Equity and growth – an uneasy relationship

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1. Introduction

Some issues in development economics have the character of an „evergreen“. The „equity-growth-relationship“ is one of them. When Kuznets (1955) published his famous article on this topic, it provoked numerous scholars to give their comments and to make their empirical studies. Kuznets presented the hypothesis of a non-linear relationship: in early periods of development, economic growth will increase distributional inequality, later on the distributional pattern will become more equal again. The result ought to be an „inverted U-shaped“-connection.

Some of the empirical tests which have been made since Kuznets presented his hypothesis confirm the “inverted U-shaped“-connection (Adelman/Morris, 1973; Adelman Fuwa, 1994; Ahluwalia, 1976), others disapprove it (Bruno /Ravallion/ Squire, 1996; Deininger/Squire, 1998). The present consensus, based on “high quality data”, seems to be that there is no definite pattern of distributional change in the course of economic development (Squire, 1999, p. 168). In other words: incomes in different brackets change more or less in the same way.

The consequence for poverty reduction seems to be clear: it is overall economic growth which matters. The poor benefit from economic growth not less (and not more) than the well to-do. On average, every one percent increase in the mean income will decrease the poverty rate by 2.5% (Ravallion, 2000, p. 8). This result is in line with those of other empirical studies (e.g. Dollar/Kraay, 2000). The poor do not just benefit from some “trickle-down“-effect which means that the upper quintiles of income earners would improve their situation first and subsequently the lower
quintiles could raise their incomes. Rather the poor participate without any delay from macroeconomic growth.

Given this result, why bother about equity at all? Is it not sufficient to stimulate growth and thereby improve the situation of the poor in absolute terms? Regardless of the importance of growth, there are still some reasons to have a closer look at the "equity-growth-relation". This will be shown in section 2. In some cases the issue of inequality might be neglected because it does not hinder but rather stimulate economic growth. The poor might benefit from this process even with an increasing inequality. This case will be discussed in section 3. Inequality, on the other hand, may be an impediment to economic growth and it cannot be neglected if one accepts that “growth matters”. Section 4 is dedicated to this issue. In section 5 the possibilities are discussed of combining economic growth with decreasing inequality, and section 6 contains some conclusions.

A general remark should be made at the beginning. The main interest in discussing here the equity-growth-issue is to clarify the potential of poverty-reduction during a process of economic growth. In so doing, “poverty” is defined as “insufficient income”: people are considered to be poor if their income does not reach a certain poverty line (usually 1 ppp. $ per capita per day). There are other possibilities of defining “poverty” utilizing some social indicators (life expectancy, literacy rates, nutritional standards etc.). But in this case, economic growth and its relationship to equity lose their importance. Even in countries with negative growth rates of average incomes and invariant distributional patterns social indicators can improve as some examples have shown (Fields; 1992, p. 70). One can draw two conclusions from this observation. First: changes of income are irrelevant for changes of poverty; second: social indicators are inadequate expressions of poverty. Following Fields (1992, p. 70), we will prefer the second conclusion. Therefore, in the sections that follow we refer to poverty in terms of income levels. It is well documented that there is a strong negative correlation between poverty in this sense and growth of average income (Fields, 1989; Sautter/Schinke, 1996, p. 218; Ravallion, 2000; Dollar/Kraay, 2000).
2. Why discuss the “equity-growth-issue”?

As mentioned before, data do not support the Kuznets-hypothesis. Nevertheless, the equity-growth-issue should be discussed carefully for at least three reasons:

a) The result that growth is not correlated with changes in inequality is usually based on cross-country studies. But there is sufficient evidence of increases or decreases in within-country inequalities over time (Ravallion, 2000, p. 12).

b) Even in cases of constant aggregate inequality over time, some income groups may considerably benefit or lose from economic growth and this, of course, is not irrelevant for poverty reduction.

c) Distributional inequality is a deciding factor in the degree of poverty-reduction generated by growth.

ad a) Individual countries may show different relations between income-growth and changes in equality over time. Systematically, we can distinguish four different cases (figure 1):

<table>
<thead>
<tr>
<th>growth rate of GDP per capita</th>
<th>+</th>
<th>-</th>
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<tbody>
<tr>
<td>+</td>
<td>1</td>
<td>2</td>
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<tr>
<td>-</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
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Increasing inequality (measured by the Gini) may go hand in hand with positive (case 1) or negative (case 3) growth rates and the same is true with decreasing inequality (cases 2 and 4).

These cases seem to be quite realistic. Ravallion (2000) reports the findings of two household surveys covering 47 developing countries in the 1980s and
1990s. The various spells as well as the corresponding changes in poverty are given in figure 2.

**Figure 2**

Change of Gini

<table>
<thead>
<tr>
<th>change in average household income</th>
<th>+</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>30% of spells</td>
<td>(PI – 1.3% p.a.)</td>
<td>(PI – 9.6% p.a.)</td>
</tr>
<tr>
<td>27% of spells</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16% of spells'</td>
<td>(PI + 14.3% p.a.)</td>
<td>(PI + 1.7% p.a.)</td>
</tr>
</tbody>
</table>

PI: % of population living below $1/day at 1993 ppp.
Source: Ravallion, 2000, p. 27

Obviously, all of the four cases shown in figure 1 are relevant. It is interesting to see that poverty declined with growing average incomes even in cases of increasing inequality (although to a much lower degree than in cases of decreasing inequality, -1.3% compared with –9.6%).

A simple graphical illustration of these different relations is given in figure 3.

**Figure 3**
The best case in terms of poverty reduction is obviously the second one (increasing average incomes go hand in hand with decreasing inequalities), whereas case 3 is the worst (decreasing incomes with increasing inequality). If inequality increases (decreases) with rising (declining) average incomes, the negative (positive) changes in poverty are modest (situations 1 and 4, see PI-changes in figure 2).

**Summing up** this point, there are various possibilities of relating equity and growth on the level of individual countries. The issue, therefore, is far from being irrelevant.

ad b) Even in cases where the Gini-coefficient remains constant, the income shares of specific deciles can change considerably. Compare, for example, the two distributional patterns in figure 4. Moving from distribution 1 to distribution 2, the lower deciles lose and the upper gain income shares, whereas the Gini as an aggregate measure of inequality remains unchanged (the area under the equal-distribution line and the Lorenz curve as percentage of the total area under the equal-distribution line). In this case, poverty may have increased in spite of constant overall inequality (dependent on the poverty-line).

![Figure 4](image)

The development of Indonesia at the end of the 1980s may illustrate this point. From 1978 to 1980 the Gini decreased by 3 percentage points signalling a more equal income distribution. At the same time, the income share of the
lowest two quintiles decreased by 4 percentage points signalling a tendency towards higher poverty (data taken from Deininger/Squire, 1996, p. 586).

The conclusion is that concentration on aggregate inequality is misleading if one is interested in poverty reduction. The fact that there may be losers and winners in economic growth is far from being irrelevant.

ad c) The effectiveness of growth in reducing poverty depends on the initial inequality in income distribution and on the change in inequality. One indicator of this effectiveness is the “growth elasticity of poverty (reduction)” as an expression of the percentage change of poverty (usually measured by the poverty rate) given a 1% change in average income. This elasticity is the higher, the lower the initial inequality was and the more inequality is lowered. Following Ravallion (2000, p. 17) one can calculate a “distribution-corrected rate of growth” and its influence on poverty. “r” being the annual percent change in the proportion of the population living in poverty, “g” the growth rate of average income per capita and “G” the Gini-coefficient, the following relation exists:

\[ r = \beta (1-G) g \]

“\( \beta \)” being the “elasticity of poverty to the distribution-corrected rate of growth”. Its estimated value is –4 (Ravallion, 2000, p. 18) which is roughly twice as high as the elasticity referring to the ordinary rate of growth. Given an increase of average income per capita of 2%, the poverty index will decrease by 5,6% in the case of an initial Gini of 0,3 and by only 3,2% if the Gini is 0,6. As we see, equity matters in so far as it influences the degree of poverty reduction generated by growth.

Whereas increasing average incomes are conducive to poverty reduction, increasing inequality is detrimental to this aim. Given these contradictory effects, Kakwani (2001) calculated an “inequality-growth-tradeoff-index” (IGTI) which neutralizes the growth effect by an increase in the Gini. An IGTI of 3,0 means that a 3% growth rate of average income will be neutralized by a 1% increase in the Gini so that the poverty rate remains unchanged. In other words: one would need a 3% increase in average income if poverty were to
remain unchanged in the event of a 1% increase in the Gini. This index, of course, is the lower, the more equal the initial income distribution was. Kakwani (2001, p. 8) calculated the IGTI for some Asian countries. For the Lao PDR the value is 0.94, for Thailand it is 4.07. Obviously, in the Lao PDR the pay-off for a growth strategy is considerably high. The country may decrease poverty with only a 1% average growth rate of income even in the event of rising inequality by 1 percentage point of the Gini. Here “growth matters” and “equity” may be neglected. This is not the case in Thailand, where efforts to make income distribution more equal will have a relatively high pay-off in terms of poverty reduction. Lowering the Gini by 1 percentage point is equivalent to a 4% increase in average income.

These are some numerical exercises which do not say anything about adequate political measures. Nevertheless, they illustrate the importance of levels and changes of inequality and they transmit the simple message, “that we cannot have the same policies for all countries” (Kakwani, 2001, p. 11). Some countries may accept (or even justify) increasing inequality while following a growth-maximizing strategy. Other countries should try to reduce inequality as a necessary completion of (or even precondition for) their growth-policy. In the next section, the first case will be discussed: rising average income with increasing inequality (situation 1 in figure 3).

3. Maximizing growth and accepting inequality

Let us suppose that a country may be characterized by the following features: the economy is stagnant, poverty is widespread, the IGTI is low. People are trapped in a kind of “incentive-trap”\(^1\): every economic surplus will be absorbed by a “forced solidarity” practiced within the extended family (or coerced by high marginal tax rates), labor shirking is widespread, “free-riding” is the predominant attitude, “rent-seeking” offers higher benefits than productive efforts, the fear of losing something prevents any “creative destruction” which is – following Schumpeter – the key to economic progress. In this case, policy should focus on the elimination of “incentive-traps” and on maximizing growth. This may lead to a more unequal distribution of income, but the poor will benefit from an absolute increase in their income more than

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\(^1\) This case is mentioned by Addison/Cornia, 2001.
they lose from a declining income share. In other words: inequality may be acceptable.

Is the country described in this way purely fictitious and the argument presented purely ideological? I hesitate to answer in the affirmative. Elements of an “incentive-trap” may be found in many countries and these elements are frequently associated with economic stagnation. In these cases, it may not be the best policy to avoid any reform which brings with it the risk of higher inequality. Less “egalitarianism” may be the price of overcoming economic stagnation. The poor will benefit from this policy in spite of increasing inequality (see the case of the Lao PDR with its low IGTI mentioned above).

It is tempting to mention in this context a well-known argument presented by John Rawls in his “Theory of Justice” (Rawls, 1971). As in his “difference principle”, the welfare of a society increases as long as the socio-economic situation of the poorest members of the society improves, facilitated, for example, by a process of economic growth – regardless of the overproportional income growth of the rich. It is the absolute improvement of the poor’s situation which matters, not their relative position in the income hierarchy. The problem, however, is that a high initial inequality may impede economic growth and substantially lower the growth elasticity of poverty. We will come back to these points. But before doing so, let us mention another argument which at first glance also supports the argument, that inequality may be acceptable.

It is the “savings-investment”-argument presented by Kaldor (1961). His point is very simple: the marginal propensity of the rich to save is higher than that of the poor. The rising income shares of the rich therefore increase macroeconomic saving rates and this facilitates higher investment-rates. Given the capacity-increasing effect of investments, economic growth will be accelerated and this favors the poor. So, rising distributional inequality may be justified.

The argument has many theoretical weaknesses: the rich may tend to some kind of conspicuous consumption, financial markets may be distorted, private savings may be transferred abroad, the relation between investment and growth is more complicated than shown in a Harrod-Domar world etc. Empirical tests show contradictory results. Cook (1995, p. 78) found “compelling evidence” for the “Kaldor-
“effect” based on a cross-country analysis of 49 developing countries. Schmidt-Hebbel/Servén (1996), did not find any influence of inequality on aggregate savings. One may conclude that Kaldor’s hypothesis is neither supported by firm theoretical arguments nor by reliable empirical evidence (Gersovitz, 1988, p. 408).

However, one should not completely reject the argument that in special situations (as described with some exaggeration at the beginning of this section) – increasing inequalities may be acceptable. “Equity” is not the only value which counts. It must be balanced with other values, and in cases of low “inequality-growth-tradeoff-indices” an increase in inequality may well be tolerable if it accelerates economic growth which gives the poor a better chance.

4. Inequality as an impediment to growth

The opposite cases are those in which inequality cannot be acceptable because it retards economic growth. Coming back to figure 3, the situation is that of case 2 with the assumption of a causal relationship: because high inequality impedes economic growth, a policy of redistribution is necessary in order to facilitate economic dynamism. In this context, several theoretical arguments should be mentioned (4.1.). After having discussed their empirical evidence (4.2.), some political conclusions may be drawn (4.3.)

4.1. The arguments

Exclusion from credit markets. Credit applicants who have high-expected rate of return projects but who are poor, have less access to credit than rich applicants with the same quality or worse quality projects. The higher the initial inequality, the lower the number of people with access to credit markets. This excludes many good projects from funding and the result is lower economic growth (Squire, 1999; Birdsall/Pickney/Sabot, 1997).

Restrictions to human capital formation. In addition to the point just mentioned, poverty hinders people from investing in their human capital. They are not only excluded from credit, but they also have high rates of time preference and high opportunity costs for attending schools. Therefore, the greater the share of poor
people in the total population, the more depressed human capital formation will be and this has negative effects not only on the poor themselves but on the whole society (Squire, 1999). Overall growth rates will be reduced as they are positively correlated to the stock of human capital (Birdsall/Ross/Sabot, 1997). An additional point in this context is the unequal access to the public school system. This kind of inequality usually goes hand in hand with an unequal distribution of personal incomes (IDB, 1998).

**Reduced X-efficiency of workers.** X-efficiency refers to the workers’ productivity holding constant all other inputs into the production process including workers’ human capital. This productivity is limited by a ‘virtual’ glass ceiling as workers do not visualize themselves progressing beyond a certain point. They, therefore, become discouraged and make less effort, and this perpetuates a vicious cycle of low incomes and high inequality (Mbabazi/Morrissey/Milner, 2001).

**Political instability.** The unequal distribution of resources may be a source of political tension and social conflict. In such a social-political environment, property rights are insecure and this discourages the process of production and the accumulation of assets (Keefer/Knaack, 2001; Perotti, 1996).

**The high propensity to a growth-reducing redistribution policy.** This argument is based on the median-voter-model. In a democratic system, the median-voter decides upon taxes and transfers. The more unequal the distribution of income is, the higher the probability that the median-voter will opt for higher taxes. Given the disincentive of taxes for investors and producers, the effect is a lower growth rate (Clarke, 1995; Squire, 1999). The somewhat paradoxical conclusion of this way of thinking is, that inequality is an impediment to growth because it triggers a policy which intends to remove this impediment. For political purposes, this approach does not help us very much.

But one should not try to draw political conclusions without looking at empirical data. What do they tell us about the validity of these arguments?

4.2. **The empirical evidence**

The message of many empirical studies seems to be: high inequality is harmful to growth. The channels, however, which transmit inequality into an obstacle to growth
are somehow obscure. Several cross-country studies showed results which were compatible with more than one of the arguments mentioned above. So, further empirical research is necessary in order to clarify the mechanisms that transform inequality into a growth-impediment.

One of the interesting results is that the influence of asset-inequality is stronger than that of income-inequality. Squire (1999) interprets this outcome in the light of the credit-market argument. Given the imperfections of credit markets, potential borrowers are asked for collaterals. In developing countries it is land which typically serves this purpose. A high concentration of land-ownership excludes many people from credit so that projects with an expected high rate of return cannot be realized.

This seems also to be a problem for investment in human capital. In their regression analysis, Deininger/Squire (1998) found that land-inequality has a significant explicative power in combination with education. They conclude “that the main channel through which initial inequality appears to effect aggregate growth is through schooling” (Deininger/Squire, 1998, p. 274). This interpretation corresponds to that of Birdsall/Ross/Sabot (1997) who compare the economic performance of some Latin-American countries with the growth process of some countries in East Asia. The main factor explaining the relative low growth rates in countries like Brazil and Colombia is seen in the inequality of education. Drop-out rates among the poor are very high and this excludes them from better paid jobs. One has to consider this connection between land-concentration and educational inequality when the question of political conclusions are raised.

Several empirical studies have been based on the political-economic arguments mentioned above. Distributional inequality may cause social conflicts and political violence which in turn weaken the process of growth. The argument is intuitively appealing, but there is no conclusive empirical evidence that it is inequality that leads to violence. Findings in literature prove to be sensitive to model specification, to the particular violence measure and to the inclusion of suspect observations referring to inequality (Wang/Dixon/Muller/Seligson, 1993). For example, Perotti (1996) presents the result that inequality increases political violence which in turn is negatively correlated with growth rates. However, when Keefer/Knack (2001, p. 24) replicated the evaluation using more reliable data on income distribution, they did not find a link between inequality and violence.
Another relationship seems to be more important. If one adds a property rights-index as an independent variable to a regression analysis, the explicative power of inequality indices is substantially reduced (Keeler/Knack, 2001). This result suggests, that inequality works through insecurity of property rights, defined as a compound index of expropriation risk, the risk of repudiation of contracts by government, the rule of law, the quality of bureaucracy and the corruption in government. These seem to be the relevant channels, which does not mean that other channels of inequality lose their explicative power completely. Land distribution still partly accounts for growth rates in addition to the property-rights index.

The median-voter approach is another attempt to relate inequality to growth. Persson/Tabellini (1994) find that the risk of a growth-declining redistribution policy is the higher, the more unequal the initial distribution of income is. The premise of this approach is a democratic system. However, Alesina/Rodrik (1994) and Deininger/Squire (1998) find no empirical support for the hypothesis that the pressures for redistribution are higher in democracies than in autocracies. In general, the median-voter model seems not to be very relevant to the majority of developing countries (Bruno/Ravallion/Squire, 1996, p. 18).

There is one general conclusion which can be drawn from these empirical studies: “not inequality per se retards growth but rather the inequality may encourage types of distortions that reduce economic performance” (Mbabazi/Morrissey/Milner, 2001, p. 18). One should bear this point in mind when the issue of political measures is considered.

4.3. Political conclusions

The significant negative correlation between land concentration and economic performance suggests that land reform could be a measure of growth stimulation. But the political conclusion is less straightforward. First: The channels through which land inequality operates are credit markets and human capital formation. Therefore, priority should be given to eliminate credit market distortions and to improve access to the educational system. The corresponding efforts can be encouraged

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1 The findings of Keeler/Knack (2001) are in line with those of Gupta/Davoodi/Alonso-Terme (1998) who concluded, that corruption increases income inequality and poverty through lower economic growth.
by land reform, but this reform would not help very much if not complemented by these changes.

**Second:** Any attempt to rearrange land-ownership or to change the operational pattern of land should be exercised **without reducing efficiency** of land utilization. Otherwise the growth effect will be negative and the poverty-reducing effect very doubtful. As the experience of several countries has shown, maintaining efficiency while redistributing land titles is a tremendous challenge. Taiwan and South Korea may be considered as countries which have succeeded in this respect. But the political conditions for land reforms in these countries have been unique after the Second World War and these conditions cannot be replicated in other areas. The present attempts to redistribute land in the South African Republic show the difficulties of such an intervention. The beneficiaries should be selected very carefully (those who promise an efficient land utilization may not belong to the poor); the government has to engage in many supplementary initiatives (as e.g. the construction of roads, the electrification of rural areas, the improvement of water supply etc.); special security-nets have to be established which make the risk of farming acceptable etc. (Zimmermann, 2000). In a word: the practice of land reform is much more complicated than theory suggests.

Referring to their results of a negative association between **asset inequality** and growth, Deininger/Olinto (2000, p. 18) point to the **privatization of state firms** in Central and Eastern Europe. In most cases, these programs made the distribution of assets more unequal. This is a growth-reducing factor, they say, and they recommend a more careful policy of privatization which avoids increased asset concentration. The point sounds convincing, but it is not well supported by the empirical tests which are reported by Deininger/Olinto themselves. Asset-inequality in their study refers to **land-distribution.** It seems a bit daring to apply the arguments underlying the relationship between land inequality and growth to the privatization issue of public enterprises. Nevertheless, the point is justified in so far as an increasing asset-inequality can be associated with **growing legal insecurity** which in turn has a detrimental effect on economic performance.

A political conclusion which is better supported by empirical evidence refers to **credit market-distortions.** A more equal access to credit is one of the most efficient ways of stimulating growth and of simultaneously improving the poors' participation in it. In
many countries, microfinance-programs of the Grameen-bank-type have shown remarkable results in opening the market to those who had traditionally been excluded. The truth, however, is that the beneficiaries had not been the poorest. Microfinance can stimulate growth which improves indirectly the situation of the ultra-poor. But it is not a direct solution to their social and economic problems.

Another political measure that is well supported by empirical data is equalizing the access to education. Without any doubt, human capital is the key to long-term economic growth and improving human capital endowment of the poor is both growth-stimulating and poverty-reducing. Political efforts have to be directed in several directions: better access to primary education in rural areas and in low-income urban areas, opening access to secondary and tertiary education for the children of low-income families, improvement of educational quality on all levels of schooling. As empirical studies for Latin America show, it is inequality of schooling that is greatly responsible for poor economic performance as well as for high-income inequality (IDB, 1998). The need for a more equal formation of human capital cannot be overstressed.

Summarizing the “inequality as an impediment to growth”-discussion, one point seems to be clear: in many countries the social, political and economic side effects of inequality retard economic growth. Specific measures should be designed to influence these effects – educational programs, microfinance schemes, safety nets for farmers, establishment of the rule of law etc. These measures seem to be more important than the correction of asset-inequality as such.

5. The scope of pro-poor growth as a “win-win”-strategy

In the last sections two contrary propositions have been discussed: accepting inequality is the necessary price for growth and overcoming inequality is a precondition of growth. In general, however, the relationship is less rigid: growth can be stimulated without increasing inequality and without a preceding redistribution of assets or incomes. In other words: neither is inequality the price nor equality the precondition of growth. In most cases the challenge is how to find a path of economic expansion, which is associated with an increasing income share for
the poor ("pro-poor growth")\(^1\). In this section, the possibilities of such a “win-win”-strategy shall be discussed.

One may start from the international consensus that the basic policy package that stimulates growth consists of liberalizing markets, keeping (or regaining) macroeconomic stability and opening up the domestic economy. This is essentially the content of a “structural adjustment policy” (SAP). The question is, how this policy works in terms of growth promotion and poverty-reduction. This will be discussed in sections 5.1.-5.3. A “structural adjustment policy” can be supplemented by social policy measures, which also have to be discussed in this context (5.4.) The topic, however, is so broad, that it cannot be discussed in every detail. I will restrict myself to referring to some issues of special importance within a “pro-poor growth”-strategy. It is self-evident, that all the measures which have been mentioned in the last section are also conducive to a “win-win”-strategy: opening up the credit market for the poor, improving their access to the educational system, a redistribution of land while keeping (or even improving) the efficiency of land-utilization, the establishment of “the rule of law” etc. The arguments already discussed in this connection will not be repeated here.

5.1. Liberalizing markets

In general, the deregulation of markets promotes private initiative and thereby stimulates economic growth. Rent-seeking activities lose their advantage whereas productive efforts become more attractive. In this way, overall economic efficiency will be strengthened. In short, liberalizing markets generates a growth-accelerating and efficiency-increasing environment.

The poor benefit more from this process the, the more the demand for labor increases because “labor” is the main resource they can offer. How far labor demand increases, depends to a large extent on the competitiveness of labor markets. In many countries these markets are some of the most regulated ones. The question, therefore, is whether liberalizing labor markets may contribute to a higher labor intensity of the growth process.

\(^1\) The meaning of the term is not quite clear. Klasen (2001, p. 2) defines the term as follows: „(the) income growth rate of the poor... must exceed the average income growth rate“.
Principally, labor market interventions (as e.g. minimum wages, severance payments, job reservations etc.) protect those who are already employed in the formal sector but they impede a higher labor absorption and therefore they discriminate against the unemployed and those who are employed in the informal sector. One can assume that unemployed and informally employed people generally belong to the poor. Thus the deregulation of labor markets may contribute to a higher labor intensity of growth and may thereby increase the income of poor people.

However, the effective wage level of those who were protected by existing regulations can decline. This comes close to a redistribution from low-income brackets to even lower ones – an effect which certainly does not correspond to the intention of a “win-win”-strategy. Therefore, any effort to deregulate labor markets should be supplemented by a firm educational campaign which improves the human capital endowment of workers. The same is true with regard to health policy. A more equal access to health services as well as to the educational system facilitates higher labor productivity of the poor which makes higher wages possible. In addition to this, subsidies which favor the use of capital-intensive techniques (subsidized interest rates e.g.) should be eliminated and all form of labor discrimination should be brought to an end.

In this context, the challenge to get rid off gender-discrimination can hardly be overstressed. Female illiteracy is one of the most important determinants of low growth rates and high poverty rates. Gender-discrimination with regard to access to education, health, services, technology and employment is tantamount to an under-utilization of human resources. It also perpetuates poverty because women usually spend a higher part of their resources on the nutrition, education and health of the coming generation than their male counterparts do (Klasen, 1998).

Liberalizing the markets of goods is another measure which stimulates growth. Seen from the perspective of a pro-poor-strategy, the process of deregulation should not exclude those markets which strongly effect the social-economic situation of the poor. These are agricultural markets, given the fact, that in many countries poverty is mainly a rural phenomenon. It is indispensable, therefore, to eliminate market restrictions which hinder the expansion of agriculture (state marketing boards e.g.).
In general, any economic growth favors the poor all the more, the higher the growth rates are in those sectors, in which the poor are strongly represented. In other words: not only overall growth, but also the sectorial composition of growth matters (Cashin/Mauro/Pattilo/Sahay, 2001). Empirical studies for several Indian states show that poverty indices decrease all the more, the higher growth rates are in rural areas relative to those in urban areas are (Ravallion/Datt, 1999). This, of course, is not only a question of deregulation, but of the whole set of measures which promote rural development. Nevertheless, to eliminate restrictions in agricultural markets is a necessary part of this policy.

One may conclude that “liberalizing markets” is an indispensable element of a growth-stimulating strategy, but that its pro-poor content depends on many supplementary measures which improve the competitive strength of the poor.

5.2. Macroeconomic stability

Markets cannot fulfil their proper function if price signals are distorted by an inflationary process. Monetary stabilization, therefore, should be an integral part of any macroeconomic policy which is designed to stimulate growth. It is true that in general the price of stabilization is a macroeconomic recession. This price would be higher, the longer the inflation period was and the higher inflation rates have been. A heterodox program which includes temporary price stops may delay and even diminish the contractive effects of an anti-inflation policy. But it is illusory to expect a cost-free stabilization. In every case the price has to be paid. Otherwise the outlook for sustainable growth is bleak.

Monetary stability is not only conducive to sustainable growth. It also seems to be an inequality-reducing measure. In their empirical study for 80 countries, Dollar/Kraay (2000) estimate the influence of inflation on the mean income of the poor, separating two different effects: a “growth effect” which shows the direct effect of inflation on the poor’s income and a “distribution effect”, which captures the indirect effect of rising price levels on incomes of the poor through its influence on income-distribution. The result is, that both effects are negative: inflation is detrimental to growth but it also leads to a deterioration of income distribution. To turn the argument on its head, it means that the reduction of inflation not only
stimulates growth but also lowers income inequality. Thus monetary stabilization is a “super-pro-poor”-policy. (Dollar/Kraay, 2000, p. 5).

This result is in line with empirical evidence presented by other authors. Using survey data on 31,869 households in 38 countries, Easterly/Fischer (2000) obtain the result that the poor are more likely to rate inflation as a top national concern. Ravallion/Datt (1999) find evidence of a negative effect of inflation on poverty in Indian states and following Romer/Romer (1998), the income share of the poor quintile is inversely related to inflation. The reason seems to be clear: the rich have access to sophisticated instruments of financial technology and therefore they can protect themselves from the risks of inflation. Not so the poor. They cannot escape from an “inflation trap”.

However, the relationship between stabilization and distributional equality seems to be non-linear. Bulir (1998) shows that reductions in inflation from hyper-inflation levels lower inequality much more than further reductions in even lower inflation rates. This does not mean that monetary and fiscal discipline become less important as soon as some success in fighting inflation is achieved. Without permanent discipline, inflation can easily gain momentum, and starting an anti-inflation policy again from high levels of price increases is much more costly than keeping monetary and fiscal discipline when low levels of inflation have been reached. It may be tempting to stabilize an “optimal rate of inflation” which facilitates structural changes and capital accumulation but avoids the negative effects of price distortions. This, however, is a difficult undertaking involving high risks. Maintaining a stabilization course is much more promising.

Macroeconomic stabilization as well as the deregulation of markets are the core elements of IMF-supported Structural Adjustment Programs (SAPs). The much-debated question is, how these programs affect income distribution and poverty. The empirical evidence is mixed and subject to several methodological caveats. Undesirable effects of SAPs may be due to false policy remedies, to an incomplete implementation of correct remedies and to factors outside the control of national authorities and international organizations. It is difficult – if not impossible – to distinguish these different causes of SAP-effects. In the case of African countries all these factors seem to have contributed to the low success-rate of these programs in terms of growth stimulation (Klasen,2001).
Garuda (2000) examined the distributional effects of IMF-programs. He used data from 58 programs over the period 1975-1991. He concluded that there is evidence of a deterioration in the distribution of income (as measured by Gini-coefficience) and in the income of the poor (as measured by the income share of the lowest quintile) within the first two years of such programs being initiated. This deterioration especially hits countries with large external imbalances in the pre-program period. However, when pre-program external imbalances had been low, countries participating in Fund-programs improved their income distribution in relation to non-program countries. So, the direction and magnitude of distributional effects depend critically on a country’s pre-program economic situation.

The results of Easterly (2001) correspond to those of Garuda. The more adjustment loans a country has received – and this means the more severe its internal and external imbalances have been - the less the poor benefit from an output expansion generated by SAPs. However, the poor suffer less from an output contraction in countries with adjustment loans than in countries without loans.

Summing up, a program of macroeconomic stabilization is a necessary element in a growth-stimulating strategy. However, income distribution can deteriorate immediately after initiating such a program if the pre-program imbalances have been very large. In these cases the costs of stabilization in terms of output losses are relatively high and are frequently borne to an over-proportionate extent by the poor. This is no argument against IMF-supported programs. If we follow Easterly (2001), the poor suffer more in countries effected by macroeconomic imbalances without adjustment loans.

5.3. Integration into world markets

Seen from a theoretical point of view, an outward-looking development strategy offers advantages both in a static and in a dynamic sense. The relatively abundant production factor is used intensively which is tantamount to producing with comparative advantages. In most developing countries, this factor is labor. So, an active participation in international trade offers high employment rates and this is conducive to a relatively equal distribution of income. In a dynamic sense, open markets generate technological spill-over effects and they attract foreign capital.
Long-term growth rates are expected to be higher than in countries which follow a more inward-looking strategy.

Usually, some East Asian countries are considered to offer convincing empirical evidence of this theoretical argumentation. Take for example the open economies of Taiwan and South Korea on the one side, the traditionally closed economies of some Latin American and Asian countries on the other side. The pattern of industrialization and its results are quite different: higher growth rates and a more equal income distribution in the open economies, stagnant growth and higher inequality in the closed economies. Referring to the growth-elasticity of poverty, Warr (2001) found that the more open economies – Taipei/China followed by Malaysia and Thailand – exhibit the highest elasticities whereas the least open economies – India and the Philippines – exhibit the lowest ones.

Nevertheless, integration into world markets is not the key to economic progress, distributional equality and poverty reduction. The success of countries like Taiwan and South Korea has many origins – educational policy, early land reforms, an intelligent combination of import substitution and export promotion, the quality of public administration among others. “Openness” has been just one factor in a whole set of institutional arrangements which led to “equity with growth”. So, one should not jump to conclusions when considering the “outward looking strategies” of East Asian countries.

Caution in the interpretation of empirical findings – this is also the message of Dollar/Kraay (2000). In their analysis of 80 countries they conclude that openness to international trade has a positive growth effect but no significant effect on income distribution (Dollar/Kraay, 2000, p. 5). So, the poor benefit from overall economic dynamism but not from a rising income share. The positive conclusion to be drawn from this finding is that neither are the poor hit by open markets. This contradicts the popular criticism of “globalization” which says that the poor have to pay the price of economic globalization. Lundberg/Squire (1999) support this criticism by their finding that openness lowers income growth in the bottom quintile. Their approach differs from that used by Dollar/Kraay (2000): the underlying data set is smaller and the indicator for “openness” captures not only exports plus imports relative to GDP but a

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1 As to the “Taiwan-success story”, see Sautter, 1990.
wide range of policy and institutional factors (ibid p. 22). Utilizing this broad indicator instead of their more restricted one, Dollar/Kraay also find that the mean income of the poor is negatively effected by “openness”, but this effect is not statistically different from zero\(^1\) (ibid p. 23). The same is true with reference to “openness of capital markets”. So, one should be careful in speaking about positive or negative influences of openness on income distribution. The empirical evidence is weak.

Another policy instrument that has to be considered in this context is exchange rate policy. An integration into world markets demands a competitive exchange rate. In many countries this is tantamount to depreciation and the establishment of an exchange rate regime which avoids real appreciations. For practical reasons, neither fixed nor completely flexible exchange rates seem to be recommendable. Many countries experiment with a managed floating. Here is not the place to discuss the arguments pro and contra this regime. Only one point will be considered: the effects of a real exchange rate depreciation. In many countries, it has been an integral element of macroeconomic reform programs.

*Demery/Squire* (1995) use a computable general equilibrium (CGE) model which allows one to disentangle the effects of specific policy variables from other influences. They find that – in correspondence with theory – a real exchange rate depreciation generates an expansion in the production of tradable goods (exports and import substitutes) favoring their producers. In case of exports, income distribution can become more unequal if exportables are produced in mines and in large rather than small and medium farms (*Bruno/Ravallion/Squire*, 1996, p. 9). This is confirmed by *Bourgignon/Morrison* (1990) who find that in developing countries with a sizeable share of mineral exports to GDP (more than 5%) an export expansion is associated with a decrease in the bottom 40% income share. However, distribution can get less unequal, if exportables are produced by small farmers (e.g. coffee).

In contrast to this result, farmers producing non-tradables (e.g. food for local markets) would be hit by real depreciations (*Christiaensen/Demery/Paternostro*, 2001) but consumers of non-tradables would benefit (*Demery/Squire*, 1995). So, the

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\(^1\) Odedokun/Round (2001) also get the result, that international openness has no effect on income distribution which allays the popular fear that has been raised in „anti-globalization circles“. 
distributional effects of a reallocation initiated by real exchange rate depreciations are very complex and they depend on factor intensity and factor ownership in the production of tradables and non-tradables as well as on the consumption pattern of the poor and the non-poor.

Summing up this point, one should be cautious in claiming an unambiguous decrease or increase in inequality as the consequence of an opening-up process. Integration into world markets has a positive growth effect and this counts more in terms of poverty reduction than the potential improvement of income distribution. However, the realization of the growth effect depends on many internal factors: the flexibility of factor markets, the educational level, the quality of public administration, the innovative capacity of the private sector etc. Opening up should be considered as part of a comprehensive development strategy. In this sense it is conducive to growth and poverty reduction. Isolated from complementary improvements in domestic institutions and policies, integration into world markets can work as an “external shock” with uncertain consequences for long-term growth.

5.4. Social policy

The macroeconomic measures discussed in 5.1.-5.3. are intended primarily to stimulate growth. This is their main contribution to poverty reduction. Their poverty-reducing effect via an improved income distribution is uncertain. Given this result, the question is: To what extent can distributional inequality (and poverty) be reduced by the tax- and transfer-system? Its possibilities are enlarged by growing overall income levels. How far these possibilities can be used, depends on the efficiency and progressiveness of taxes and public expenditure.

As to these conditions, the findings are bleak. In general, neither the income side of public budgets nor their expenditure side has any progressive features. In many countries, income tax-rates increase with rising incomes, but tax evasion eliminates a great deal of the potential redistributive effect. Apart from this, indirect taxes are the more important source of public revenue and in general they have a regressive character, given the higher consumption-rates of lower quintile-households.
With reference to public expenditure, the result is no better. Dollar/Kraay (2000, p. 24) get the result that government spending devoted to health and education has no statistically significant effect on income distribution. These findings are confirmed by Filmer/Pritchett (1997) who found little relationship between public health spending and health indicators such as infant mortality. Country-specific studies show the same results. Studying social policy in Ecuador, Younger (1999) found that “the government does not do much to redistribute welfare” (ibid p. 347). In this country, as in many others, social expenditures primarily benefit the middle class. The political system seems to be unable to target expenditure to the poor.

Nevertheless, there are exceptions. Even in periods of an economic recession an expenditure-shift can favor the poor and protect them from severe income losses. Indonesia seems to have been an example (Thorbecke, 1991). A careful mix of spending cuts during adjustment helped mitigate the short-term consequences for the poor of declining growth. What can be managed in periods of low growth-rates should be even more possible with accelerating growth.

So, the potential exists to combine increasing growth rates with decreasing inequality using a carefully targeted tax and expenditure system. But to implement this kind of policy seems to be much more difficult than implementing a program of macroeconomic adjustment and growth-stimulation. Therefore, to say that “growth” contributes more to poverty-reduction than “social policy”, implicitly means that one acknowledges the relative high political constraints on social policy. There would be much more scope for combining “equity with growth” if these constraints could be relaxed.

6. Conclusions

Starting from the premise that poverty-reduction is a political aim (which is far from being self-evident considering real politics and not written political declarations), the relationship between equity and growth is relevant for at least four reasons:

1. The initial inequality decides upon the growth-elasticity of poverty reduction.
2. In some cases, accepting higher inequality can be the price of accelerating growth as an important factor of poverty-reduction.

3. In many cases, asset-inequality – or more important: its side-effects – is an impediment to growth.

4. The distributional effects of measures which are intended to stimulate growth are mixed. In order to give economic growth a “pro-poor”-direction, more should be done than liberalizing markets, eliminating macroeconomic imbalances and integrating markets into the world economy.

All these points can be supported by empirical evidence, albeit to a differing extent. The question is: What political conclusions can be drawn from theoretical arguments and empirical findings? Besides all country-specific lessons, there seem to be some general conclusions:

1. A significant improvement in the educational level of low-income earners will stimulate growth and contribute to a more equal income distribution. It is not sufficient just to realize high enrolment rates for primary education. Drop-out rates have to be reduced significantly, the quality of teaching must be increased and access to secondary education has to be facilitated. Moreover, all forms of gender-discrimination in the educational system have to be eliminated. An educational campaign of this type will not reduce poverty within a few years. It is a long-term strategy, but without this effort all short-term measures risk being unsustainable.

2. What is true for educational policy may also apply to health policy. “Human capital” which is the decisive factor for growth includes both, the physical health and the intellectual capacity of people. At present the access to health services is far from being equal for higher and lower income-quintiles. Improving access for the poor contributes to equity as well as to growth.

3. Economic growth depends on reliable property rights. In so far as the inequality of income- and asset-distribution undermines the system of property rights, a redistribution may be conducive to economic growth. But one should be careful. The efficiency of asset-utilization should not be threatened. An easier way is to
redistribute the growth of assets, not their stock. An appropriate measure to make asset-growth more equitable, is a program of microfinance.

4. Macroeconomic stabilization, liberalization of markets and integration into the world economy are steps in the right direction. They stimulate growth and thereby reduce poverty, but their redistributive effect is uncertain. An anti-inflation policy may improve the absolute and relative income position of lower quintiles, and liberalizing agricultural markets may have positive effects for the rural poor. But an exchange rate depreciation and a tariff-reduction cannot be targeted in favor of the poor. Macroeconomic tools are oriented towards macroeconomic goals. They would lose their effectiveness if they were focused on the aim of income-redistribution.

5. Economic growth could be given a more explicit “pro-poor”-direction if growth-stimulating measures were supplemented by measures which are intended to strengthen the poor’s competitive power in liberalized markets (points 1-3) and which knot a reliable safety-net for low income-earners. The latter is the case for a carefully targeted social policy.

One cannot speak about “equity and growth” without at least mentioning the international dimension of the problem. The fact is that industrialized countries still have a long way to go in order to materialize their responsibility for a more equitable global environment. They frequently undermine the elements of an international “rule of law”. Their policy towards developing countries is far from being coherent. On the one hand they give incentives, on the other hand they punish those who respond to them. Take development aid and trade policy as an example. So, “equity and growth” is also an international issue. It is mainly the part of industrialized countries, to establish a global environment which makes growth more equitable on the international level. This would be conducive to a more equitable growth-process within developing countries.


