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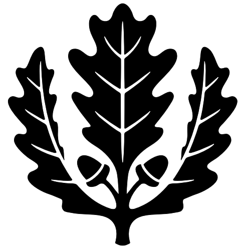

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Economic Reforms and Pro-Poor Growth: Lessons for Africa and other Developing Regions and Economies in Transition

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Abstract

The paper discusses the meaning and measurement of pro-poor growth and also reviews evidence of pro-poor growth (or the lack of it) in a large cross-section of countries and time periods. The emerging story is that many episodes of growth are not pro-poor and also that although economic reforms have had positive effects in those countries that have been steadfast in implementing market reforms, the overall impact on growth has been small for many countries and in most cases not pro-poor. I present a general theory of pro-poor growth that includes ten principles that should be incorporated in all economic reforms that seek to generate pro-poor growth. These principles highlight the importance of understanding the poor, their economic activities, capabilities, constraints that impede their participation in markets and also an appreciation of linkages within sectors and regions. It is argued that pro-poor reforms cannot have the intended impact unless there are significant changes in the institutions of governance. Finally, the principles presented underscore the fact that pro-poor growth policies cannot be sustained without workable partnerships between markets and states in the ever changing and complex processes of social and economic development.

Journal of Economic Literature Classification: O10, O21, I30

Keywords: Economic Reform, Pro-Poor Growth, Developing Countries, Economies in Transition, Africa, Poverty Reduction.

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Economic Reforms and Pro-Poor Growth: Lessons for Africa and other Developing Regions and Economies in Transition

I. Introduction

The most pressing concern for policymakers in developing countries is designing and implementing policies that raise the quality of life for the majority of their citizens within the context of severe resource constraints. Quality of life, generally measured by various proximate indicators such as life expectancy, health status, nutritional adequacy, infant and maternal mortality, and various other measures of human capital, is highly correlated to a country's income, poverty and the quality of institutions. By and large, developing countries are characterized by weak institutions, low growth and poverty all which translate into low levels of human development. The multiplicative effects of these outcomes result in poverty traps that are extremely difficult to break out of. This state of affairs has forced governments to embark on a wide range of reforms in their institutions of governance and economies with the goal of achieving economic growth.

Over the last four decades or so, there have been significant institutional and economic reforms in developing countries. Institutional reforms have focused on the introduction of political competition by shifting from military and single party regimes, strengthening the institutions of governance through adoption of democratic constitutions and instituting mechanisms for improved accountability and transparency. These reforms have been instrumental in expanding the democratic space and to an extent have reduced conflict situations that have in the past undermined development in a large number of countries. Likewise, virtually all developing countries have instituted wide ranging macroeconomic and sectoral reforms—agriculture, trade, financial sector, monetary and fiscal policies, public sector reforms, etc. These reforms have largely been in response to dismal economic performance, instability

and associated outcomes such as poverty, high and unsustainable deficits, inflation rates, etc. The primary object of economic reforms has therefore been the achievement of high and sustained economic growth. Reforms translate into economic growth by establishing conducive environment for saving and investment, risk taking, providing incentives to producers, creating certainty in markets, increasing the size of markets by removing barriers to international trade, improvements in competitiveness, removing barriers to entry, etc. By and large, economic reforms are meant to lower the transactions of engaging in productive activities or the cost of doing business. Public sector reforms support economic growth by increasing the efficiency of government spending decisions and removing artificially created barriers that impede market transactions.

The emphasis on reforming economies to achieve high rates of economic growth is largely motivated by the fact that economic growth associates with lower poverty rates and improvements in the quality of life generally. Reforms that result in high rates of economic growth are therefore expected to result in substantial poverty reduction. If in fact there exist a strong link between economic growth and poverty reduction, then economic reforms that accelerate economic growth are the ideal anti-poverty strategies. It is because of the presumed strong link between economic growth and poverty reduction that reforms have been widely accepted across the developing world. However, while it is in fact true that economic growth associates with poverty reduction, this outcome does not always hold or relationship can be weak such that economic growth does not yield substantial declines in the levels of poverty. Furthermore, different episodes of growth could have substantially different impact on poverty even in the same country. Even more bothersome is that not all economic reforms result in significant economic growth and there are cases where reforms have resulted in perverse outcomes.

Policymakers seeking to deal with the problem of poverty in developing countries therefore have two key policy concerns. The first is to institute economic policy reforms that result in economic growth. Second, they should be concerned that the ensuing growth associates with substantial gains to the poor—what is referred to as pro-poor growth. This means that policymakers must carefully evaluate economic reform proposals so that they prioritize reforms that are pro-poor.

This paper looks at economic reform experiences of developing and transitional economies with respect to growth outcomes and more specifically their impact on poverty. The paper relies on existing literature and therefore largely reflects a compilation of state of knowledge on the subject of growth and poverty. Nevertheless, I also attempt to present what I consider to be a general theory of reforms and pro-poor growth. The section that follows provides a brief summary of reform policies that have been implemented over the last four decades or so in developing countries. Section III focuses on meaning and measurement of pro-poor growth. Here we briefly outline a number of the common measures of poor growth followed by evidence of growth and poverty reduction in a number of countries. It is demonstrated that, while growth is generally good for the poor, there are many cases when growth experiences in developing countries have not been pro-poor. Section IV provides a discussion of the link between reforms and growth and also pro-poor growth. The general finding is that the impact of reforms on growth has varied widely. While the reforming countries experience higher growth, this growth has not been pro-poor. In addition, the African experience with reforms has been disappointing. In Section V, I attempt to formulate what I call a *general theory of reform and pro-poor growth, or simply a pro-poor growth paradigm*. The primary objective is to outline some principles that can guide in the design of pro-poor growth policies. A brief summary of the paper is provided in the concluding section.

II. Economic Reforms: From Structural Adjustment to Post-Washington Consensus

The general meaning of the term "reform" is to change direction or to take corrective measures. In essence, reforms are prompted by unfavorable state of affairs such as slow growth, high rates of poverty, debt crisis, inflation, macroeconomic instability, etc. The goal of reforms is therefore to reverse such trends and move the economy to a more favorable growth path. The nature of reforms varies a great deal across countries and also over time. In some cases, reforms involve major changes in policy direction such as the shift away from planned economies to market economies or from fixed exchange rates to flexible rates. In such cases, the reforms are initiated in response to failure of existing policies to achieve say rapid growth or due to excessive imbalances in the international trade markets. Other reforms may be less radical and often involve gradual changes such as tax reductions or marginal changes in regulations. Regardless of the nature of reform, they do nevertheless reflect a desire to change the trend as a result of observed weaknesses in existing policies.

The key focus of economic reforms is the creation of wealth. The debate over wealth creation has in turn been guided by some accepted orthodoxy, paradigm or conventional economic thinking. Adam Smith's prescription for free markets was in fact a critique of then accepted orthodoxy that considered mercantilism as the best way for nations to accumulate wealth. Likewise, recent economic reforms have been guided by some accepted wisdom or orthodoxy about the processes that guide wealth creation. The accepted wisdom about the creation of wealth change over time as new information is revealed following implementation of specific policies. This section discusses some of the recent economic reforms in developing countries.

The first broad economic reforms introduced in developing countries comprise policies that are collectively referred to as the Structural Adjustment Policies (SAPs). The accepted

development paradigm during the period after Second World War was one where central planning was considered the best mechanism for resource allocation. The leading development economistss of the day including Rostow, Myrdal and others all emphasized the importance of the state in development and the inadequacy of a laissez faire market economy in resource allocation. Thus, development theories of the day put a heavy emphasis on the importance of government and the dangers associated with market failures as had been shown by Keynes. However, over time, these government-led model of development failed in virtually all countries. The interventionist polices resulted in a general lack of fiscal discipline and extensive intervention in markets. Governments created inflationary situations as a result of public sector deficits and monetary expansion. In addition, countries tended to regulate their exchange rates resulting in overvalued currencies and also imposed various controls in both domestic and international markets. Likewise, the countries were characterized by high levels of state provision of goods and services. Thus the pre-SAP era was an era of "government" controlled economies and maligned prices. As noted by Goff (2003), these policies resulted in serious instabilities:

> Taken together, these policies severely restricted the scope of market forces: limiting the role of the price mechanism and reducing incentives, efficiency and innovation. They were also unsustainable: export industries were condemned to a lack of competitiveness, leading to balance of payments deficits and the loss of foreign exchange reserves. Fiscal deficits would add to the mountain of public debt. The country would thus become dependent on repeated loans from the IMF and the World Bank for fear of running out of funds and the resulting exchange rate crisis and hyper inflation (p. 49).

In response, SAPs were recommended primarily to deal with stabilization and structural change. Stabilization policies were meant to create more stable economies by lowering the inflationary expectations and reducing the role of the government in determining prices. Stabilization programs involved tighter monetary policies and higher real interest rates, reduction in government spending such as subsidies and exchange rate depreciation so as to make imports

relatively more expensive and exports cheaper. Policies to change the structure of the economies were geared to making economies of developing countries closer to those of developed countries and included trade liberalization through the removal of quantitative restrictions, privatization of state enterprises and liberalization of the capital markets. Beginning in the 1970 and 1980s, many developing countries adopted "structural adjustment" reforms that were often imposed as conditionalities for loans and other facilities by the Bretton Woods Institutions.

During the 1990s, the adjustment policies were followed by deeper and broader set of reform policies that are now commonly referred to as the "Washington Consensus" so called because they reflected the accepted orthodoxy by Washington-based development agencies, namely, the Bretton Woods Institutions, US Treasury and the Federal Reserve Bank.[1] The consensus included the following specific reforms—often referred to as the "ten commandments" of economic development:

- Fiscal discipline to reduce deficits, inflation and balance of payments
- Reordering public expenditures priorities
- Tax reform so as to have a broad tax base and moderate marginal tax rates
- Liberalizing interest rates so that interests are determined by market forces
- Competitive exchange rate
- Trade liberalization—removal of quantitative restrictions and replacement with low and uniform tariffs
- Liberalization of foreign direct investment or generally openness to foreign investment
- Privatization of state enterprises
- Deregulation so as to reduce barriers to entry and exit
- Property rights—legal security of rights

The Washington Consensus was largely influenced by the experiences of the East Asian economies. While countries in Latin America and Africa stagnated, had high rates of inflations, large domestics

[1] The term "Washington Consensus" was coined by John Williamson in 1989.

and international debt, etc, the Asian countries that had opened up their economies and followed policies that were very similar to those of developed countries were prospering. In addition, several empirical studies concluded that countries that pursued market policies grew significantly faster. Thus, the East Asian development model was considered a major success and thus it was believed that same policies would result in success if adopted by the other developing countries. During the 1990s, the Washington Consensus policies dominated reforms in Latin America and Africa.

The general thrust of the set of policies referred to as the Washington Consensus involved adoption of conservative macroeconomic policies and liberal microeconomic policies. These policies translate in to expanding the role of the market in resource allocation and reducing the role of the state to a minimum. The conventional wisdom that guided these policies was the belief was that too much government involvement in the economies of many developing countries was a primary hindrance to economic growth. The consensus recommended a relatively few instruments with the primary goal being generating economic growth.

By the mid 1990s, the Washington Consensus as a development paradigm had started to lose currency. There were concerns that the simple "free market" focus did not yield the positive results expected and the Washington Consensus was soon replaced by what came to be known as the post-Washington Consensus pioneered by Joseph Stiglitz (1998). Stiglitz was critical of the Washington consensus largely because of its failure to take into account the importance of the state in the development process and also the peculiarities of different countries. In particular, Stiglitz considered the Washington Consensus as having pushed the capabilities of the market too far:

> To be sure, governments can make maters worse. No doubt, the Washington Consensus represented, in part, a reaction to the failures of the state in attempting to correct those of the market. But the pendulum swung too far in the other direction and for too long. The consensus policies often assumed the worst about the nature and capability of governments and made that one size fit all. That resulted in a strong bias against basing policy advice on an analysis of what interventions are appropriate in what contexts or to build the institutions or capacity of states to intervene effectively (Stiglitiz, Post-Washington Consensus Consensus, p2.)

In the case of Africa, Stiglitz observes that the Washington Consensus policies were unsuitable and largely resulted in failure:

> In Africa, the costs of a simple-minded belief in the magic of the market were palpable and huge. For example, policy conditionalities imposed on the countries of the region, too often focused much too narrowly on liberalization of agricultural prices without adequate attention to the pre-requisites to make that effective such as functioning markets for inputs and outputs, credit availability and infrastructure (especially roads); the insistence on static comparative advantage led to the fallacy of composition whereby increasing exports of commodities by many countries led to collapse in their prices; financial sector reforms were focused excessively on making interest rates market-determined in very thin and rudimentary markets leading often to prolonged periods of very high interest rates without improving the availability of credit. (Stiglitiz, Post-Washington Consensus Consensus, p3-4).

Stigilitz emphasized the importance of quality institutions, voice and partnerships in governance of states and also the links between national and international environment. In short, the post Washington Consensus recognizes the important role of government in complementing markets. While accepting the importance of markets, recent policy focus also recognizes the importance of investing in the poor in areas such as health, education and good governance so that the people can be able to take advantage of economic opportunities. The paradigm shift has associated with the formulation and implementation of what is referred to as the Poverty Reduction Strategy Papers (PRSPs). Policies under the PRSPs target economic growth but also prioritize pro-poor spending, often requiring ring-fencing specific pro-poor expenditures. In addition, PRSPs are formulated within the context of individual country's circumstances and call for broad participation of the people.

III. Pro-Poor Growth: Meaning and Measurement

(i) Meaning of Pro-Poor Growth

While growth is important, there has been concerns that growth may not necessarily reduce poverty substantially and therefore just because a country experiences positive growth is not

sufficient to assess whether the poor indeed benefit. Thus, in assessing the impact of growth on poor, information on the distribution of gains from growth is necessary. That is, to determine whether growth is pro-poor, it is necessary to evaluate how the benefits of growth are shared amongst the different income groups. The increased focus on pro-poor growth is a consequence of mounting evidence that for many episodes of growth, gains are not shared by all members of the population and in fact growth may have associated with declining well-being of the poor—what may be referred to as immiserizing growth. With the current focus on the Millennium Development Goals, there is more emphasis on the concept of pro-poor growth which is in essence placing higher weights on the well-being of the poor. In this section, we focus on the link between reforms and economic growth, and more specifically, pro-poor growth. We begin with a brief discussion of the meaning and measurement of pro-poor growth followed by discussion of reforms and pro-poor growth.

Pro-poor growth is variously defined as follows:

- In its simplest interpretation, the concept of "pro-poor growth" implies the type of growth that is good for the poor. If we take this simple definition, then for so long as growth associates with a reduction in the proportion of the poor in the population (holding the poverty line constant), then it is pro-poor.
- Pro-poor growth is also defined as growth that results in an increase in the incomes of the poor. This means that real incomes of the poor between two time periods increases. Ravalion and Chen (2003) consider growth to be pro-poor if, and only if the poor people benefit in absolute terms.
- Finally, others define pro-poor growth as one that associates with larger proportionate increases in incomes of the poor than the rest of the population. In other words, this definition takes into account the distributional shifts following economic growth. Klasen

(2001) uses the term pro-poor growth to mean that the poor benefit disproportionately from economic growth. This implies that the proportional income of the poorest quintile or those below the poverty line should exceed the average income growth rate. A related concept in discussing pro-poor growth is progressivity. The idea of progressivity is commonly used in tax and benefit-incidence literature to mean that benefits are a decreasing function of income (or tax burden increases with income). Gasparini (2005) uses the concept of progressivity to capture pro-poor growth if the change in income as a share of initial income (growth rate) is a decreasing function of income. Simply, pro-poor growth under this concept of progressivity is one where the change in income is a decreasing function of the initial level of income. White and Anderson (2001) also define pro-poor growth as one where the poor's share of an income increase is greater than their current share of total income or the poor's share of an increase in income is greater than some international benchmark. Simply, these definitions suggest that growth is pro-poor if poor's income grows more than the incomes of the non poor.

There are many other definitions of pro-poor growth (also referred by some authors as poverty bias growth (Hersels (2000), Mcculloch and Bauch (1999)). The key element of these definitions is that ensuing growth not only benefits the poor but they benefit disproportionately.

(ii) Measuring pro-poor growth

A number of measures of pro-poor growth have been developed. These measures seek to capture the pro-poorness of growth as defined above. The various measures are either absolute (meaning they focus exclusively on what happens to the poor) or relative which implies that the measures look at the changes in the well-being of the poor relative to the other income groups. Some of the common pro-poor growth measures and approaches are discussed below.

(a) Growth Elasticity of Poverty

A simple measure of pro-poor growth is the total growth elasticity of poverty defined as the proportional change in the poverty headcount between two time periods for a one percent change in mean income.[2] If the growth elasticity of poverty (GEP) is greater than 1, then it means that a small change in income results in proportionally larger decreases in poverty. Other things equal, the larger the GEP, the larger the reduction in poverty reduction for a given rate of growth—hence more pro-poor. This measure is attractive because of its simplicity and the fact that it is not data intensive. However, the measure can be misleading because the responsiveness of poverty to growth also depends on the initial levels of income and state of income distribution. Poverty may be more responsive to change in income when income is low as compared to higher incomes. Thus, the same rate of economic growth may appear pro-poor in a low income country but not so in a middle income country. Likewise, poverty is less responsive to increases in income if the inequality is higher. Consequently, while GEP is a convenient measure, it should be interpreted with caution particularly when comparing pro-poorness of growth across countries. In other words, although the elasticities are illustrative, they are sensitive to the location of the poverty line in income distribution (Bourguignon 2002, 2003; Ravalion 1997).[3]

(b) Rate of Pro-Poor Growth

The other measure of pro-poor growth takes into account not only the number of poor people but also what happens to changes in incomes of the poor. Ravallion and Chen (2003) use Growth Incidence Curves (GIC) to measure pro-poor growth. A GIC shows the rate of growth for a given period of time at each percentile of the distribution. If GIC is >0, for particular percentiles, then it

[2] The total Growth elasticity of poverty γ is given by $[\Delta H/\Delta U^*u/H]$, where H is the headcount index and u is the mean income. The growth elasticity of poverty is obtained by estimating a regression equation of the following general form: $\text{Log Pov} = \alpha + \beta \text{ LogU} + \gamma t + e$ where Pov is the poverty measured by headcount or consumption, U is the mean income, γ is the trend rate of change in income and e is the error term.

[3] Also, the elasticity measure can give quite misleading results. For example, if the rate of growth is zero and there is a small change in poverty (reduction), the measure would imply an infinite growth elasticity of poverty.

means that poverty declines for those groups. Ravallion and Chen propose a numerical indicator of pro-poor growth based the mean of the growth rates of poor as a measure of pro-poor growth. If the mean growth rate of the poor is positive, then growth is pro-poor and vice versa.

For illustration, Table 1 provides some hypothetical data showing three growth scenarios for each of the percentiles. Each of the growth scenarios result in different growth incidence curves as shown in Figures 1-3. For simplicity, we focus on the meaning of the different GICs. In Figure 1, we observe that growth rate is >0 for all percentiles meaning that poverty has fallen for all groups. However, the curve is also strictly increasing over all the income groups which suggest increases in inequality. That is, the higher income groups benefit more. The horizontal line shows the mean growth rate over entire distribution. As is evident, the lower income groups have growth rates that are below the mean growth suggesting that growth is not pro-poor. Likewise, in Figure 2, the GIC is above zero for entire distribution but the curve is strictly decreasing suggesting that the growth associates with decreases in inequality. Furthermore, the growth rates for the poorest groups are higher than the mean growth rate which means the poor benefit more than the rich-- hence pro-poor growth. Figure 3 shows a case where the middle group benefit most while the lowest and richest groups benefit least.

Figures 4 and 5 show GICs for China based on Ravalion and Chen (2003). Both figures show that growth in China has been high for entire distribution of population. The GIC for the period 1990-1999 shows that growth in China was not pro-poor and resulted in increasing inequality. On the other hand, for the period 1993-1996, the pattern of growth is different and pro-poor. This shows that in evaluating pro-poorness of growth, it is important to evaluate different time intervals.

(c) Pro-Poor Growth Index

Kakwani and Pernia (2000) develop a measure of pro-poor growth, which they call the Pro-Poor Growth Index, that takes into account the effect of growth on income distribution and poverty. The premise of this measure is that poverty reduction is dependent on both economic growth and changes in income distribution. Specifically, increases in growth reduce poverty but if such increases also associate with increases in inequality, then the magnitude of poverty reduction is lower. That is, increases in inequality lowers the poverty reduction effectiveness of growth. Thus a measure of pro-poor growth that does not take into account the effect of changes in inequality on poverty reduction will tend to be biased (over estimate the poverty reduction if inequality had increased).

Kakwani and Pernia decompose the proportionate change in poverty (O) resulting from 1% change in growth into two components:

(a) impact of growth when income distribution does not change (pure growth effects- O_g)
(b) the impact of income distribution when the total income remains constant (pure inequality effect-O_1)

Such that: $O = O_g + O_1$

The pure growth effect is negative because growth reduces poverty if inequality is held constant. The pure inequality effect can be negative (if inequality decreases) and positive (if inequality increases). They define the Pro-Poor Growth Index (PPGI= Ø) as ratio of the total poverty elasticity of growth (γ) to the elasticity of poverty with respect to per capita income assuming no change in income distribution (γ_g)

$$Ø = \gamma/\gamma_g$$

Ø is the pro-poor growth index. If $\Phi>1$, then the growth is pro-poor if $0<\Phi<1$, although economic growth reduces poverty, the inequality effect of economic growth is negative and therefore the poor benefit proportionately less than the non-poor.

Table 2 which is borrowed from Kakwani and Pernia shows the computation of PPGI for the case of the Lao people's Republic. For the periods 1992-1993 and 1997-1998, Lao experienced impressive growth but this growth episodes were also accompanied with rapid increases in inequality. This means that although growth would as expected result in reductions in poverty, the pro-poorness of the growth is reduced by increases in inequality. The overall poverty elasticity was -0.7 which can be decomposed into pure growth effect (-3.2) and pure inequality effect (2.6). The pro-poor growth index is therefore (-0.7/-3.2) = 0.21. This means that growth was associated with reduction in poverty but was not pro-poor.

(d) Poverty-Equivalent Growth Rate

Kakwani and Son (2002) extend the PPGI to what they refer to as the Poverty Equivalent Growth Rate (PEGR). Although the PPGI captures the distribution of benefits to the poor and non-poor, it does not account for the rates of actual growth rate. We have observed that increases in income reduces poverty but increases in inequality increase poverty. Thus, growth is pro-poor (anti-poor) if the change in inequality that accompanies growth reduces (increases) total poverty. This means that growth is pro-poor (anti-poor) if the total elasticity of poverty is greater (less) than the growth elasticity of poverty (Kakwani and Son 2002). The PEGR (γ^*) is the growth rate that will result in the same level of poverty reduction as the present growth rate γ if the growth process has not been accompanied by change in inequality. The PEGR is obtained by simply multiplying the PPGI by the growth rate of mean income:

$$PEGR = \gamma^* = PPGI * \gamma$$

Where γ is the growth rate of mean income. A characteristic of this measure is that proportional reduction in poverty is a monotonically increasing function of the PEGR. Growth is pro-poor (anti-poor) if γ^* is greater (less) than γ. If γ^* is between 0 and γ, then growth is accompanied with increased inequality but poverty reduces. If γ^* is negative, then such growth is immiserizing and the

benefits of growth are offset by increases in inequality. Kakwani and Son suggest that a country's performance in reducing poverty should be judged on the basis of PEGR and not just by growth rate alone.

Table 3 and Figure 6 provides some hypothetical data to illustrate the concept of PEGR. The data shows the actual growth rate and the corresponding poverty equivalent growth rate. Again, the PEGR is here assumed to represent the growth rate that would result in the same level of poverty reduction if growth does not result in changes in inequality. In year 1, the actual growth rate is 10% but the PEGR is 6%. This means that the 10% actual growth with the associated inequality increases would result in the same level of poverty reduction as 6% growth with no changes in inequality. If actual growth rate is higher than the PEGR (cases 1-3, 9-10), and both are positive, then poverty reduces but the growth is not pro-poor. If on the other hand PEGR is greater than actual growth and both are positive, then the growth is pro-poor. For the periods 6-8, the economy experiences a recession and the PEGR is lower than the actual growth rates and both are negative meaning that the recession hit the poor harder.

(e) <u>Poverty Growth Curve</u>

Son (2003) has proposed another measure of pro-poor growth which he refers to as the Poverty Growth Curve (PGC) that is based on the definition of pro-poor growth as growth where the poor benefit proportionately more than the rich. The PGC is analogous to the GIC but has some distinct properties and uses a higher standard for pro-poor growth. If we describe the Lorenz curve as $L(p)$ as the percentage share of income or expenditure enjoyed by the bottom p percent of the population, then the generalized Lorenz Curve is given by $\mu L(p)$ where μ is the mean income or expenditure. If the entire Lorenz Curve shifts upward, then the new distribution is said to exhibit second order dominance over the previous distribution. In this case, if the $\Delta\mu L(p) > 0$ for all p, (meaning that the generalized Lorenz Curve shifts upward) then poverty decreases unambiguously

for various measures of poverty (Ω) and for all poverty lines. Likewise, if the curve shifts downward, poverty increases unambiguously (Atkinson 1987). Son defines the PGC as the growth rate of the mean income $g(p)$ of the bottom p percent of the population when the individuals are ranked by their per capita income or expenditures. Thus, if $g(p) > 0$ poverty decreases unambiguously and vice versa. If g is the growth rate for the entire population, the growth is pro-poor if $g(p) > g$ for all $p < 100$. If $0 < g(p) < g$ for all $p < 100$, then growth reduces poverty but is associated with increases in inequality so that the poor benefit less than the non-poor. On the other hand, if $g(p) < 0$ for all $p < 100$ and g is positive, then this implies immiserizing growth.

Table 4 provides some illustrative data and shows growth rate for all percentiles and the growth rate of mean income (which is given by growth when $p=100$). Case 1 shows that growth is positive for all percentiles meaning that poverty decreases unambiguously. However, the growth rate for all $p < 100$ is less than the mean growth rate, hence the poor benefit less than the rich and thus growth is not pro-poor. Case II shows that growth rate for all $p < 100$ is higher than the mean growth rate and as such growth reduces poverty and is also pro-poor. Cases III shows a case where the economy experiences a recession but the poor are hit more than the rich. Figure 7 shows the Poverty Growth Curve.

Summary-Pro-Poor Growth Meaning and Measurement

During the last few years, there has been an explosion in the volume of literature on pro-poor growth. The interest is, as noted previously, driven primarily by concerns that the poor do not always benefit from growth. The definitions of pro-poor growth therefore generally seek to capture the gains by the poor relative to non-poor. As shown, there has been major advances in techniques to measure pro-poor growth primarily attributed to Ravalion, Chen, Kakwani and Son. All these measures focus primarily on capturing the gains to the poor and also on changes in the income

distribution arising from growth. The meaning and measurement of pro-poor growth are of policy relevance and emphasizes the importance of looking beyond the aggregates.

IV. Reforms, Growth and Poverty Reduction

Before proceeding with an analysis of reforms and growth, we begin by reviewing country experiences with economic growth and poverty reduction. Because the primary objective of economic reforms is to achieve economic growth, we first look at the role of growth on poverty reduction. Relying on existing studies, we draw some broad conclusions about growth and poverty reduction. We then investigate whether in fact growth is generally pro-poor.

(i) Growth and Poverty Reduction

There is now a large volume of empirical studies on the relationship between growth and poverty reduction. These studies typically evaluate elasticity of poverty with respect to changes in consumption or income between two time periods (intervals). The expected relationship is that growth reduces poverty, hence a negative coefficient. As noted previously, the size of the elasticity of poverty matters in terms of evaluating effectiveness of growth in reducing poverty. For our purposes, we focus on whether growth reduces poverty.

Table 5 provides empirical findings of the poverty elasticity of growth for different countries and time periods. By and large, the results show that growth associates with poverty reduction. However, the elasticities vary widely across countries and with episodes of growth. Low elasticities suggest that growth does not reduce poverty substantially. The results presented here basically support the well-established fact that growth is good for the poor. Hence, growth is necessary for poverty reduction. Nevertheless, this does not mean that growth is necessarily pro-poor as defined in this paper. As previously observed, capturing the pro-poorness of growth requires that we look more carefully at what happens to the incomes of the poor and also the state of income distribution.

(ii) Pro-Poor Growth

Tables 6,a-d provide summaries of empirical evidence of the pro-poorness of growth for various countries using different measures discussed previously. Table 6a shows results from Kakwani and Pernia (2000) for a number of Asian countries; Table 6b summarizes results the experiences of 18 Africa countries based on a study by Bingsten and Shimeles (2003); Table 6c provides results of a study by Son (2003) that include 84 countries and 241 growth episodes; and Table 6d reports the results of a sample of Latin American countries by Gasparani (2005). Table 7 which is obtained from Cord et al (2003) provides additional cross country evidence of pro-poor growth. The results presented in these studies reveal that many episodes of economic growth are not pro-poor. This is true for all measures of pro-poor growth and for all measures of poverty. In fact, the evidence reveals that while episodes of economic growth generally associate with reduction in the incidence of poverty, they are not pro-poor.

(iii) Reforms and pro-poor growth

We now turn to the impact of reforms in producing pro-poor growth. In evaluating the impact of reforms, four key issues are of interest:

- In General, are reforms successfully in generating economic growth?
- Which type of reforms appear to associate most strongly with economic growth?
- In cases for which reforms have translated into growth, has that growth been pro-poor?
- What types of reforms appear to be both good for economic growth and also pro-poor?

Table 8 provides a schema for evaluating reforms. In as far as growth is concerned, there are three possible outcomes: (i) No change in growth, (ii) negative growth and (iii) positive growth. Each of these outcomes could also be associated with no change, increase or decrease in poverty and inequality. The direction and magnitude of change of both poverty and inequality determines pro-poorness of growth. We can therefore evaluate reforms by classifying their impact on growth, poverty and inequality. But evaluating reforms is complicated and requires detailed analysis of specific country experiences. For one, although it is true that many developing countries have

implemented reforms, it is important to note that commitment to the reforms has varied greatly and there has been many cases stop-and-go and outright policy reversals. Thus, it is difficult to isolate the failure of policies per se from the inadequacies of the policies and the implementation issues themselves. In addition, the institutional context may influence the success of reforms. Finally, policies may yield pro-poor growth in one country and completely opposite results in another The point here is that good analysis of reform and pro-poor growth should be on case by case basis.

Reforms and Growth

The above concerns not withstanding, for reforms to be pro-poor, they must first result in accelerated growth and so the question is whether reforms in developing countries have associated with growth. Thus, before we even worry whether growth is pro-poor or not, we need to evaluate whether economic reforms have had positive growth trajectory.

The predominant thrust of reforms in developing countries since the 1980s as embodied in the structural adjustment policies and the broad Washington Consensus has been to improve the functioning of markets or simply shifting economies to a market orientation. These policies have included macroeconomic stabilization, liberalization of domestic and international trade—including exchange rate and price liberalization, removal of price distorting policies such as agricultural price support, financial sector reforms, privatization and overall reduction of the size and scope of government. If we consider the period since 1980s as the reform period, we can then evaluate the growth experiences in the reforming countries.

Tables 9 and10 provides data for growth rates for Latin America and Sub-Saharan African countries respectively. Table 9 also provides aggregate growth rates for other countries. The aggregate data reveal that the growth experience of Latin America and Africa has been disappointing during the reform period. The regions actually experienced higher growth rates during the pre-reform era. Latin American countries showed some signs of growth during the early 1990s but SSA

stagnated. In fact, data reveals that about 16 countries had lower per capital income in 1994 than in 1960 (Rodrick 1997). However, East Asia managed to maintain high growth throughout. If we were then to judge reforms based on the aggregate data, then a broad conclusion is that reforms have not been good for growth. However, this is misleading. If we look closely to the growth experiences of individual countries in Tables 9 and 10, we find that growth varies widely across the countries. The emerging picture is that there have been wide variations in the growth performance with some countries experiencing credible growth while others had disastrous experiences. Data for the mid 1990s and early 2000s shows that SSA economies have performed better than previous periods achieving a growth rate of 2% in per capita GDP between 1995 and 1999 (IMF 2005). Again, there are wide variations across countries. Thus, it would be misleading to attribute poor growth performance to reforms. Still, SSA performance is much lower than other developing countries. Appendix 1 shows recent growth performance in Africa.

Empirical evidence on the determinants of growth show that controlling for other variables, market reforms have had a positive effect on growth (Greenaway and Wright (2001); Barro (1991, 1996); Fernandez and Montiel (1997), Gregorio and Lee; Rodrik (1997); Dollar (1992); Bruno and Easterly (1995); Sachs and Warner (1995); Levine and Zervos (1993), Kimenyi, et al (2003), among others). These studies evaluate the independent effects of policies such as trade liberalization, inflation, commercial policies, etc. Thus, the empirical evidence suggest that other things equal, market reforms are good for growth. Countries that have been persistent in solidifying reforms and thus score high on measures of quality of policy indices, have other things constant, experienced higher growth rates. While countries may experience some initial slow down with the commencement of reforms, sustaining and deepening reforms seem to pay off in the long run. Thus a general conclusion is that market reforms are good for growth. For Africa, it appears from

evidence that the failure to grow is primarily due to both institutional factors (wars for example) and failure to sustain reforms.

Reforms and Pro-Poor Growth

We now turn to investigating whether the growth resulting from reforms is pro-poor. We have already observed that for many countries, the growth performance has been weak. Thus, regardless of whether such growth is pro-poor or not, we would not expect much by way of poverty reduction given the values of the growth elasticity of poverty presented earlier. Evidence reveals that for most of the developing countries—especially in SSA, poverty rates generally increased during the reform period. In other words, there has not been substantial poverty reduction associated with reforms. Early evaluation of the structural adjustment programs for example showed that, even where the policies resulted in growth, poverty increased. Table 11 shows the changes in poverty for some of the adjusting African countries. The results show that countries like Ghana, Tanzania and Zimbabwe that scored favorably in terms of macroeconomic policies also experienced increases in poverty (see also Ali).

Szekely (2003) finds that while reforms have had a positive effect on growth in Latin America, the growth has also associated with increases in inequality so that the gains to the poor have been modest. Thus, growth in Latin America has not been pro-poor. This is consistent to results by Gasparini (2005). If we look at the evidence of pro-poor growth provided in this paper (see data discussed in Section III), we find that the growth experiences for most of the reforming countries has not been pro-poor. In some cases, reforming countries have actually experienced immiserizing growth.

Summary: Reforms and Pro-Poor Growth

An evaluation of reform and growth experiences is complex and linking reforms to pro-poor growth is even more so. The foregoing discussion provides some highlights on the country experiences

with reforms, growth and poverty reduction. The broad conclusions that we draw from existing evidence can be summarized as follows:

- Growth is good for poverty reduction
- Controlling for other variables including institutional features, market reforms are good for growth
- Market reforms supplemented or complemented by state interventions are good for both growth and equity and are pro-poor
- Country growth experiences vary considerably
- Most growth episodes associate with poverty reduction but are not pro-poor
- Casual evidence seems to show that where reforms have resulted in growth, the growth has not been pro-poor for most countries
- For Africa, there are two key problems that we should be concerned with:
    - low growth (or even negative growth); and
    - limited pro-poor growth.

V. A Pro-Poor Growth Paradigm

The ultimate object of poverty reduction is to enhance human development which essentially implies improvements in people's well-being. Following Sen (1987), I consider well-being to incorporate two key aspects—functionings and capabilities. Functionings refer to the type of life people are able to achieve while capabilities refers to the capacity and freedom to achieve and choose life or functionings. From Sen's insights, we can consider pro-poor growth to be growth that expands the opportunities and capabilities of the poor so that they participate more and benefit from economic activities. Thus pro-poor growth policies must necessarily stimulate economic activities that the poor are involved in and at the same time must raise their capabilities so that they can exploit opportunities. This is not to say that the broad policies such as macroeconomic stability are not important. To the contrary, reform policies for growth of the entire economy are necessary for poverty reduction. However, we have seen that these policies might not reach the poor and thus

we need specific polices for pro-poor growth. Below, I focus on basic principles that I consider essential for the achievement of pro-poor growth which I call the *Ten Commandments of Pro-Poor* Growth. Taken together, these principles encompass what I consider to be general theory of pro-poor growth policies.

A. The Poor and Their Activities.

One simple but crucial concept in policy design is the principle of target efficiency. Policies are most effective when they are appropriately targeted. Within the context of pro-poor growth, it is apparent that a possible reason for the failure of the broad reform policies is that they do not target the poor effectively. One reason for this is the assumption that effects of policies are effectively transmitted to the poor through the market mechanism—which is the basis of many of the market policies. But this process assumes that market signals are transmitted to all sectors and with sufficient speed and efficiency so that all markets respond to policy shocks. In addition, such models implicitly assume that markets are well integrated and adjust appropriately. If this were the case, broad policies can be expected to influence the activities of the poor. Because the idea of pro-poor growth is that the poor benefit most from growth, then a pro-poor policy must by design invigorate what the poor do much more than the other activities.

Consider an economy characterized by sectoral distribution of activities as shown in Table 12. Assume that a policy shock is introduced in this economy—say liberalization of prices. Except for subsistence fishing, the various sectors respond positively but to varying degrees as reflected by the assumed adjustment coefficient (meaning percentage change in economic activity in response to the policy shock). Even if we assumed that poverty was evenly distributed across the sectors, the ensuing growth would not be pro-poor as most of the population benefit far less than others. This policy, though increasing economic activity also increases the inequality. The most likely reason for the differential outcomes is that some sectors are not strongly integrated. For example the rural

subsistence agriculture and urban informal sectors may be only weakly linked to the formal sectors of the economy. Because of the fact that markets are not fully integrated, the impact of reform policies may not influence some of the markets. Simply, the basic issue here is that we need to know and target where the poor people are and what the do (see Mwabu and Thorbecke 2001). I therefore propose the following principle for pro-poor reform policies:

- **Principle 1**: *Pro-poor reform policies must target activities of which most poor are involved in directly rather than relying on leakages from other markets.*

B. Improving the Functioning of Markets for the Poor

Past reforms have tended to focus on broad policies that improve the functioning of markets generally. Trade liberalization and deregulation of the domestic economy all improve on the efficiency of markets. But such reforms may have limited impact on the functioning of markets for the poor. Just because we liberalize trade does not necessarily imply that the rural agriculture markets operate more efficiently. Consequently, pro-poor reforms must focus on those constraints that hinder the poor from fully participating in markets. A poor farmer's main barriers may not even be production but taking goods to the markets. Markets for the poor can be significantly enhanced for example by simple improvements in rural access roads that make it possible for the farmers to engage in bigger rural markets.

- **Principle 2**: *Pro-poor reform policies must focus on improving the functioning of markets where poor people participate.*

C. Exploiting What the Poor have in Abundance—Labor

A good measure of a pro-poor growth reform must be one that results in increased utilization of what marketable resource the poor have in abundance—unskilled labor. Many reforms that have resulted in economic growth have mainly impacted on sectors that require skilled labor. In essence the reforms result in increasing wages of high income earners but neither increases employment or

wages of low skill workers. The result is that those reforms increase inequality and have no significant increases in the incomes of the poor. Pro-poor reforms must therefore target stimulation of those labor-absorbing activities which calls for policies that raise production in agriculture and labor intensive industries. Hence the next principle:

- **Principle 3:** *Pro-poor reform policies should support low-skill, labor intensive economic activities.*

D. Improving Linkages Between Markets

The fact that reform policies may have generated growth but have had limited impact on poverty reduction suggests that markets are weakly linked as suggested above. One could think of multiple markets in the same country and which are poorly linked or at least that there are bottlenecks that hinder spillover effects from one sector to another. Because of the poor linkage, some markets might experience booms but this does not filter to other markets. Because most macro policies operate more directly in formal markets where the well-off participate, growth cannot be pro-poor unless the impact of those markets is transmitted to those markets. Likewise, the poor may increase production but they may not benefit substantially because they may not be able to reach those other markets (for example, a farmer who grows vegetables but is not able to access the wider urban markets). By and large, I consider a key problem of the failure of growth to filter down to the poor as due to segmentation of markets. Thus, a way to increase the pro-poorness of growth must seek to reduce the degree of market segmentation:

- **Principle 4:** *Pro-poor reform policies should seek to reduce market segmentation so that markets for the poor are better integrated in the economy which requires improving on the forward and backward linkages.*

E. Capabilities

Poverty is directly related to productivity—that is, poor generally have low productivity primarily because of lack of appropriate skills. Thus, even when the economy expands, increases in the earnings of the poor tend to lag those of skilled workers considerably. As already noted, a pro-poor

growth strategy must translate in large improvements in the earnings of the poor relative to the non-poor. Because of the fact that the poor start with very low or no skills at all, small investments that raise their capabilities can have larger increases in productivity. It is such response to productivity that would translate into pro-poor growth. Reform policies should therefore include a mixture of targeted public expenditure that raises capabilities such as in health, education, skills training, etc. Improving the capabilities of the poor raises productivity and gives the poor tools that helps them exploit economic opportunities.

- **Principle 5**: *Pro-poor growth strategy should ring-fence public expenditures for raising capabilities of the poor.*

F. Target Groups Outside the Market

Within many of the developing countries, there are many groups that operate outside the market—that is, they are completely cut off from markets. The general reforms that were discussed earlier would have absolutely no impact on these groups (adjustment coefficient = 0). The implication here is that there are groups that operate completely outside the market and will not benefit from most of the broad macro reforms. As such, a pro-poor growth strategy must seek to bring these groups into the realm of markets which may require facilitation to create markets. These groups of poor can only benefit if there are specific policies that result in the evolution of markets.

- **Principle 6**: *Pro-poor growth policies should create mechanisms for enabling those groups that operate outside the markets to participate in all forms of markets (commodity, credit, labor, and land markets)*

G. Food Security

One simple rule for pro-poor growth should be to focus on ensuring that the poor are insulated from hunger. No policy will help the poor out of their state if in fact they are exposed to possibilities of starvation. Thus, there has to be a well focused policy that ensures that food is available to the poor—meaning improvements in production, distribution, storage, etc.

- **Principle 7**: *Pro-poor reforms should include a food security policy.*

H. Strategies to Deal with vulnerability

One of the reasons that gains by poor tend to be eroded is because of their exposure to extreme risks—drought, floods, disease, etc. All these random events (and some not so random) hit the poor hard resulting in large swings in welfare often eroding any gains achieved from growth during normal times. These may involve early warning systems and appropriate safety nets.

- **Principle 8**: *A broad pro-poor growth reform strategy should include policy initiatives that protect vulnerable populations from large swings in consumption.*

I. Assets

A key element of sustainable pro-poor growth has to do with asset accumulation (Kimenyi 1994; Kimenyi et al. 1998). Pro-poor growth will be self sustaining if it results in accumulation of assets by the poor. A most important asset for many developing countries is land but there are also many other forms of assets that the poor could accumulate. More often than not, there are many barriers to accumulation of assets—from system of rights to pure imperfection in the markets. Policy should therefore focus on removing barriers that make it difficult to accumulate assets.

- **Principle 9:** *Pro-Poor Growth reforms should include policies that support accumulation of tradable assets by the poor.*

J. Governance

Finally, reforms for pro-poor growth must be founded on good governance. In particular, the reforms must focus on those policies that make it possible for the poor to fully participate in the decision making process and be able to hold those in power accountable. This requires broad institutional reforms that increase the poors' voice—basically power diffusion (Kimenyi 2005a and 2005b).

- **Principle 10**: *Pro-poor growth reforms must include institutional reforms that empower the poor through progressive diffusion of power.*

VI. Conclusion: Reform Experiences and Lessons

This paper has covered broad issues concerning pro-poor growth and economic reform. I have discussed the main economic reforms that developing countries have implemented since the 1970s and shown that, by and large, these reforms have focused on market reforms. I have also discussed the meaning and measurement of pro-poor growth and also provided evidence of pro-poor growth or the lack of it in large cross-section of countries and time periods. The emerging story is that many episodes of growth are not pro-poor and also that although economic reforms seem to have a positive effect on growth in those countries that have been steadfast in their reforms, the overall impact on growth has been small for most countries. Furthermore, the evidence seems to show that where reforms have translated in positive growth, the growth has not been pro-poor.

Finally, I have provided 10 basic principles for pro-poor growth. These principles rely on casual observations and development literature —looking at what poor people do, where they live, what they can offer to the market, how they can increase their productivity, etc. These principles highlight the importance of looking at the poor as people rather than as mere numbers and getting a better understanding of the economy and the linkages within sectors and regions. Pro-poor reforms cannot have their intended impact unless there are significant changes in the institutions of governance. Finally, pro-poor policies cannot be sustained without workable partnerships between markets and states in the ever changing and complex processes of social and economic development.

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Table 1: Growth and Poverty: Hypothetical Data

Percentile	Growth1	Growth2	Growth3
1	1.6	7.8	1.2
2	2.2	7.5	1.8
3	2.5	7.0	2.4
4	3.0	6.0	3.5
5	3.7	5.0	4.5
6	4.8	4.0	5.5
7	6.5	3.2	6.0
8	7.5	2.8	3.8
9	7.8	2.2	2.0
10	8.0	2.0	1.0
Mean growth	4.	4.	3.

Table 2: Growth and Inequality Effects on Poverty Reduction, Lao, PDR

Poverty Incidence 1992- 1993 1993-1997 % Annual Change	Headcount Ratio 45.0 38.4 -3.1	Poverty Gap Ratio 11.3 10.3 -1.8	Severity of Poverty 4.2 4.0 -0.9
Poverty Elasticity	-0.7	-0.4	-0.2
Explained by Growth inequality	 -3.2 2.6	 -4.2 3.8	 -2.9 2.7
Pro-poor Growth Index	0.21	0.09	0.07

Source: Kakwani and Pernia (2000)

Figure 1: Growth Incidence Curve-Case 1

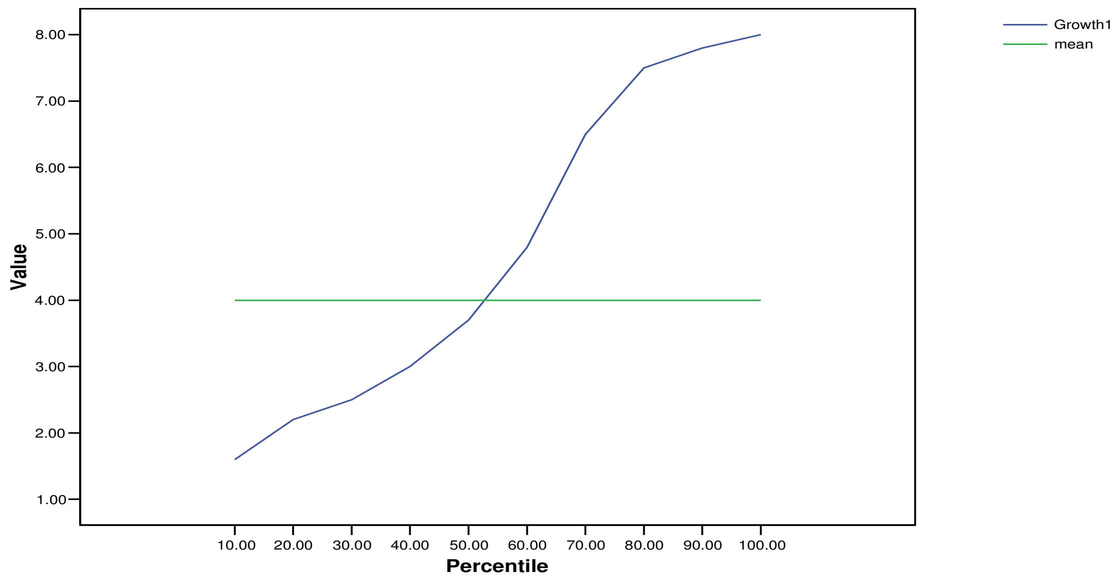

Figure 2: Growth Incidence Curve-Case 2

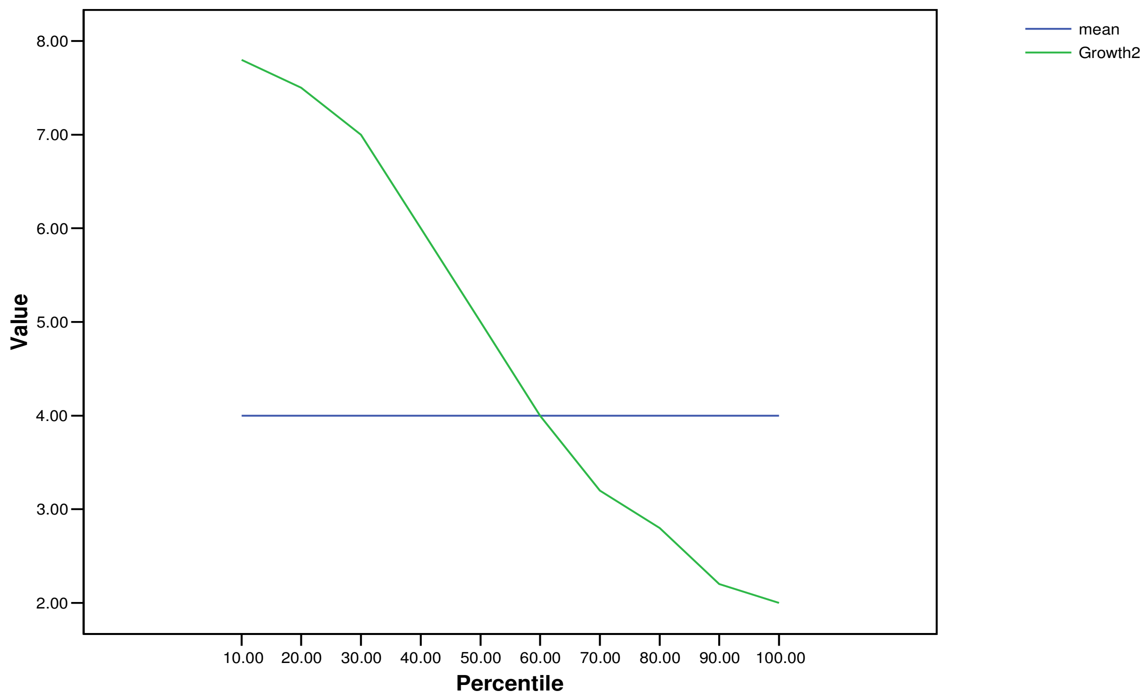

Figure 3: Growth Incidence Curve-Case 3

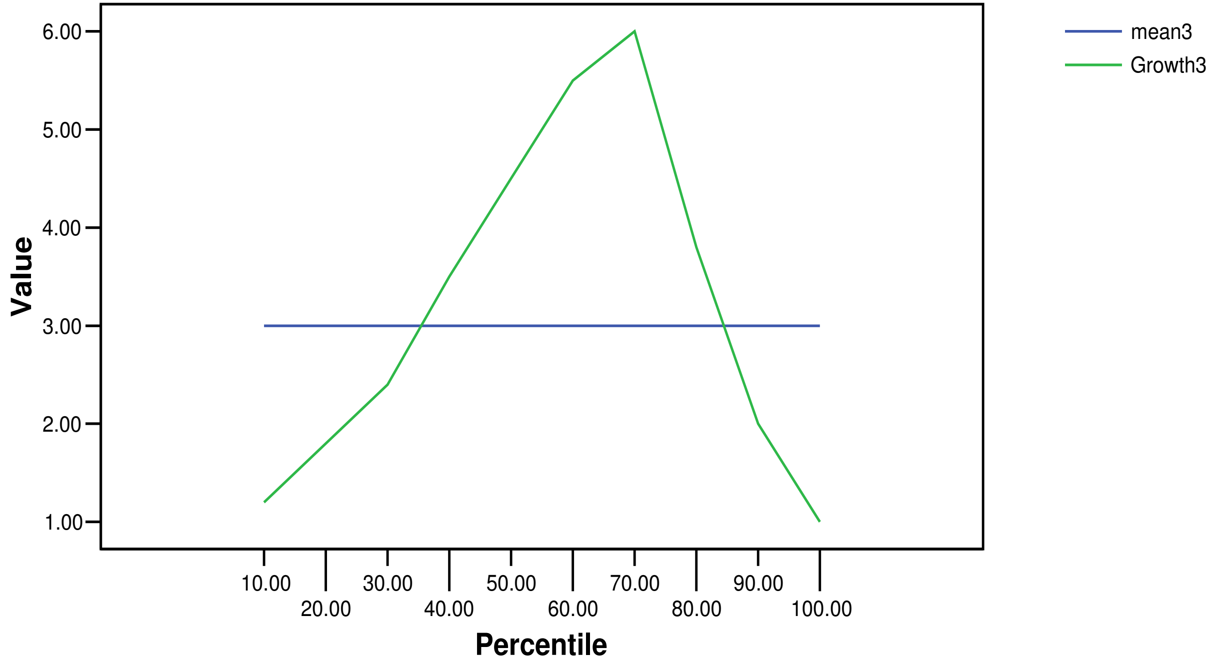

Figure 4: Growth Incidence Curve for China, 1990-1999

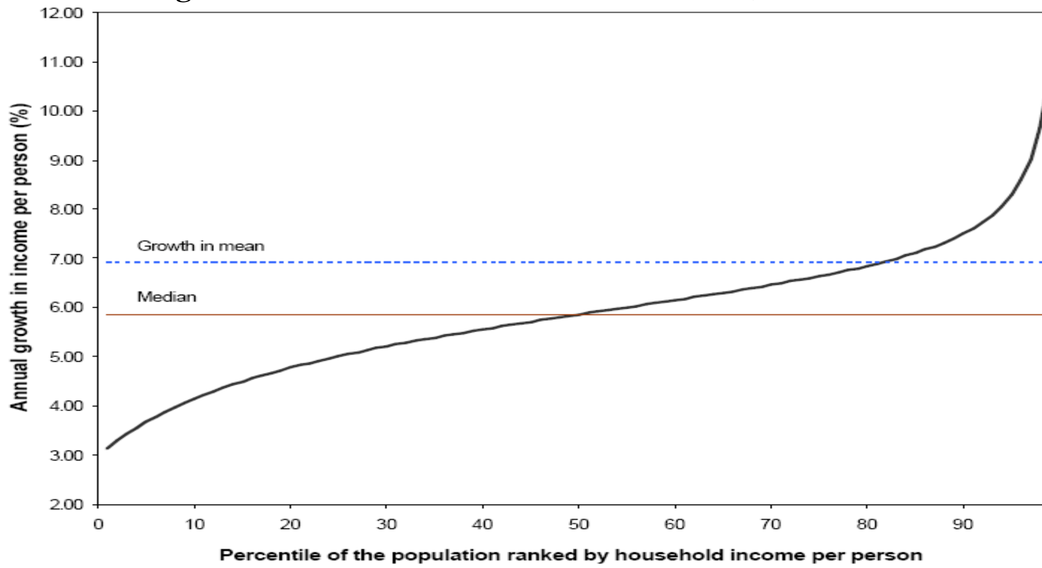

Figure 5: Growth Incidence Curve for China, 1993-1996

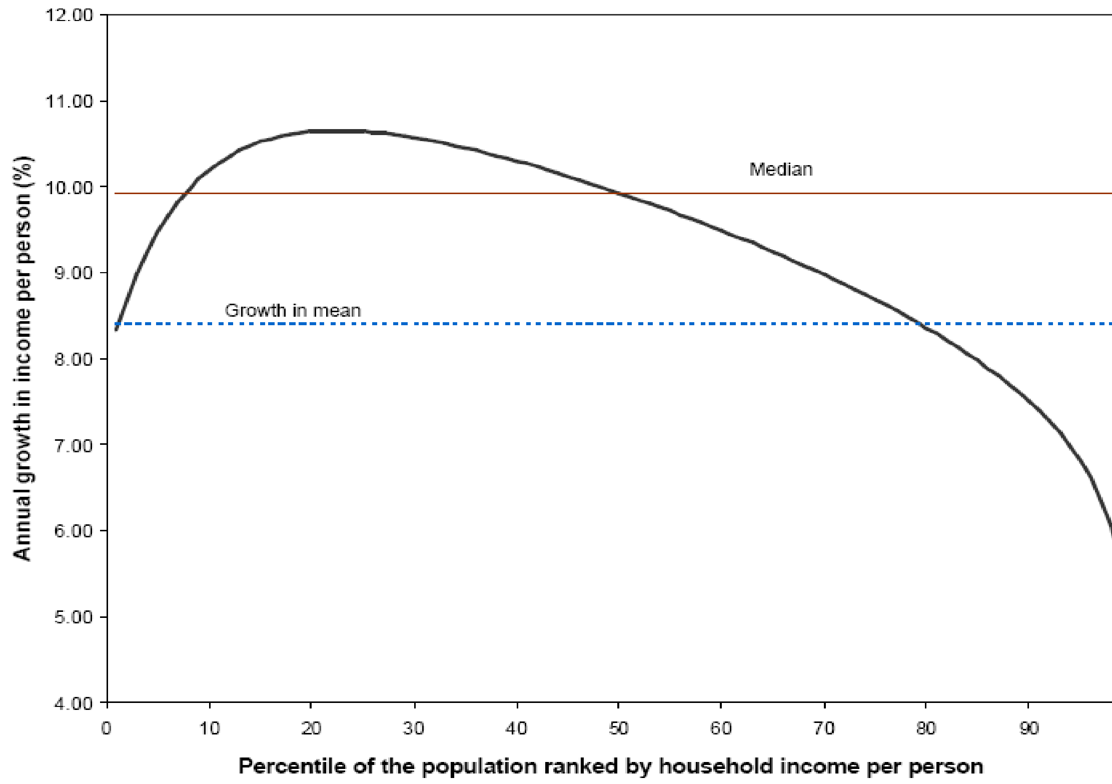

Table 3: Poverty Equivalent Growth

Year	Actual growth	PEGR
1	10.00	6.00
2	9.00	6.00
3	7.00	5.00
4	4.00	5.00
5	4.00	6.00
6	-1.00	-0.50
7	-0.50	-0.10
8	-0.50	-0.80
9	4.00	2.00
10	6.00	3.00

Table 4: Poverty Growth Curve

Percentile	Case I	Case II	Case II
10	7.50	6.00	-3.45
20	7.00	5.60	-3.12
30	6.80	5.40	-3.00
40	6.40	5.20	-2.85
50	6.20	5.19	-2.50
60	6.00	5.00	-2.20
70	4.85	4.20	-2.00
80	4.60	4.00	-1.80
90	4.00	3.60	-1.50
100	8.00	2.50	-1.00

Figure 6: Equivalent Growth Rate

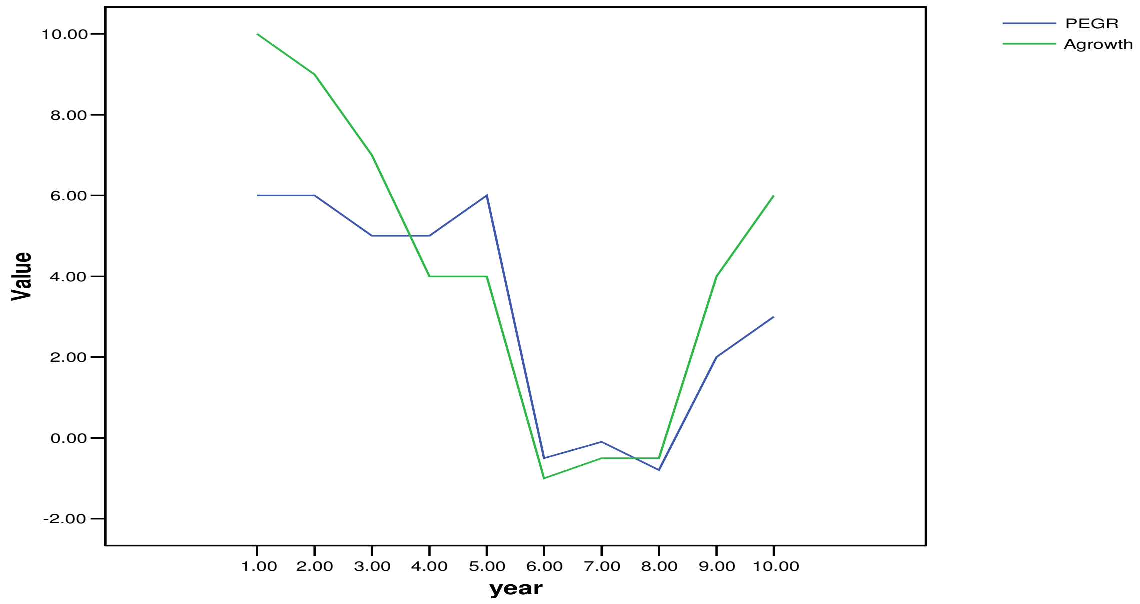

Table 7: Poverty Growth Curve

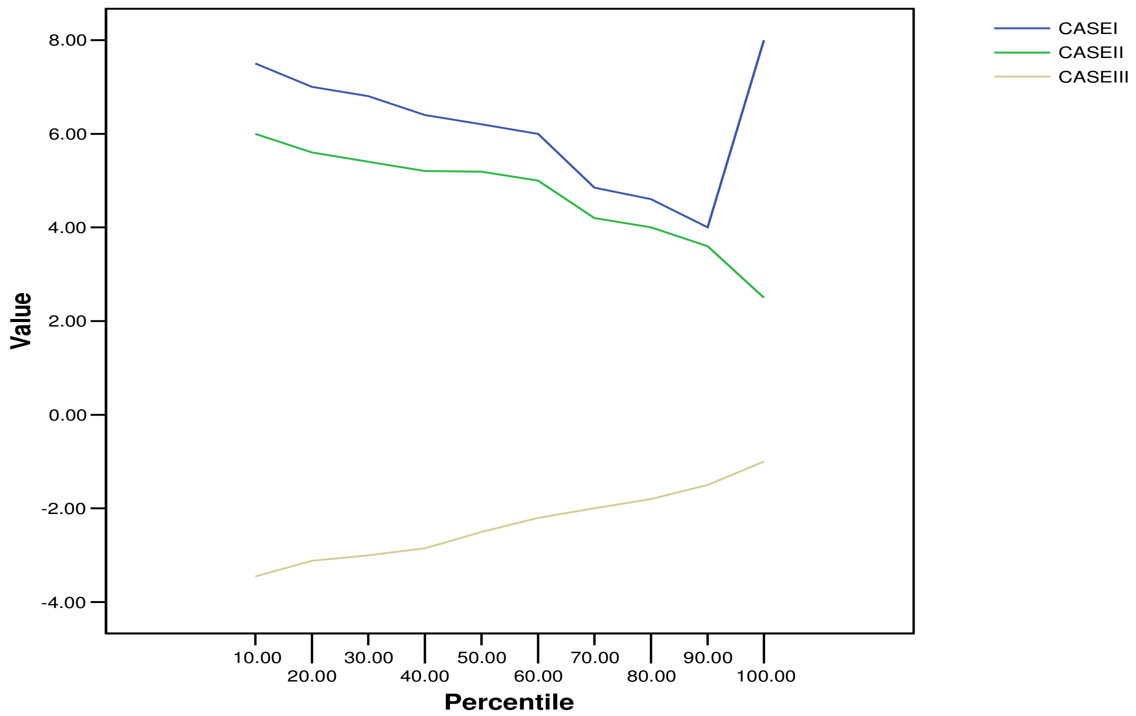

Table 5: Growth Elasticity of Poverty

STUDY	Countries	Periods/Intervals	Growth Elasticity Of Poverty
Adams 2003	50 countries	101	- 2.59
Ravalion and Chen 2003	42 countries	64	- 3.12
Bruno, Ravalion and Squire	20 countries	-	-2.12
Kakwani and Pernia (2000)	Korea	1994-95	-3.10
	Lao	1992/93-97/98	-0.70
	Philippines	1994-97	-2.50
	Thailand	1994-96	-3.10
	Vietnam	1992/93-97/98	-1.10
Pasha and Palanivel (2004)	Bangladesh	1980s 1990s	-0.29 -0.81
	Cambodia	1990s	-2.31
	China	1970s 1980s 1990s	-0.18 -1.26 -1.09
	India	1970s 1980s 1990s	-2.15 -0.60 -0.77
	Indonesia	1970s 1980s 1990s	-1.33 -1.35 0.72
	Lao PDR	1990s	-1.37
	Malaysia	1970s 1980s 1990s	-1.26 -1.36 0.63
	Nepal	1980s 1990s	0.33 0.27
	Pakistan	1970s 1980s 1990s	-2.73 -0.38 2.01
	Sri Lanka	1970s 1980s 1990s	-0.30 -2.28 1.24
	Thailand	1970s 1980s 1990s	-1.02 0.10 -0.63
	Vietnam	1990s	-1.18

Table 5 Cont.: Growth Elasticity of Poverty

STUDY	Countries	Periods/Intervals	Growth Elasticity Of Poverty
Christiaensen, Demery and Paternostro	Ethiopia	1994-1997	- 0.56
	Ghana	1992-1999	-0.95
	Madagascar	1993-1997 1997-1999 1993-1999	-0.27 -4.50 -0.11
	Mauritania	1987-1995	-0.82
	Nigeria	1992-1996	-1.30
	Uganda	1992-1997	-1.21
	Zambia	1991-1996 1996-1998	-0.58 0.37
Gasparini (2005)	Argentina	1992-1998 1998-2001 2001-2003 1992-2003	73.7 -6.4 -0.3 -3.6
	Chile	1990-1994 1994-1998 1998-2000 1990-2000	-1.4 -1.4 -4.4 -1.3
	Paraguay	1997-1999 1999-2001 2001-2002 1997-2002	-0.4 -3.3 -4.1 -0.6
	Uruguay	1989-1998 1998-2001 2001-2003 1989-2003	11.4 4.7 -3.8 -5.2

Table 6a: Pro-Poor Growth

Study	Country/Region	Measure	Interval	Value	Pro-poor
Kakwani and Pernia (2000)	Korea	Pro-poor growth index (PPGI)	1994-1995	1.14	yes
	Lao	PPGI	92/93-97/98	0.21	no
	Philippines	PPGI	1994-1997	0.67	no
	Thailand	PPGI	1994-1996	0.64	no
	Vietnam	PPGI	1992/93-97/98	0.84	no

Table 6b: Pro-Poor Growth in Africa

Study	Country/Region	Measure	Interval	%Pro-poor
Bingsten and Shemels	18 African Countries	White and Anderson	67 spells	55%
Bingsten and Shemels	Lao	Kakwani and Pernia	67 spells	40%

Table 6c: Pro-Poor Growth- International (Source- Son (2003))

Growth Type	Positive Growth	Negative Growth	Total
Pro-poor	84	11	95
Not pro-poor	71	23	94
Immiserizing	9	0	9
Inconclusive	35	8	43
Total	199	42	241

Table 6d: Pro-poor growth in Latin America

Country	Measure	interval	Value	Pro-poor
Argentina	Ravalion and Chen	1992-1998	-7.1	No
		1998-2001	-15.1	No
		2001-2003	1.8	Yes
		1992-2003	-8.0	No
	Poverty Equivalent Growth rate	1992-1998	-8.3	No
		1998-2001	-17.3	No
		2001-2003	-3.5	No
		1992-2003	-8.6	No
Chile	Ravalion and Chen	1990-1994	8.8	Yes
		1994-1998	2.5	Yes
		1998-2000	-1.9	Yes
		1990-2000	4.0	Yes
	Poverty Equivalent Growth rate	1990-1994	5.0	Yes
		1994-1998	4.4	Yes
		1998-2000	-1.2	No
		1990-2000	4.1	Yes
Paraguay	Ravalion and Chen	1997-1999	-16.1	No
		1999-2001	16.4	Yes
		2001-2002	-30.0	No
		1997-2002	-7.8	No
	Poverty Equivalent Growth rate	1997-1999		
		1999-2001		
		2001-2002		
		1997-2002	-6.5	No
Uruguay	Ravalion and Chen	1989-1998	-4.8	No
		1998-2001	5.9	Yes
		2001-2003	-12.1	No
		1989-2003	-3.7	No
	Poverty Equivalent Growth rate	1989-1998	-4.5	No
		1998-2001	13.5	Yes
		2001-2003	-14.5	No
		1989-2003	-4.0	No

Source: Gasparini (2005).

Table 7: Cross Country Evidence of Pro-Poor Growth

Negative Growth Inequality Rises				*Positive Growth/Inequality Rises*							
Anti-Poor Recession	*Yrs*	*g*	*g20*	*Broadly Shared Growth*	*Yrs*	*g*	*g20*	*Not Pro-poor By Any Definition*	*Yrs*	*g*	*g20*
Poland	20	-0.2	-1.4	Korea, Rep	32	6.7	6.6	Costa Rica	35	1.6	-0.1
Iran, Islamic Rep	15	-0.4	-0.7	Taiwan, China	31	6.3	6.2	Tanzania	27	1.5	-2.1
Slovak Republic	10	-0.4	-0.5	Hong Kong China	20	5.8	5.2	Bulgaria	10	1.5	-3.5
Niger	32	-0.6	-1.3	Singapore	20	5.4	5.2	Panama	26	1.4	-2.3
Sierra Leone	21	-0.8	-7.7	China	15	5.0	1.6	Nigeria	38	1.2	-0.5
Zambia	37	-1.0	-2.7	Malaysia	25	4.7	4.1	Dominican Republic	20	1.0	-0.2
Estonia	10	-1.7	-6.2	Thailand	36	4.2	3.1	El Salvador	30	0.7	-1.2
Latvia	10	-4.2	-7.4	Mauritius	11	3.7	1.6	Senegal	31	0.2	-0.5
Russian Federation	10	-5.6	-14.3	Brazil	33	2.5	0.3	Ethiopia	14	0.2	-1.2
				Colombia	31	2.3	2.1				
				Mexico	38	2.1	0.9				
				Ecuador	26	1.7	0.3				
				Philippines	40	1.5	0.5				
				Chile	24	1.4	1.1				
				Peru	33	0.4	0.1				
Negative Growth/Inequality Falls				*Positive Growth/Inequality Falls*							
Pro-Poor Recession	*Yrs*	*g*	*g20*	*Pro-Poor Biased Growth*	*Yrs*	*g*	*g20*		*Yrs*	*g*	*g20*
Guyana	37	-0.4	-0.1	Gabon	15	7.7	9.0	Trinidad & Tobago	31	1.8	2.1
Jordan	17	-0.6	1.0	Indonesia	35	3.7	4.4	India	34	1.8	2.2
Belarus	10	-1.8	-1.1	Tunisia	25	3.4	3.6	Bangladesh	32	1.3	1.5
Madagascar	33	-2.1	-1.7	Egypt, Arab Rep	32	2.8	4.5	Nepal	18	1.2	3.9
				Ghana	10	2.4	4.3	Jamaica	35	1.1	1.5
				Sri Lanka	32	2.3	3.4	Honduras	28	0.5	1.3
				Hungary	31	2.2	2.7	Bolivia	22	0.3	1.0
				Turkey	26	2.2	2.9	Venezuela, RB	31	0.1	0.1
				Pakistan	32	2.2	2.8				

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Figure 8: **Schema for Analyzing Reform, Growth, Poverty and Inequality**

Growth outcomes	Reforms have no impact on growth of the economy. Growth trajectory before and after reform remains the same	Reforms result in recession. Growth trajectory after reform lower than before reforms	Reforms result in growth. The growth trajectory after reforms higher than before reform
Impact on Poor	Poverty rate constant	Poverty rate constant	Poverty rate constant
	Poverty rate decreases	Poverty rate decreases	Poverty rate decreases
	Poverty rate increases	Poverty rate increases	Poverty rate increases
Impact on Inequality	Inequality constant	Inequality constant	Inequality constant
	Inequality decreases	Inequality decreases	Inequality decreases
	Inequality increases	Inequality increases	Inequality increases

Table 9: Growth in Latin America

	1960-70	1970-80	1980-90	1990-2000	1960-2000	1970-2000
LATIN AMERICA						
Argentina	2.29%	1.38%	-3.87%	4.22%	1.00%	0.57%
Bolivia	0.60%	2.01%	-2.22%	1.08%	0.37%	0.29%
Brazil	4.23%	5.67%	-0.26%	1.46%	2.77%	2.29%
Chile	2.19%	1.22%	1.28%	4.79%	2.37%	2.43%
Colombia	2.23%	3.11%	1.35%	0.87%	1.89%	1.78%
Costa Rica	1.85%	2.59%	-0.94%	1.75%	1.31%	1.13%
Ecuador	1.35%	6.16%	-1.17%	-0.85%	1.37%	1.38%
El Salvador	2.24%	0.05%	-1.66%	2.30%	0.73%	0.23%
Guatemala	2.44%	3.05%	-1.21%	0.84%	1.28%	0.90%
Jamaica	3.43%	-1.14%	1.72%	-1.05%	0.74%	-0.16%
Mexico	3.28%	3.27%	-0.43%	1.78%	1.97%	1.54%
Nicaragua	3.25%	-2.70%	-3.00%	-2.42%	-1.22%	-2.71%
Panama	4.98%	3.35%	-0.69%	1.96%	2.40%	1.54%
Paraguay	1.70%	4.46%	1.01%	-0.58%	1.64%	1.63%
Peru	3.73%	0.45%	-3.13%	2.47%	0.88%	-0.07%
Uruguay	0.43%	2.70%	-1.00%	2.81%	1.23%	1.50%
Venezuela	2.95%	-2.79%	-1.36%	-0.80%	-0.50%	-1.65%
Avg	***2.05%***	***1.56%***	***-0.74%***	***0.98%***	***0.96%***	***0.60%***
REFERENCE						
Japan	***9.27%***	***3.09%***	***3.53%***	***1.05%***	***4.23%***	***2.55%***
USA	***2.87%***	***2.66%***	***2.16%***	***2.30%***	***2.50%***	***2.37%***
East Asia (9)	***4.69%***	***5.36%***	***4.45%***	***3.95%***	***4.61%***	***4.58%***
World	***2.53%***	***1.99%***	***0.98%***	***1.32%***	***1.70%***	***1.43%***

Source: Heston, Summers and Aten (2002)

Growth of real per-capita GDP (percent annual average)

country	*1960-94*	*1960-75*	*1975-85*	*1985-94*
BOTSWANA	4.40	6.12	5.57	0.23
LESOTHO	3.72	5.91	2.49	1.44
SEYCHELLES	3.65	2.57	5.45	3.46
CAPE VERDE IS.	2.83	0.15	8.25	1.25
MAURITIUS	2.48	1.61	1.50	5.02
SWAZILAND	2.07	5.24	-1.57	0.84
CONGO	1.76	2.79	4.95	-3.49
GABON	1.59	8.07	-3.21	-3.89
TANZANIA	1.49	2.99	-0.69	1.41
KENYA	1.12	1.83	-0.39	1.60
CAMEROON	1.05	1.95	5.47	-5.36
SOUTH AFRICA	0.92	3.06	-0.58	-0.97
TOGO	0.89	3.46	0.38	-2.83
GUINEA-BISS	0.88	2.85	-1.69	0.47
NAMIBIA	0.84	3.50	-3.06	0.75
NIGERIA	0.84	3.66	-1.57	-1.20
MALAWI	0.64	1.95	0.18	-1.01
ETHIOPIA	0.64	1.16	-0.20	0.68
ZIMBABWE	0.60	2.06	-0.96	-0.10
GUINEA	0.48	0.39	0.36	0.77
BURKINA FASO	0.37	-0.19	1.74	-0.20
MAURITANIA	0.36	1.15	-1.26	0.84
GAMBIA	0.28	1.33	-0.06	-1.09
GHANA	0.27	0.10	-1.43	2.43
UGANDA	-0.05	0.23	-1.35	0.91
MALI	-0.14	-0.71	1.43	-0.94
SENEGAL	-0.23	-0.14	0.33	-1.01
COTE D'IVOIRE	-0.35	3.18	-1.81	-4.61
BENIN	-0.37	-0.30	0.51	-1.44
NIGER	-0.45	0.75	-0.62	-2.24
MOZAMBIQUE	-0.62	0.14	-4.48	2.39
BURUNDI	-0.91	-2.37	1.65	-1.32
CENTRAL AFR.R.	-0.98	-0.30	-0.97	-2.12
ZAMBIA	-1.22	1.74	-4.53	-2.46
SIERRA LEONE	-1.29	0.62	-2.62	-2.14
ANGOLA	-1.64	-1.00	-0.42	-4.06
CHAD	-1.94	-1.63	-3.71	-0.50
RWANDA	-1.98	1.14	1.74	-11.34
MADAGASCAR	-2.11	-1.23	-2.59	-3.04
COMOROS	..	..	..	-1.93
LIBERIA	..	1.77	-1.00	..
SOMALIA	..	-0.48	-1.98	..
SUDAN	..	..	-0.15	0.85
ZAIRE	..	1.48	-3.65	..
Average	**0.51**	**1.59**	**-0.11**	**-0.83**

Table 11: Adjustment and Poverty in Africa

Country	Head count ratio 1985%	Headcount Ration 1999%	Change in poverty(% points)	Change in Macro policies (score)
Cote d'Ivoire	40.31	45.93	5.62	-1.3
Ghana	20.00	33.49	4.49	2.2
Kenya	53.17	58.83	5.66	0.5
Mauritania	32.17	35.52	3.35	0.5
Rwanda	31.59	37.94	6.35	-0.2
Senegal	49.65	54.75	5.10	0.5
Tanzania	53.53	59.79	6.26	1.5
Uganda	37.10	44.69	7.59	0.2
Zambia	48.53	52.54	4.01	-0.3
Zimbabwe	56.71	62.26	10.55	1.0

Source: World bank 1994

Table 12: Evaluating Impact of Policy

Sector	Population involved in activity	Adjustment coefficient
Industrial	5	15
Small and micro enterprises	10	6
Commercial agriculture	5	20
Subsistence crop farming	55	2
Subsistence animal husbandry	15	1
Commercial fishing	5	10
Subsistence fishing	5	0

Appendix 1: African Growth: 1960-2003

	1960–2003		1990–94		1995–99		1990–99		2000–03	
1	Equatorial Guinea	7.1	Mauritius	5.4	Equatorial Guinea	32.9	Equatorial Guinea	17.8	Equatorial Guinea	19.2
2	Botswana	6.9	Uganda	3.0	Rwanda	8.9	Mauritius	4.8	Sierra Leone	11.6
3	Mauritius	4.1	Seychelles	3.0	Mozambique	6.8	Mozambique	3.8	Botswana	5.5
4	Seychelles	2.4	Mali	2.8	Cape Verde	5.8	Burkina Faso	3.7	Chad	5.0
5	Cape Verde	2.3	Equatorial Guinea	2.7	Malawi	5.7	Uganda	3.5	Mozambique	4.6
6	Swaziland	2.2	Burkina Faso	2.7	Angola	4.7	Cape Verde	3.5	Mauritius	3.9
7	Burkina Faso	2.1	Ghana	2.0	Burkina Faso	4.6	Seychelles	3.4	Cape Verde	3.8
8	Comoros	1.8	Botswana	1.6	Mauritius	4.1	Botswana	2.7	Tanzania	3.8
9	Mali	1.8	Chad	1.4	Uganda	3.9	Mali	2.7	Burkina Faso	3.2
10	Gambia, The	1.6	Lesotho	1.3	Botswana	3.8	Ghana	1.9	Angola	3.0
11	Lesotho	1.5	Swaziland	1.3	Seychelles	3.7	Malawi	1.9	Mali	2.8
12	Gabon	1.5	Guinea-Bissau	1.1	Mali	2.5	Lesotho	1.8	Nigeria	2.4
13	Mozambique	1.5	Cape Verde	1.1	Côte d'Ivoire	2.5	Benin	1.6	São Tomé and Príncipe	2.3
14	Cameroon	1.4	Benin	0.9	Lesotho	2.4	Swaziland	1.2	Zambia	2.1
15	Burundi	1.4	Mozambique	0.7	Senegal	2.4	Namibia	0.7	Uganda	2.0
16	Chad	1.2	Namibia	0.7	Ethiopia	2.2	Senegal	0.6	Cameroon	1.9
17	Congo, Rep. of	1.2	Gabon	0.5	Guinea	2.2	Rwanda	0.5	Ghana	1.8
18	Kenya	1.1	Gambia, The	0.1	Benin	2.2	Guinea	0.5	Benin	1.8
19	Tanzania	1.0	Nigeria	–0.1	Ghana	1.8	Chad	0.5	Lesotho	1.7
20	South Africa	0.9	Comoros	–0.4	Cameroon	1.7	Tanzania	0.4	Congo, Rep. of	1.5
21	Guinea-Bissau	0.9	Tanzania	–0.5	Tanzania	1.3	Gambia, The	0.3	Rwanda	1.5
22	Malawi	0.8	Zimbabwe	–0.5	Swaziland	1.2	Côte d'Ivoire	0.3	South Africa	1.4
23	Nigeria	0.8	Burundi	–0.7	Burundi	0.7	Burundi	—	Senegal	1.3
24	Guinea	0.7	Guinea	–1.2	Namibia	0.7	Zimbabwe	—	Gambia, The	0.9
25	São Tomé and Príncipe	0.7	Senegal	–1.2	Kenya	0.6	Gabon	–0.1	Swaziland	0.5
26	Uganda	0.7	Kenya	–1.3	Gambia, The	0.5	Nigeria	–0.1	Niger	0.4
27	Benin	0.5	São Tomé and Príncipe	–1.8	Zimbabwe	0.5	Ethiopia	–0.2	Namibia	0.0
28	Ethiopia	0.4	Côte d'Ivoire	–1.9	Central African Rep.	0.4	Kenya	–0.3	Guinea	–0.1
29	Togo	0.4	Malawi	–2.0	South Africa	0.4	Comoros	–0.6	Ethiopia	–0.2
30	Rwanda	0.4	South Africa	–2.0	Niger	0.3	South Africa	–0.8	Comoros	–0.4
31	Namibia	0.3	Ethiopia	–2.6	Togo	—	Guinea-Bissau	–0.8	Togo	–0.8
32	Côte d'Ivoire	0.3	Congo, Rep. of	–3.1	Madagascar	—	São Tomé and Príncipe	–1.5	Madagascar	–1.0
33	Ghana	0.2	Togo	–3.1	Nigeria	–0.1	Niger	–1.5	Kenya	–1.0
34	Angola	0.1	Madagascar	–3.1	Chad	–0.4	Togo	–1.6	Seychelles	–1.2
35	Zimbabwe	0.1	Niger	–3.2	Congo, Rep. of	–0.6	Madagascar	–1.6	Gabon	–1.8
36	Niger	–0.1	Central African Rep.	–3.9	Gabon	–0.7	Angola	–1.7	Burundi	–2.2
37	Sierra Leone	–0.2	Sierra Leone	–4.8	Comoros	–0.8	Central African Rep.	–1.7	Guinea-Bissau	–2.4
38	Zambia	–0.3	Zambia	–5.4	São Tomé and Príncipe	–1.1	Congo, Rep. of	–1.8	Central African Rep.	–3.2
39	Senegal	–0.8	Cameroon	–6.6	Zambia	–1.5	Cameroon	–2.4	Congo, Dem. Rep. of	–3.3
40	Central African Rep.	–0.8	Rwanda	–7.9	Guinea-Bissau	–2.8	Zambia	–3.4	Malawi	–3.8
41	Madagascar	–1.2	Angola	–8.2	Congo, Dem. Rep. of	–4.8	Congo, Dem. Rep. of	–8.1	Côte d'Ivoire	–4.7
42	Congo, Dem. Rep. of	–2.7	Congo, Dem. Rep. of	–11.5	Sierra Leone	–13.5	Sierra Leone	–9.1	Zimbabwe	–6.5

Sources: World Bank, World Development Indicators database, 2004; World Economic Outlook (WEO) database, 2004; and IMF staff estimates.
Note: Data not available for Eritrea and Liberia.