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What has really happened to poverty and inequality during the growth process in developing countries?

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Preface

The primary goal of the ILO is to contribute, with member States, to achieve full and productive employment and decent work for all, including women and young people, a goal embedded in the ILO Declaration 2008 on *Social Justice for a Fair Globalization, and*[1] which has now been widely adopted by the international community.

In order to support member States and the social partners to reach the goal, the ILO pursues a Decent Work Agenda which comprises four interrelated areas: Respect for fundamental worker's rights and international labour standards, employment promotion, social protection and social dialogue. Explanations of this integrated approach and related challenges are contained in a number of key documents: in those explaining and elaborating the concept of decent work[2], in the Employment Policy Convention, 1964 (No. 122), and in the Global Employment Agenda.

The Global Employment Agenda was developed by the ILO through tripartite consensus of its Governing Body's Employment and Social Policy Committee. Since its adoption in 2003 it has been further articulated and made more operational and today it constitutes the basic framework through which the ILO pursues the objective of placing employment at the centre of economic and social policies.[3]

The Employment Sector is fully engaged in the implementation of the Global Employment Agenda, and is doing so through a large range of technical support and capacity building activities, advisory services and policy research. As part of its research and publications programme, the Employment Sector promotes knowledge-generation around key policy issues and topics conforming to the core elements of the Global Employment Agenda and the Decent Work Agenda. The Sector's publications consist of books, monographs, working papers, employment reports and policy briefs.[4]

The *Employment Working Papers* series is designed to disseminate the main findings of research initiatives undertaken by the various departments and programmes of the Sector. The working papers are intended to encourage exchange of ideas and to stimulate debate. The views expressed are the responsibility of the author(s) and do not necessarily represent those of the ILO.

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[1] See http://www.ilo.org/public/english/bureau/dgo/download/dg_announce_en.pdf

[2] See the successive Reports of the Director-General to the International Labour Conference: *Decent work* (1999); *Reducing the decent work deficit: A global challenge* (2001); *Working out of poverty* (2003).

[3] See http://www.ilo.org/gea. And in particular: *Implementing the Global Employment Agenda: Employment strategies in support of decent work, "Vision" document*, ILO, 2006.

[4] See http://www.ilo.org/employment.

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Foreword

This paper examines the association between growth and poverty reduction and argues that is not as strong an empirical relationship as it is generally expected to be in development policy making. It also shows that to expect growth not to have any systematic positive association with income inequality in developing countries is misplaced. It is argued that we ought to expect that, in general, growth is more likely to weakly reduce poverty and a little more strongly increase income inequality. With this more realistic perspective on the associations between economic growth, income inequality and absolute poverty, the paper goes on to examine whether the speed at which developing economies have globalised, has influenced the intensity with which growth impacted poverty and inequality respectively? It is shown that amongst the fastest globalisers, growth on average increased inequality significantly and was not associated with poverty reduction. On the other hand, for developing economies that globalised at a relatively slower pace, growth reduced poverty and was not associated with rising inequality.

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Introduction

This paper argues that the association between growth and poverty reduction is not as strong an empirical relationship as it is often expected to be in development policy making. We argue that the measure of growth that is typically used in establishing the strong inverse relation between growth and poverty is not very suitable for measuring economic growth. When the appropriate indicator, i.e. change in GDP per capita, is used as a measure of growth (instead of change in the mean expenditure/ income from the household survey) the results pertaining to the "inverse relation" become very weak. We also argue that to expect growth not to have any systematic positive association with income inequality (as in the first half of the Kuznet's curve[5]) in developing countries is also misplaced; and the view that growth does not systematically increase inequality in developing countries, is also a consequence of using the same unsuitable indicator of economic growth, namely the change in survey mean expenditure/income. The paper also shows that when we use the correct indicator of economic growth, we ought to expect that in general, growth would very weakly reduce poverty and a little more strongly increase income inequality – instead of expecting it to strongly reduce poverty and be indifferent to changes in inequality. With this more realistic perspective on the associations between economic growth, income inequality and absolute poverty, the paper goes on to examine whether the speed at which developing economies have globalised, through enhanced trade and FDI flows, has influenced the intensity with which growth impacted poverty and inequality respectively. We find that amongst the fastest globalisers, growth on average increased inequality significantly and was not associated with poverty reduction. On the other hand, for developing economies that globalised at a relatively slower pace, growth reduced poverty and was not associated with rising inequality.

The rapid reduction and elimination of absolute poverty is one central of aim of development. Development policies that are supposed to achieve this aim are twofold: growth policies and distribution policies respectively. While the importance of the type and combination of growth and distribution policies is country and situation specific, such policies are also seriously influenced by the **general expectations** that one forms on the interrelationships between poverty, growth and inequality. These general expectations are based on taking an overview of the historical experience of countries with regards to these relationships. It is these general expectations that are explored in the present paper.

It is useful to illustrate by example what these general expectations are and how they are formed. If we assume that, on average, growth strongly and unambiguously tends to reduce poverty, and that inequality does not show any systematic pattern of increase with growth- then the type of policy questions explored as a consequence of these positions will be of a particular variety. In particular, the search for patterns of growth that reduce poverty more would become of *secondary* importance – because it would be taken for granted that overall growth always reduces some poverty. Second, the consequences of inequality rising with economic growth would not be entertained as an empirical likelihood and thus policies designed to contain inequalities would not be developed with any urgency. In fact, this is what the dominant general policy view has been during the last two decades; namely that

[5] See Kuznets (1955) where the argument was first developed. The rise in inequality at lower levels of development is related to incentive based arguments for investment by owners of capital proposed by Kuznets. Therefore unlike the growth-poverty inverse relation that has no theoretical basis, the inequality-growth positive relation has a conceptual basis. Consequently in order to accept the former, the empirical relation has to be quite strong.

growth per se reduces poverty and that it does not systematically increase inequality. In our view these positions need to be seriously reformulated on the basis of evidence.

Alternatively – and in contrast to the expectations outlined above – if our general assessment were to suggest that, on average, in the developing world, poverty reduction from growth had been highly contingent, and that income inequality had shown a systematic tendency to increase with growth – then this would imply an entirely different emphasis in the policy research agenda than the one we have hitherto witnessed. The focus, in such an imagined context, would not only be on growth paths and specific conditions that would be expected to encourage poverty reduction; but also on assessing growth paths that would exacerbate inequalities less. This is in fact the view that we shall come to take in this paper.

We shall examine some key empirical relationships that have obtained between poverty, inequality and growth during the last two decades of globalisation in the developing world. As noted, the central purpose of this exercise is to identify valid general associations that set the terrain in which policy discussions are conducted and where more specific hypotheses are formulated. The reason why we think this is important to do is because in the case of poverty, inequality and growth, it is precisely these broad associations that may not have been what one may have thought them to be until recently.

The data set

Observations on absolute poverty rates that exist for developing countries are collected unevenly in terms of periodicity and are also limited in number for any particular country. Thus there is little possibility of a longer run time series country analysis. In the present exercise we use episodic data (on change) in order to find grounds for the "generalisations" that can be considered valid. It is obvious that for such an exercise we need a data base that covers indicators that are of interest; namely on poverty, growth and inequality.

We assume that the absolute poverty estimates made available through the World Bank's PovcalNet[6] are comparable and useable for cross-sectional work and that problems associated with comparability and the determination of poverty lines across countries can be abstracted from. This is not an inconsiderable assumption, given recent debates on the subject[7], and it is made not to undervalue the importance of debates, our point of departure is that despite technical problems associated with the construction of poverty lines, we currently have no choice but to use these numbers. Without these there can, at present, be no empirical assessment on poverty rates. Of course, if the data are all unreliable then the analysis will follow their suit, but we assume that this is not the case. We are also not concerned with the generation of global and regional estimates in this paper[8]. This mostly

[6] http://iresearch.worldbank.org/PovcalNet/

[7] See for example Ravallion (2010), Reddy and Pogge (2002), Deaton (2001), Karshenas (2010).

[8] See for example, Karshenas (2010). The range of latest global poverty estimates can vary from 322 million to 1.5 billion depending on the "type" of poverty estimate being used (Anand et al. 2010). There are differences of opinion regarding the appropriate estimate type. The trend in poverty is one of decline in the world, but progress on this goal it is spread unevenly across the world. These estimates are also based on individual country poverty estimates but apart from having

leaves internal survey based issues that we need to consider with respect to the variables of interest.

Poverty and Inequality estimates

Household surveys are the basis of estimates of inequality and poverty rates. It is well known that with richer households, problems of truth telling obtain with respect to reporting income and expenditure. This leads to biases. Such biases emanating from the richer *respondent* sub samples can result in downward estimations of both the mean of income/expenditure and of measures of distributional inequality generated from household surveys. Thankfully, this particular problem does not affect estimates of the absolute poverty headcount rate. The degree of these biases can vary across surveys undertaken in different countries, as well as at different points of time in any given country. In short, when using survey data while we do not need to worry about poverty headcount estimates, we ought to be aware of the biases in inequality and survey mean income/expenditure estimates. Unfortunately, because the only appropriate source of measuring inequality is the household survey, little can be done about it on this count, except perhaps to arbitrarily adjust the inequality indicator upwards, and that procedure, if adopted, must entail its own problems. So this problem is often carried over in any analysis that uses inequality estimates[9]. This is of course not only true for our analysis but any analysis that uses survey based distribution measures.

In addition to problems associated with forming an international poverty line itself, the estimates of incidence of poverty suffer from a number of weaknesses from the point of view of use. One is that the survey method may not be uniform across countries. This clearly makes cross-country comparisons subject to objections, but not much can be done about it. Another problem arises from the fact that the estimates are derived from household surveys for some countries and from income surveys for others. Once again for this reason cross-country comparisons of levels of poverty can become problematic[10]. While little can be done to resolve differences in survey methods, the use of episodes reduces these problems to a degree. In any particular country, the time-trend given by household survey-based estimates ought not to be radically different from that given by income-survey-based estimates. Time trends should ideally be observed over a reasonably long period; yet, for some countries, data are available only for two periods with a short interval in between. Something can be done to reduce this problem but not to eliminate it[11].This problem is

problems associated with individual country estimates, they additionally entail aggregation and predicting missing value problems. The country estimates of poverty have produced considerable discussion and this includes technical areas of research concerning the choice of the international poverty line, the method of its updating, and the consistency of this method of updating over time.

[9] Using change data overcomes this problem to some degree, i.e. if we assume the bias to be constant in a country over time.

[10] Thus, with the same poverty line, we are likely to get different estimates of poverty incidence for any given country depending on whether we use the data on consumption distribution or the data on income distribution

[11] Given that the available survey-based estimates are for discrete time-periods, time-trends at the country level can only be observed by comparing the estimates for initial and terminal periods, which happen to be different for different countries. The issue here is that while a comparison of initial and terminal values will mostly show some trend, the actual incidence for each year in the period (for which we do not have observations) can take the form of a trendless fluctuation. It is

especially acute when we test expectations on inequality and growth, which would require longer periods to be properly tested.

We minimize the chances of error by (1) leaving out the cases where the gap between the initial and terminal periods is less than 4 years, (2) choosing, wherever data for more than two periods are available, initial and terminal periods in such a way as to minimize the possibility of deriving misleading trends, (3) choosing a single time-period or "spell" for each country even though multiple "spells" could have been chosen for some, and (4) leaving out the cases in which the incidence has been and remains very low (2 per cent or less). The resulting sample of is of 69 countries[12]. Of these the core developing economies have 58 episodes. The analysis is based on these samples.

Estimates of growth

As far as growth is concerned, it is important to be absolutely clear about the choice of indicator, and this is where the central problem lies. This issue is quite independent of the aforementioned bias in the mean of incomes or expenditures from a survey. The central point to be made in this regard is that when growth is referred to in any applied economics literature in the absence of qualifications it is always understood to represent change in GDP or GDP per capita. A country's growth is associated with the expansion of her national income or output. This is generally and always case. Therefore the use of change in a mean from a survey when it is used as a growth proxy should be explicitly (and perhaps repeatedly) acknowledged for what it actually represents, as opposed to what it is supposed to proxy for[13]. Secondly, the observed change in a survey-based mean of income/expenditure can be quite different from even the observed change in private consumption expenditure (personal disposable income) per capita which is the equivalent category derived from national accounts statistics[14]. Third, a change in private consumption expenditure (personal disposable income) per capita that is based on national accounts can itself be quite different from change in per capita GDP from the same national income accounts in any given country (since tax rates and saving behaviour can change)[15].

therefore entirely possible that the trend would have been quite different from what we observe, not only if we had different initial and terminal dates for an episode, but also if we knew what the missing values between the two points actually were.

[12] China, India and Indonesia have been split in to rural and urban in the PovcalNet dataset. We have combined them with population weights to create all country indicators of change in the survey mean, poverty headcount ratio and the gini coefficient. Treating rural and urban China, India and Indonesia as separate countries thereby increasing the observations makes no difference to the results.

[13] See Ravallion (2001a) discussion on national accounts and survey means. Most of the estimates that show a generally strong growth-poverty (absolute) inverse relation, including the numerous works on poverty by Ravallion himself, are based on survey means. Bourguignon (2003) also uses the survey mean but his purpose is to explore the analytics of poverty, inequality and growth.

[14] Private consumption is one element in GDP.

[15] In a few of the least developed countries, mean income/expenditure derived from surveys is found to be higher than private consumption expenditure (personal disposable income) per capita derived from national accounts data (see UNCTAD, 2002). In these countries, it seems, it is the poorer households that tend to be under-represented in household surveys. In such cases, there is an

The most important issue from a growth perspective is not so much about preserving the sanctity of the empirical universe (the household survey) from which data are drawn to show links between "growth", inequality and poverty; but rather it is about whether "growth" that is captured by the change in the mean of income/expenditure from a household survey is in fact the "growth" we are interested in, in the first place?

Our view is that a change in the survey-based mean is a poor indicator of economic growth; and that in exploring the growth-poverty link we are interested not in the former but an indicator based on per capita national income. Thus an observed (inverse) relationship between change in the poverty incidence and change in (survey-based estimates of) mean income; or (the lack of one) between change in survey-based mean income and change in income inequality - do not in fact constitute a reasonable basis for claiming that in general or on average "economic growth" was either poverty-reducing or distribution-neutral. At best, such results, if found, tell us that a rise in a household survey's mean income/expenditure during selected episodes across countries was associated negatively with changes in the poverty rate and was not associated with changes in inequality. The central point is that using survey means as a proxy for "economic growth", especially when the difference between growth in GDP per capita and the change in survey mean is not addressed can be misleading.

The growth of national income and the growth of survey means

GDP per capita with all its faults as an indicator is after all the accepted indicator of growth in most applied economics research[16]. It is clearly not unreasonable to take the view that the burden of providing rationales for preferring the mean of income or expenditure from a survey as a superior measure of "growth" to change in GDP per capita, ought to be on analysis that reveals such a preference.

The mean income in a household survey on the other hand, only reflects the average income of the households covered in the survey. The change in this indicator is indeed the change in the indicator of "average welfare"[17]. Unlike the change in GDP per capita, the change in mean expenditure/income from a household survey is not a good indicator of economic growth in a country. The question as to why there are likely to be differences between these two indicators in terms of coverage of categories of output and income included in calculation is a separate one from what these indicators best represent. In our view change in GDP per capita is an established indicator of economic growth or expansion, while change in the mean income/expenditure from a survey is not an economy wide growth indicator, but an average welfare indicator. Therefore these categories are not substitutive in terms of what they represent.

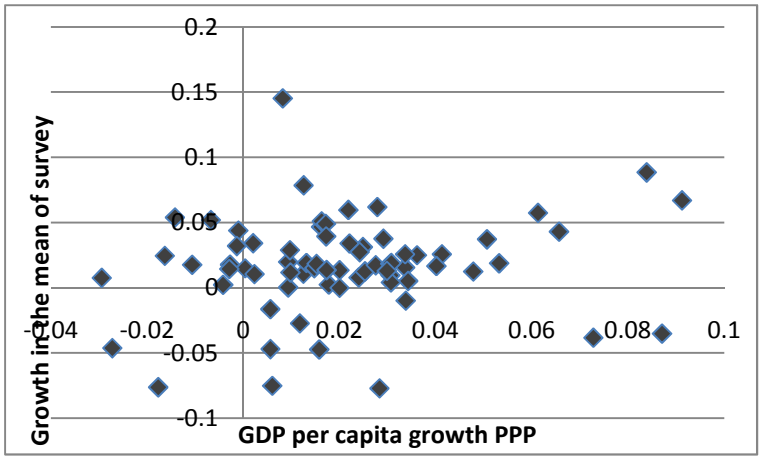
underestimation, not just of distributional inequality, but also of poverty incidence. On the other hand, there is serious overestimation of average consumption/income.

[16] It needs to be kept in mind that problems with the GDP indicator as such are mostly with its welfare implications and not with its growth aspects.

[17] When the GDP indicator is normalised by the population estimate of a country, it is still an indicator of growth; namely the change in "GDP" per capita. The fact that this normalisation to population ostensibly also makes the indicator some sort of proxy of "average" welfare in an economy- i.e. the national income per head- has little to do with its appropriateness as an indicator of economic growth.

The graph below Figure 1 shows this issue quite clearly. From our sample of episodes, we plot the change in GDP per capita on the x axis, and the change in mean expenditure from the household survey on the y axis. It is quite obvious that there is no systematic relationship. In other words, changes in average incomes have not systematically followed changes in GDP per capita. This means that whatever relationships obtain between poverty inequality and growth these are unlikely to be similar between the respective "growth" proxies.

Figure 1. A change in GDP per capita is not systematically related to a change in mean incomes from surveys



Note: The equation is y=0.235x + 0.012; R^2 = 0.024; N = 69. The growth measure is the compound annual growth rate for all illustrations in this paper. In all following figures *** and ** indicate 1% and 5% significance levels.

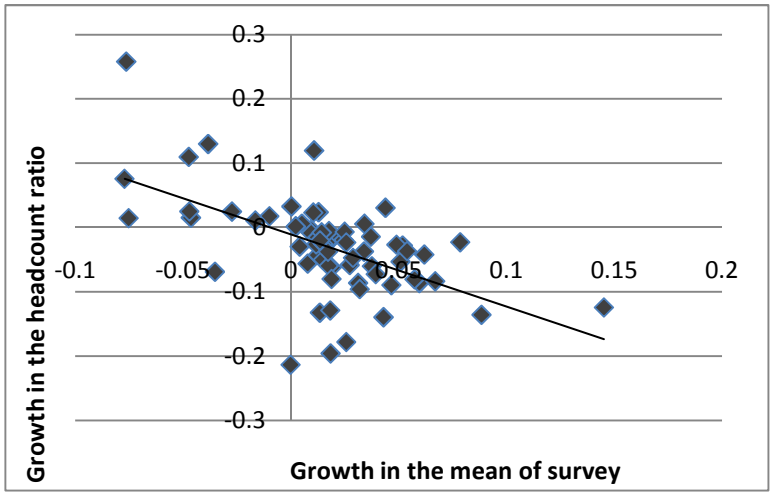
Results using the change in the survey mean as an indicator of growth

Before we proceed with illustrations, some clarifications are needed. There are two varieties of empirical illustrations that need to be distinguished for our purposes; the analytical and the historical. For example, in the former it can be asked whether or not growth reduces poverty in the developing world in an analytical sense, i.e. by holding change in inequality constant in the poverty-growth-inequality identity. In this type of illustration, there is often an attempt to explore expectations on the "pure effects" of growth and of changes in inequality respectively on changes in poverty. It is in such exercises that we can also get an empirical decomposition of the change in the absolute poverty rate into a "growth effect" and "distribution effect"[18]. It is important to make the basic point that such an exercise tell us nothing about what has happened to poverty in the growth process. In an historical illustration, on the other hand, we are interested in the signs and significance of coefficients in bi-variate relationships i.e. between two change variables. These

[18] See Annex for such an illustration with the present data set. A precise characterization of this identity is given in Bourguignon (2003). While it is the case that we can learn a lot from the examination of changes in poverty, inequality and the mean income drawn from the same universe (i.e. the survey), it is a separate matter whether that learning has any implication for considering the change in survey mean as an equivalent to economic growth.

relationships clearly do not tell us how one variable was analytically associated with the other, or whether the change in one was instrumental in causing the other to alter, rather these simply, but importantly, show that the "observed" association between two variables in the episodes across countries, given all the interdependencies, was of a certain sign and statistical significance. This is of course important in itself, because it is precisely what informs the aforementioned general expectations within which hypotheses are set up for more detailed empirical work, typically at a country level. We first examine the relationships using the change in the survey mean as a proxy for growth. This as we have suggested above is not a good indicator of economic growth and is better seen as an indicator of expenditure (or income) based average welfare in the household survey. Figure 1 shows the cross-country relationship between change in poverty incidence and change in survey mean expenditure/income from the survey. This is a reasonable relationship, bearing in mind that we are looking at change variables[19].

Figure 2. An increase in survey mean income is significantly related to the decline in poverty during the episodes

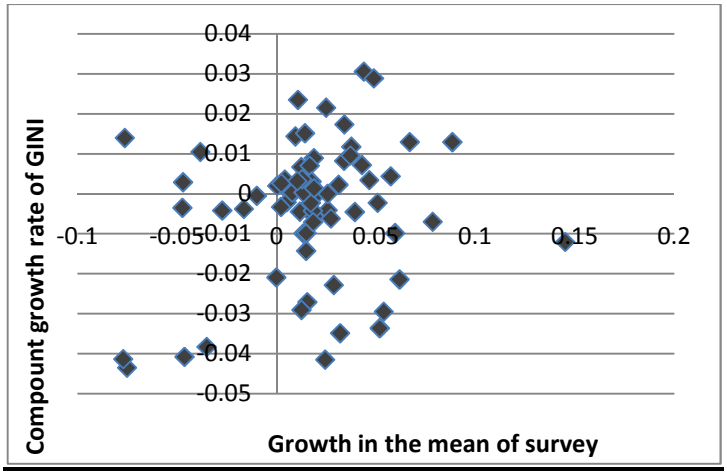


Note: The equation is y = -1.121***x - 0.011; R^2 = 0.32; N = 69.

[19] Typically the relationship between two change variables is found to be much weaker than the same variables measured on a level basis. This means that a test based on change variables is much more demanding. An inverse relationship between growth and change in poverty means that faster growth leads to a faster poverty reduction. One line of reasoning from this that can be developed is to examine the elasticity of this change relationship. If the elasticity of poverty with respect to growth is very high then growth would be considered sufficient for poverty reduction. If it is low then redistribution (or other factors) would matter more. Ravallion and Chen (1997) estimated the elasticity number of 3. The increase in mean income or consumption by 1 per cent reduces the proportion persons living under poverty by 3 per cent. Our elasticity equivalent in Figure 2 is 1.2 per cent. It is much lower. Bourguignon (2003) makes the generally overlooked point that if R-Squared values are taken to represent the proportion of explained variance of observed changes in poverty headcounts,- as they ought to- then the values of this statistic are in themselves so low (.26 in his sample; .36 in ours) so as to make us worry more about the unexplained variation first, and this is almost always high enough for one not to rely on growth strategies as a main policy instrument to reduce poverty.

Figure 3 shows the cross-country relationship between change in the Gini coefficient of income distribution and the change in survey mean expenditure/income from the survey for the same set of countries.

Figure 3. An increase in survey mean is not significantly associated with an increase inequality during the episodes



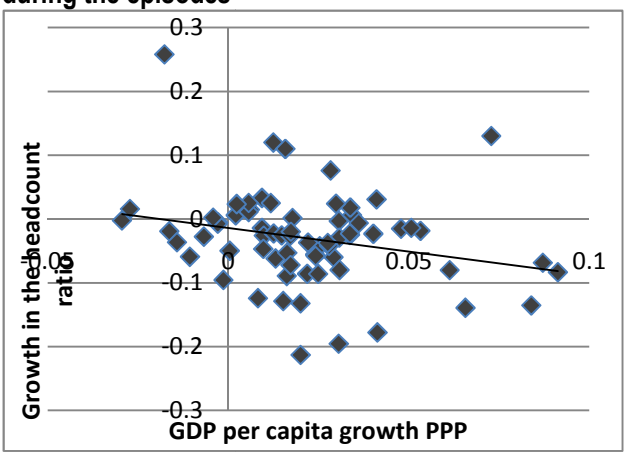
Note: The equation is y = 0.098x - 0.005; R^2 = 0.046; N = 69.

When we look at how inequality moved during these growth episodes, we find that not only is the fit very poor in Figure 2, but the coefficient on the growth variable is not statistically significant at the 5 per cent level. Overall, Figures 1 and 2, taken together suggest that change in poverty has been significantly and inversely related to growth during the episodes; and the change in inequality has not been associated with growth. The general relationship between "growth" – as it is measured by the change in the survey mean – on the one hand, and changes in poverty and inequality respectively on the other, are according the dominant policy view. From these illustrations, it would be valid to say that in general growth systematically reduced poverty but did nothing systematic to change inequality in the preceding decades of globalisation in the developing world- the period from which our sample is drawn.

Results using the change in GDP per capita as an indicator of growth

We now use growth in GDP per capita as the growth proxy – the indicator which in our view reflects better what is normally understood by growth – for the same episodes. There are some interesting changes that occur. Figure 4 shows the cross-country relationship between change in poverty incidence and change in GDP per capita PPP for the same periods and countries.

Figure 4. An increase in GDP per capita (PPP) is weakly but significantly related to the decline in poverty during the episodes

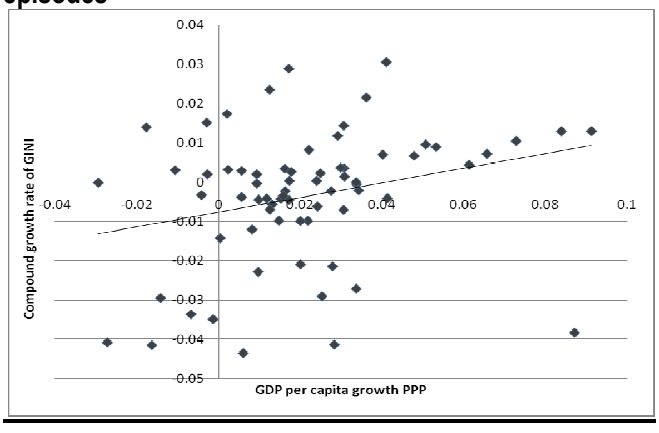


Note: The equation is y = -0.741**x-0.014; R^2 = 0.062; N= 69.

Compared to Figure 2, while the relationship is an inverse one, and the coefficient on growth variable is still significant and negative, it is much weaker and the general fit is now very poor. Purely on grounds of it being an empirical relation, with no strong theoretical reasons to expect it, this is a weak association and stands in glaring contrast to the relationship shown in Figure 2 above. And that is the crucial point. If we use the more appropriate indicator of growth, we must lose faith in the strength of this association. Using change in GDP per capita as a proxy for growth makes poverty reduction much more contingent on other factors.

Figure 5 shows the cross-country relationship between change in the Gini coefficient and change in GDP per capita PPP. While this fit is also weak one, the coefficient on the indicator capturing the change in inequality – i.e. the Gini – is now positive and significant. Figure 5 must be seen in contrast to Figure 3 where there was no systematic relationship found between the change in the mean of survey and the change in the Gini coefficient.

Figure 5. An increase in GDP per capita (PPP) weakly but significantly increased inequality during the episodes



Note: The equation is y = 0.152*x - 0.007; R^2 = 0.050; N = 69.

Thus using the change in GDP per capita proxy for growth, not only shows a weak, albeit significant, inverse relationship between economic growth and poverty change but also a weak but significant and positive relationship between change in inequality and growth. In short, taking the change in GDP per capita as a proxy for growth, we can expect both poverty to decline and inequality to weakly rise with growth. These illustrations put a sobering perspective on the so called general inverse relationship between growth and poverty. It is obvious that the popular policy view is really influenced by the results that emerge from using the less appropriate proxy for economic growth, namely the change in the survey mean[20].

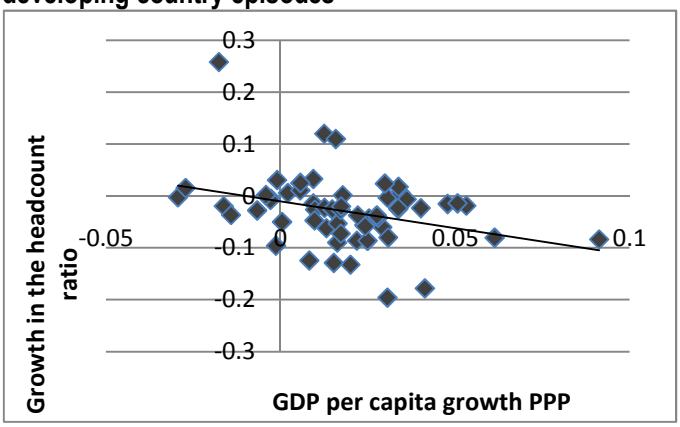
The historical relationships observed above suggest some reorientation in basic assessments. If we assume that our procedure of selecting episodes is independently meaningful, then the main differences in our simple associative tests are attributable to our choice of the growth indicator. The experience of the developing world in the episodes examined above, suggests a few things. First that amongst the growth proxies used in poverty analysis we should at least also always use GDP or GDP per capita- indicators that researchers working on economic growth recognise as growth. The change in the mean from a household survey may well be a better indicator of "average welfare", but it is not a good indicator of economic growth. The terminological ambiguity in calling both indicators "growth" may seem innocuous, but this has been seriously misleading at least for the policy maker. Second, using the GDP per capita indicator we need to be much more circumspect about our expectations on the impact of economic growth on poverty reduction and a little more alert to the possibility of income inequality rising with growth. In short the practice of using these two indicators, as if they were interchangeable or stood for the same category is dubious.

Our episodes of 69 countries include transition economies and petroleum exporting developing economies. It can be argued that a better picture is likely to emerge if we took the sample of more typical developing economies. If we reduce the sample by countries from these two sub-groups, we get a sample of "core" developing countries[21]. In this core developing country sample the coefficients and the fits become stronger especially with respect to the inequality and growth results.

[20] See Fields (1989); Ravallion (1995, 2001a); Bruno, Ravallion and Squire (1998); Dollar and Kraay (2001a); and Chen and Ravallion (2004). It is worth noting, however, that one study – Lundberg and Squire (2003) – found a tendency for economic growth to be associated with rising inequality.

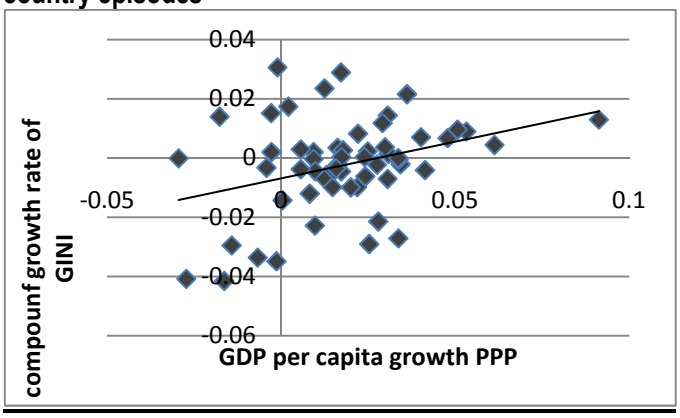
[21] See Ghose, Majid and Ernst (2008) for a fuller discussion on a similar categorization. We take the developing economies characterization of the World Bank from WDI and exclude two categories from it. The first are those countries 50 per cent or more of whose export earnings are based on petroleum related products. The second group is of countries that have per capita incomes of US$10,000 or more in 2003, who are not considered developed and are not major exporters of petroleum. Essentially core developing countries exclude petroleum exporting developing countries, small high income developing countries.

Figure 6. An increase in GDP per capita (PPP) weakly but significantly reduced poverty for core developing country episodes



Note: The equation is y = -1.034**x – 0.01; R^2 = 0.10; N = 58.

Figure 7. An increase in GDP per capita (PPP) significantly increased inequality for core developing country episodes



Note: The equation is y = 0.247**x - 0.007; R^2 = 0.111; N=58.

There is an improvement in the growth poverty reduction inverse relation compared to the full sample of 69 economies just as there is a strengthening of the positive relation between inequality change and growth (Figures 4 and 5) but the fit is still poor. In fact data on income inequality from WIDER show fairly clearly that Gini coefficients of income distribution have risen with GDP per capita in developing countries. This is an independent corroboration of the general tendency of income inequality to rise with growth in developing countries.

Table 1. Income inequality and national income are in general positively related for core developing economies- panel regression results

	Core developing countries (1)	Developed countries (2)	All countries (3)
GDP per capita PPP (000s)	.934	.018	.009
	(.232)***	(.029)	(.040)
Observations	381	410	1185
R-squared	.221	.008	.202

Note: Dependent variable is GINI (GINI measure using pooled observations of consumption, gross earnings, gross income and net income. The type of GINI does not vary within country). *, **, *** indicate 10%, 5% and 1% levels of significance. Standard errors are reported in parenthesis. Both specifications use a panel data time series model with fixed effects. Column 1 shows results for Core developing countries. Column 2 shows results for developed countries. The results using a balanced panel with predicted values of the Gini give similar results.
Number of countries per group: Core developing: 71, Developed: 23
Source: GINI measures come from the UNU-WIDER World Income Inequality Database (http://www.wider.unu.edu/research/Database/en_GB/wiid/). GDP per capita values are taken from the World Bank World Development Indicators database and are expressed in 2005 international US$. (http://data.worldbank.org/data-catalog/world-development-indicators)

The speed of globalisation and the historical association between growth and poverty; and growth and inequality

In previous sections, we found that the overall economic growth and poverty reduction relationship to be a weak one, and the one between growth and rising inequality a relatively stronger one than what is popularly believed. Can we say something in this context about the globalisation experience of the developing world? We focus on ***core*** developing economies.

While results on the relationship between indicators of globalisation and growth have been subject to debate, if a general view can be formed it is one that suggests that trade flows in the developing world have either been good for growth or at least have not been bad for growth. The impression with regards to FDI and growth is even less conclusive. It needs to be stated that, if a positive relationship between growth and trade is taken to be generally valid, then the aforementioned growth poverty-reduction framework (which suggests that growth is unambiguously good for poverty reduction and is not systematically related increasing inequality) comes in to play.

The aim of this section is to examine if we can say anything about what may have happened to the associations between economic growth on the one hand; and poverty and inequality, respectively, on the other. We split our sample between fast and slow globalisers. Our proxies of globalisation are the annualised growth rates in TRADE /GDP ratios and in FDI/GDP ratios. For this purpose we rank country episodes in a descending order according to the annualized growth in the TRADE/GDP ratio. Then we simply divide our sample between a top half that shows relatively higher growth in the TRADE/GDP ratio and a bottom half with comparatively lower growth in TRADE/GDP ratios. Similarly

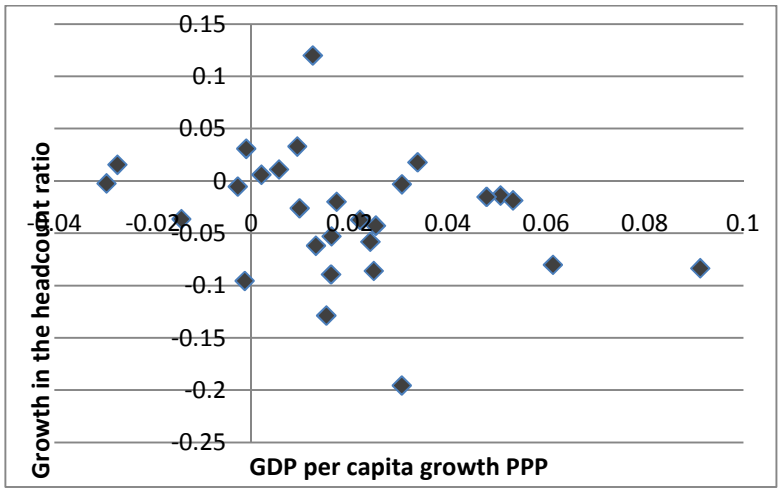
we split the sample in to a top and a bottom half with respect to growth in FDI /GDP ratios[22].

In needs to be noted that we also need to examine the relationship between growth and the two standard indicators of globalisation in our **unsplit sample** of core developing country episodes. This exercise is done in Annex 3. Economic growth was found to be positively associated with increased trade openness (TRADE/GDP ratios) but not with increased FDI flows (FDI/GDP ratios) during these episodes.

The pace of trade openness and the poverty-inequality-growth linkage

The speed at which economies opened up to trade when captured by the change in the TRADE /GDP ratio reflects realised openness. It is important to bear in mind that this does not necessarily tell us anything about liberalisation policy. It is quite clear from Figure 11 that on average in our sample of countries with high trade growth, economic growth was not systematically associated with poverty reduction.

Figure 11: There is no systematic relationship between and growth and poverty reduction in countries with high speed trade openness (Top 28)



Note: The equation is y = -0.646x - 0.021; R^2 = 0.0797; N=28.

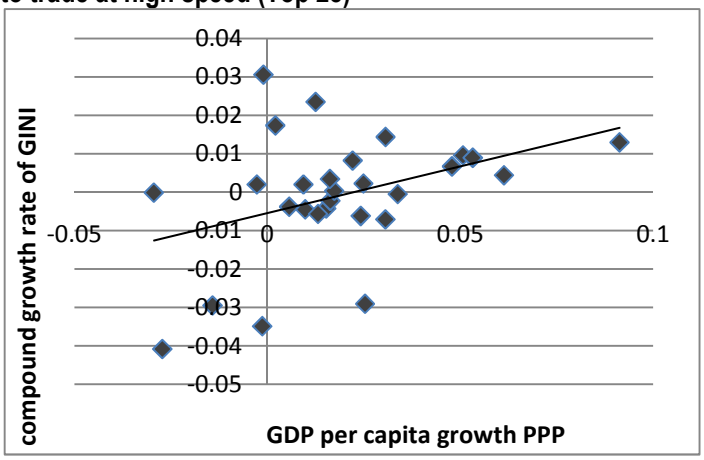
This is interesting because it implies that if growth did take place in this sub-sample on account of trade openness, as was the case here, it was not the kind of growth that shows

[22] The advantage of an episode based change data set is that we can put sample splitting controls on it to examine globalisation effects. It is important to be clear on the question that is not being asked here. We are not examining what the direct effect of changes in FDI or trade is on poverty reduction and inequality changes; or asking how these globalisation capturing variables instrumentally impinge on growth. The question posed here is whether in countries with a higher velocity of exposure to trade and FDI, the two basic associations between growth and poverty reduction; and growth and changes in inequality, respectively, show distinct patterns.

up in an inverse growth-poverty relationship[23]. This is of course not to say that poverty may not have declined in these economies either before their opening up or via other redistributive mechanisms with varying lags. However, growth amongst economies that opened up to trade with speed was not associated with poverty reduction[24].

The obvious reason for the absence of a linkage between growth and poverty reduction is likely to be that inequality may have been systematically associated with the growth process amongst this high speed trading group. Figure 12 shows exactly that.

Figure 12. Growth in inequality is positively associated with economic growth in countries that opened up to trade at high speed (Top 28)



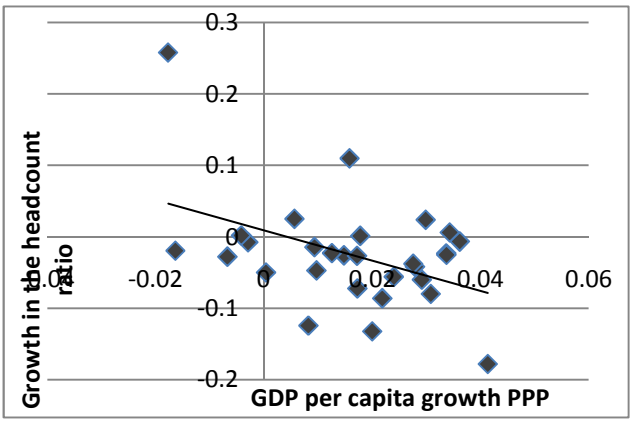
Note: The equation is y = 0.242**x - 0.005; R^2 = 0.148; N=28.

Inequality was clearly related positively to growth in the top 28 traders in our sample of episodes. On the other hand, in countries that increased TRADE/GDP ratios at a lower speed- that is countries in the bottom group of trade growth- it is interesting that the results are the opposite. Figure 13 shows us that on average, the inverse growth poverty reduction relationship is obtained in these economies, and Figure 14 shows that in this group changes in inequality were *not* systematically associated with economic growth.

[23] This of course raises the question of the type of growth that is friendly to poverty reduction. This issue is explored in a sector specific context in Majid (2004), and more generally in a dual economy framework in GEC (2008).

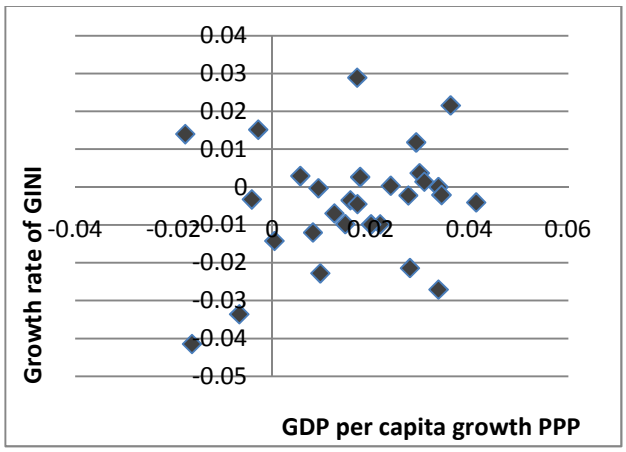
[24] See Ghose (2003) for an overall assessment of the way economic globalisation impacted developing economies during the 1980s and 1990s. It is quite clear that the trade based component is essentially one of increased exports of manufactured goods from a few large and important developing economies. This means that increased trade dominantly impacted organized parts of the developing economy where the poor are generally not employed.

Figure 13. Growth and poverty reduction are inversely related in countries with a lower speed trade growth (Bottom 29)



Note: The equation is y = -2.118***x + 0.009; R^2 = 0.191; N = 29.

Figure 14. Growth and inequality change are not systematically related in countries with a lower speed trade growth (Bottom 29)



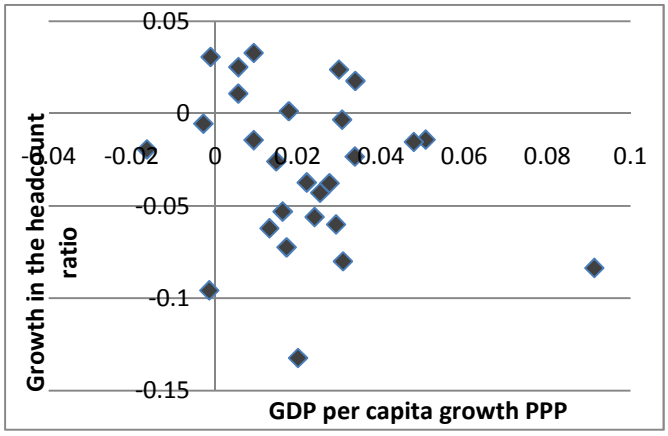
Note: The equation is y = 0.237x - 0.008; R^2 = 0.056; N = 29.

In short, while high speed trade openness did enhance growth, it produced economic growth that seems to have done little for poverty reduction and which has been associated with exacerbating inequalities. On the other hand, the more moderately opening economies with respect to trade showed the expected inverse growth-poverty relationship and did not seem to have experienced growth that systematically increased inequality. In fact and curiously the policy view which holds that growth generally reduces poverty and does not systematically increase inequality – fits better with the experience of those countries whose pace of trade-led opening was relatively slow rather than fast.

The pace of FDI openness and the poverty-inequality-growth linkage

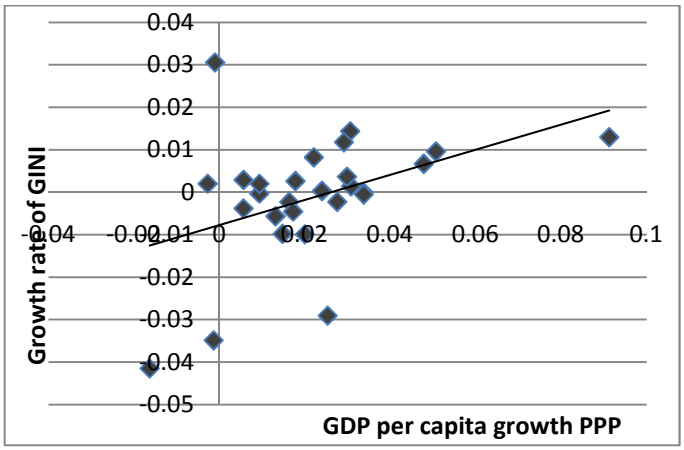
We can now look at FDI flows as we have done with trade in the previous section. The point to bear in mind here is that in our un-split sample, (discussed in Annex 2), unlike trade openness and growth, we cannot find any link between the speed of FDI flows and economic growth. The general relationship that is found to be valid for trade openness and growth is not valid for FDI inflows and growth. We first look at the countries with the high speed increase in FDI/GDP ratios.

Figure 15. There is no systematic relationship between and growth and poverty reduction in countries with high speed FDI/GDP growth (Top 27)



Note: The equation is y = - 0.464x - 0.019; R^2 = 0.052; N = 27.

Figure 16. Growth and inequality change are positively related in countries with high speed capital openness (FDI/GDP growth) (Top 27)

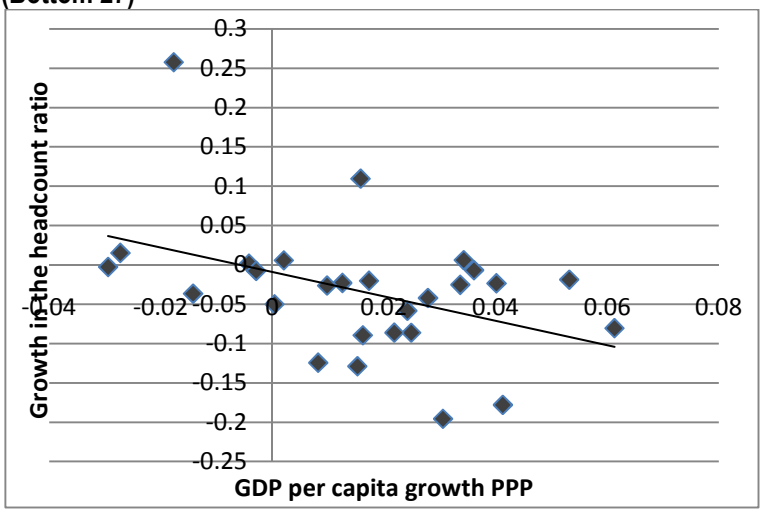


Note: The equation is y = 0.295**x – 0.008; R^2 = 0.17; N=27.

Figures 15 and 16 show that in economies which experienced high speed FDI flows, poverty and economic growth were not inversely related; and growth and inequality were positively related. These associations suggest that, on average, high speed FDI inflows are either adverse or neutral and generally not beneficial for welfare. The story of countries experiencing a relatively slow pace in FDI/GDP growth is shown in Figures 17 and 18. In these countries the expected inverse association between growth and change in poverty

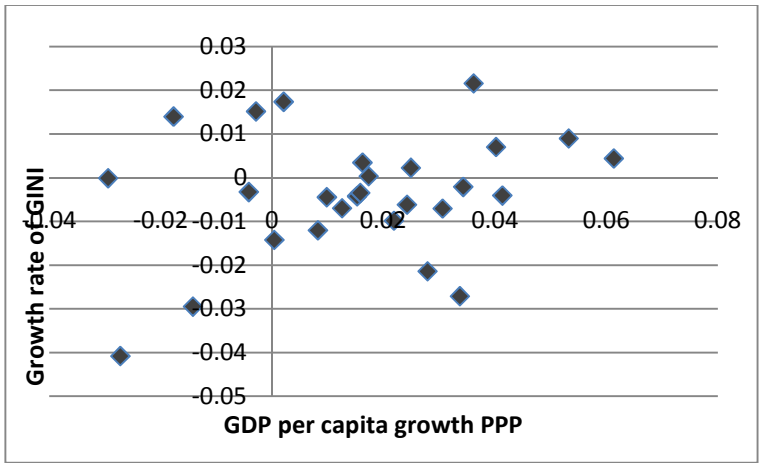
obtains; and importantly no positive association between growth and inequality change can be established. So countries opening more slowly to FDI did well on our welfarist associations.

Figure 17. Growth and poverty reduction inversely related in countries with lower speed FDI growth (Bottom 27)



Note: The equation is y = - 1.555**x - 0.009; R^2 = 0.1711; N = 27.

Figure 18. Growth and inequality change are not systematically related in countries with lower speed FDI growth (Bottom 27)



Note: The equation is y= 0.16x – 0.006; R^2 = 0.065; N = 27

Conclusion

The analytical framework in which we can understand the process of poverty reduction is not a controversial one, where economic growth reduces poverty when inequality is held constant; and rising inequality increases poverty when growth is held constant. It is important not to associate these results with how we ascertain the actual experience of poverty reduction and growth in developing countries in the recent decades. The historical experience of developing countries with respect to the so called growth-poverty reduction relationship has been a weak one. It is unfortunate that an implausible indicator of economic growth has often been used to bolster a growth-poverty inverse relation that has in fact been much weaker; and to show the absence of a positive relation between inequality and economic growth where one may have been warranted. Using a more plausible measure of economic growth- the change in GDP per capita- we find that the historical association between growth and inequality is a weakly positive one and the one between growth and poverty change a weakly negative one. In the universe of typical developing countries, which we call core developing countries, the same relationships persist and become somewhat stronger. It is important to bear in mind that the question we wish to explore is what "economic growth" means, on average, for changes in poverty rates? The question is not what increases in average household income imply for poverty rates among those households whose income on average is increasing. This is because economic growth (change in GDP per capita) is not systematically related to changes in household mean income.

In the period from which our episodes are drawn, developing countries have also opened up and integrated in to the global economy. They have done so at varying speeds. Our observations in the globalisation context are limited to the pace of opening up; and the relationship of this pace or speed to the strength of the relationships observed between poverty, inequality and growth. While rapidly increasing TRADE/GDP ratios have been associated with higher growth, the same cannot be said about rapidly increasing FDI/GDP ratios. It also appears that in countries that have globalised faster in these episodes on each of the two counts of opening up- inequality has significantly increased with growth and this is perhaps why the experience of developing countries that have opened up fastest, does not reveal any systematic growth and poverty inverse link. The converse is also true. It is the case that countries that opened up relatively slower than the fast globalisers with respect to the same indicators have on average displayed unambiguous decreases in poverty and shown no systematic rise in inequality with respect to economic growth.

In conclusion, We should not expect- and we ought not to have expected in past- that rapid and high speed globalisation would be beneficial for reducing poverty in any direct sense; just as we should not expect -and ought not to have expected in the past- that growth per se would dramatically reduce poverty and have no systematic effect on inequality.

Annex 1. Data and episodes

Table A1. Annualized compound growth rates of selected variables for core developing countries

Country	Classification	Period	Growth rate of the headcount	Growth rate of the per capita GDP PPP	Growth rate of the GINI coefficient	Growth rate of the mean of the survey	Growth rate of the FDI as % of GDP	Growth rate of trade as % of GDP
Bangladesh	Core	1992 - 2005	-0.3320	0.0306	0.0144	0.0095	0.4405	0.0543
Bolivia	Core	1991 - 2005	11.9695	0.0125	0.0235	0.0108		0.0230
Brazil	Core	1990 - 2007	-6.2084	0.0131	-0.0057	0.0191	0.1581	0.0262
Burkina Faso	Core	1994 - 2003	-2.5245	0.0337	-0.0271	0.0155	-0.0383	-0.0275
Burundi	Core	1992 - 2006	-0.2517	-0.0294	-0.0001	0.0076	-0.1801	0.0311
Cambodia	Core	1994 - 2004	-1.8720	0.0532	0.0090	0.0188	-0.0002	0.0768
Cameroon	Core	1996 - 2001	-8.6082	0.0219	-0.0098	0.0596	-0.0601	0.0156
Central African Republic	Core	1993 - 2003	-2.7832	-0.0067	-0.0336	0.0519		-0.0188
Chile	Core	1990 - 2006	-17.7960	0.0413	-0.0041	0.0257	0.0555	0.0102
China	Core	1990 - 2005	-8.3574	0.0913	0.0130	0.0670	0.0772	0.0467
Colombia	Core	1995 - 2006	3.2764	0.0094	0.0020	0.0003	0.1321	0.0266
Costa Rica	Core	1990 - 2005	-8.6188	0.0249	0.0023	0.0312	0.0461	0.0294
Cote d'Ivoire	Core	1993 - 2002	3.0630	-0.0010	0.0305	0.0439	0.0983	0.0466
Djibouti	Core	1996 - 2002	25.7706	-0.0177	0.0140	-0.0763	-0.0199	-0.0127
Dominican Republic	Core	1992 - 2005	0.6124	0.0343	-0.0021	0.0052	0.0576	0.0087
Ecuador	Core	1994 - 2007	-8.9507	0.0162	0.0034	0.0467	-0.1418	0.0220
Egypt, Arab. Rep.	Core	1991 - 2005	-5.6014	0.0240	0.0003	0.0078	0.1677	-0.0007
El Salvador	Core	1995 - 2005	-1.4382	0.0094	-0.0003	0.0198	0.2229	0.0190
Ethiopia	Core	1995 - 2005	-4.2892	0.0253	-0.0290	0.0125	0.2776	0.0712
Gambia, The	Core	1998 - 2003	-12.4290	0.0082	-0.0120	0.1452	0.0095	-0.0256
Ghana	Core	1992 - 2006	-3.7310	0.0221	0.0082	0.0340	0.2090	0.0604
Guatemala	Core	1998 - 2006	-2.6251	0.0098	-0.0045	0.0117	-0.0691	0.0579
Guinea	Core	1991 - 2003	-2.2851	0.0126	-0.0070	0.0785	0.0494	-0.0215
Guinea-Bissau	Core	1991 - 2002	1.5320	-0.0272	-0.0408	-0.0463	0.0721	0.0505
Honduras	Core	1990 - 2006	-5.3035	0.0163	-0.0023	0.0509	0.0957	0.0331
India	Core	1994 - 2005	-1.5396	0.0478	0.0067	0.0125	0.0896	0.0697
Indonesia	Core	1990 - 2005	-6.0030	0.0292	0.0118	0.0376	0.1090	0.0176
Jordan	Core	1992 - 2006	-13.2280	0.0200	-0.0099	0.0135	0.2697	0.0077
Kenya	Core	1992 - 2005	-5.0010	0.0004	-0.0143	0.0149	0.0297	0.0149
Lao PDR	Core	1992 - 2002	-2.3357	0.0402	0.0070	0.0167	0.0705	
Lesotho	Core	1993 - 2003	-2.5890	0.0148	-0.0098	0.0150	0.1941	0.0105
Madagascar	Core	1993 - 2005	-0.5522	-0.0027	0.0020	0.0177	0.1157	0.0452
Malawi	Core	1998 - 2004	-1.9395	-0.0163	-0.0415	0.0245	0.3455	-0.0065
Mali	Core	1994 - 2006	-4.2013	0.0279	-0.0214	0.0619	0.0308	0.0078
Mauritania	Core	1993 - 2000	-9.5704	-0.0013	-0.0349	0.0320	0.1632	0.0608
Mexico	Core	1992 - 2006	-12.8800	0.0153	-0.0042	0.0183	0.0384	0.0442
Mongolia	Core	1995 - 2005	1.7638	0.0338	-0.0005	-0.0099	0.2592	0.0315
Morocco	Core	1991 - 2007	0.1264	0.0178	0.0026	0.0024	0.0769	0.0198
Mozambique	Core	1997 - 2003	-1.4115	0.0507	0.0096	0.0371	0.2704	0.1181
Nepal	Core	1996 - 2004	-2.6693	0.0172	0.0289	0.0490		-0.0291
Nicaragua	Core	1993 - 2005	-5.8282	0.0242	-0.0062	0.0273	0.0698	0.0212
Niger	Core	1992 - 2005	-0.7643	-0.0029	0.0151	0.0144	-0.0451	0.0115
Pakistan	Core	1991 - 2005	-7.2416	0.0173	-0.0045	0.0394	0.0943	-0.0006
Panama	Core	1991 - 2006	-3.7733	0.0276	-0.0023	0.0173	0.1490	-0.0180
Paraguay	Core	1990 - 2007	0.5760	0.0021	0.0174	0.0341	0.0022	0.0297
Philippines	Core	1991 - 2006	-2.0113	0.0173	0.0003	0.0136	0.0499	0.0279
Senegal	Core	1991 - 2005	-4.7086	0.0097	-0.0228	0.0288		0.0181
South Africa	Core	1993 - 2000	1.0813	0.0056	-0.0038	-0.0164	0.8839	0.0393
Sri Lanka	Core	1991 - 2002	-0.6636	0.0362	0.0215	0.0250	0.0716	0.0111
Swaziland	Core	1995 - 2001	-3.6564	-0.0142	-0.0295	0.0540	-0.0526	0.0209
Tanzania	Core	1992 - 2000	2.5110	0.0057	0.0029	-0.0470	0.4477	-0.0287
Thailand	Core	1992 - 2004	-19.5600	0.0306	-0.0071	0.0184	0.0557	0.0478
Tunisa	Core	1990 - 2000	-7.9995	0.0308	0.0014	0.0189	0.2008	-0.0015
Turkey	Core	1994 - 2005	2.3796	0.0299	0.0037	0.0129	0.1448	0.0185
Uganda	Core	1992 - 2005	-2.3299	0.0337	0.0000	0.0257	0.3286	0.0154
Vietnam	Core	1993 - 2006	-8.0363	0.0613	0.0044	0.0574	-0.0422	0.0651
Yemen, Rep.	Core	1992 - 2005	10.9702	0.0158	-0.0035	-0.0473	-1.8617	0.0091
Zambia	Core	1993 - 2004	0.1793	-0.0042	-0.0033	0.0022	-0.0322	-0.0051

Source : Data on headcount, Gini coefficient and mean of the survey come from Povcal (http://iresearch.worldbank.org/PovcalNet/povcalSvy.html) while data on GDP, FDI and Trade come from the World Bank World Development Indicators (http ://data.worldbank.org/data-catalog/world-development-indicators).

Annex 2. The analytical identity involving change in poverty, economic growth and change in inequality across developing countries

Most tests on poverty change involving both variables of inequality and growth as independent variables show that inequality is positively and growth inversely related to poverty. It should be noted that generally in simple multivariate regressions, coefficients on x-variables are counterfactual in nature. For example, in our case when a third variable capturing inequality is introduced in the poverty-growth regressions, we are, for example, no longer forming an overview on how the poverty rate moved with economic growth during those episodes; but rather we are forming an overview on how poverty *would have* moved with growth, during those episodes, had there been no change in inequality. And we can say the same for interpreting the inequality coefficient. In other words, multivariate regression coefficients do not tell us anything about how the poverty rate had actually moved with growth, on average, during the cross country sample episodes. It should be obvious that if we do not allow for change in inequality, then it is highly probable that any growth will reduce the poverty rate. The central point is the obvious one; namely that from the policy dictum that growth *reduces* poverty based on the analytical equation, it does not follow that growth was in any historical sense associated with poverty reduction. That matter has to be separately examined. We report coefficients from various specification regressions[25]. The results are unexceptional. The regressions with survey means proxying for growth are much stronger.

[25] See the paper by Bourguignon entitled The Growth Elasticity of Poverty Reduction, in Eicher and Turnovsky, eds. (2003).

Table A2. Dependent variable: percentage change in poverty headcount during growth spell

	Naive model	Standard model	Improved standard model 1	Improved standard model 2
Explanatory variables	(1)	(2)	(3)	(5)
Y = percentage change in GDP per capita PPP	-1.03**	-1.50***	-1.45	-1.96
DGini = variation in Gini coefficient		1.83***	1.92***	4.12
Y * poverty line / GDP per capita PPP			31.70**	33.29**
Y * initial Gini coefficient			-0.036	-0.023
DGini * poverty line / GDP per capita PPP				-59.76**
DGini * initial Gini coefficient				0.004
Obs	58	58	55	55
R-squared	0.1	0.27	0.37	0.45

	Naive model	Standard model	Improved standard model 1	Improved standard model 2
Explanatory variables	(1)	(2)	(3)	(5)
Y = percentage change in mean income	-1.25***	-1.26***	-4.45***	-3.35***
DGini = variation in Gini coefficient		0.98**	1.63***	6.32***
Y * poverty line / mean income			1.21***	0.89***
Y * initial Gini coefficient			0.046**	0.025
DGini * poverty line / mean income				-2.79***
DGini * initial Gini coefficient				-0.055
Obs	58	58	55	55
R-squared	0.36	0.41	0.62	0.7

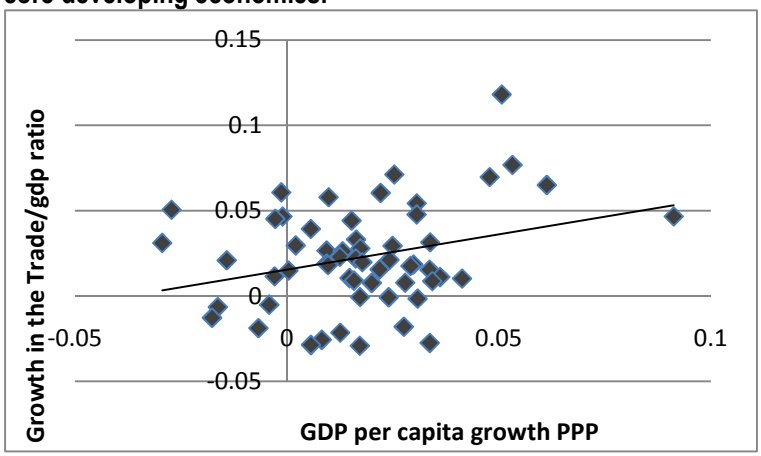
Notes: We take only one growth spell per country using in each case most ancient and most recent observations available. The full list of countries and episodes is in the appendix table 1.

Sources: Povcal database (http://iresearch.worldbank.org/PovcalNet/povcalSvy.html) (download date 06.2011) and World Development Indicators Database (http://data.worldbank.org/data-catalog/world-development-indicators)

Annex 3. The relationship between trade openness and FDI flows, and growth for core country sample episodes

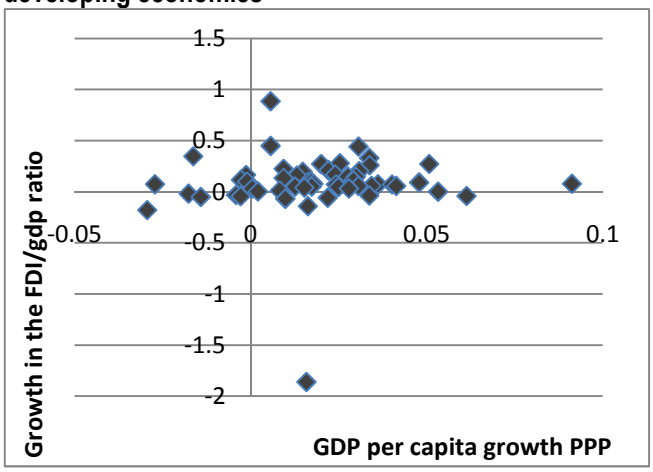
Does the episodic data we have show that high speed globalisation was associated with growth in the developing world? We can see in Figure A3.1 that there exists a positive relationship between growth and changes in TRADE/GDP ratios for the full core developing country sample. It is also clear from Figure A3.2, that a positive relationship between growth and the change in net FDI flows as a percentage of GDP does not exist.

Figure A3.1. Trade Openness is positively associated with economic growth for the sample episodes in core developing economies.



Note: The equation is y = 0.413**x + 0.013; R^2 = 0.088; N = 57.

Figure A3.2. FDI flows show not systematic relationship with economic growth for sample episodes in core developing economies



Note: The equation is y = 0.67x + 0.065; R^2 = 0.002; N=54.

Economic growth was associated with increased trade openness (TRADE/GDP ratios) but not with increased FDI flows (FDI/GDP ratios) during these episodes. Any form of bundling of these two- even it is argued that trade and FDI expansion are connected - under the rubric of "globalisation" is both unwarranted and misleading[26]. These results with carefully chosen episodic data, in our view are not implausible in the light of the literature. It is our impression that while there is a greater consensus on a positive growth and trade openness linkage, there is less agreement on a similar growth and FDI link. These illustrations are just by way of contextualizing the argument in the main text, namely that in this sample of poverty, inequality and growth episodes the associations between the growth and globalisation variables are not implausible.

[26] The countries that globalised fastest (the top 27) during the episodes the results are the same as the overall results. Speedy trade expansion tended to have been associated with enhanced growth, but speedy FDI expansion was not associated with growth.

Selected Bibliography

Anand, S., P. Segal and J.E. Stiglitz (eds). 2010. *Introduction in Debates in the Measurement of Global Poverty*, Oxford University Press, Oxford.

Bourguignon François. 2003. "The growth elasticity of poverty reduction", in Eicher and Turnovsky (eds.), *Inequality and Growth*, MIT Press.

—. 2004. *The Poverty-Growth-Inequality Triangle*, paper presented at the Indian Council for Research on International Economic Relations, New Delhi, on February 4, 2004.

Bruno, Michael, Martin Ravallion and Lyn Squire. 1998. "Equity and Growth in Developing Countries: Old and New Perspectives on the Policy Issues." In Vito Tani and Ke-Young Chu (eds.), *Income Distribution and High Growth*. Cambridge, MA: MIT Press.

Chen, Shaohua and Martin Ravallion. 2004. *How Have the World's Poorest Fared Since the Early 1980s?*, Policy Research Working Paper Series 3341, The World Bank.

Chen, Shaohua and Martin Ravallion. 2001. "How Did the World's Poor fare in the 1990s?", *Review of Income and Wealth*, Wiley Blackwell, 47(3), 283-300.

Chen, Shaohua, Gaurav Datt and Martin Ravallion. 1994. "Is Poverty Increasing in the Developing World?" *Review of Income and Wealth*, 40(4), 359-376.

Deaton, Angus. 2001. "Counting the World's Poor: Problems and Possible Solution," *World Bank Research Observer* 16, 125-148.

Dollar, David. 2005. "Globalization, Poverty, and Inequality since 1980," *World Bank Research Observer*, vol. 20(2), 145-175.

Dollar, D. and A. Kraay. 2001a. *Growth is good for the poor*. World Bank Policy Research Working Paper No. 2587.

Dollar, D. and A. Kraay. 2001b. *Trade, growth, and poverty*, Policy Research Working Paper No. 2615, The World Bank

Eicher, Theo and Stephen Turnovsky (eds). 2003. *Inequality and Growth*, MIT Press.

Fields, G. 1989. *Distribution and Development*, The MIT Press.

Ghose, A.K. 2003. *Jobs and Incomes in a Globalising World*, International Labour Organisation, Geneva.

Ghose, A.K., N. Majid and C. Ernst. 2008. *The Global Employment Challenge*, International Labour Organisation, Geneva.

Karshenas, M. 2010. *Estimating Global Poverty* (mimeo). May 2010.

Kuznets, Simon. 1955. "Economic Growth and Income Inequality," *American Economic Review* 65.

Ravallion Martin. 2001a. *Measuring aggregate welfare in developing countries: how well do national accounts and surveys agree?* World Bank Policy Research Working Paper No. 2665.

—. 2001b. “Growth, Inequality and Poverty: Looking Beyond Averages”, *World Development*, 29(11), 1803-1815.

—. 2010. *Poverty Lines across the World*, Policy Research Working paper 5282. The World Bank.

—. and Shaohua Chen. 1997. "What Can New Survey Data Tell Us about Recent Changes in Distribution and Poverty?", *World Bank Economic Review*, vol. 11(2), Oxford University Press.

Reddy, Sanjay G. and Thomas W. Pogge. 2002. *How Not to Count the Poor*, (Version 3.0), mimeo, Barnard College, New York.

WIDER (World Institute for Development Economics Research). Research data base on income inequality, http://www.wider.unu.edu/research/Database/en_GB/database/.

World Bank. 1990. *World Development Report: Attacking poverty*, Oxford University Press for the World Bank.

—. PovCalNet, World bank data base on poverty, World Bank website, econ.worldbank.org/povcalnet.

—. World Development Indicators online. World Bank website, http://data.worldbank.org/data-catalog/world-development-indicators.

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