The role of small and medium enterprises and poverty in Pakistan: An empirical analysis

Sharafat ALI
Government Post Graduate College Kot Sultan, Layyah, Pakistan
rana.sa.pk@gmail.com
Humayun RASHID
Allama Iqbal Open University, Islamabad, Pakistan
humayun_21@yahoo.com
Muhammad Aamir KHAN
PMAS Arid Agriculture University, Rawalpindi, Pakistan
muhammad.aamir.khan@mail.mcgill.ca

Abstract. *The role of Small and Medium Enterprises (SMEs) is very important in economic growth, employment generation and poverty alleviation. Annual time series data has been used to examine the impact of SMEs on poverty in Pakistan for the period between 1972 and 2007. Log-linear autoregressive model has been estimated by Ordinary Least Squares (OLS) method using one year previous value of HCR as explanatory variable. The results of the study confirm a strong and negative impact of small scale industries' output on poverty levels in Pakistan. The economic policy makers must focus on the establishment of formal financial markets to overcome the financial constraints faced by the SME sector in Pakistan. Simplification of lending procedures, enforcement of credit rights, and reduction in credit costs would be helpful for the establishment of robust SME sector in Pakistan.*

Keywords: poverty, small and medium enterprises, income inequality, population growth.

JEL Classification: I32.
REL Classification: 14D.

I. Introduction

The performance of Small and Medium Enterprises (SMEs) has been a major concern in the developing economies. Different authors define SMEs differently. Some of the authors differentiate them in terms of capital assets while others on the basis of skill and turnover. The Bolton Committee (1971) formulated "economic" and "statistical" definition of SMEs according to which an SME is an independent firm, which has relatively small share of its market place, and managed by the owners themselves, or part owners personally, and not by the medium of formalized management structure. According to statistical definition SMEs are characterized by the size, contribution to GDP, employment opportunities provided by these firms, exports, and their contribution to national economy. Jordan et al. (1998) define the SMEs that have fewer than 100 employees and a turnover of less than 15 million euro. The UNIDO defines SMEs in terms of number of employees and classifies them in developing and developed economies differently (Abor and Quarty, 2010). Classification of SMEs in developing countries is usually practiced as follows:
- Micro-firms with less than five workers;
- Small-firms with 5 to 19 workers;
- Medium-firms with 20 to 99 employees;
- Large-firms with 100 or more employees.

On the other hand, classification of SMEs in industrialized nations is given as follows:
- Small firms with 99 or less employees;
- Medium-firms with 100 to 500 employees;
- Large firms with 500 or more workers.

Although SMEs have been defined by different economists differently but they have been recognized as an important potential sector for generation of employment opportunities and major contributor of livelihood for the poor class. Importance of SMEs has been recognized all over the world. SMEs increase productivity growth in the economy. Increased productivity growth plays an important role for public welfare and reduction in poverty. SMEs not only play significant complementary role in industrialization of the economy but also act as driver of structural change. The productivity growth in the economy implies innovation in the economy. SMEs growth also enhances the degree of specialization.

Therefore, an efficient network of SMEs in Pakistan is a pre-requisite for the establishment of robust industrialization. Government of Pakistan has declared SMEs as one of the four important drivers of growth for the Pakistan economy. SMEs play very important role in value addition and employment generation in

Pakistan. SME sector is highly labor-intensive and this sector provides employment to the major part of non-agriculture labor force in Pakistan (Economic Survey of Pakistan, 2004-05). In Pakistan, SMEs constitute 90 percent of the business enterprises, provides 80 percent of the employment opportunities to non-agriculture labor force, 25 percent of the total exports, 35 percent of the manufacturing value added and contributes more than 30 percent to the GDP of the national economy (Economic Survey of Pakistan, 2009-10). SME sector in Pakistan comprises of cotton weaving, wood and furniture, metal products, art silk, grain milling, jewelry, carpets, sports goods, pottery, dairy and poultry, fisheries, food and catering, and slaughtering.

Pakistan's industrial sector is geographically diversified. The large-scale industries are, mostly located in urban areas whereas most of the SMEs are located in small towns and rural areas. These SME units located in rural localities are of great importance for the provision of employment to poor rural workers (Qureshi and Ghani, 1989). Hence SME sector is very important in Pakistan's economy. A well-developed modern SME sector, in an open economy, is highly desirable. Developing counties have been reaping the benefits of the export orientation of this sector (Berry, 1998).

The instant paper is organized as follows: Section II represents the review of literature. Section III comprises of the data and methodology. The results and discussion have been presented in Section IV. Aided by descriptive statistics and correlation matrix. Furthermore regression estimates have also been reported in this section. Section V comprises of conclusions of the study. The references are listed in Section VI.

II. Review of literature

Pioneer studies in development economics by Lewis, Nurkse and Rosenstein-Rodan focused on economic development. However, these authors less focused on the impact of economic development on the poor and were proponents of the 'trickle-down' impact of economic growth to the poor (Lipton and Ravallion, 1995). Some of the development economists have argued that robust growth and sustained development can be obtained through development of capital intensive large scale enterprises (Loveman and Sengenberger, 1991).

According to Adelman and Robinson (1989) development more often takes place in urban areas than in rural areas hence the poor are not benefited by the process of development. The growth of unskilled labor-intensive sectors may be helpful for poverty reduction and equal distribution of income (Alderman and Robison, 1989). The growth of labor-intensive industries may ensure greater involvement of the

poor and better utilization of cheaper labor input. The utilization of low-wage workers in the production process, if low wages are high enough for reducing poverty and low enough for competing in the market with the rivals, makes the labor-intensive industries compete in international market and helps in poverty reduction simultaneously. Sen (1960) and Myrdal (1968) emphasized on the roles of labor-intensive industrialization on poverty reduction.

In recent years the importance of SMEs for the contributions in economic growth and development of the economies has been recognized. SMEs employ much more labor force than the huge multinational corporations (Mullineux (1997). Due to dynamic and evolutionary nature of small scale firms, they serve as agents of change (Audretsch, 2000). SME sector has been a source of concern for the policy makers for the accelerated growth in developing nations. SMEs are a major source of potential employment in low income economies. That is why these enterprises are considered to be the "engine of growth" for attainment of growth objectives in developing nations (Advani, 1997). The initiatives for the promotion of SMEs by the governments of the recent times, especially in developing countries, are underway (Feeny and Riding, 1997).

Wider economic and socio-economic objectives such as poverty alleviation can be achieved by developing the SMEs (Cook and Nixon, 2000). There is a low cost associated with the job creation in SMEs and these enterprises are more labor intensive than the larger firms (Leidholm and Mead, (1987) and Schmitz (1995).

Since the SMEs are labor intensive and these type of firm are more likely to be based in rural areas and smaller urban areas hence the development of SMEs may be helpful for the economic satiability, growth and employment. The dispersion of these enterprises in these areas and their labor intensity may be very important in equal distribution of income. The development of SMEs helps the economies to grow in the long run these enterprises improve domestic market efficiency and uses the scarce resources productively (Kayanula and Quartey, 2000).

Mukras (2003) suggests set of policy recommendations for poverty alleviation through strengthened SMEs. Strengthened SMEs generate employment and economic growth in the economy. The proponents of pro-SMEs argue that entrepreneurial and innovative ventures in SMEs help to improve growth of the economy and reduce the poverty levels in developing economies (Beck et al., 2004). Small scale enterprises increase competition and entrepreneurship in the economy and result in economy wide benefits in efficiency, innovation and growth in productivity. Gebremarian et al. (2004) analyzing the relationship between development of small scale business, growth and incidence of poverty in West Virginia found a strong negative relationship between small scale business and the incidence of poverty.

Beck et al. (2005) exploring the relationship between SMEs, growth and poverty find a strong and strong relationship between the importance of SMEs and growth in GDP per capita. The study could not find enough evidence of the poverty alleviating impact of SMEs in a sample of 45 countries. However, it has been deduced that SMEs are labor intensive so growth in these enterprises increases employment more than the large scale industries' growth (Snodgrass and Biggs, 1996). Aina and Amnes (2007) suggest more effective and fully funded policy program for the development of SMEs in Nigeria, for generating employment opportunities for economic growth, to empower the poor and deprived.

The adoption of growth strategies that helped to promote labor-intensive industries and SMEs promoted high levels of growth with low levels on income inequality in Republic of Korea and Taipei, China during 1950s to 1990s. The absorption of rural surplus labor and reduction in urban unemployment due to establishments of these small and medium enterprises helped these economies to growth with low inequality. The People's Republic of China, though, has shown robust and high levels of growth but income inequality increased during last three decades. It has been suggested that the unification of labor market and encouragement of SMEs, more labor-intensive development policy, for better growth and more equal distribution of income in China (Li and Lou, 2008).

Some of the studies focus SMEs sector's contribution to the GDP and employment that it generates in the economy. SME sector has been playing a very important role in development, employment generation and poverty alleviation in African economies. About 85% of the manufacturing employment in Ghana is provided by the SME sector. This sector consists of 92% of business and contributes 70% of the GDP in Ghana. Where as in South Africa, this sector contributes to 52-57% of the GDP and provides 61% of employment. SMEs constitute 91% of the formal business in South Africa. The authors also suggest appropriate strategy for the improvement in Ghana and South Africa, (Abor and Quartey, 2010).

Agyapong (2010) discusses the role of micro, small and medium enterprises (MSMEs) in poverty alleviation in Ghana. The author is of the view that town and rural based MSMEs help to create jobs and increase income of the people. This increased income helps the people to obtain better schooling, health facilities and empowers them to get rid of vicious circle of poverty. Furthermore, growth in small and medium enterprises (SMEs) also contributes to human capital through on job training. The author is also of the view that MSMEs also contribute in the increase of tax revenue of the government.

III. Data and methodology

This study focuses on the impact of small scale enterprises on poverty in Pakistan for the period between 1972 and 2007. The impact of inflation, health expenditure, rate of population growth and income inequality on poverty has also been analyzed. Annual time series data is used for all of the variables. An autoregressive model has been used to incorporate previous year's poverty level (measured by HCR) as one of the explanatory variables. Small scale industries output as percentage of GDP has been used as proxy variable of small scale enterprises. The data of small scale industries' output as percentage of GDP (SME) and Health Expenditure as Percentage of GDP (HE) for the 1972-2004 has been obtained from the Statistical Handbook (2005) of State Bank of Pakistan and the data for these variables for the period of 2005-07 has been taken from the State Bank of Pakistan Annual Report (2008). Annual poverty Head Count Ratio (HCR) and income inequality measured by Gini coefficient (GINI) has been obtained from Annual Economic Survey of the Ministry of Finance, Government of Pakistan. The population growth rate (P) and consumer price index (CPI) has been taken from the World Development Indicators (WDI) (2008) of the World Bank.

In the model, poverty is function of small scale enterprises, inflation, health expenditure, and population growth rate and income inequality. The following autoregressive model has been estimated:

$$LHCR_t = \alpha + \beta_1 LSME_t + \beta_2 LCPI_t + \beta_3 LHE_t + \beta_4 LP + \beta_5 LGINI_t + \beta_6 LHCR(-1) + \varepsilon_t$$

Where:
LHCR = Log of Poverty Head Count Ratio;
LSME = Log of Small scale industries' output as percentage of GDP;
LCPI = Log of Consumer Price Index;
LHE   = Log of Health expenditure as percentage of GDP;
LP   = Log of Population growth rate;
LGINI = Log of Gini Coefficient;
LHCR(-1) = Log of one year lagged value of Poverty Head Count Ratio;
ε_t = Error term.

IV. Results and discussions

a) Descriptive Analysis

This analysis consists of time series data set for 36 years from 1972 to 2007. The descriptive statistics displayed in Table 1 show that the average of the head count ratio (HCR) averaged around 27.63 percent during 36 years with standard

deviation of 6.74. The average of the Gini Coefficient (GINI) is 0.38 with standard deviation of 0.02. The mean values of small scale industries output as percentage of GDP (SME), inflation measured through Consumer Price Index (CPI) and health expenditure as percentage of GDP (HE) has been 4.83, 8.97 and 0.74 percent, respectively, with standard deviation of 1.15, 5.30 and 0.73 percent respectively. The population growth rate (P) stood on the average at 2.65 percent with standard deviation of 0.30.

Table 1. *Descriptive statistics of the variables*

	HCR	SME	CPI	HE	P	GINI
Mean	27.63	4.83	8.97	0.74	2.65	0.38
Median	25.20	4.45	7.88	0.73	2.54	0.39
Maximum	45.75	8.70	26.66	1.19	3.19	0.42
Minimum	20.71	3.80	2.91	0.40	2.14	0.34
Std. Dev.	6.74	1.15	5.30	0.17	0.30	0.02
Skewness	1.04	1.96	1.73	0.42	0.54	0.12
Kurtosis	3.26	6.66	6.11	3.63	2.24	1.69
Jarque-Bera	6.64	43.09	32.58	1.63	2.61	2.67
Probability	0.04	0.00	0.00	0.44	0.27	0.26
Observations	36	36	36	36	36	36

The results show that all the variables are positively skewed except Gini coefficient. Small scale industries' output as percentage of GDP is more skewed than the HCR. The peakedness or flatness relative to normal distribution of the data set is measured by kurtosis. The excess kurtosis value for HCR of 0.26 is not so high than that of the normal distribution. Value of kurtosis for SME is 6.66 showing the data set to be more peaked than that of normal curve. Health expenditure and population growth rate show normal peakedness as these variables show kurtosis closer to zero. Joint hypothesis of skewness and kurtosis is tested by Jarque-Bera (JB) test. JB test suggest that SME and CPI are not normally distributed.

The correlation matrix reported in Table 2 shows that small scale industries output as percentage of GDP, health expenditure and Gini coefficient are negatively associated with poverty measured by HCR but health expenditure is highly correlated with poverty levels in Pakistan. Inflation and population growth rate are positively correlated with poverty. The association between population growth rate and poverty is strong.

Table 2. *Correlation matrix*

	HCR	SME	CPI	HE	P	GINI
HCR	1.00					
SME	-0.38	1.00				
CPI	0.33	-0.18	1.00			
HE	-0.64	-0.18	-0.34	1.00		
P	0.66	-0.70	0.47	-0.25	1.00	
GINI	-0.25	0.50	-0.31	-0.17	-0.59	1.00

Time trends of PHCR and small scale industries' output as percentage of GDP are shown in Figure 1. The trends lines shown in the figure show a negative association between poverty and SME output in Pakistan. Poverty levels have been declining in the years of increase in small scale industries' output. Poverty shows increasing trends in the years of decline in small scale industries' output.
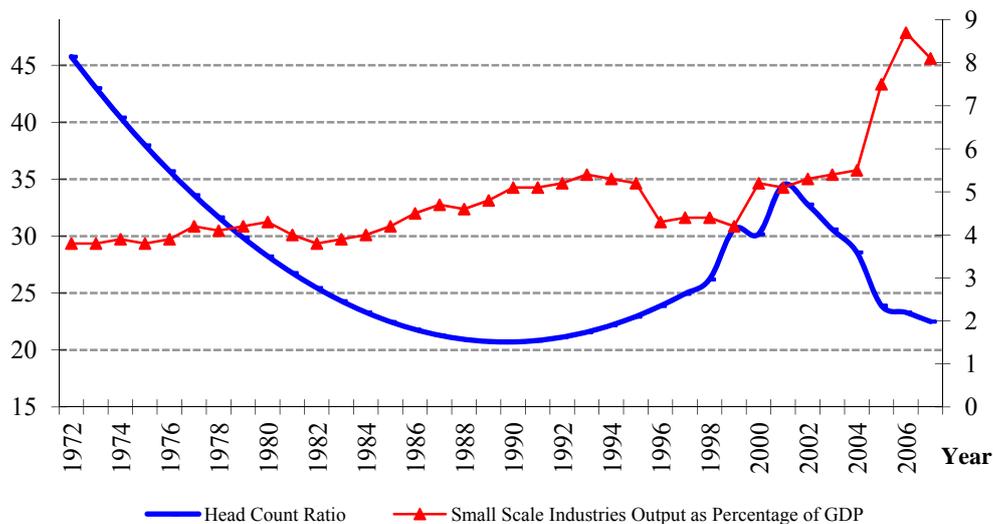

Figure 1. *Poverty and small scale industries' output trends*

b) The Impact of SMEs on Poverty in Pakistan The model at equation (1) has been estimated to analyze the impact of small scale industries' output as percentage of GDP (SME), consumer price index (CPI), health expenditure (HE), population growth rate (P) and Gini coefficient (GINI) on poverty (HCR) in Pakistan. The results are reported in the Table 3. The estimated model is significant as the value of R-squared and Adjusted R-squared is 0.96 and 0.95. It implies that approximately 95 percent of the variations in explained variable are explained by explanatory variables included in the model. F-statistic is also highly significant at 1 percent significant level. H-statistic has been used to check the presence of autocorrelation in the error term. The value of h-statistic comes out to be 1.04 which implies that there is no autocorrelation problem in error term. The Durbin-Watson d statistic is not used autoregressive models to detect serial correlation. Durbin (1970) suggested h-statistic to test first-order serial correlation in autoregressive models.

Small scale industries' output as percentage of GDP also showed negative and significant impact on poverty in Pakistan. This may be due to the fact that small scale enterprises use more labor than employed by large scale firms. SMEs play key role in the acceleration of pro-poor growth in the economy. Since the SME sector employs about 80 percent of the non-farm labor force in Pakistan so the role of the SME sector in ensuring the fruits of the economic growth to be equitably distributed.

The positive sign with inflation elasticity of poverty shows that inflation exerts a positive impact on poverty levels in Pakistan. But the coefficient of inflation is not significant. The results do not prove a relationship between inflation and poverty explained by the economic theory. In economic theory increase in inflation, in short run, is associated with increase in employment levels in the economy. Increase in inflation reduces the purchasing power of the low income segments of the population due to the vulnerability of these people to inflationary pressures in the economy (Kalim and Shahbaz, 2009). Inflation effects poverty through its impact on real wages in the economy. Real wages, Latin America, increase slowly than the increase in inflation during the times of high inflation (Cardoso, 1992). This increase in employment benefits the strived in the economy. Agenor (1998) and Chaudhry et al. (2010) strengthen the conclusion of positive relationship between inflation and poverty.

Table 3. *Estimations of the Autoregressive Model*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.6108	0.2922	2.0902	0.0458
LSME	-0.2497*	0.0668	-3.7403	0.0008
LCPI	0.0039	0.0211	0.1857	0.8540
LHE	-0.0161	0.0675	-0.2383	0.8134
LP	0.7186*	0.1684	4.2664	0.0002
LGINI	-0.4173**	0.1884	-2.2151	0.0351
LHCR(-1)	1.0115*	0.0714	14.1745	0.0000
R-squared = 0.96 Adjusted R-squared = 0.95 F-statistic = 121.40 Prob(F-statistic) = 0.00 h-statistic = 1.04				

Note: *(**) significant at 1% (5%) level of significant.

Expenditure on health also showed negative and significant impact on poverty. Better health services in the economy help to improve the human capital and better human capital increases the productivity of labor. Higher productivity of labor results in higher income and reduction in poverty. Provision of better health services in an economy provides economic security and helps the poor to improve their economic conditions. Better health services help reduce poverty and lower poverty levels by improving health conditions of the poor class.

Population growth rate has been found to be positively and significantly associated with poverty in Pakistan in the long run. The population growth rate elasticity of PHCR is 0.719 showing that one percent increase in population growth rate causes 71.90 percent increase in poverty head count ratio. There is close correlation between population growth and poverty. A persistent and gradual rise in population increase absolute and relative poverty in the economy by stagnating or deteriorating employment opportunities. According to the population-poverty cycle theory, some negative consequences are yielded by the too rapid population growth. Increase in population increases the household size and dependency ratio in the economy. Rapid population growth increases the economic, social and psychological problems related to the situations of underdevelopment. Population growth reduces saving rates both at individual and national levels and as a result prospects of improved livelihood become meager not only for the existing generations but also transmit the poverty to the generations to come (Todaro and Smith, 2009). Population growth causes an increase in poverty by negatively affecting economic growth in Pakistan (Afzal, 2009). Chaudhry (2009) is also of the view that increased population, increased dependency ratio increase the probability of the household to be the poor.

The Gini index elasticity of poverty is -0.4173 implies that income inequality has a negative impact on poverty levels in Pakistan. The elasticity shows that one percent increase in Gini coefficient increases the poverty measured by HCR by 41.73 percent. The elasticity is significant at 5 percent level of significance. This may due to the fact that increase in income inequality may affect growth. Aggregate saving in a country may increase with the increase in the income inequality if the rich people in the economy save high proportion of their income than the low income groups. This higher saving level would be source of high levels of investment and increased growth. Income distribution impacts growth through economic, political or social channels (Voitchovsky, 2005). Low levels of poverty can be achieved either through achieving the goal of higher levels of growth or improved distribution of income, or both (Datt and Ravallion, 1992). Kakwani, (1993) and Bourguignon (2001, 2003, 2004) establishing a relationship between poverty alleviation, economic growth, and changes in income distribution concluded that combination of economic growth and income distribution determines the direction and incidence of poverty. The total effect of economic growth can be poverty augmenting if economic growth has negative impact on distribution of income.

The coefficient of one year previous value of HCR exerts positive and highly significant impact on incidence of poverty. Our result strongly supports the vicious cycle of poverty argument of Nurkse that a "country is poor because it's poor". The result of this study is also in strong agreement with the results of Chaudhry et al. (2010).

V. Conclusions

This study focused on the impact of small scale industries on poverty in Pakistan. The analysis incorporated autoregressive model wherein Inflation, health expenditure, population growth rate, income inequality and one year lagged value of poverty head count index as explanatory variables. Annual time series data for the period of 1972-2007 has been used. The study reviews the earlier empirical studies on the relationship between small scale enterprises and poverty. This paper represents the descriptive analysis of the explanatory variables and trends in poverty and small scale industries' output.

The poverty reducing impact of increase in small scale industries' output has been examined. The result is significant which implies that small scale enterprises can play very important role in the economic growth, employment generation and poverty alleviation in Pakistan. The results of the study imply that a strong SME base is required for the development of the economy and poverty alleviation in Pakistan. The economic policy makers should focus on the establishment of formal financial markets to overcome the financial constraints faced by the SME sector in Pakistan. Simplification of lending procedures, enforcement of credit rights, and reduction in credit costs would be helpful for the establishment of robust SME sector in Pakistan. Moreover provision of health services and more educated and technically skilled labor force would accelerate the growth of the SMEs and would be helpful in the process of poverty reduction.

Health expenditure and poverty levels have been found to be negatively related. This may be due to the fact that health services may be unequally distributed for the rich and the poor. Poverty itself may be a constraint for the poor to avail better health services. This implies that policies should focus on the provision of better health services to the household irrespective of their respective income group. The policies focusing on better education and health facilities would also help to control population growth

References

Abor, J. and Quartey, P. (2010). "Issues in SME Development in Ghana and South Africa", *International Research Journal of Finance and Economics,* 39, pp. 218-228

Adelman, J. and Robinson S. (1989). "Income Distribution and Development", in Chenery, H. Srinivasan, T.N. (eds.), *Handbook of Development Economics* Vol. II, Amsterdam: Elsevier Science Publishers B.V., Chapter 9, pp. 949-1003

Advani, A. (1997). "Industrial Clusters: A Support System for Small and Medium-Sized Enterprises, Private Sector Development", *World Bank Occasional Paper*, No. 32, World Bank, Washington, DC

Afzal, Mohammad (2009). "Population Growth and Economic Development in Pakistan", *The Open Demography Journal,* 2, pp. 01-07

Agenor, Pierre-Richard (1998). "Stabilization Policies, Poverty and the Labor Market", Mimeo, IMF and World Bank

Agyapong, Daniel (2010). "Micro, Small and Medium Enterprises' Activities, Income Level and Poverty Reduction in Ghana-A Synthesis of Related Literature", *International Journal of Business and Management,* 5(12), pp. 196-205

Aina, Olayinka Chris Mnitp, RTP, Amnes (2007). "The Role of SMEs in Poverty Alleviation in Nigeria", *Journal of Land Use and Development Studies,* 3(1), pp. 124-131

Audretsch, David B. (2000). "The Economic Role of Small and Medium-Sized Enterprises", The United States

Beck, T., Demiruc-Kunt, A. and Livine R. (2005). "SMEs, Growth and Poverty: A Cross-Country Evidence", *Journal of Economic Growth,* 10, pp. 199-229

Beck, T., Demiruc-Kunt, A. and Maksimovic, V. (2004). "SMEs, Growth and Poverty-Do Pro-SME Policies Work? World Bank Policy Research", *Working Paper,* No. 268

Berry, Albert (1998). "The Potential Role of the SME Sector in Pakistan in a World of Increasing International Trade", *The Pakistan Development Review,* 37(4), pp. 25-49

Bolton, J.E. (1971). *Report of the Committee of Inquiry on Small Firms,* HMSO, London

Bourgnuignon, F. (2004). "The Poverty-Growth-Inequality Triangle. Paper presented at the Indian Council for Research on International Economic Relations", New Delhi, on February 4

Bourguignon, F. (2003). "The Growth Elasticity of Poverty Reduction: Explaining Heterogeneity across Countries and Time Periods", in Eicher, T.S., Turnovsky, S.J. (eds), *Inequality and Growth: Theory and Policy Implications,* Cambridge: MIT Press

Bourguignon, G. (2001). "The Pace of Economic Growth and Poverty Reduction. Paper presented at LACEA 2001 Conference", Montevideo, Uruguay (http://www. Nip-lac.org/programs_lacea/ Bourguignon.pdf)

Cardoso, Eliana (1992). "Inflation and Poverty", *NBER Working Paper* No. 4006

Chaudhry, Imran Sharif (2009). "Poverty Alleviation in Southern Punjab (Pakistan): An Empirical Evidence from the Project Area of Asian Development Bank", *International Research Journal of Finance and Economics*, 23, pp. 23-32

Chaudhry, Imran Sharif, Malik, Shahnawaz, Hassan Abo Ul. and Faridi, Muhammad Zahir (2010). "Does Education Alleviates Poverty? Empirical Evidence from Pakistan", *International Research Journal of Finance and Economics*, 52, pp. 134-141

Cook, P. and F. Nixon (2000). "Finance and Small and Medium-Sized Enterprise Development. IDPM", University of Manchester, Finance and Development Research Programme *Working Paper Series*, Paper No. 14.

Datt, G. and Ravallion, M. (1992). "Growth and Redistribution Components of Change in Poverty Measure: A Decomposition with Applications to Brazil and India in the 1980's", *Journal of Development Economics*, 38(2), pp. 275-295.

Durbin, J. (1970). "Testing for Serial Correlation in Least-Squares Regression When Some of the Regressors Are Lagged Dependant Variable", *Econometrica,* 38, pp. 410-721.

Economic Survey (Various Issues). Ministry of Finance, Government of Pakistan

Feeny, L.S. and Riding A.L. (1997). "Business Owners' Fundamental Tradeoff: Finance and the Vicious Circle of Growth and Control", *Canadian Business Owner,* November.

Gebremarian, G.H., Gebremedhin, T.G., and Jackson, R.W. (2004). "The Role of Small Business in Economic Grwoh and Poverty Alleviation in West Verginia: An Empirical Analysis", *The paper at the American Agricultural Economics Association Annual Meeting*, Denver, Colorado, August 1-4

Granger, C.W.F. (1988). "Some Recent Developments in a Concept of Causality", *Journal of Ecnometrica,* 39, pp. 199-211

Jordan, J., Lowe, J. and Taylor P. (1998). "Strategy and Financial Policy in U.K. Small Firms", *Journal of Business Finance and Accounting*, 25(1/2), pp. 1-27

Kakwani, N. (1993). "Poverty and Economic Growth with Application to Cote D'Ivoire", *Review of Income and Wealth*, 39(2), pp. 121-139

Kalim, Rukhsana and Mohammad Shahbaz (2009). "Remittances and Poverty Nexus: Evidence from Pakistan", *International Research Journal of Finance and Economics,* 29, pp. 46-59

Kayanula, D., and Quartey P. (2000). "The Policy Environment for Promoting Small and Medium-Sized Enterprises in Ghana and Malawi. Finance and Development Research Programme{, *Working Paper Series*, Paper No. 15, IDPM, University of Manchester

Li, Shi and Ghuliang Luo, (2008). "Growth Pattern, Employment, and Income Inequality: What the Experience of Republic of Korea and Taipie, China Reveals to the People's Republic of China", *Asian Development Review,* 25(1 and 2), pp. 100-118

Liedholm, C. and Mead D. (1987). "Small Scale Industreis in Developing Countries: Empirical Evidence and Policy Implications", *International Development Paper*, No. 9., Department of Agriculture Economics , Michigan State University, East Lansing, MI, USA.

Lipton, M. and Ravallion, M. (1995). "Poverty and Policy", In Behrman, J., Srinivasan, T.N. (eds), *Handbook of Development Economics,* Vol. IIIB, Amsterdam: Elservier Science B.V., pp. 2551-2657

Loveman, G., and Sengenberger, W. (1991). "The Re-emergence of Small Scale Production: An International Comparison", *Small Business Economics,* Vol. 3

Lukas, E. (2005). "The Economic Role of SMEs in World Economy, Especially in Europe", http//www.uni-miskolc.hu/uni/res/kozlemenyek/2005/pdf/lukacs.doc

Malik, Sohail J. (2005). "Agriculture Growth and Rural Poverty: A Review of the Evidence. Pakistan Resident Mission Working Paper Series", *Working Paper,* No. 2: Asian Development Bank

Mukras, M.S. (2003). "Poverty Reduction Through Strengthening Small and Medium Enterprises", *Botswana Journal of African Studies,* 17(2), pp. 58-69

Mullineus, A.W. (1997). The Funding of Non-Financial Corporations (NFCs) in the EU (1971-1993): Evidence of Convergene, Mimeo, Department of Economics, University of Birmingham

Myrdal, Gunner (1968). *Asian Drama: An Inquiry into the Poverty of Nations*, New York, Pantheon

Qureshi, S.K. and Ghani, E. (1989). "Employment Generation in Rural Pakistan with a Special Focus on Rural Industrialization: A Preliminary Analysis", *The Pakistan Development Review,* 28(4), pp. 587-402

Schmitz, H. (1995). "Collective Efficiency: Growth Path for Small Scale Industry", *Journal of Development Studies,* 31(4), pp. 529-566

Sen, A.K. (1960). *Choice of Techniques: An Aspect of the Theory of Planned Economic Development*, Oxford: Basil Blackwell

State Bank of Pakistan (2005). *Statistical Book,* Karachi

State Bank of Pakistan (Various Issues). *Annual Report*, Karachi

Todar, M.P. and Smith, S.C. (2009). "Population Growth and Economic Development in Economic Development", Ed. 10, Published by Prentice Hall, pp. 295-309

UNIDO (2002). "Creative Industries and Micro & Small Scale Enterprise Development: A Contribution to Poverty Alleviation", Project XP/RAS/05/002

Voitchovsky, Sarah (2005). "The Effect of Inequality on Growth: A Review of the Recent Empirical Literature", DFID Commissioned Study

World Bank (1990). "World Development Report 1990: Poverty", New York: Oxford University Press

World Bank (2008). *World Development Indicators*, Washington D.C., December