

# Pro-poor growth: a review of what we know (and of what we don't)

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## Abstract

This paper reviews a number of recent contributions to the pro-poor growth literature. In doing so, it divides these contributions into three different groups. The first group consists of papers that have explored the relative contributions of income growth and distributional changes to changes in poverty. A second group of papers focuses on the growth-inequality relationship, with some paying attention to the potential impact of the growth process on inequality and others stressing the potential effect of inequality on growth. The third group of papers is less related to the mechanics of what Bourguignon (2004) refers to as the poverty-growth-inequality triangle and more to the policies that countries should pursue in a successful poverty reduction strategy.

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## I. Introduction

While poverty reduction has become the main goal of development efforts (as evidenced by the adoption of the Poverty Reduction Strategy Paper – PRSP – Approach and of Millennium Development Goals – MDG – frameworks by most international agencies), there has been an ongoing, and admittedly sometimes heated, debate about the elements that should be at the center of any sensible poverty reducing strategy. Should such a strategy have a growth bias or instead mainly concentrate on empowering the poor to benefit from growth? Is inequality affected as a general rule by growth? How does existing inequality affect the impact of growth on poverty, and how does inequality affect growth? As an indicator of the interest generated by this debate, a quick search in Yahoo for the string "Pro-poor Growth" generates about 18,700 hits, up from about 12,000 in late 2003 and about 8,000 in March 2003.

Several factors may have contributed to this interest. First, having poverty (rather than growth) as the main goal of development has complicated matters. It used to be the case that policy makers and the economics profession more generally were already struggling to make growth happen. Now, practitioners need to add a new concern, namely who benefits from growth, as a way to infer its overall impact on poverty. This in turn requires being able to discriminate among the potential different growth patterns associated with different poverty reduction strategies.

A second possible reason is the renewed interest in both the distributional implications of policy reforms and the determinants of inequality. Although inequality and poverty are very different phenomena they are strongly related. In fact, for a given level of mean income, higher inequality will typically imply higher poverty levels. Also, for a given income growth rate, higher inequality will typically imply a lower rate of poverty reduction.

A third possible reason may be the apparent disconnect between how economists at Multilateral Institutions, at least at the World Bank, view the policies they advise and how opinion leaders around the globe view those very same policies. According to the Global Poll (2002), opinion leaders are roughly split between those who think that reforms recommended by the World Bank hurt the poor and those who think that these reforms have a positive impact on poverty<sup>1</sup>. Also according to the Global Poll, sizeable minorities of opinion leaders all over the world believe that the Bank's actions have increased the gap between rich and poor people in their countries.<sup>2</sup>

This paper enters this debate by reviewing recent contributions to the pro-poor growth literature. In doing so, and to facilitate comparison, we divide these contributions into three different groups. First, we consider papers that have explored the relative contribution of income growth and distributional changes to changes in poverty. The issue is relevant because even if poverty responds to both factors, gaining knowledge

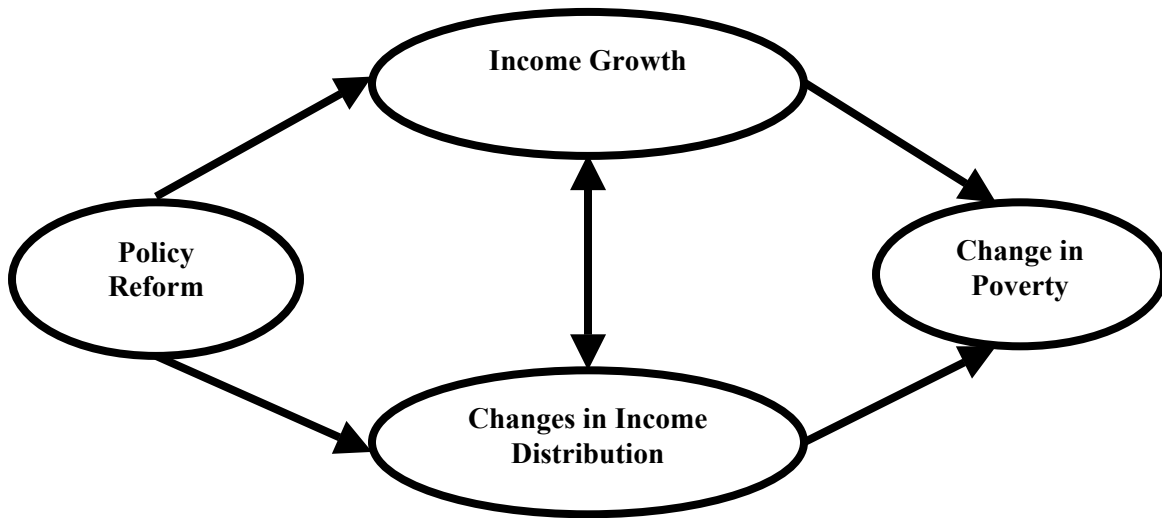
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<sup>1</sup> The Global Poll: Multinational Survey of Opinion Leaders 2002, Chart 21.

<sup>2</sup> The Global Poll: Multinational Survey of Opinion Leaders 2002, Chart 19.

about their relative importance may be helpful when trying to strike the right balance between pro-poor and pro-growth interventions. A second group of papers considered below focuses on the growth-inequality relationship, with some paying attention to the potential impact that the growth process has on inequality and others stressing the potential effect of inequality on growth. These papers have largely focused on whether countries will have to face trade-offs between reducing inequality and improving growth performance, or instead whether there exists a virtuous circle in which growth leads to lower inequality, with lower inequality in turn leading to faster growth. The third group of papers we consider is less related to the mechanics of what Bourguignon (2004) refers to as the poverty-growth-inequality triangle and more to the policies that countries should pursue in a successful poverty reduction strategy. Given that poverty outcomes will depend on how a given policy affects growth and inequality, assessing how appropriate a particular policy is for a poverty reduction strategy will require knowledge about the links between policies and growth on the one hand and between those same policies and inequality on the other. Figure 1 graphically presents these potential interrelations in a unified framework.

**Figure 1. Policies, growth, distributional change and poverty reduction.**



To anticipate some of the results discussed below, there seems to be some consensus in a few areas: (i) growth is fundamental for poverty reduction, and in principle growth as such does not seem to affect inequality; (ii) growth accompanied by progressive distributional change is better than growth alone; and (iii) high initial inequality is a brake on poverty reduction. Beyond these points of agreement, however, there seems to be little consensus. In particular, we still do not know enough about the potential impact of inequality and redistribution on growth, and we know very little about the potential impact of different policies on inequality and the existence of potential trade-offs between pro-poor and pro-growth policies. Also, while there seems to be some empirical evidence pointing towards changes in inequality being responsible for significant short run fluctuations in poverty, there is also the possibility that the observed relationship is mainly driven by “noise” in the data.

The rest of the paper is organized as follows Section II reviews the poverty growth-inequality link. Section III focuses on the potential relationship between inequality and growth. Section IV reviews the results of papers that have explored the determinants of inequality. Section V closes with some conclusions.

## **II. The poverty growth inequality link**

There are linkages between changes in the level of poverty in any given country with changes in the average income level (i.e. growth) and changes in income inequality (i.e. income redistribution). This would suggest that a sensible poverty reduction strategy will have to focus both on growth issues and on the pattern of that growth (i.e. who benefits from growth). But what is the relative importance of these elements?

In a recent paper, Kraay (2003) has explored these issues and identified three potential sources of pro-poor growth (understood as growth that leads to a fall in a given poverty measure). These are: (i) a high growth rate; (ii) a high sensitivity of poverty to growth; and (iii) a poverty reducing pattern of growth. His results suggest that roughly half of the variation in short-run changes in poverty can be explained by growth in average incomes. In the medium- to long-run, growth would account for between 66 and 90 percent of the changes in poverty. Virtually all of the remainder of the variance would be due to changes in relative incomes, with the cross country sensitivity of poverty to growth accounting for little of the variation.

There is, however, a different way to look at this issue – by focusing on the expected change in poverty (rather than on the share of variance explained) that would be associated with a one percent growth rate (i.e. the poverty elasticity of growth), and how this impact is affected by inequality. In this regard, Ravallion (1997) presents a parsimonious empirical model of the relationship between poverty and growth where the rate of poverty reduction associated with a given growth rate depends on a distributional correction (one minus the initial Gini index). In Ravallion (2004) the model is improved (in empirical terms) by using an adjustment for possible nonlinearities in the relationship between the growth elasticity of poverty and the initial inequality.

Bourguignon (2002) also focuses on the impact of growth on poverty reduction. However, he adopts a different approach. Specifically he explores alternative specifications for the relationship between poverty, inequality and growth and concludes that, at least for headcount poverty,<sup>3</sup> assuming that income follows a log normal distribution may prove satisfactory. This in turn is useful because it allows computing the growth and the changes in inequality elasticities of poverty as a function of per capita income levels (relative to the poverty line) and inequality (as measured by the Gini).

Table 1 (taken from Lopez and Serven (2004)) presents the theoretical elasticities of headcount poverty to growth and inequality computed under the assumption that the

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<sup>3</sup> Admittedly Bourguignon (2004) also concludes that if one focuses on P1 (the poverty gap ) or P2 (the squared poverty gap), the functional approximations he explores may prove unsatisfactory.

income distribution can be approximated by a long-normal density function. The elasticities are computed for different Gini coefficients (running from .3 to .6) and different levels of development (expressed in terms of the share of the poverty line to per capita GDP). Table 1 suggests that in a country where the poverty line is about 33 percent of per capita income and the Gini coefficient is .3, the growth elasticity of poverty would be  $-4$  (i.e. growth of one percent of GDP would reduce poverty by 4 percent) whereas the inequality elasticity would be 5.2 (a one percent increase in the Gini would increase poverty by 5.2 percent). In contrast, if the same country had had high inequality levels, say a Gini of .6, the growth elasticity of poverty would have been  $-0.9$ , and the inequality elasticity 2. Thus high initial inequality levels are likely to represent a barrier for poverty reduction since both the impact of growth on poverty and the impact of progressive distributional change on poverty will be much smaller than in countries with a better income distribution.

Table 2 presents these same results in a different way, and reports (also for different levels of inequality and development) the share of variance in the changes in poverty that would be due to growth.<sup>4</sup> Thus a high entry (close to 1) in this table would imply that changes in poverty are mainly driven by growth (i.e. a pro growth strategy will likely be a good poverty reduction strategy), whereas a low entry (close to zero) would imply that changes in poverty are mainly driven by changes in inequality (i.e. a pro-growth strategy that does not take into account potential increases in income inequality may lead to disappointing results on the poverty front).

Inspection of table 2 suggests some interesting features. First, for a given inequality level, the richer a country is the more important that inequality becomes in explaining changes in poverty. Put in other words in poor countries a pro-growth bias will be key to reduce poverty (i.e. policy makers will be willing to trade-off slight deteriorations in inequality for faster growth). For example, according to table 6 in countries where the poverty line is 110 percent of per capita income<sup>5</sup> the share of changes in poverty due to growth would be, depending on initial inequality levels between two-thirds (high inequality) and 99 percent (low inequality). In contrast, in richer countries (for example with a poverty line equivalent to 33<sup>6</sup> percent of per capita income) growth explains a much smaller share of changes in poverty: depending on inequality levels this share would be between 17 and 37 percent. This implies that in low-income countries growth has to be at the center of any development strategy but as income levels increase attention should also be paid to the pattern of growth.

A second feature that emerges from table 2 is that for a given income level, it is also the case that the more unequal a country is the smaller the share of variance explained by growth. Again, this would suggest that in more unequal countries one has to pay more

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<sup>4</sup> Here we exploit the fact that empirically growth and changes in the log gini have a similar variance. Thus the share of the variance of changes in poverty due to growth or to inequality will just depend on the growth and inequality elasticities.

<sup>5</sup> With a US\$1 a day poverty line this would imply a per capita income of about US\$330.

<sup>6</sup> With a US\$1 a day poverty line this would imply a per capita income of about US\$1100.

attention to the potential deterioration of income levels that might accompany the growth process.

All in all these findings would justify a pro-growth bias in low income and low inequality countries and policy packages that adequately balance growth and inequality objectives in richer and more unequal countries.

### **III. The growth-inequality link**

The theoretical literature offers a number of different explanations for a potential link between growth and inequality, with some of them stressing a growth-to-inequality type of causality while others put more stress on an inequality-to-growth direction of causality.

On the growth-to-inequality potential causality, the starting point should be the Kuznets hypothesis. This hypothesis suggests that the distribution of income would deteriorate over the initial stages of development as an economy transforms from rural to urban and from agricultural to industrial. Subsequently, inequality would decrease as the labor force in the industrial sector expands and that of the agricultural sector falls.

More recently, however, a number of economic models have argued that technological progress (arguably the major source of economic growth) may lead to higher inequality whenever it is not neutral, or in other words whenever it affects the productivity of different types of labor in different ways. For example if the introduction of new technologies increases the demand for skilled labor (relative to unskilled labor), one might argue that inequality will likely increase. Admittedly, one also has to consider that if the higher growth associated with technological progress leads to an expansion in the pool of skilled labor, the impact of technological progress on education is likely to be ambiguous.

As for the impact of inequality on growth, the theoretical literature is divided between those who suggest that inequality is detrimental for growth, and those who predict that inequality is conducive to higher growth. There are three main arguments for the detrimental impact of inequality on growth.

The first is the political economy argument (Alesina and Rodrick (1994)), which is based on the following three premises: (i) redistributive government expenditure and taxation are negatively related to growth because of their negative effect on capital accumulation; (ii) taxes are proportional to income but the benefits of expenditure accrue equally to all individuals, which in turn implies that an individual's preferred levels of taxation and expenditure are inversely related to his income; and (iii) the tax rate selected by the government is the one preferred by the median voter. Taken together, those premises would imply that growth increases as inequality falls.

A second argument for an inequality-to-growth direction of causality relies on the so-called sociopolitical instability approach (Alesina and Perotti (1996)) which can be summarized as follows: (i) highly unequal societies create incentives for individuals to engage in activities outside normal markets, such as crime, etc; (ii) sociopolitical instability discourages accumulation because of current disruptions and future uncertainty. This approach would also imply that growth increases as inequality falls.

A third argument for the proposition that increases in inequality lead to lower growth is the presence of credit constraints. Galor and Zeira (1993) note that if (i) the process of development is characterized by complementarity between physical and human capital so that growth increases as investment in human capital increases; and (ii) credit constraints prevent poorer individuals from investing in education, then inequality will adversely affect growth prospects by reducing the number of individuals who are able to invest in human capital. Similarly Aghion et al. (1999), show that if (i) there are decreasing returns with respect to individual capital investments; and (ii) credit imperfections mean that individual investments are an increased function of initial endowments, then inequality would be detrimental to growth by concentrating investment in fewer richer people (with a lower marginal return to investment).

It is worth noting here that even if the three arguments above predict that inequality hampers growth, their predictions on the impact of redistribution on growth are different. For example, the political economy argument is based on the premise that progressive distributional change has a negative impact on growth. On this argument, redistribution would negatively affect growth through two different channels. First, it would provide a disincentive to work effort from those on the receiving side. Second, it would discourage investment from those who transfer the bulk of resources. On the other hand, the sociopolitical and credit constraints arguments would predict that redistribution – by increasing political stability in the first case and by creating investment opportunities with a high marginal return in the second case – would have a positive impact on growth.

Admittedly, there are also models that predict that inequality is likely to be growth enhancing. First, one may consider Kaldor's hypothesis that the marginal propensity to save of rich people is higher than that of poor people. Then if the investment rate is positively related to the saving rate, and growth is positively related to investment, more unequal economies can be expected to grow faster. Bourguignon (1981) builds a more elaborate model and shows that with a convex saving function, aggregate output depends on the initial distribution and is higher the more unequal society is.

A second reason why inequality may lead to faster growth is related to investment indivisibilities. If new investment projects require large initial sums, in the absence of effective capital markets that allow pooling of resources by small investors, wealth concentration would support new investment and therefore lead to faster growth.

A third reason supporting this argument can be based on the potential trade offs between efficiency and equality. For example compressed wage structures that do not reward

merit will lead to more equal societies, but it also likely that they will reduce workers' incentives to put in additional effort or aim at outstanding achievements Mirrlees (1971).

The previous discussion suggests a clear division of opinion in the theoretical literature, but what does the empirical literature suggest? On the growth to inequality relationship, the results found in the empirical literature are quite unanimous. The results in Deininger and Squire (1996), Chen and Ravallion (1997), Easterly (1999) and more recently, Dollar and Kraay (2002) all suggest that growth, as such, does not have an impact on inequality.

Unfortunately, on the inequality to poverty link the empirical literature is less unanimous and shows the same division that the theoretical models suggest. Alesina and Rodrik (1994) and Perotti (1996) use one cross section to run a regression of the average yearly growth rate of per capita GDP over 1960-85 on initial inequality (as measured by the Gini coefficient in Alesina and Rodrik (1994) and as measured by the share in income of the third and fourth quintile in Perotti (1996)) and a number of standard control variables. In both works the results suggest that inequality in income is negatively associated with subsequent growth. In Alesina and Perotti (1996), the authors test whether income inequality raises political instability, and whether the latter reduces investment, identifying a potential channel for an inverse relationship between income inequality and growth.

Instead Li and Zou (1998) and Forbes (2000) review these results using fixed effects estimates arguing that omitted country specific effects will bias the OLS estimates, and that if one is to address how a change in inequality within a given country is related to growth within that country, a panel framework is more appropriate. The results of Li and Zou (1998) are based on a standard fixed effects estimation whereas those of Forbes (2000) are based on the first differences Generalized Methods of Moments (GMM) estimator proposed by Arellano and Bond (1991). In both papers the conclusion is that income inequality (as measured by the Gini coefficient) is positively associated with economic growth.

To introduce even more variability in these results, Barro (2000) uses a three-stage least squares (3SLS) estimator which treats country specific effects as random errors, arguing that the differencing in running fixed effects may exacerbate the biases. In contrast to works reviewed above he finds no relationship between inequality and growth. Barro (2000) also finds that the investment ratio does not depend significantly on inequality.

On the impact of redistribution on growth it is worth noting the work by Easterly and Rebelo (1993) and Perotti (1996). Using several measures of redistribution (marginal tax rates, average tax rates, social spending) Easterly and Rebelo (1993) find that redistribution is likely to have a positive impact on growth. Similarly, Perotti (1996) tests whether income inequality has an impact on the marginal tax rate, and whether the latter affects growth. His results suggest that while inequality may play no role in setting the marginal tax rate, higher marginal tax rates will have a positive impact on growth.<sup>7</sup>

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<sup>7</sup> Admittedly, neither the work of Perotti nor that of Easterly and Rebelo control for fixed effects which, as noted above, seem to be responsible for the change in the sign of the impact of inequality on growth.

All in all the previous discussion suggest that there is some consensus (at least in the cross country empirical literature) on the lack of causality from growth to income distribution in one or the other direction. However, on the potential causality from inequality to growth, views are much more divided, with some studies concluding that inequality leads to faster growth, but others suggesting that inequality is likely to lower growth. All the results are summarized in table 3.

#### **IV. The policies-growth-inequality link**

The previous two sections have explored the poverty-growth-inequality triangle. However, from a policy perspective, there is another issue that is likely to be more interesting than the existence of empirical regularities between growth, inequality, and poverty, namely what kind of policies should a country pursue in a successful poverty reduction strategy. Since poverty outcomes will depend on how a given policy affects growth and inequality, assessing how appropriate a particular policy is for a poverty reduction strategy will require knowledge about the links between policies and growth on the one hand, and between those same policies and inequality on the other hand.

On the growth front, the literature is quite rich and there are several empirical models that may offer guidance as to the expected impact that a particular policy may have on long-run growth. On the inequality front, however, our state of knowledge is much more limited. In principle, one might take the result pointing to lack of causality from growth to inequality mentioned above at face value and select policies on the basis of their expected impact on growth. Further, as noted by Lundberg and Squire (2003) most pro-growth policies might be expected also to have an impact on inequality, and in some cases even conflict with the growth objective. Thus advising on the expected growth impact of policies alone could lead to unpleasant outcomes (as the anti-globalization movement has been pointing out repeatedly over the last few years). Beyond the anti-globalization claims, Easterly (2001) finds that Bank and Fund structural adjustment tends to reduce the growth elasticity of poverty, a result that would be consistent with a positive relationship between increases in inequality and the implementation of adjustment programs. Easterly speculates that this may be due to the poor being ill placed to take advantage of the new opportunities created by structural adjustment reforms.

Unfortunately, this is likely to be the weakest strand of the empirical literature on pro-poor growth, and not only because one has to face the inherent difficulties of linking a purely micro phenomenon like poverty changes to policies (which are usually in the macro domain), but also because most of the papers focusing on this issue explore the determinants of inequality rather than poverty (probably due to data constraints). As noted above inequality does matter for poverty reduction, and in principle it could be the case that a pro-growth policy – if leading to a significant deterioration in income distribution – results in an increase in poverty. Thus the need to focus on income distribution issues. Similarly, if the analysis of a policy is carried out with the only purpose of assessing its impact on income distribution, the results are also likely to be partial, in particular since many policies are implemented with an efficiency objective in

mind. However, unless these results are subject to subsequent analysis, it will be difficult to assess the relative importance of a policy for poverty reduction, especially in those cases where a policy presents a trade-off between growth and inequality objectives.

In addition there is the problem that available empirical work relies on different controls (only a few variables are usually included in all the papers), estimation techniques (some studies use simple OLS, whereas others present more refined estimates based on SUR techniques, IV, and GMM), and even model specifications (in some cases the dependent variable is the level of the Gini whereas in some others it is the change in the Gini; similarly, some studies include fixed effects whereas others present pooled estimates). With these caveats in mind, we next review recent work by Barro (2000), Dollar and Kraay (2002), Li and Zou (2002), Kraay (2003), Lundber and Squire (2003), and Lopez (2004).

The Barro (2000) results are based on a regression (estimated using the SUR technique) of the levels of inequality on a set of controls including (logged) income, primary, secondary and higher education, the rule of law, democracy, and trade. He presents results both with and without fixed effects. His main results suggest that primary and secondary schooling would reduce inequality whereas higher education would lead to greater inequality. He also finds evidence suggesting that better enforcement of the rule of law goes along with less inequality of incomes, and that greater openness to trade would go along with more inequality and be more pronounced in poor countries. Democracy would not be a significant factor.

The Dollar and Kraay (2003) results are instead based on a regression of the growth rate of the incomes of the lowest quintile of the population against average growth and a set of regressors to capture the impact of trade, inflation, government consumption, financial development and the rule of law on growth and on distribution. The authors find that more trade and a better rule of law would lead to higher equality, whereas higher inflation, higher government consumption, and additional financial development would lead to higher inequality.

The specification of Li and Zou (2002) is similar to the one in Barro (2000) with the level of the Gini as the dependent variable and controls that include inflation, financial development, government spending, and openness. Their results suggest that higher inflation would lead to higher inequality, whereas higher government spending, financial development, and better education would lower it. They do not find that openness to trade has a significant impact on inequality.

Kraay (2003), however, finds little evidence that poverty reducing patterns of growth in relative incomes are significantly correlated with a set of explanatory variables that the empirical growth literature has identified as important determinants of growth in per capita income, and concludes that cross country evidence is unlikely to be very informative about the policies and institutions that are likely to lead to poverty reducing patterns of growth in relative incomes.

The findings of Lundberg and Squire (2003), who estimate a system of simultaneous equations for growth and the levels of the Gini coefficient, indicate that higher education, lower inflation, and land distribution would lead to lower inequality (and lead to faster growth), whereas trade openness (as measured by the Sachs-Warner index) and more civil liberties would likely pose a potential conflict between the goals of faster growth and more equitable distribution.

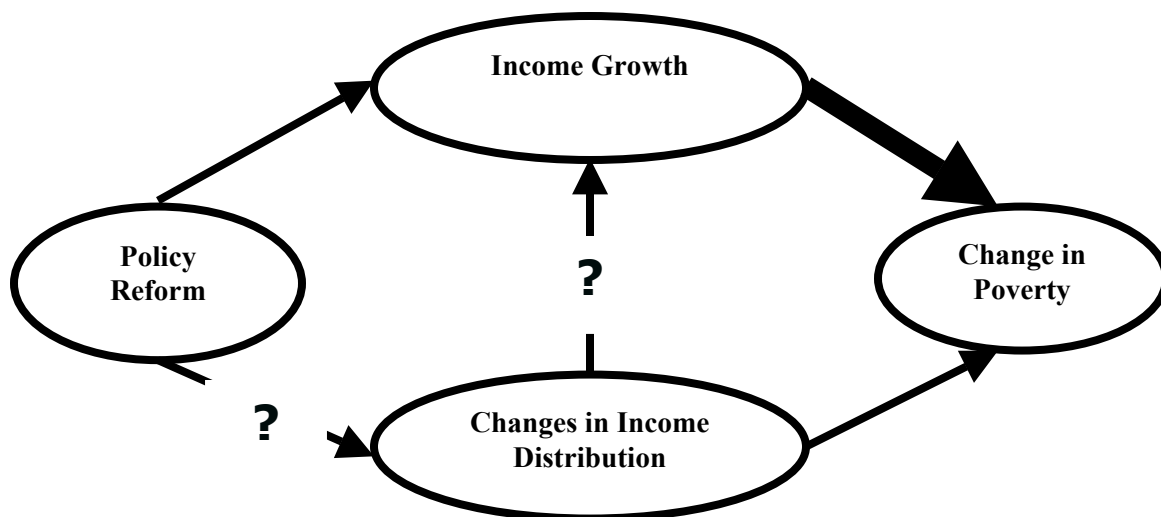
Finally, the findings of Lopez (2004) are based on the estimation of a dynamic panel with fixed effects for the change in the Gini coefficient. His results suggest that improvements in education and infrastructure, and lower inflation levels would reduce levels of inequality. On the other hand, financial development, trade openness, and decreases in the size of government would be associated with increases in inequality. When (under the assumption of a log normal income distribution) one simulates the expected impact of progress in these areas on (headcount) poverty levels, Lopez (2004) finds that these policies are likely to be pro-poor in the long run (i.e. the growth effect offsets the increase in inequality) but might also lead to temporary short run increases in poverty in the absence of compensatory measures.

All in all, the above discussion would suggest few intersections of variables. The studies reviewed seem to agree on the fact that higher inflation leads to higher inequality, but on little else. On trade, three of the studies find that greater openness would lead to higher inequality, one that it would lead to lower inequality, and two find no impact. On financial development, findings are also split with two studies finding a negative impact on income distribution, one a positive impact, and one no impact. On education, the results are also mixed, but with a tendency to suggest that education if anything would reduce inequality. Table 4 summarizes these results.

## **V. Conclusions**

This paper has reviewed recent contributions to the pro-poor growth literature. The conclusions emerging from this review can be summarized as follows. There seems to be some consensus in a few areas: (i) growth is fundamental for poverty reduction, and in principle growth as such does not seem to affect inequality; (ii) growth accompanied by progressive distributional change is better than growth alone; and (iii) high initial inequality is a brake on poverty reduction. Beyond this, there seems to be little agreement. We still do not know enough about the potential impact of inequality and redistribution on growth, and we know very little about the potential impact of different policies on inequality. Also, while there seems to be some empirical evidence pointing towards changes in inequality being responsible for significant short run fluctuations in poverty, there is also the possibility that the observed relationship is mainly driven by noise in the data. Figure 2 aims at representing these issues graphically.

**Figure 2. Policies, growth, distributional change and poverty reduction.  
What we know and what we don't**



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**Table 1. Theoretical Elasticities under log-normal assumption**

	<b>Growth</b>		<b>Elasticity</b>	
<b>PL<sup>a</sup> / Gini</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>0.6</b>
<b>.16</b>	-6.2	-3.3	-2	-1.2
<b>.33</b>	-4	-2.2	-1.3	-0.9
<b>.50</b>	-2.8	-1.6	-1	-0.7
<b>.66</b>	-2.1	-1.2	-0.8	-0.5
<b>.90</b>	-1.4	-0.9	-0.6	-0.4
<b>1.1</b>	-1	-0.7	-0.5	-0.4

	<b>Inequality</b>		<b>Elasticity</b>	
<b>PL<sup>a</sup> / Gini</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>0.6</b>
<b>.16</b>	12.9	7.7	5.3	4
<b>.33</b>	5.2	3.3	2.4	2
<b>.50</b>	2.5	1.7	1.4	1.2
<b>.66</b>	1.2	0.9	0.8	0.8
<b>.90</b>	0.4	0.4	0.4	0.4
<b>1.1</b>	0.1	0.1	0.2	0.3

<sup>a</sup> Source: Lopez and Serven (2004)

<sup>b</sup> Poverty line as a share of per capita GDP

**Table 2. Share of poverty changes variance due to growth 1/**

	<b>Gini</b>			
<b>Pov. Line 2/</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>0.6</b>
<b>.16</b>	0.19	0.16	0.12	0.08
<b>.33</b>	0.37	0.31	0.23	0.17
<b>.50</b>	0.56	0.47	0.34	0.25
<b>.66</b>	0.75	0.64	0.50	0.28
<b>.90</b>	0.92	0.84	0.69	0.50
<b>1.1</b>	0.99	0.98	0.86	0.64

<sup>a</sup> Source: Lopez and Serven (2004)

<sup>b</sup> Poverty line as a share of per capita GDP

**Table 3. The growth-inequality link**

<b>Impact of growth on income distribution</b>	
Dollar and Kraay (2002)	no impact
Easterly (1999)	no impact
Chen and Ravallion (1997)	no impact
Deininger and Squire (1996)	no impact
<b>Impact of inequality on growth</b>	
Forbes (2000)	positive
Li and Zhou (1998)	positive
Barro (2000)	no impact
Alesina and Rodrik (1994)	negative
Perotti (1996)	negative
<b>Impact of redistribution on growth</b>	
Easterly and Rebelo (1993)	positive
Perotti (1996)	positive

**Table 4. Policies and Equality<sup>a</sup>**

	B(2000)	D&K(2002)	L&Z(2002)	K(2003)	L&S(2003)	L(2004)
Better Education	+		+		+	+
More Trade	-	+	o	o	-	-
More Financial. Devel.		-	+		o	-
Less Government Spending		+	-	o		-
Better Rule of Law	+	+		o		
Lower Inflation		+	+		+	+

<sup>a</sup> Positive entries indicate that the policy/outcome in the first column contributes to more equality.

Negative entries indicate a contribution to higher inequality. o indicates no significance and a blank indicates that the policy was not considered.

B(2000): Barro (2000); D&K(2002):Dollar and Kraay (2002); L&Z(2002): Li and Zou (2002); K(2003): Kraay (2003); L&S(2003): Lundberg and Squire (2003); L(2004): Lopez (2004).