the upper poverty line of US $2.00 per day. In other words, a significant portion (45%) of the respondents is trapped in poverty.

Table 4.2. Relative Poverty of Respondents at US $2.00 per Person per Day Poverty Line

Relative Poverty	Frequency	Percentage	Cumulative Percent
POOR	226	45.2	40.2
NOT POOR	274	54.8	100.0
Total	500	100.0	100.0

Source; survey data, 2012

This study therefore found that 20% of the respondents fall below the lower poverty line of US $1.25 a day and as much as 45% fall below the upper poverty line of US $2.00 per day. In other words, 45% of the sample is poor. Expenditure on food takes the highest percentage, as much as75% of the total expenditure of the household, leaving just 25% of the expenditure to cover other basic necessities as clothing, health, housing, utilities etc.
The annual household expenditure on health is very low, with frequently given expenditure on health (mode) being Ghs10 per annum. It appears as if people in these poverty zones do not spend much on their health. Most choose to self-medicate or avail themselves of health facilities that accept the National Health Insurance cards, citing affordability as the reason. Most (72%) of these small enterprise operators have some of their dependents in school. This means that as urban dwellers, they are aware of the importance of education. The mean annual expenditure on education (which covers fees, books and stationery, as well as extra classes) is, however, low. Thus, most of these dependents are sent to government/subsidized schools or low fee-charging private educational institutions at the basic, secondary or tertiary level.
Under type and quality of accommodation, it was found out that, majority (52%) of the respondents live in single rooms, and only few (9.4%) live in other types of accommodation, some of which may be better than a chamber and a hall. Even under this category characterized as others, there are respondents who indicated they spend the night in kiosks and stalls. Generally, these rooms or dwellings are shared by as many as four (4) persons. In some circumstances, there could be as many as between 10 and 20 people sharing one room. It came up also that majority (57.2%) of the respondents stay in rented accommodation. It is important to note, however, that most of

them rent the accommodation jointly. Most of those who do not rent accommodation live in family houses. Others stay with relatives, and friends.

Analysis of the dependency statistics also indicates that most of the respondents (86.8%) live with some dependents. Most of the respondents that live with some dependents (78%) have their children as the dependents. Very few stay with their children and other dependents and fewer still have their children stay with others. On average, respondents that stay with other relatives stay with about three (3) and respondents that have responsibility outside the household take care of about three dependents. The educational level of the small enterprise owners is generally low. Many (39%), including the illiterates, have educational level below JSS education. Majority (67%) of the small enterprise operators is women and they dominate in all the types of small businesses. This is consistent with the literature on poverty and small enterprises in Ghana. According to the Industrial Census (GSS, 2006), small scale businesses are dominated by women in Ghana (GPRS ll, 2005).

3.2. Performance of Respondent's Enterprises

This section discusses the type of business respondents are engaged in, the sales turnover from the business, and the relationship between the performance of the businesses and poverty level of their households.

3.2.1. Type of Businesses

Table 4.10 shows the nature of Businesses the respondents are engaged in. Many of them (37%) engage in table top trading activities. 21.6% trade in kiosks, 13% use stalls and 10.4% undertake hawking. 18% engage in other businesses such as fishing, offering taxi services, smoking and wholesaling fish and fish mongering. This pattern demonstrates most of the respondents are engaged in micro enterprises that require small start-up capital.

Table 3.3. Type of business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hawking	52	10.4	10.4	10.4
	Table top	185	37.0	37.0	47.4
	kiosk	108	21.6	21.6	69.0
	stall	65	13.0	13.0	82.0
	Others	90	18.0	18.0	100.0
	Total	500	100.0	100.0	

Source: survey data, 2012.

Table 3.11 shows the number of employees engaged by the respondents. The number of employees shows the size of the businesses.

Table 3.4. Number of Employees

Number of Employees	Frequency	Percent	Cumulative Percent
0	403	80.6	80.6
1	48	9.6	90.2
2	27	5.4	95.6
3	10	2.0	97.6
4	6	1.2	98.8
5	4	0.8	99.6
6	2	0.4	100
Total	500	100	

Source: survey data, 2012

Table 3.11 indicates that most of the respondents (80.6%) have no employees. It must be noted, however, that many of such traders have helpers who are either their children, dependents or relatives that they do not consider as employees. About 99.6% of the respondents do not have employees or engage between one and five employees. This observation means that nearly all the respondents are engaged in micro enterprises. This is consistent with the definition of the National Board for Small Scale Enterprises(NBSSI) in Ghana which describes businesses with employees between 1 and 5 as micro enterprises. Based on NBSSI definition, only two businesses qualify as small enterprises.

3.2.2. Sales turnover of respondents' businesses

Sales revenue can be a good indicator of the growth of a business. In small enterprises where good financial records are hardly kept, making the determination of net profit or loss problematic, sales performance is a good measure of performance. This study tried to gather sales data from the owners of the enterprises. The results are interesting.

The mean daily sales are very low at Ghs 60.40. However, the standard deviation from the mean is high at Ghs 74.50. This is because we have some of the businesses with very high sales. For instance, the maximum daily sales recorded are Ghs710 while the minimum is as low as Ghs1.20, making the range wide (Ghs710).

Thus, the general performance of the respondents businesses is low, even though few performed very high. The

modal daily sales which demonstrates the frequently recorded sales is low (Ghc39.50), which can lead us to the conclusion that the performance of the businesses reviewed is low. This is not surprising given the small size of operation and the nature of business done.

Almost all the respondents (99.6%) are engaged in business operations that can be described as micro enterprises since they employ between 0 and 5 people. Majority of the respondents (59%) trade on table tops and in kiosks and a few (13%) others use stalls. This pattern demonstrates most of the respondents are engaged in micro enterprises.

The sales revenue of the respondents' enterprises is generally low, even though few performed very high. Moreover, the respondents operate small holdings and have low profitability.

3.3. Relationship between the Performance of Small Enterprises and Poverty Reduction

The present study tested the one-tailed hypothesis that there is a statistically significant positive correlation between level of expenditure on basic needs of the small enterprise owners' household and sales revenue of the enterprise. This means the more sales revenue from the business (high performance), the higher the owner's household expenditure on basic needs (lower poverty). Pearson's correlation test shown in table 4.12 confirmed the study hypothesis, suggesting that the relationship between the two variables was highly significant ($r=0.574$; $n = 498$; $p < 0.01$).

Table 3.5.
Relationship between Sales and Household Expenditure

	Total Annual Household Expenditure	Annual Sales
Total Annual Household Expenditure	-	0.574
Annual sales	0.574	
** $p < 0.01$(one tailed)		

Source: Survey data 2012

R2 converted to percentage (0.5742x100) is approximately32%. This means 32% of the changes in Y is explained by changes in X. So, 68% of the changes in Y is explained by other factors.

Thus, using the household expenditure of the owners of the small enterprises as an indicator of their relative poverty, and sales turnover as an indicator of performance of their enterprises, this study found a significant correlation between the performance of an enterprise and the poverty level of its owner. The more sales revenue from the business (high performance), the higher the owner's household expenditure on basic needs (lower poverty).

Using SPSS to do a linear regression from the data collected on the variables: sales revenue of the enterprise (X) and level of expenditure on basic needs of the small enterprise owners' household (Y), gives the model equation as:

$$Y = 6566 + 0.32X \qquad \text{(eq. 1)}$$

The explanation is that Ghs6566 of the small enterprise owners' consumption expenditure is given, and that for every Ghs1 increase in sales revenue of the business, the owner's household consumption expenditure on basic needs increases by 32 pesewas. Given that the level of expenditure on basic needs of the small enterprise owners' household is negatively related to Poverty (P), and sales revenue of the enterprise is positively related to Growth of Small Scale Enterprises (SSEg), equation 1 can be restated as:

$$P = 6566 - 0.32SSEg \qquad \text{(eq. 4)}$$

Thus, 32% of the Poverty level in the households of small scale enterprise owners can be explained by the performance of their enterprises.

Hence Poverty has some indirect relationship with the growth of small enterprises. Though the relationship, from the data gathered for the present analysis, is not very strong. It is however found to be statistically significant.

4. Conclusions

This study found out that poverty is indirectly related to the increase in performance of small scale enterprises. As indicated above, the general performance of the enterprises run by these respondents is low, and that reflects on the welfare of their households, which was also found to be generally poor (High Poverty).

An increase in performance of an enterprise influences positively the welfare of the owners' household. Specifically, an increase in the performance of an enterprise reduces the poverty level of the owners' household. Thus, this study, just like many others, has found that growing small enterprises can contribute to poverty reduction. The poor generally work in small enterprises and that is where they earn their income to maintain their livelihood. There is therefore the need for general policy framework to ensure quick development of SMEs.

References

Buame, C. K. (1997): Management of Small and Medium Enterprises, University of Ghana Technical Series,

Assembly Press, Accra.
Ghana Statistical Service (2012): Population and Housing Census, GSS, Accra, Ghana
Ghana Statistical Service (2008): Ghana Living Standard Survey (GLSS 5), GSS, Accra, Ghana.
Ghana Statistical Service (2006): 2003 National Industrial Census Report, GSS, Accra, Ghana
Government of Ghana, (2005): The Budget and Economic Policy for the 2006
FinancialYear, Ministry of Finance, Accra.
Government of Ghana (2002) "Ghana Poverty Reduction Strategy 2002 – 2004: Agenda for growth and Prosperity, analysis and policy statement", Accra.
Institute Adult Education (2005): Introduction to the Economy of Ghana, Centre for Distance Education, University of Ghana, Legon, Accra.
ILO, SEED (2006): Poverty Reduction through Small Enterprises, Working Paper N.75, ILO, Geneva.
ILO (2003): Working Out of Poverty, ILO, Geneva.
Liedholm,C. and Mead, C. (1987): Small Scale Industries in Developing Countries, McGraw-Hill Inc. U.K.
Millinium Development Summit (2000), MDGs: http://www.undp.org/mdg/basics.
Nabila, J. S. and Fayorsey, C. (1996): Adolescent Fertility and Reproductive Health in Ghana, FADEP Technical Series No. 7, Assemblies of God Press, Accra
National Board for Small Scale Industries, (2005): Newsletter, Vol. 1, No. 8 , B.P.P. Publishers, December, 2005.
National Development Planning Commission (1997): Ghana Vision 2020, The First Medium-Term Development Plan, 1997 – 2000, Accra.
National Development Planning Commission (2004): Ghana Poverty Reduction Strategy (GPRS II), NDPC, Accra.
Steel, W. F. ((1977): Small Scale Employment in Developing Countries, Evidence of Ghana, Journal of Modern African Studies, 17 (2), New York.
Thomi, W. H and Yankson, P.W.K.(1985): Small Scale Industries and Decentralisation in Ghana, Legon/Frankfurt, University of Ghana, Accra.
Thorsten et. al. (2005): SMEs, Growth, and Poverty: Cross-Country Evidence, "Journal of Economic Growth, V10, 199-229.
UNCTAD (2003): Trade and Development Report 2003: Capital Accumulation, Growth and Structural Change, UNCTAD, New York.
World Bank (1998): Employment, and Development of Small Scale Enterprises, World Bank Staff Working Paper, No. 363, Washington D.C.