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Trends in income distribution in the post- World War II period: Evidence and interpretation

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Discussion Paper No. 2001/89

Trends in Income Distribution in the Post-World War II Period

Evidence and Interpretation

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with Sampsa Kiiski²

September 2001

Abstract

Until recently, the literature on income inequality within countries suggested that trends in this area had remained stable over the last few decades, and that there is no relation between changes in inequality on the one side and domestic and external liberalization on the other. Against this background, our study reviews changes in within-country inequality over the last twenty years on the basis of an extensive review of the literature and of an analysis of inequality trends in 73 countries accounting for over four-fifths of world population and GDP. The paper finds that over the last two decades inequality rose in two-thirds of these 73 countries. This pattern is not uniform but marks a clear departure from the inequality trends recorded since the end of World War II. The paper also suggests that, with the exception of growing educational dispersion in Latin America, traditional causes of inequality (such as land concentration and urban bias) cannot explain the recent rise in income inequality. The latter appears to be related to a shift towards skill-intensive technologies and, especially, to the drive towards domestic deregulation and external liberalization.

.../...

Keywords: policy reform, Washington Consensus, inequality, inequality trends, liberalization

JEL classification: E62, H53, I38

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Of the six main components of this new paradigm, capital account liberalization appears to have had the strongest disequalizing effect, followed by domestic financial liberalization, labour market deregulation and tax reform. Privatization was found to be associated with rising inequality in some regions but not others, while trade liberalization had insignificant or mildly disequalizing effects.

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1. Introduction

With the exception of Latin America and part of sub-Saharan Africa, a widespread move towards greater egalitarianism was recorded in the majority of the socialist and developing countries during the 1950s and 1960s and in the industrialised economies during the second Golden Age. Over the last twenty years, this trend towards greater equality has been halted in parallel with the emergence, consolidation and diffusion of a new economic paradigm often referred to as the ‘Washington Consensus’. This paradigm stresses stringent macroeconomic stabilization, deregulation of domestic product and factor markets, privatization and a reduced role of the state in the economy. During the last decade, such policy paradigm has extended its reach by emphasizing policies—such as the removal of barriers to international trade, opening up to foreign direct investments and liberalization of short-term portfolio flows—which help in accelerating the globalization of the world economy induced by the fall in the cost of international telecommunications and transports.

This new policy approach—which has deeply marked policy-making in developed, developing and transitional countries—is claimed to reduce rent-seeking, improve competition, offer major opportunities for export and growth to developing countries with narrow domestic markets, promote the convergence of the living standards of poorer countries with those of the advanced nations and reduce the incidence of poverty worldwide. It is also claimed that the within-country distributive impact of these policies is, on the whole, neutral (or positive in areas with a surplus of educated labour), that the long-term income distribution is broadly stable, that there is no clear association between inequality and growth and that, thus, poverty is best reduced through growth-oriented, rather than distributive, policies.

Against this background, our study reviews the tendencies in within-country inequality in the post-WWII period, with particular attention to the last twenty years, i.e. the years of domestic liberalization and globalization. It argues that the many case studies reviewed hereafter and an econometric analysis of inequality trends in 73 countries accounting for 80 percent of the world population and 91 percent of the world GDP-PPP suggest that last two decades have been characterized by a surge in within-country inequality in about two thirds of the developing, developed and transitional nations. In many of these countries, especially those where the upsurge in inequality was sizeable, or where inequality rose from already high levels, growth and poverty alleviation slowed down perceptibly. While this pattern is not entirely uniform, as ‘late liberalizers’ such as India exhibited stable or slowly declining inequality indexes until very recently, this trend towards greater inequality marks a clear departure from the past.

Our paper suggests that, with the exception of growing educational inequality in Latin America, the traditional causes of inequality such as land concentration and the urban bias, are unlikely to explain the recent rise in income concentration. The latter is more likely to be related to the shift towards skill-intensive technologies and, especially, to the adoption of policies towards domestic deregulation and external liberalization.

We argue that the recent increase in inequality conflicts with the stated objectives of the international community to eradicate poverty, as higher inequality reduces the poverty alleviation elasticity of growth and, under certain conditions, it depress growth itself. The paper ends suggesting that to achieve simultaneously growth and poverty alleviation, it is necessary to tackle not only the traditional sources of inequality but also to introduce macroeconomic and structural policies, which avoid the distributive distortions of the new orthodox economic paradigm.

2. Within-country inequality trends in the post-WWII period

Several analyses have shown that between-country inequality explains a far bigger share of global inequality than within-country inequality. However, from a policy perspective it is more important to focus on the latter than on the former. There are two reasons for this. First, between-country inequality is path dependent and is not easily modifiable by policy action. The income gap between the countries of the OECD and those of, say, Africa is strongly path-dependent. It is the result of differences in history, geography, technological development, culture, demography and so on—that is, factors that require at least several generations to be modified. Second, despite the alleged demise of the nation-state, most policy decisions that affect inequality are still taken at the national level.

We also believe that the analysis of within-country changes in inequality should draw more on a systematic review of country case-studies. On the basis of a review of the postwar literature on income distribution Kanbur (1998: 12) notes that ‘Despite the huge amount of resources devoted to the development-distribution relationship in the (cross-sectional) Kuznetsian approach, it has to be said that the harvest is meagre’. We recommend with him that generalizations about inequality changes and their causes are more based on country case studies and that less emphasis be placed on cross-sectional analyses. Hereafter the inequality changes intervened in the post World War II period in the major groups of countries are reviewed region by region.

2.1 The OECD countries: mostly U- and ‘\’-shaped inequality pattern

The developed market economies emerged from World War II with relatively high income inequality. Income concentration, however, declined steadily between the 1950s and 1960s, and this trend continued during most of the 1970s. This view is confirmed by a review of income distribution trends sponsored by the OECD (Sawyer, 1976: 26) which concludes that ‘...broadly, it would appear that through the 1950s there has been some movement towards greater equality almost everywhere. In the 1960s and early 1970s, the same remained true for France, Italy, Japan and the Netherlands. The picture is unclear in Germany ... and in the United Kingdom ... In North America, there seems to have been a marginal move away from inequality.’

A steady decline in unemployment, stable earnings inequality and a rapid expansion of social security schemes (Boltho, 1997) led to a steady rise in the labour share and to a drop in the concentration of the pre-tax, pre-transfer income distribution. Unemployment fell to an unweighted average of 2.7 percent for the main 14 OECD countries in 1973 before climbing back to 6.8 in 1990 and 10.1 percent in 1994 (Boltho, 1997).

Table 1
Interdecile ratio^c of pre-tax or post-tax income distribution in selected OECD countries

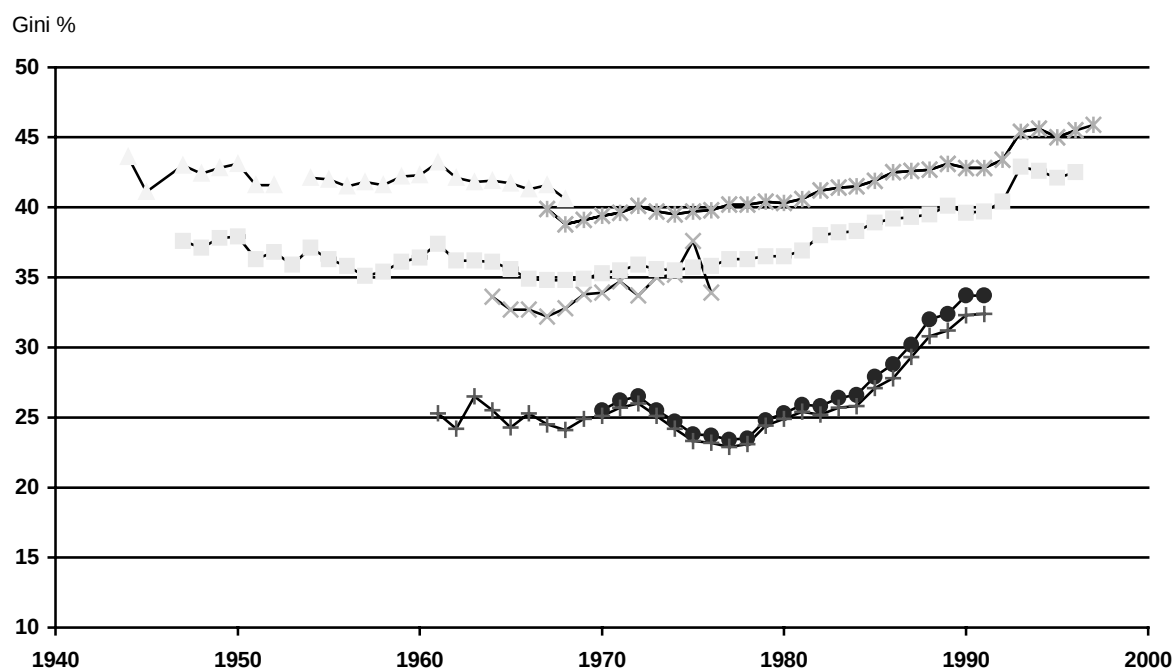
Country	Canada (pre)	France (pre)	Germany (post)	Italy (post)	Japan (pre)	Holland (post)	UK (pre)	USA (pre)
Around 1950	19.6	....	13.9	....	....	17.6	....	23.8
Around 1960	16.6 ^a	40.1	11.2	19.1 ^b	8.5	12.5	11.5	25.0
Around 1970	26.5	26.6	11.7	15.8	6.6	10.6	11.8	23.4

Source: authors' elaboration on data in Sawyers (1976).

Notes: ^a1965, ^b1967, ^cratio of the income shares of the top and bottom deciles.

In addition, the social security schemes introduced or expanded during the Golden Age reduced even more rapidly the inequality of the distribution of post-tax post-transfer income. Between 1951 and 1975, public expenditure on social security rose steadily from just below 3 to almost 12 percent of GDP in the USA, from 7 to 14 percent in four commonwealth countries (Australia, Canada, New Zealand and the United Kingdom) and from 8 to 20 percent in eleven West European countries (Cornia and Danziger, 1997: Figure 2.3). Thus, 'despite a surprisingly stable pretax earnings structure, the distribution of post tax income has nonetheless changed towards greater equality in those European countries for which reasonably reliable data are available. Fairly pronounced changes along these lines have taken place in Italy, the UK and the Netherlands; more modest ones in France and Germany' (Sawyer, 1976: 216-7).

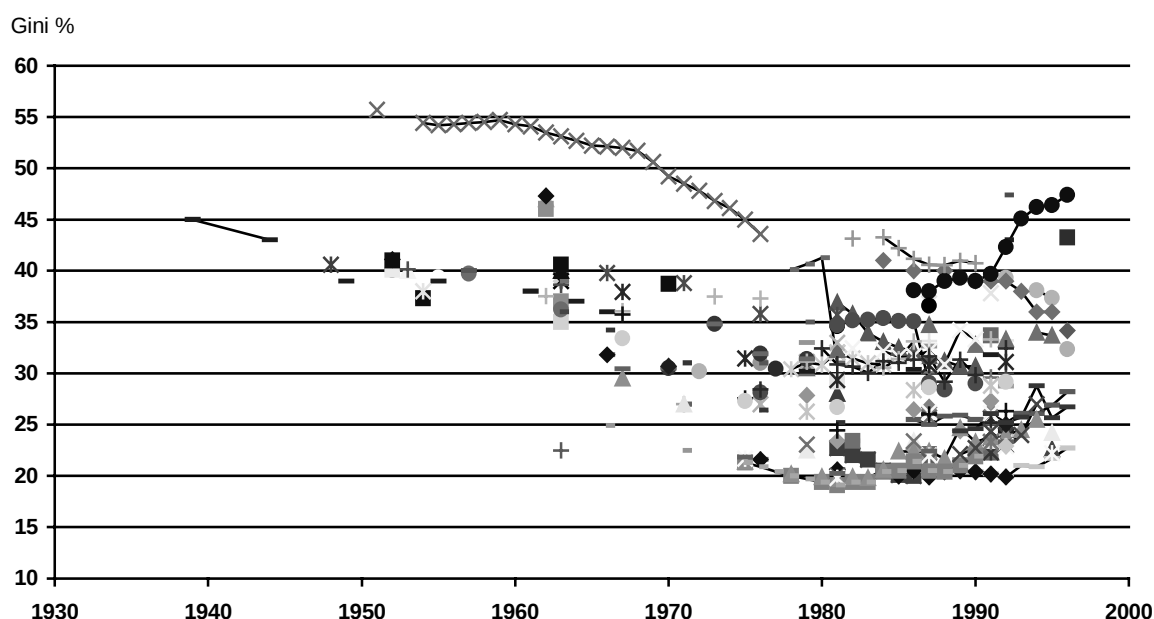
Figure 1
Trends in the Gini coefficients of the distribution of gross income in the USA (two upper curves) and of net income in the UK (lower curve), 1944-97



Since the late 1970s this trend has halted or reversed in most of the region: first, inequality started rising from the mid-late 1970s in the Anglo-Saxon group. Inequality rose first in the mid-late 1970s in four Anglo-Saxon countries (USA, UK, Australia and New Zealand)

which were the first among the OECD countries to adopt a neoliberal policy approach (Brandolini, 1998). The increase was particularly pronounced in the UK where the Gini coefficient of the distribution of net disposable income rose more than 30 percent between 1978 and 1991; i.e. twice as fast the increase recorded in the US during the same period, and more than double the fall registered in the UK between 1949-76 (Figure 1).

Figure 2
Trends in the Gini coefficients of the distribution of income (various concepts) in the Nordic countries (Denmark, Finland, Norway and Sweden), 1939-98



The Scandinavian countries and the Netherlands are part of a second wave of countries where the inequality follows a U-shaped pattern, though in these countries the trend reversal took place 5-10 years after the first group, and though the rise in inequality started from lower levels and was less pronounced (Figure 2). A third wave of countries, including Finland and France, experienced a gradual flattening of inequality indexes starting around 1975-80 (Brandolini, 1998). Only in Ireland and Italy there is evidence of an uninterrupted decline in inequality until 1992. In Italy, however, inequality rose by 4 points between 1992 and 1995 possibly as a result of the introduction since 1993 of vigorous measures in the field of deficit control, privatization and liberalization (Brandolini 1998).

Despite its reputation for having achieved fast growth with equity, also Japan experienced a rise in income inequality during the last two decades. Before World War II (indeed, for most of its history), Japan experienced large income gaps between the rich and the poor. These large differences were substantially reduced during the first three decades of the post-WWII period. By the mid-late 1970s, the Gini coefficient of net disposable income had fallen to around 0.30 (Ozawa, 1997). However, since the early 1980s, this trend has been reversed, and in 1993, the Gini coefficient stood at 0.44, almost the same as the United States and far higher than that of countries such as Sweden and Denmark. Few countries have seen inequality rise so sharply in such a short period.

Table 2
Trend in the Gini coefficient of various income concepts in Japan

Year	Before taxes Before transfers	After taxes Before transfers	After taxes After transfers
1970s	0.300	.....	.....
1981	0.349	0.330	0.314
1984	0.398	0.382	0.343
1987	0.405	0.388	0.338
1990	0.433	0.421	0.364
1993	0.440	.....	.....

Source: Ozawa (1997).

One of the recent factors contributing to this rise in inequality has been the policy to end Japan's decade long economic slump by lifting restrictions on competition. That has forced companies to scrap the old egalitarian lifetime employment system, with its age-based wage scales, in favour of rewarding productive workers with higher salaries. The ranks of those earning little or no income have also swelled as the economy's slide into recession has increased bankruptcies and the attendant job cutting. The rise in inequality has been influenced also by growing number of low paid women entering the workforce and soaring land prices in the 1980s.

Most of this increase in *income inequality* in industrialized countries is explained by a rise in *earnings inequality* (Gottschalk and Smeeding 1997). Countries with centralized wage-setting institutions (Germany, Italy), a high union density and adequate minimum wages (France) contained the pressures towards higher earnings inequality and experienced either smaller increases in earnings inequality or no increases at all. At the other end of the spectrum, the UK, the US and other countries with decentralized wage negotiations and flexible labour markets experienced the largest rises. In the US, respectively 30 and 20 percent of the rise in earnings concentration is explained by a 44 percent fall in the minimum wage and the decline in unionization (ibid.).

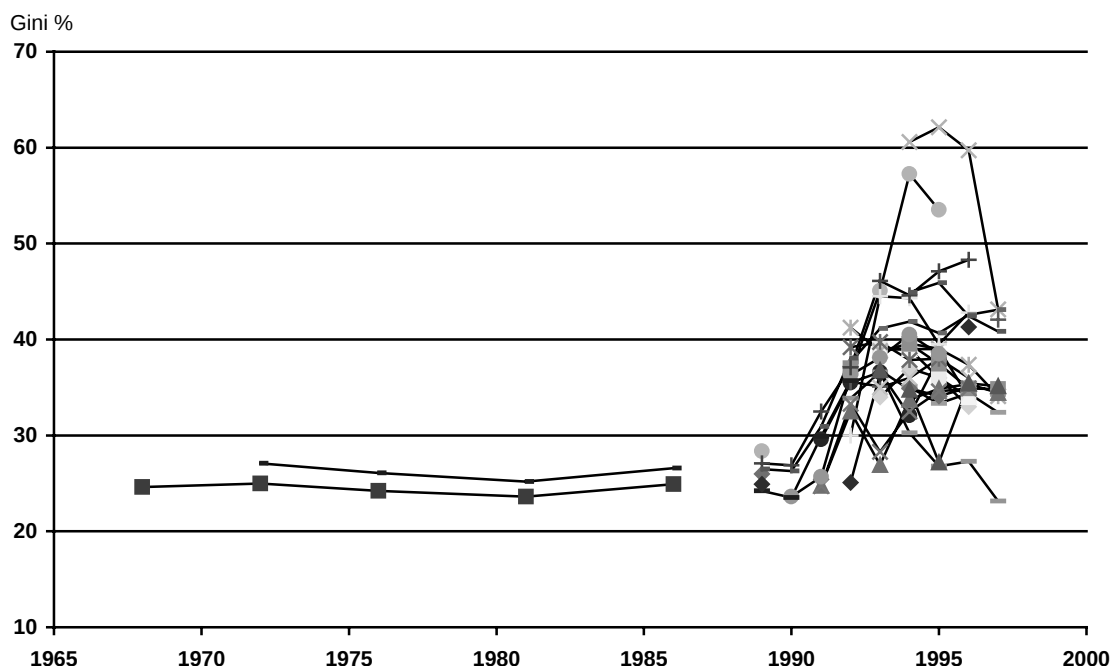
Other factors contributed to the rise in inequality. An upsurge in the share of financial rents, urban land rents and profits contributed to the growing dispersion of market incomes. To start with, there is evidence that the profit share in industry, transport and communication has risen since the middle 1970s to the early 1980s in all industrialized countries (UNCTAD, 1997). In addition, returns to financial capital increased in line with the adoption of a policy of high interest rates which was introduced in 1982 and which was sustained for over a decade. High rates by an historical standard have therefore induced an increase in the of GDP assigned to the financial rents particularly in countries with a large domestic debt (Italy and Belgium). Finally, the redistributiveness of the tax and transfer system declined, as the value of transfers fell relative to GDP and personal income tax became less progressive (Atkinson, 1999). These last changes however accounted for only a modest part of the total increase in inequality.

2.2 The widespread rise of inequality in the former Soviet Bloc

Inequality of the distribution of net disposable income narrowed up to the mid-late 1970s but increased moderately during the mid-late 1980s likely owing to the spread of the

‘second economy’ in Hungary and Poland and the introduction of wage incentives during the Gorbachov era in the USSR (Atkinson and Micklewright, 1992). Conclusions about the low and stable level of inequality in the region would change somewhat, though not fundamentally, if the (poorly documented) disequalizing impact of dual distribution systems, growing regional differences in the supply of consumer goods and rise of shortages over time is taken into account (Braithwaite and Heleniak, 1989).

Figure 3
Trends in the Gini coefficients of the distribution of income (various concepts) in the countries of the former Soviet Union, 1968-97



Since 1989, income concentration has risen moderately in the countries of Central Europe (Milanovic, 1998; Cornia, 2001) where earnings inequality rose less than anticipated and a comprehensive welfare state was preserved or even expanded (Table 3). In contrast, in the former USSR and South Eastern Europe, Gini coefficients rose on average by an astounding 10-20 points, i.e. 3-4 times faster than in Central Europe (Figure 3, Table 3). In these countries, the transitional recession and fall in the wage share were very pronounced, social transfers declined, their composition and targeting deteriorated (Milanovic, 1995; Cornia, 1996) and privatization was far less egalitarian than in Central Europe (Honkkila, 1997).

The rise in inequality observed in the countries of the former Soviet Union is perplexing. As noted by Doyle (1993: 19, cited in McAuley, 1994) ‘... Russia has experienced a widening of its income distribution over one year equivalent in scale to that which occurred in the UK over ten years’.

Table 3
Gini coefficients of the distribution of net per capita disposable household income between 1989 and 1994-5

Moderate Increases	1989 Gini	1989-95 Increase	Large Increases	1989 Gini	1989-95 Increase
Slovenia	23.7	1.3	Lithuania	27.5	8.5
Hungary	21.4	1.6	Latvia	22.5 ^a	8.5
Slovakia	19.5	3.0	Estonia	27.7	11.9
Romania	23.5	4.9	Bulgaria	25.0 ^b	12.0
Czech Republic	18.5	4.9	Moldova	26.7	13.3
Poland	24.9	5.1	Russia	25.7	15.2
			Ukraine	23.3 ^a	24.1

Source: UNICEF (1995, 1997); Milanovic (1998) for Latvia and Ukraine.

Notes: ^a1988. The data are not always directly comparable over time due to changes in the sampling framework. For a few countries and years the data refer to gross household income per capita. ^b1990.

Table 4
Decomposition of the increase in the Gini coefficient of the distribution of household incomes between the pre-transition period and the years 1993-6

Country	Due to							Overall Gini change
	Change in concentration of							
	Change in income structure	Wages	Social transfers	Out of which			Inter action term	
				Pensions	Non- pension transfers	Non-wage private sector		
Hungary(1989-93)	-1.3	+5.9	-0.6	+1.4	-0.2	-0.6	-1.3	+2.2
Slovenia(1987-95)	-0.2	+3.6	-0.6	-0.1	-0.4	+0.4	-3.8	+2.6
Poland (1987-95)	-1.7	+3.4	+3.5	+3.2	-0.1	+0.8	+0.9	+7.0
Bulgaria(1989-95)	+1.4	+7.8	+0.9	+0.4	+0.4	-0.4	+0.3	+10.0
Latvia (1989-96)	-1.6	+15.0	-1.5	-2.0	+0.5	+1.4	-3.3	+10.0
Russia (1989-94)	-3.4	+17.8	+5.1	+3.9	+0.4	+3.0	+1.2	+23.6

Source: Milanovic (1998: Table 4.2).

Also in this region, rising *earnings inequality* seems to have played a central role in the surge of overall *income inequality* (Table 4). The rise in earnings inequality has been attributed to the emergence of ‘scarcity rents’ for professionals such as accountants, bankers, computer and other specialists who were ‘undersupplied’ during the old system, and to a more general rise in returns to education following liberalization (Vecernik, 1994; Rutkowski, 1999). Such explanations, based on standard human capital theory, account however for less than half of the observed increase. To start with, many highly educated employees in the ‘budgetary sector’ continued to receive very low wages unrelated to their skills and experience. Earnings inequality appears to have risen also because of the fall in the minimum wage relative to the average (Standing and Vaughan-Whitehead, 1995), the expansion of a poorly regulated and highly inequitable informal sector, mounting wage arrears, and a surge in interindustrial wage dispersion unexplained (after controlling for skill intensity) by productivity differentials which has favoured workers in politically influential sectors such as mining and power generation and penalized workers in sectors

like health, education, culture and agriculture whose wages were affected from the severe tax collection difficulties experienced during the last few years (Cornia, 1996).

The limited or even negative contribution of the rise in capital incomes to the overall rise in income inequality suggested by the first column of Table 4 is explained by the massive undersampling of the new high income groups and to the considerable underreporting of their income in the household budget surveys, as suggested by the growing discrepancy between the average income per capita derived from the national accounts and that computed on the basis of the household budget survey. The limited information available on the distribution of financial assets and bank deposits tend to support this view.

2.3 Latin America: a rise in inequality in the 1980s followed by a further rise or stagnation in the 1990s

With the exception of Uruguay and Argentina, i.e. highly urbanized countries with an educated labour force, a comparatively extensive social security system and Gini coefficients of 0.30 and 0.40, in the early-mid 1950s, Gini coefficients in Latin America traditionally ranged between 0.45 and 0.60, i.e. among the highest in the world (Altimir, 1996). This acute income polarization was rooted in a highly unequal distribution of land and educational opportunities, which benefited a tiny agrarian, mining and commercial oligarchy. The rapid growth which followed the adoption of the 'import substitution strategy' in the 1950s had, on the whole, a disequalizing impact. Of 21 growth spells recorded over 1950-79, inequality fell in four cases, stagnated in five and rose in eleven, including during years of growth (Altimir, 1994). In the 1970s, however, inequality declined moderately in most of the region except for the Southern Cone countries (Altimir, 1996) following the introduction by the ruling military regimes of an extreme version of the neoliberal reforms. The combination of a rise in inequality over the 1950s and 1960s with a fall over the 1970s made that by 1980, all medium and large-sized Latin American countries had a greater concentration of income than in the early-mid 1950s.

From 1980 to the mid 1990s, inequality in the region was affected by large external shocks, the recessionary adjustment introduced to respond to them and the slow and unstable growth pattern re-established in late 1980s and which lasted throughout the 1990s. Altogether, the 1980s were characterized by regressive distributive outcomes. Inequality declined in only three (Colombia, Uruguay and Costa Rica) out of 11 cases (Altimir, 1996). Colombia (which had low foreign debt, avoided a drastic adjustment and raised the average and minimum wage level during the decade) showed less inequality in 1990 than in 1980, though the gains were wiped out in subsequent years. Uruguay recorded no change in the 1980s and made strides in subsequent years (Iglesias, 1998). On the basis of such information, Iglesias (1998: 6) notes that '... at the end of the decade (of the 1980s), there was a substantial rise in inequality in most cases. That means that the recession of the 1980s hit the poor harder than the rich'.

Most important to the focus of this paper, income polarization did not decline with the return to full capacity growth in the 1990s as shown by a recent review of the 1990s making use of standardized microdata from 49 nationwide representative household surveys for 15 countries covering 90 percent of the population of the region (Székely and Hilgert, 1999). The study shows that none of the countries examined recorded a distributive improvement during this period. In eight cases, statistically significant

increases in inequality were found between the first and last observations for the 1990s, while in 7 cases there was no change. Also in this period, the main force behind these overall was a further polarization in labour incomes.

The income polarization of the 1980s (and likely of the 1990s) was the result of fast inequality rises during recessionary spells and slow declines during periods of recovery. It has been estimated (Cornia, 1994) that in the 1980s the poverty elasticity of growth for the region as a whole was 1.79 during recessions but only 0.61 during recoveries. In particular, the functional distribution of income worsened rapidly during recessions, as suggested by the decline by 5-6 percentage points in the labour share between 1980 and the late 1980s in Argentina, Chile and Venezuela, and by the 10 point decline of Mexico (Sainz and Calcagno, 1992). Four structural changes underlie this trend and possibly explain the permanent surge in income inequality discussed above. First, there was a slowdown in job creation. Second, growing informalization of the labour market (that is, a shift to sectors where lower productivity and lower wages are the rule). Third, formal sector wages evolved less favourably than GDP per capita. Fourth, minimum wages mostly fell in relation to average wages (Table 5).

Table 5
Ratio of the indexes of minimum to average wage (1980 = 100)

	1980	1986	1991		1980	1986	1991
Brazil (Rio de Janeiro)	100	76	74	Mexico	100	91	54
Chile	100	78	86	Paraguay*	100	116	127
Colombia	100	95	92	Peru	100	57	43
Costa Rica	100	121	138	Uruguay	100	98	123
Ecuador*	100	65	36	Venezuela*	100	109	55

Source: Based on ECLAC (1990, 1991).

Note: *Ratio between the indexes of the minimum wage and of GDP/c (1980 = 100).

Finally, there was a widening in wage differentials by skill and educational level (Tokman, 1986; Sainz and Calcagno, 1992; Székely and Hilgert, 1999). Barros *et al.* (1992) argue that, in the case of Brazil, this trend can be explained mainly by a surge in wage differentials by level of education, since during 1980 and 1985 the ratio between the average earnings of illiterate workers and workers with lower primary education declined from 0.63 to 0.59, while the corresponding ratio between college-educated workers and workers with secondary education rose from 2.36 to 2.42. However, in other countries of the region, it appears that recession, adjustment and restructuring affected the demand for highly skilled labour (the supply of which was expanding rapidly) more than it did that for less skilled workers (Altimir, 1996).

This review may be concluded by noting with Altimir (1996: 59) that

Under these new economic modalities (characterized by trade openness, fiscal austerity, a prudent management of monetary policy, less public regulation of markets and more reliance on private initiative), the pattern of income distribution tends, as suggested above, to be unequal at the very least, and more unequal—in most cases, at least in urban areas—than those that prevailed during the last stages of the previous growth phase in the 1970s.

2.4 China: a U-shaped trend driven by rising regional and urban-rural inequality

Also in China income inequality followed over the last 50 years a U-shaped pattern with the turn-around point located around the mid 1980s. At the beginning of the Maoist experiment in 1953, the nationwide Gini coefficient of the distribution of household incomes was 0.56 reflecting a situation of profound inequality in the access to education, land and social welfare as well as the impact of years of war. In the 1950s and 1960s, the creation of agricultural communes, socialization of industrial assets and development of an embryo of social security led to egalitarian growth. Thus, despite large regional differences in natural endowments, the national Gini coefficient fell to 0.31 in 1964 and 0.26 in 1975 (Table 6).

Table 6
Evolution of the Gini coefficients and the income gap in China, 1953-95

Year	Overall Gini	Urban Gini	Rural Gini	income gap, U/R ^a	Inter-provincial income gap(rural) ^b	Inter-provincial income gap(urban) ^b	Inter-provincial income gap(total) ^b
1953	0.56 ^c	.....	...	...	.....	...	...
1964	0.31 ^c	.....	...	...	.....	...	...
1978	0.32	0.16	0.21	2.37	.....	...	...
1981	....	0.15	0.24	2.05	2.80	1.81	12.62
1984	0.28 ^d	0.16	0.26	1.71	3.16 ^e	1.59 ^e	9.22 ^e
1988	0.38	0.23	0.30	2.05	.....	.....	.....
1990	....	0.23	0.31	2.02	4.17	2.03	7.50
1995	0.43	0.28	0.34	2.47	4.82	2.34	9.79
1998	0.41 ^c	.....	...	...	.....	...	...

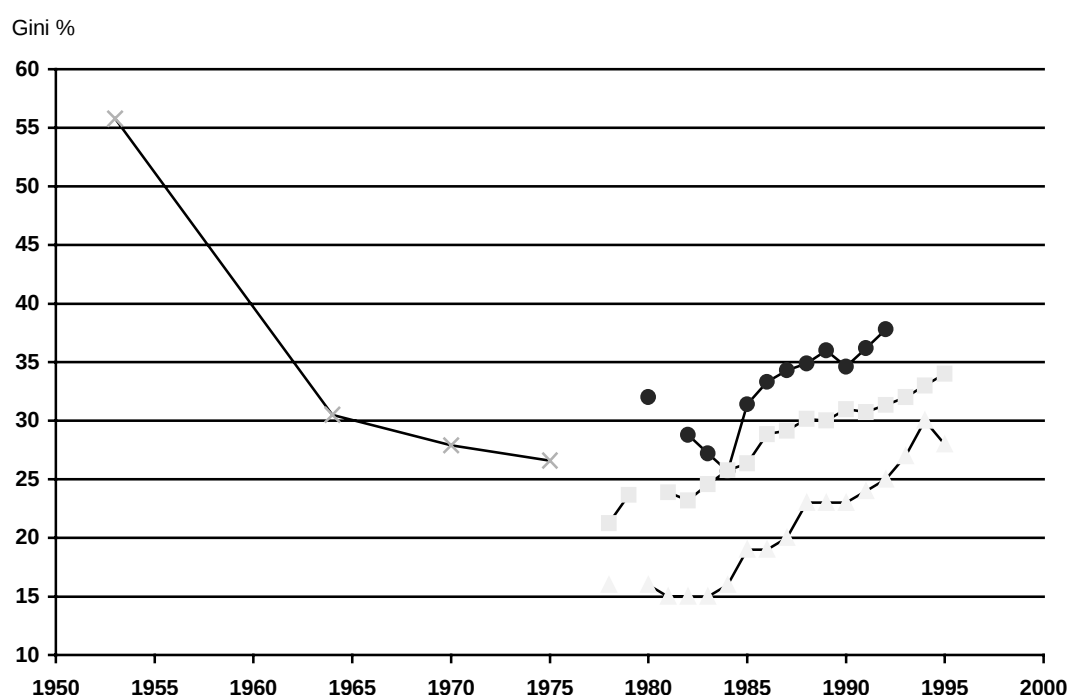
Source: State Bureau of Statistics and World Bank (2000).

Notes: ^a ratio between the average urban and rural average income; ^b ratio between the average income of the highest to the lowest province, by rural, urban and total area; ^c data for these years are not comparable with those of the other years and are provided only for illustrative purposes; ^d refers to 1983; ^e refers to 1985.

This equitable distribution proved to be an asset for the success of the subsequent market reforms which, even in the best cases, generally cause some income polarization. The reforms adopted in agriculture since 1978 replaced the rural communes with an egalitarian family-based agriculture and introduced considerable price incentives for the farmers. The result was a sharp acceleration of growth, which jumped to 9-10 percent a year and was sustained at that level over the entire 1978-95 period, to decline only marginally to around 8 percent for the rest of the decade. Between 1978 and 1984—the years of rapid agriculture-led growth—there was only a modest upsurge in inequality in both rural and urban areas. As a result, the rural poverty rate fell unprecedentedly from 30.7 percent in 1978 to 15.1 percent in 1984—literally halving the percentage of rural poor in just six years (Gustafsson and Zhong, 2000).

In turn, the urban Gini coefficient stagnated at a very low level,¹ as the introduction of various performance-related bonuses in urban-based state enterprises² did not apparently lead to any visible rise of urban income disparity. Social policy played an important role in sheltering the registered urban population from the price and stabilization reforms of the 1980s. Transfer payments rose from 4.8 to 5.5 percent of national income between 1979 and 1985 (Ahmad and Hussain, 1991) while the welfare of urban industrial workers was further safeguarded by an increase in consumer and industrial subsidies, which came to represent a kind of invisible transfer payment. In rural areas such a role was negligible as welfare payments and social relief declined from 0.5 to 0.3 percent of GDP over the 1980s.

Figure 4
Trends in the Gini coefficients of the distribution of net disposable income for the total, rural and urban economy (from the top to the bottom curve) in China, 1953-95



In contrast, income concentration rose fast between 1985 and 1990, and very fast after 1990, (Figure 4) so that by 1995 the national Gini coefficient reached 0.43 (Table 6) and remained broadly constant until 1998. The rise in income disparity in the second part of the 1980s can be traced to a rise in the urban-rural gap driven by a faster expansion of urban activities (Ping, 1997). In view of the unequal spread of non-agricultural activities across provinces, interprovincial inequality also became an important contributor to overall inequality, as indicated by the widening of the gap between mean incomes per capita of interior and coastal provinces (last column of Table 6). Though incomes were also growing in less well-endowed provinces, the 1990s witnessed a visible income divergence between the relatively rich coastal provinces and the poor interior regions. Finally, the 1988 and

¹ The urban poverty rate does not take into account, however, the floating population which is much more poverty prone (Gustafsson and Zhong, 2000).

² Industrial reforms were introduced starting from 1984.

1995 surveys of rural incomes suggests that widening income concentration within individual provinces is due also to an upswing in earnings inequality (McKinley and Brenner, 1998) in the township and village enterprises.

Such rise in inequality had a negative impact on poverty alleviation. The pace of rural poverty alleviation declined sharply over 1984-95 as compared to 1978-84 (Gustafsson and Zhong, 2000). Furthermore between 1988 and 1995 the overall poverty rate rose in Western China and mountain locations and among ethnic minorities. Finally, it appears that worsening inequality more than offset the poverty alleviation effect of growth during that period, and that the slight decline in poverty over 1988-95 was due to the fall in the young age dependency ratio due, *inter alia*, to the adoption of the one-child family policy (ibid.). Public policy contributed to the rise in income polarization alluded to above. The fiscal decentralization introduced since 1978 substantially reduced the possibility of the central government to control regional inequality by means of resource transfers to poorer provinces thus allowing an undesirable accentuation in regional disparities and overall inequality. Industrial policy—deliberately developed along the lines of an ‘unbalanced growth model’—played an even greater disequalizing role, as it favored explicitly the coastal provinces through the granting of special administrative and economic powers, tax privileges and other benefits which facilitated the development of export industries and the inflow of foreign direct investment.

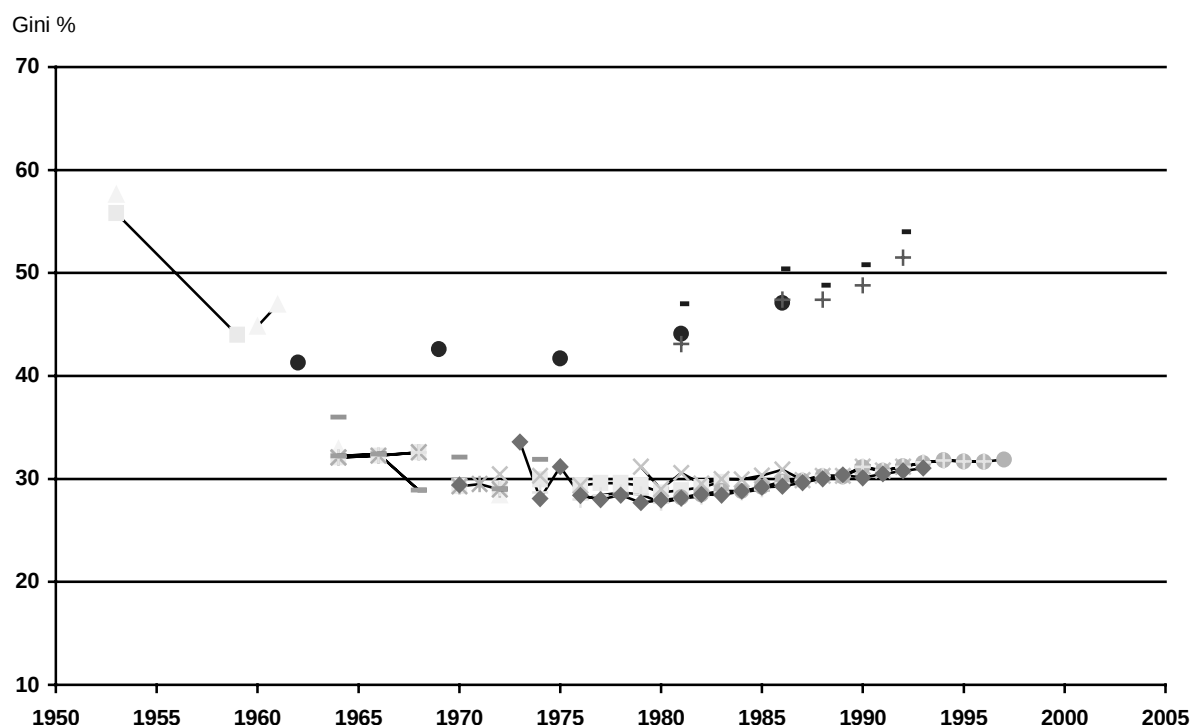
In recent times, Chinese farmers have been being pinched by falling prices for agricultural products and a rise in taxation. Over 1993-8, the average price of grains fell by 30% while agricultural taxes more than tripled to a nationwide total of nearly \$5 billion. If unauthorized local taxes are added, the figure exceeds \$10 billion. Such trends have further exasperated the urban-rural gap and could threaten social stability and the development of the market economy as, as suggested by writings of Chinese democratic populists, suffering peasants have historically set the stage for the demise of Chinese dynasties.

2.5 East and Southeast Asia: a common if milder reversal of inequality trends

It is widely believed that countries in this region were able to combine fast growth with equity. This view is however not entirely accurate. First, the initial level of income inequality varied considerably within the region. The countries of Northeast Asia—Japan, South Korea and Taiwan had and still have a distinctly more equitable distribution than the Southeast Asian ones (Thailand in particular, Figure 5). Greater initial equity in the former countries was the result of the introduction in the immediate postwar period of major reforms, which confiscated and redistributed land and other assets (like the *zaibastu* in Japan) and imposed steep wealth taxes. In the subsequent decade inequality remained low because an equitable access to education permitted a widespread increase in human capital. The Southeast Asian countries, in turn, never undertook any relevant reforms to equalize rural incomes and relied for their development on resource rents which *-ceteris paribus-* affect income inequality (Jomo, 2000). Thus, in the 1950s and 1960s, Hong Kong, Thailand, Singapore and Malaysia had medium-to-high Gini coefficients, ranging between 0.40 and 0.50 (You, 1998; Oshima, 1998).

Figure 5

Trends in the Gini coefficients of the distribution of gross income in Thailand (higher curve with dark dots starting in 1962) and net income in Taiwan (first descending arm continuing in the lower curves), 1953-97



Note: higher curve with dark dots starting in 1962 and net income in Taiwan, first descending arm and lower curves).

Second, and most important for the focus of this study, between the mid-late 1950s and the 1990s, the Gini coefficient of income distribution rose steadily in Thailand (from 0.41 to 0.52) and South Korea (from 0.34 to 0.39) and followed an inverted U-pattern in Malaysia (Oshima, 1998). In South Korea, however, the trend towards greater *income inequality* was accompanied by a remarkable and steady decline in *earnings inequality* the Gini coefficient of which fell from 0.40 to 0.29 over 1976-1993 owing to a narrowing of wage differentials between educational groups, occupations and genders (Fields and Oyo, 2000).

In Thailand, the Gini coefficient of the distribution of total income rose steadily during the years of rapid growth mainly because of the increase in the share and concentration of non-farm profits linked to the expansion of the globalization-related financial, insurance and real estate (FIRE) sector concentrated in the Bangkok region (Sarntisart, 2000).

In turn, Hong Kong, Taiwan and Singapore show a mild U pattern, with fairly rapid declines in inequality until the late 1970s and early 1980s, followed by moderate rises offsetting half of the earlier fall (Oshima, 1998). In Hong Kong the decline in inequality which occurred between 1957 and 1979 was fully offset between 1979 and 1991. In Taiwan, the Gini coefficients of the distribution of net income fell steadily from 0.32 to 0.28 between 1964 and 1980 thanks to a rapid expansion of employment for both well-educated and low-skilled workers. The supply of workers, including well-educated ones, rose rapidly because of significant improvements in education. While the demand for all

types of labour expanded quickly, the demand for low-skilled labour expanded even more. As a result, the wages of low-skilled workers rose more than the average, and wage differentials narrowed (Kanbur, 1998). Over 1980-93, however, the development of skill-intensive sectors again pushed up wage inequality, while the share of capital and property incomes in the total surged in line with the development of large corporations and escalation of land prices. By 1993, Taiwan had reached her level of inequality of 1964 though it was still below that of the 1950s.

Indonesia also follows a mild U pattern with a Gini of total income of 0.35 in 1964-5 declining to 0.32 by 1987-90 to rise again to 0.38 by 1997 (Feridhanusetyawan, 2000). During the first period, inequality fell thanks to the investment of the oil rent in the financing of the green revolution. This substantially raised employment and production opportunities in the rural sector and, given a low land concentration, reduced rural income inequality from 0.31 in 1964-5 to 0.25 in 1990. In fact, the period from the mid 70s to the mid-late 80s can be considered as a successful example of fast and equitable growth accompanied by rapid poverty reduction. The years from 1987 to 1996—the period of rapid globalization, with radical devaluation, tariff reform and financial deregulation—were characterized instead by the development of the urban-based manufacturing and capital-intensive FIRE sector, a slowdown in agriculture and widening of the urban-rural gap. This tendency was exacerbated by the lack of an effective income transfer system and the retrenchment of rural development programmes—which during the prior period had a perceptible impact on poverty and inequality. As a result, overall inequality rose from a low of 0.32 in 1987 to 0.38 in 1997 (Feridhanusetyawan, 2000) though the fast growth of this period offset this negative effect and still allowed to cut the overall poverty rate from 17 to 11 percent over 1987-96.

Jomo (2000: 18) summarises the reason for this widespread reversal in inequality trends in the regions during the last 15 years by noting that: ‘Liberalization since the 1980s seems to have adversely affected income distribution. Deregulation, reduced government interventions, declining commitment to earlier redistributive mechanisms, and greater government efforts to meet investors expectations have probably all contributed to increased inequality in the region’. While export orientation and fast growth have helped to steadily reduce the incidence of poverty, equity may not be achieved in the absence of effective state mechanisms for redistribution.

The effect of the Asian crisis on inequality is still being analyzed. While the impact on poverty was immediate, due to a sharp output contraction, that on inequality manifested itself in two stages. During the first, inequality remained constant or even declined marginally as in the immediate the crisis hit the hardest middle-high income people in the FIRE sector. In a second phase, however, inequality and poverty rose—especially among the urban poor—due to the recession induced by the crisis and because of the stringent stabilization measures introduced to combat it. In a summary analysis of the impact of the Asian crisis, Knowles *et al.* (1999) found that while over 1997-8 inequality dropped marginally in Indonesia, it rose in Thailand, the Philippines and South Korea.

2.6 The late liberalizers of South Asia

With the exception of Sri Lanka, policy reform has been slow to come to the region, and until the early 1990s all South Asian countries followed rather inward-looking policies.

India launched its first IMF stabilization programme in July 1991, while deregulation, trade liberalization and privatization were partially only in part in the subsequent years. A slow approach to adjustment and globalization has also been evident in Bangladesh and Pakistan.

By and large, during the post-World War II period, income distribution in the region changed less than elsewhere, but it too followed a mild U pattern. In India, the Gini coefficient of household consumption expenditure fell from 0.36 to 0.31 over 1951-61 as a result of the partial land reform of those years and affirmative action in favour of low caste groups. It then broadly fluctuated in the 0.29-0.32 range until the onset of stabilization and gradual liberalization in 1991. In the 1980s, stable inequality, substantial expenditure on rural development and rapid growth induced mainly due to the result of the faster agricultural growth (which rose to 4 percent, up from 1.8 percent in the prior decade) brought about by the 'green revolution', reduced rural poverty from 50-55 to 35 percent.

In the 1990s, the years of the gradual liberalization and globalization, GDP growth accelerated moderately to 5.6 percent. Such growth was, however, far more concentrated in the urban sector (which account for less than a third of the total population), by regions and income group. Urban inequality rose moderately from 0.34 to 0.36,³ thus reducing urban poverty from 33 to 28 percent between 1991 and 1997. The rural poverty rate, in contrast, stagnated owing to the slow growth of agriculture, the retrenchment of rural development programmes and a rise in rural inequality (Mundle and Tulasidhar, 1998; Jha, 2000) and has likely risen among the agricultural labourers. To start with, the demand for labour and rural wages fell because of a slow growth of agricultural and non-agricultural activities (possibly due to liberalization-induced rural deindustrialization). Poverty was also affected by the cuts in government expenditure on rural infrastructure and food subsidies, and the government decision to raise by 35 percent the procurement prices of grains and, later on, the food prices in the outlets of the public distribution system (to which rural poverty is very sensitive). In sum, the experience of the 1990s points to a moderate rise in both urban and rural inequality, a larger rise in overall inequality due to a widening of the average urban-rural gap and a sharp decline in the poverty alleviation elasticity of overall growth (Ravallion and Datt, 1999).

In Sri Lanka, Bangladesh and Pakistan inequality followed a typical, though not pronounced, U-shaped pattern. In Pakistan, the Gini coefficient declined moderately (from 0.39 to 0.33) during the growth years of 1963-1973 but gradually climbed back to reach 0.41 in 1992-3 (Banuri *et al.*, 1997; Oshima, 1998). The U-shaped pattern is more evident in the rural sector where an initial drop of 7 Gini points was followed by a rise of 12-13 points. Banuri *et al.* (1997) suggest that inequality has risen during spells of slow growth and declined during periods of expansion (particularly of the manufacturing sector) and that social policies had only a limited impact on inequality. The unfavourable shifts in the ratio of rural wage to food prices and the rise in the share of GDP absorbed by interest payments were other relevant factors.

³ Many argue that such modest increase in inequality contrasts with other economic trends (e.g. the capitalization of the stock market) and is the result of the exclusion of new high income groups from the National Sample Survey (NSS), as suggested for instance by the growing divergence between the average consumption per capita measured by the NSS in relation to that offered by the national accounts.

In Bangladesh, the limited available evidence (Oshima, 1998) seems to indicate that there was a moderate decline in overall inequality until the mid 1970s, followed by an upturn of 3-4 points in the subsequent dozen or so years. Also in this case, the U-shaped trend is more marked for rural inequality; in contrast, urban inequality stagnated. Finally, Sri Lanka exhibited a sharp decline in inequality between 1953 and 1973, followed by an 11-point increase over the subsequent 14 years.

2.7 Sub-Saharan Africa: falling urban-rural gap but rising intraurban and at times intrarural inequality

In this region, the statistical basis for analysing changes in inequality and poverty is much weaker. The conclusions that can be arrived at on such basis are thus highly tentative. Yet, here too there seem to be some regularities.

In the past, overall inequality was the product of the large urban-rural income gap inherited from the colonial era and reinforced by the ‘urban bias’ of the policies introduced by the new governments. In southern and eastern Africa, inequality was also due to high land concentration.⁴ Against this background, the 1980s were characterized by the massive application of adjustment programmes aimed at reducing the urban-rural gap and stimulating growth and export orientation. These measures succeeded in liberalizing the economy and the exchange rate regime, in devaluing the real exchange rate (which fell on average by 30 percent between 1980-98) and in raising the opening of the African economies—the average import-export ratio to GDP rose from 51 to 62 percent over the same years (Kayizzi-Mugerwa, 2000). In spite of all this, the growth impact of these policies was modest at best and GDP per capita in the region stagnated with the exception of 1994-6. Even in the few success stories (Uganda, Ghana and Mozambique) the recovery remained fragile and donor-dependent while exports did not shift—with the exception of atypical Mauritius—towards labour intensive manufacturing.

The impact of policy reform and output stagnation was the hardest in the urban sector. In several cases, the sector experienced a drop in its domestic terms of trade and large income falls among most urban groups while rural areas were less affected or gained, as in the case of Uganda. Thus, in many cases, the urban-rural gap was reduced by a process of ‘equalising downward’ (UNCTAD, 1997) as well illustrated by the case of Côte d’Ivoire (Table 7).

While the urban economy generally deteriorated, the impact on the rural sector varied. Intrarural inequality rose in countries characterized by a high concentration of land, such as Kenya, or a collapse of the food and inputs marketing arrangements, such as Zambia (McCulloch *et al.*, 2000), while it fell or remained constant in countries such as Mozambique and Uganda characterized by a peasant agriculture rebounding from years of near collapse and civil strife (Bigsten, 2000).

⁴ In countries such as Kenya, South Africa, Zimbabwe, Malawi and so on, the Gini coefficients of land concentration is in the 0.6-0.8 range

Table 7
Gini coefficients of the distribution of income in the rural, urban and overall economy

Country	Year	Rural	Urban	Overall
Côte d'Ivoire	1970	.....	....	0.53
	1985			0.39
	1995			0.37
Kenya	1982	0.40	....	0.52 ('76)
	1992	0.49		0.58 ('84)
Mauritius	1986	.....	....	0.40
	1991			0.37
Ethiopia	1989	0.41	....	....
	1994	0.46		
Tanzania	1983	0.53	....	....
	1991	0.76		
Nigeria	1986	.....	....	0.37
	1993			0.42
Uganda	1989	....	....	0.33
	1992	0.33	0.43	0.38
	1998	0.32	0.37	0.36
Zambia	1991	0.56	0.45	0.56
	1996	0.49	0.47	0.52
	1998	0.52	0.48	0.51

Source: World Income Inequality Database, UNU/WIDER, Helsinki (www.wider.unu.edu); Kayizzi-Mugerwa (2000); Bigsten (2000); McCulloch *et al.* (2000).

The changing nature of African inequality is underscored also by the trend observed in South Africa. In this country, overall income disparity fell from 0.63 to 0.55 between 1990 and 1995 following the abolition of apartheid. This trend resulted from a drop in the interracial income gap and a surge in income concentration within the coloured and, especially, Asian and Black population. For the latter two groups, the Gini coefficients of the distribution of income rose from 0.29 to 0.46 and from 0.35 to 0.51 (Jenkins and Thomas, 2000).

3. Econometric analysis of trends in within-country inequality

The above review suggests that during the last two decades inequality increased, if from different levels and to different extents, in a good number of countries. These findings, however, run counter to some of the evidence found in the literature. In a much cited paper, for instance, Deininger and Squire (1996: 583) note that 'Decadal averages of inequality indexes across regionsare relatively stable through time, but they differ substantially across regions, *a result that emerges for individual countries as well*' (emphasis added). A recent study too comes to the conclusion that long-term income inequality is stable. After fitting linear trends to 49 country data the authors conclude that '... there is no evidence of a time trend in 32 countries or 65% of our sample' (Li *et al.*, 1998: 35)

An examination of the estimation procedure followed by Li *et al.* (1998) suggests that their conclusions are biased by the methodology adopted. To start with, some of the country trends are estimated on too few and poorly spaced datapoints which are bound to yield statistically

insignificant trends.⁵ Second, the datapoints were fitted only with linear trends, i.e. a functional form, which does not permit to capture trend reversals. Third, their sample did not include most economies in transition, the great majority of which witnessed inequality rises over the last 10 years. Fourth, their time series stopped in 1991-3 and could not thus capture the impact of the recent changes. Fifth, in assessing the global direction of the changes in inequality, the country results were not weighted with the share of the sample countries in world population and GDP-PPP while even their estimates show that inequality rose in large and medium countries (such as the US, UK, China and Eastern Europe) while it fell mainly in small and medium ones.

Table 8
Trends¹ in the Gini coefficients of the distribution of income² from the 1950s to the 1990s
for 73 developed, developing and transitional economies

	Sample countries in each group	Share of population of sample countries	Share of world population	Share of GDP-PPP of sample countries	Share of world GDP- PPP
Rising inequality, of which:	48	59	47	78	71
continuously rising	17	4	3	5	5
U shaped	29	55	44	73	66
rising–stable	2	0	0	0	0
Falling inequality, of which:	9	5	4	9	8
continuously falling	6	3	3	7	7
inverted U shape	3	2	1	2	1
No trend	16	36	29	13	12
Not included in sample	...	...	20	...	9
Total	73	100	100	100	100

Source: Authors' calculations using the November 1998 version of the WIDER Income Inequality Database (WIID), which includes the 2,622 observations of the Deininger-Squire (1996) database and 1,131 observations collected by WIDER staff.

Notes: (1) These results were obtained on the basis of 770 'reliable observations' concerning the entire national economy of 73 countries (2) the data refer to 'per capita household disposable income' in 52 cases (gross in 28 cases, net in 17, unknown in 8), 'per capita consumption expenditure' in 9; 'gross earnings' in 14 (mostly economies in transition) to 'gross earnings'.

We therefore estimated inequality trends an unbiased methodology and making use of the World Income Inequality Database⁶ which allows to increase the number of countries analysed to 73⁷ (which account for 80 percent of the world population and 91 percent of the

⁵ The time trend in LSZ is statistically significant in 11 percent of the countries with 4-5 observations, but in 37 and 42 percent of the countries with 6-10 or more than 10 observations.

⁶ The WIID database has been developed by WIDER and is accessible on www.wider.unu.edu.

⁷ Of these 73 countries, 33 are developing (Argentina, Bahamas, Bangladesh, Brazil, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, Dominica Republic, El Salvador, Guatemala, Honduras, Hong Kong, India, Indonesia, Jamaica, Korea (South), Malaysia, Mexico, Pakistan, Panama, Philippines, Senegal, Singapore, South Africa, Sri Lanka, Taiwan, Tanzania, Thailand, Tunisia, Turkey, Venezuela); 18 are OECD (Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, United Kingdom, United States); and 22 are transitional economies (Armenia, Azerbaijan, Belarus, Bulgaria, Czech Republic, Croatia, Estonia, Georgia, Hungary,

world GDP-PPP) and updates the time series so as to include information about the mid-late 1990s. The datapoints retained have been interpolated country by country with linear and quadratic functions (so as to capture possible trend reversals). For each country, we choose as ‘best fit’ the functional form with the most significant t and F statistics and, as a subordinate criterion, the highest R².

The results of our estimate are summarized in Table 8. They confirm the conclusions arrived at on the basis of the review of country studies in section 2.1 and sharply differ from those of Li et al. (1998). In fact, inequality was found to have *risen* in 48 of the 73 countries analysed and to have remained constant in 16 (including Germany and Brazil as well as medium or large countries such as India, Bangladesh, Indonesia and Tanzania—for which the most recent data discussed in section 2.1 show an inequality upsurge). Only in nine countries there is evidence of a decline in income concentration over the long-term. These include mainly small countries (Bahamas, Honduras, Jamaica, Norway, Tunisia) and medium countries (France, Malaysia, the Philippines, South Korea).

Table 9
Comparison between findings about inequality trends reached by LSZ and our results
WIID in Table 8 (findings are expressed in % of countries in the various categories)

	LSZ SAMPLE 49 Countries Linear Trends LSZ Period	LSZ SAMPLE 49 Countries Linear or Quadratic LSZ Period	WIID SAMPLE 73 Countries Linear or Quadratic LSZ Period	WIID SAMPLE 73 Countries Linear or Quadratic WIID Period		
	% of countries	% of countries	% of countries	% of countries	% of population	% of GDP- PPP
Rising inequality of which	20	39	51	66	59	78
Continuously rising	20	12	22	23	4	5
U-shaped pattern	..	27	27	40	55	73
Rising-stable	..	0	2	3	0	0
Falling inequality	14	22	22	12	5	9
No trend/stable inequality	66	39	27	22	36	13

Source: authors calculations on the data of Table 8 and on results are reported in Li, Squire and Zou (1998).

Notes: % of Countries, Population and GDP-PPP refers to the percentages of the total number of countries, populations and GDP-PPP of the samples in 1995 (data from WB). LSZ Sample includes 573 observations over 1947-94 with expenditure Ginis adjusted upward 6.6 points. The WIID sample includes 770 observations covering 1939-98. WIID sample uses 269 common observations to LSZ. Twenty-four additional countries mostly from FSU/EE are included, and 4 countries of LSZ were dropped due to geographical changes or insufficient data.

Kazakhstan, Kyrgystan, Latvia, Lithuania, Macedonia, Moldavia, Poland, Rumania, Russia, Slovakia, Slovenia, Ukraine, Yugoslavia). Except for Africa, these countries account for between 84 and 98 percent of the population and between 82 and 98 percent of the GDP-PPP of these regions. For Africa, the six countries included in the analysis account for 18 and 32 percent of the total population and GDP-PPP, respectively.

If one weighs these results by population size and GDP-PPP, the conclusions are strengthened, as inequality was found to have risen in countries that accounts for 59 percent of the population and 78 percent of the GDP-PPP of the sample countries. Inequality was found to fall in countries comprising only 5 and 9 percent of the population and GDP-PPP of the total sample.

The results in Table 8 differ from those of Deininger and Squire (1996) and especially of Li *et al.* (1998). Table 9 analyses the sources of these discrepancies. In this regard, we recall that our procedure differs from that of Li, Squire and Zou (LSZ) in four ways. To disentangle the effect of each of these four factors we recalculated the trends introducing one difference at the time, as illustrated in the different columns of Table 9. First, we interpolated the same LSZ datapoints by means also of quadratic functions and present the results in the second column. Next, we enlarge the sample from 49 to 73 countries but still use the same time period (1947-94) used by LSZ and present the results in the third column. Third, we rerun the interpolations by extending (when possible) the time series until 1998. In this process we have replaced (only) a few of the LSZ time series with newer and more reliable datapoints which have become recently available in the literature and which make use of the same income concept throughout the period, a fact that affects the conclusions about inequality in a few OECD sample countries. Finally, for the last three experiments we have weighed the results also by the population and GDP-PPP of the countries falling in the various categories of ‘rising inequality’, ‘falling inequality’ and ‘no trend/stable inequality’.

An analysis of these differences indicates that the choice of the functional form used to interpolate the data explains over 40 percent of the difference in the proportion of countries with rising inequality. Another 25 percent is due to the increase in country coverage (from 49 to 73) while differences in time-series coverage explain about thirty percent of the overall difference. As noted, weighing for GDP-PPP (but not by population size) exasperates the differences in results even further.

4. Summary findings about inequality trends

The analysis in sections 2 and 3 allows to arrive to the following conclusions:

- Inequality declined between the 1950s and the 1970s though there were several exceptions to this rule. In many economies of sub-Saharan Africa the development of national states often caused an increase in rural-urban and overall inequality, and in Latin America the decline in inequality began only in the 1970s and did not concern the Southern Cone.
- Reversal in inequality trends over the last two decades: during the last 20 years, the prior decline in inequality was reversed in several countries (see also Birdsall, 2000). Out of the 29 countries showing a U shaped trend in income inequality, the reversal took place in the mid 1970s in Sri Lanka and Thailand; in the late 1970s and early 1980s in the ‘early liberalizers’ (UK, US, New Zealand and Australia); the early-to-mid-1980s in several Latin American countries, 1984 in China; 1985-90 in several Central or Northern European countries, 1989-92 in the Eastern European and among the former members of the USSR; and 1992-3 in Italy and Finland. And of the 48 countries with a rising trend (whether U-shaped, continuously rising, or rising then stable) inequality started to rise in

one in 1960-65, in four in 1966-75, in 7 in 1975-80, in eight in 1980-5, in 11 in 1985-90 and in 14 after 1990.

- Intensity of the rise: the increase in the Gini coefficients recorded during the period under examination has often been substantial. Of the 48 countries with a rise in inequality, the change was of less than 5 Gini points in six countries, of between 5 and 10 points in 30 nations (in 9 of them the rise occurred from Gini coefficients of already 0.40-0.45), by between 10 and 20 points in 10 countries and by more than 20 points in a couple of transitional economies of the former Soviet Union (Table 10). By the mid-late 1990s, 46 of the 73 countries analysed had Gini coefficients higher than 0.35-0.40 (a threshold beyond which growth and poverty alleviation may be affected) as opposed to 29 in the 1980s.

Table 10
Transition matrix of Gini coefficients for 73 countries between 1980 and the latest available year (mid-to-late 1990s)

Latest Gini 1980 Gini	<25	25.0 - 29.9	30.0- 34.9	35.0- 39.9	40.0- 44.9	45.0- 49.9	50.0- 59.9	>60.0	Total
<25	TTT O	TT O	TTTT O	TTTT	T	T			18
25.0-29.9		T OOOOO	TT R		TT O	T			13
30.0-34.9		R	OOO RR	OO R T	OO R				13
35.0-39.9				RRRR OO	RR L	L	R		11
40.0-44.9				RR	RR	LL	R LLL		10
45.0-49.9				R	R		R L		4
50.0-59.9						R	LL	L	4
Total	4	10	13	17	13	6	9	1	73

Source: Authors' elaboration on WIID.

Notes: T = transition economies, O = old OECD, L = Latin America, R = Others. Gini coefficients have been harmonized in terms of net income terms by adding 1 extra point to expenditure data and subtracting 5.5 points to gross income data.

- Regions most affected: the increase in inequality affected all regions except the MENA region for which lack of long-term data prevents reaching firm conclusions. The increase was universal in the economies in transition, almost universal in Latin America and the OECD and increasingly frequent, if less dramatic in South, Southeast and even East Asia where the effects of the 1997 financial crisis have not yet fully been assessed (Table 10). The limited data for sub-Saharan Africa (Table 5) tentatively suggest a mixed picture.
- Sources of the rise: in countries with a developed wage economy, the inequality upswing seems to have been driven by a fall in the labour share and a surge in earnings dispersion not explained by the traditional increases in returns to education or in educational

inequality. A rise in income concentration appears to have been due also to growing regional disparity (as in China and Thailand). Adverse changes in tax and transfer systems and the boost in land and financial rents (as in Japan and Taiwan) have also been important factors. These changes and their underlying causes are discussed in greater detail below.

5. Causes of the recent rise in inequality

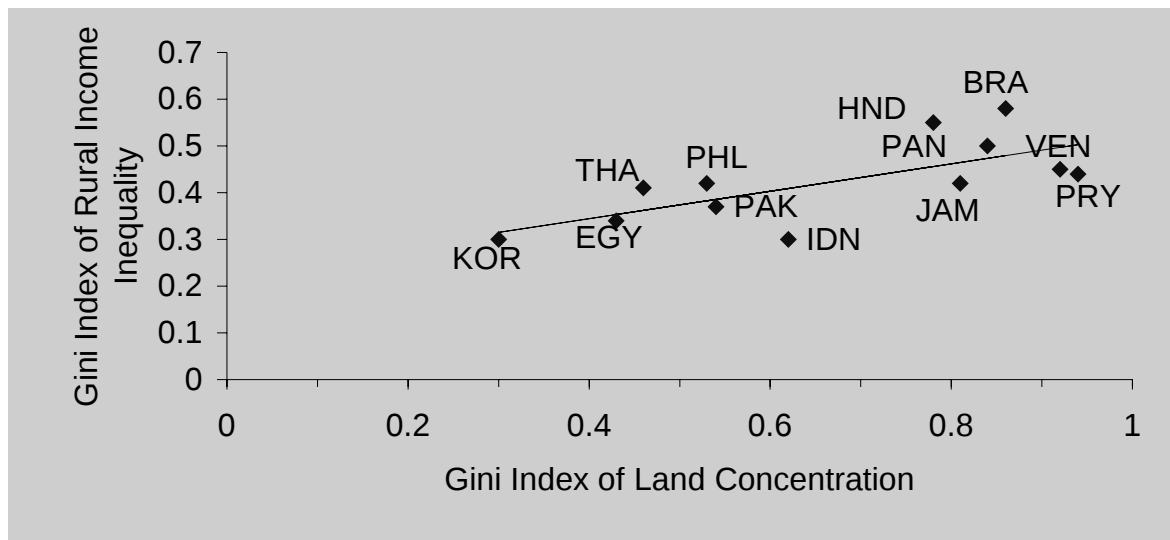
5.1 The limited impact of the traditional causes of inequality

This study argues that the traditional causes of inequality—i.e. those responsible for high income concentration in the 1950s through 1970s—are still a major source of inequality but explain only a small part of the rise in income dispersion discussed in sections 3 and 4, and that such rise depends instead mainly on recent endogenous and policy changes.

Land concentration

The historical dispossession of the peasantry by the colonial authorities led to considerable land concentration and high income inequality in the rural areas of many developing countries. In the 1950s and 1960s, in Latin America and Southern Africa, the Gini coefficient of land distribution ranged between 0.6 and 0.8 as opposed to 0.3-0.5 in most of Asia. High land concentration affects inequality over both the short-term (Figure 6) and the long-term. In the short-term, high land concentration leads to the appropriation by the landlord of a large share of agricultural output in the form of land rent.

Figure 6
Relation among land concentration and rural inequality



In Latin America, in the 1950s, the land rent absorbed almost half of total agricultural income. In addition, in view of the low labour absorption of large farms, high land concentration depresses the wage of rural casual labourers and, through them, the minimum wage in the urban sector. Over the long-term, in countries with surplus labour, high land concentration leads to an agricultural growth slower than that achievable under a peasant

agriculture as small farms absorb a greater amount of family labour, face lower supervision costs and have higher land yields and total productivity per hectare than large farms (Berry and Cline, 1979; Cornia, 1985).

Over the last 40 years, the share of agriculture in total output and employment has declined everywhere. In Latin America, agriculture now barely produces 10 percent of total output and employs only 20 percent of the labour force. In addition, during the first two postwar decades, at least 27 land reforms redistributed latifundia and state land to marginal farmers in Japan, South Korea, Taiwan, Kerala, Egypt, Iraq, China and 14 Latin American countries. As a result, land rents as a share of GDP have declined in most countries. In Latin America, the land rent fell from 20 to 2-3 percent of total household incomes (Londono, 1996).

Thus, while rural inequality still depend crucially on land concentration, and while in the absence of land reform income concentration in rural areas depresses both rural wages and urban minimum wages, there is no evidence that such phenomena intensified during the last two decades. To test the hypothesis, we regressed on two cross sections of 35 countries for the period 1970-4 (pre-Washington Consensus) and 1990-99 (post-Washington Consensus) the Gini coefficient of land concentration (Landineq) obtained from IFAD and Otsuka *et al.*, (1990) on the national Gini coefficient of the distribution of disposable income per capita (Incineq) included in WIID. As expected, in the more recent period the relationship between land concentration and income inequality becomes less pronounced and significant, while the share of unexplained variance rises. While the simplicity of the test suggests caution in interpreting the results, these results lend some support to the view that the role of land concentration in the explanation of overall income inequality has declined over time.

$$\begin{aligned} (1970-4) \text{ INCINEQ} &= 22.96 (3.25) + 0.26 (2.49) \text{ LANDINEQ} & R^2 &= 0.15, \text{ nobs} = 35 \\ (1990-9) \text{ INCINEQ} &= 27.40 (3.89) + 0.15 (1.40) \text{ LANDINEQ} & R^2 &= 0.05, \text{ nobs} = 35 \end{aligned}$$

The curse of natural resources

Countries well endowed with natural resources (particularly minerals, metals and nonfuel primary exports) relative to other factors of production tend to grow more slowly and to have a higher income and asset inequality than other types of economies (Sachs and Warner, 1995). First, in these economies, production requires a lot of capital but little unskilled labour and only few skilled workers. This compresses the demand for unskilled labour and discourages investments in education. Second, high volatility of commodity prices reduces the incentives to invest in education and may force poor families to pull their children out of school because of the direct costs of education became unbearable or because the opportunity cost of the child time rises in times of low commodity prices. Thus, transitory shocks may cause permanent damage to the educational opportunities of the poor and increase the dispersion of educational attainments. Third, the ownership of mineral resources is usually concentrated due to the greater ease with which it can be cornered by predatory élites. Only where governments are able to capture such rent through taxation and to spend it in ways which benefit the poor (as in Botswana and Indonesia) are mineral exports likely to reduce inequality.

Be as it may, the curse of natural resources hardly explains the widespread surge in inequality observed over the last two decades. Indeed, in most resource-rich economies the mineral rent/GDP ratio has fallen since 1980-5 and in 1994 was smaller than in 1970 (Table

11). While over the last 20-30 years new discoveries have augmented the size of the potential rent in some countries (such as Nigeria in the 1970s), international commodity prices have been low and impacted negatively the natural rent/GDP ratio. In addition, changes in the rent/GDP ratio between 1980 and 1994 cannot in any case explain the rise in income concentration observed in many resource-poor economies.

Table 11
Ratio of natural rent^a to GDP in selected countries over several years^b

	1970	1975	1980	1985	1990	1994	1970-94 peak-1994	
Bolivia	6.9	14.5	<i>27.1</i>	17.8	10.8	4.3	2.3	24.8
Chile	10.0	<i>16.2</i>	10.2	10.0	11.7	6.2	3.8	10.0
Indonesia	6.5	15.5	<i>27.4</i>	16.1	9.5	5.3	1.2	22.1
Nigeria	7.6	26.7	41.9	<i>46.7</i>	45.8	36.8	-29.2	9.9
Peru	4.5	5.2	<i>14.9</i>	10.2	7.4	1.8	2.7	12.2
Philippines	5.3	4.0	4.4	3.1	3.0	1.9	3.4	3.4
Saudi Arabia	67.6	71.2	<i>85.6</i>	40.7	50.6	39.7	27.9	35.9
South Africa	4.2	8.7	<i>15.1</i>	9.1	5.9	3.2	1.0	11.9
Venezuela	20.0	33.2	<i>44.5</i>	27.0	33.3	20.0	0.0	22.5
Zambia	<i>25.8</i>	21.7	14.8	14.3	10.4	7.7	17.1	17.1

Source: Authors' elaboration based on World Bank data.

Notes: The highest ratio for each country is shown in *Italics*. All countries with a rent-GDP ratio above 4 percent have been included, with the exception of Sierra Leone, Surinam, Iran, Kenya and others for which no income distribution data are available. (a) The natural rent is obtained by subtracting from the output of the mining, forestry and plantation sectors the total cost of production, including wages and taxes. (b) Three-year moving average around the central year; two-year average for 1970 and 1994.

Also in this case we regressed the ratio of the mineral rent to GDP in current prices (Minrent) on the national Gini coefficient of the distribution of disposable income per capita (Incineq) for the two periods analysed (1970-4 and 1990-9) on a cross section of 32 countries. And also in this case we find that the association between income inequality and the size of the mineral rent is weaker and less significant in the latter period while the proportion of overall variance explained by the regression falls between the first and second period.

(1970-4) INCINEQ = 37.83 (21.04) + 0.67 (1.95) MINRENT R² = 0.11, nobs = 32

(1990-9) INCINEQ = 36.62 (20.94) + 0.30 (1.14) MINRENT R² = 0.04, nobs = 32

Urban bias

During the immediate postwar period, overall inequality in many developing and industrialising countries was influenced by the 'urban bias' of exchange rate and pricing policies which penalized agriculture, the overtaxation of export crops, an urban-centred allocation of public expenditure and investment, and drainage of rural savings for investment in urban areas. Even reformist leaders, such as Velasco and Cardenas, who promoted agrarian reform in Peru and Mexico, followed price and credit policies that favoured the urban sector and imposed controls on food prices.

The massive wave of adjustment programmes launched in the 1980s and 1990s was explicitly meant to correct some of these biases and raise farm incomes relative to urban

incomes (or, more precisely, to raise incomes in the tradable sector relative to those in the non-tradable sector). Yet, the impact of these measures has varied considerably depending on the extent of the 'pass through' of the benefits of devaluation to the rural producers, the efficiency of private trading, the removal of input subsidies and changes in international prices. For instance, it appears that in sub-Saharan Africa, the terms of trade of agriculture improved the most in the countries which were 'less vigorous adjusters' (UNCTAD, 1998).

In addition, Eastwood and Lipton (2000) suggest that factors other than those aiming at the improving the terms of trade of agriculture may have offset the positive impact of devaluation and raised urban-rural inequality. Among them: the better education of the urban residents which may allow them to exploit more rapidly new opportunities in the wake of price liberalization; the shift induced by trade and financial liberalization to activities such as those in manufacturing and the FIRE sector that are, by definition, urban-based; and persistent bias in investment and social spending unaffected by the adjustment of domestic terms of trade. These authors (Table II.3) indicate that the limited data available suggest no overall upward or downward tendency in the rural-urban bias since the 1980s, though they suggested that the urban bias appears to have declined in Brazil, Chile and Honduras and parts of Africa (UNCTAD, 1997) but not in Asia where, as in post-1984 China, Thailand and India industrial and public expenditure policy favoured the urban sector. All in all, it would appear that policy changes in this area were not a main factor in the recent rise in overall inequality.

Inequality in education

Research has indicated that the relationship between educational expansion and inequality is unlikely to be linear. During the initial phases of development, educational expansion increases the number of skilled workers less rapidly than their demand, thus leading to a surge in scarcity rents and inequality (government educational policies can however moderate this effect). As the relative abundance of skilled workers grows, scarcity rents and the wage rate of skilled workers decline relative to that of unskilled workers and earnings inequality drops. Empirically, 'inequality in education' has been shown to rise until the average number of years of schooling reaches 6.3 and to decline thereafter (Ram, 1990, cited in Londono, 1996). However, such 'maximum inequality threshold' in education is likely to rise with economic development and the adoption of skill-intensive technologies. In the US an increase in average educational achievement has been accompanied by a rise in wage inequality by skill level. Two interpretations have been offered to explain this contradiction. The first underscores the fact that the rapid increase in the supply of skilled workers has been accompanied by an even more rapid increase in its demand (Topel, 1997). A second explanation suggests that, even assuming a balanced evolution in the supply and demand for labour, inequality can rise if the rate of returns to schooling increase over time due to technological or other factors.

Whether an increase in average educational achievement raises or reduces inequality depends on how this 'average' is arrived at. In Latin America, for instance, educational inequality has been rising steadily despite a rise in the average education to close to 6.3 years as the regional educational strategy emphasized the reduction of the number of those with no education (a policy choice that reduces the educational variance) with a rapid expansion in the number of university graduates (a policy choice that raises educational

variance) (Morley, 2000).⁸ Such strategy has thus delayed the point at which overall educational inequality begins to decline, and has possibly contributed to the rise in overall inequality in the region. A detailed study of ten Latin American countries confirm that differences in educational achievements represented in 1989 the most important source of income inequality (Fiszbein and Psacharopoulos, 1995).

The East and Southeast Asian educational strategy, in contrast, focused on an expansion of secondary education thus reducing educational inequality and the concentration of labour income, as discussed in section 2 for the case of South Korea. Educational variance remained low also in the European economies in transition which experienced a widespread surge in inequality. The decline in pre-primary and secondary enrolments and the expansion in privately funded university education observed in many transitional economies (UNICEF, 1995) might affect the future distribution of human capital but not the current one. In contrast, the difficulties experienced by several African states in sustaining primary education in the 1980s and 1990s, and the increase in secondary and higher education driven by the expansion in private provision are likely to have had, and continue to have, a disequalizing impact on the long-term distribution of human capital. In other words, with slow progress or deterioration in enrolment and retention rates in the 1970s and 1980s, it is likely that the dispersion of the human capital stock rose further in the 1980s and 1990s in this region. As discussed above, however, the inequality trends in Africa (where two third of the people live in the rural areas) seem only partially related to changes in the distribution of human capital.

To test whether changes in the dispersion of educational achievement explain a smaller or greater part of overall income inequality in the postreform than in the pre-reform period we derive the variable *Vareduc* that represents the ratio of the absolute value of the difference between the average number of years of education of the labour force (taken from the Barro-Lee series) and the threshold at which educational variance has been estimated to reach its peak; i.e. 6.3 years in the developing countries and 9 years in the OECD countries and the transitional countries of Europe. And also in this case it would appear that the relation in the postreform period is somewhat less satisfactory than during the pre-reform period. As argued above, however, in some regions (such as Latin America) this regression might likely yield opposite results if it were estimated separately for the main regions.

$$\begin{aligned} (1970-4) \text{ INCINEQ} &= 31.75 (14.04) + 2.42 (2.36) \text{ VAREduc} & R^2 &= 0.11, \text{ nobs} = 48 \\ (1990-9) \text{ INCINEQ} &= 33.01 (14.18) + 1.98 (2.03) \text{ VAREduc} & R^2 &= 0.09, \text{ nobs} = 48 \end{aligned}$$

In conclusion, it would appear that—with the exception of worsening educational inequality in Latin America and Sub Saharan Africa—the traditional causes seem unable to explain the rise in inequality observed during 1980s and 1990s in two thirds of the countries analysed. Other more recent changes, discussed hereafter, are likely to be more relevant.

⁸ In Latin America the standard deviation of education has risen from 3 years in 1960 to over 4.5 years in the mid 1990s (Morley, 2000).

5.2 The impact of the ‘new’ causes of inequality: technological changes and policy shift towards liberalization and globalization

Technological change

Rising wage inequality has often been ascribed to technological change. First and foremost, new technologies, it is argued, generate a demand for skills and earnings distribution more skewed than that emanating from old technologies. Wage dispersion in the increasing number of sectors producing or using new technologies therefore tends to grow. Yet, much of this rise in earnings inequality can be controlled by policies facilitating the adjustment of labour supply to this new demand pattern and calibrating appropriately the speed of the expansion and the differential access to education.

Comparisons between South Korea and Brazil in the 1960s-70s and Canada and the US in the 1980s-90s illustrates this point. In South Korea, the opening of educational opportunities to all social strata led to rapid growth in productivity and a decrease in inequality in the 1960s and 1970s. In Brazil, in contrast, the increase in enrolment rates was slow, and the returns to skilled labour rose for only a small portion of the population, while inequality soared. Similar effects can be observed at higher average levels of education. Murphy, Craig and Romer (1998) compare the US (where the ratio of university to high school wages rose by over 20 percent between 1980 and 1995) and Canada (where this ratio remained constant). They conclude that, while technological change does raise the relative demand for educated workers, they also note that governments control powerful policies for counteracting the unwanted inequality side effect of technological progress. Whether the relative earnings of educated workers rises depends on the extent to which government policies promote post-secondary education through adequate public spending on education and other measures.

Second, in advanced countries, information technologies diminish the cost of monitoring unskilled workers, minimize labour shirking and reduce the wage premia needed to ensure their efficient performance. Third, especially in the service sector and in a few industrial branches, new, often imported, technologies replace unskilled labour with skilled labour and physical capital and so push up the rate of unemployment and affect functional distribution of income and wage spread. In support of this argument, the World Bank (2000) suggests that the shift towards skill-intensive employment observed in the west in the 1970s and 1980s was matched in the 1990s by a similar shift in several developing countries. Even this, however, cannot be a major factor in many developing countries where inequality rose already in the 1980s, or in regions such as Africa and the transitional economies of Europe where low investment rates over many years have retarded the introduction of new technologies. Finally, advances in telecommunications and information technologies are turning formerly non-tradable services into international tradables—for example data processing and accounting. This creates a new comparative advantage for low-income countries with an educated workforce (the growth of software development in Bangalore is a well known example) but affect negatively employment in other countries. This should have generated however a pressure towards lower inequality in a number of middle income Asian countries where, instead, inequality trends over the last decade appear to be have been hedging slowly upward.

Thus, with the exception of the advanced countries, the evidence to support the hypothesis that technological change is the key factor behind the inequality rises of the last twenty years does not, on balance, seem strong.

Macroeconomic stabilization

The 1980s and 1990s have witnessed a surge in the number of adjustment programmes introduced with the assistance of the IMF and World Bank. While stabilization is in most cases necessary and unavoidable, when brought about through conventional instruments—especially in developing countries—its impact is unlikely to be distributionally favorable. Orthodox stabilization emphasises demand contraction (through fiscal and monetary restraint to fight inflation) as well as supply-enhancing measures (devaluation, elimination of price distortions and mobilization of resources) the main distributive effects of which are discussed hereafter.

Devaluation in particular can fail to have the effects anticipated by orthodox adjustment. In sectorally diversified developing economies with an equitable asset distribution, well developed trade and transport infrastructure, and an abundant stock of educated labour, devaluation, devaluation and gradual trade liberalization generally have positive effects on growth, distribution and poverty reduction. In contrast, in poor primary commodity exporters, the same policies often generate a different effect, due to the incomplete ‘pass through’ of the benefits of devaluation to primary sector producers, the removal of input subsidies and infrastructural supports which often accompanies devaluation and adverse changes in international prices. As well, in economies whose exports do not depend on price competition but on the business cycle in the importing countries (such as some Sahelian economies), devaluation can have a contractionary effect as it may increase the price of essential imports for domestic production, while having little effect in stimulating non-price-competitive exports (Krugman and Taylor, 1978).

Second, even in sectorally diversified economies, devaluation may increase inequality and have an ambiguous effect on poverty. For instance, under conditions of high land concentration and incomplete markets for credit and insurance, an improvement in the domestic terms of trade of agriculture brought about by devaluation may amplify rural inequality and produce modest results in terms of poverty reduction. Devaluation would have a more favourable impact if the distribution of land were more equitable, rural markets more efficient, and the dependence on exports of raw materials less pronounced.

Finally, devaluation has an unfavourable impact on people in the urban sector producing non-tradable goods. This sector includes not only rich rent-seekers but also poor people who are affected by the increase in the price of basic goods triggered by devaluation, the removal of subsidies, the output contraction in the non-tradable sector and the slow recovery of urban tradable goods. If the incomes of these people fall more than do the incomes of people employed in the tradable sector, intraurban income inequality may increase.

Contractions in aggregate demand have been achieved through reductions in the real money supply, wage repression and cuts in public expenditure (which take effect more quickly than revenue-raising measures). Among the revenue-raising measures, indirect taxes, tariffs and user fees have predominated. Expenditure cuts entail the reduction of

subsidies for food, fuel and other goods, retrenchments in public employment and cuts in public sector wages. While quickly restoring macroeconomic balance, demand contraction tends to generate recessions of varying duration (IMF, 1998) and has been criticised for the unnecessary output losses it causes. For instance, the UN Economic Commission for Latin America and the Caribbean (ECLAC, 1990: 50) has estimated that:

in order to improve the trade balance by \$100 billion in three years [1981-84], the region sacrificed a total of some \$250 billion in lost product: that is to say, two and a half dollars of domestic production were sacrificed in order to save one dollar of foreign exchange. This means that any efficient combination of tariff surcharges or special export subsidies which saved or generated one dollar of foreign exchange at a lower cost than that amount of lost production would have been preferable to the adjustment policy which was actually followed.

Demand contraction entails also changes which, though often with a sound rationale from a balance of payments viewpoint, tend to cause adverse distributive outcomes (Johnson and Salop 1980). The IMF staff has known for long, for instance, that stabilization may entail changes that are undesirable from an egalitarian perspective but that, according to them, can be justified when trying to attain given growth and balance-of-payments objectives: 'real wage rates may have to fall and real profit rates increase so as to encourage increased foreign capital inflow' (ibid.: 23).

Economic slumps in industrialized countries have a greater impact on profits than on wages because of the stickiness of the latter, because well developed social safety nets cushion most of the loss in wage income and because firms hoard labour during recessions that they perceive to be temporary so as to reduce the screening and training costs they face over the medium term. In contrast, in many types of developing countries inequality rises during recessions (as wages are downward flexible, social safety nets little developed and labour hoarding rare) and falls during recoveries. As a result, under the recessions which are deliberately induced by demand contraction, wages often fall faster than GDP/capita and profits, the wage share declines and inequality of the size distribution of income worsens. Bourguignon *et al.* (1989) found evidence of an unequalizing trend in all countries which had undertaken stabilization and structural adjustment programmes but Malaysia. Iglesias (1998) comes to similar conclusions for Latin America.

Inequality is often accentuated by the policies followed to *control inflation*. No doubt, high inflation (as that of Bolivia and Peru in the mid 1980s and of Russia and Ukraine in the early 1990s) causes a worsening of inequality, as the poor are least able to index their incomes and maintain the real value of their assets, and unskilled labour is especially vulnerable to layoffs in recessions caused by ill-designed stabilization efforts. *Ceteris paribus*, this redistribution of assets affects income inequality permanently. Finally, the most fundamental argument in favouring of controlling inflation is that inflation rates of more than 40 percent reduce growth (Bruno and Easterly, 1995).

Yet, the dominant approach to inflation control itself suffers from various problems. First, the inflation targets adopted in orthodox stabilization programmes are often single digits, even though the literature shows that below the threshold of 40 percent a year inflation is not costly (ibid.; Stiglitz, 1998). Second, such ambitious targets are achieved by means of large rises in interest rates and budget cuts, which have negative distributive effects. Third,

as evidenced by the allegedly ‘successful’ Chilean and Mexican stabilization experiences, the monetary approach to the control of inflation can generate unexpected monetary and fiscal side-effects which require that austerity measures be kept in place for many years (up to seven in at least one instance) in order to push inflation below an acceptable threshold (Solimano, 1992).

Structural reforms

Evaluation of the distributive impact of structural reforms is more complex and might lead to different conclusions depending on the specific instrument and region analysed. Often, reforms in different areas have offsetting effects on equity. Yet, here too there seem to be some regularities.

Several studies find that trade distortions have a negative effect on income distribution and that, by implication, trade liberalization improves equity. Wood (1994) argues that the expansion of S-N trade accounts for between a third and a half of the increase in inequality in the OECD countries since the 1970s, and for its supposed decline in the fast growing East Asian exporters of manufactured goods (as noted in Section 2, however, such decline was reversed in the 1980s and 1990s in most of them).

According to this model, an expansion of labour intensive manufactured exports in poor countries raises the demand for unskilled (but literate) labour relative to that of skilled and illiterate labour and thus reduces the wage differential. Symmetrically, in the developed countries, a rise in the imports of labour-intensive goods (and in the supply of low-skilled immigrants), in contrast, reduces the demand for unskilled labour, increases unemployment among these workers and depresses their relative wage.⁹ Finally, Barro (1991) and Sachs and Warner (1995) found that trade distortions are associated with slow growth and, therefore, slow poverty reduction. Rodriguez and Rodrik (2000), however, argue that these results suffer from the omission of key variables and that there is no clear relation between trade openness, growth and poverty reduction.

The ability of the ‘S-N trade story’ to explain the inequality changes of the last twenty years is however partial at best. To start with, Singh and Dhumale (2000) note that labour intensive manufactured imports from developing countries account for a mere 1-2 percent of GDP of the OECD countries and that these cannot therefore explain large changes in wage dispersion in these countries. Other factors, such as the liberalization of labour markets, changes in remuneration norms and cuts in social transfers, they argue, may have had greater impact on inequality in the advanced countries. Also in less developed countries, the empirical record offers little verification of the predictions of the approaches grounded in orthodox trade theory. Although free trade helped reducing income inequality in the East Asian exporters of labour intensive manufactured goods in the 1960s and 1970s, the opposite has been observed over the last 20 years in a broad range of developing countries, including in the same East Asian exporters of manufacturers (see Section 2). Indeed, an array of studies indicates that wage differentials rose in line with liberalization in Latin America, the Philippines and other countries (Cornia and Reddy, 2001).

⁹ As noted in Section 2, there is evidence that in the 1980s wages of workers with high education rose relative to that of workers with lower education.

Alternative theoretical approaches, such as those which stress structural inflexibilities or imports of world class technology requiring highly educated labour can better explain these observations (ibid.).

For instance, Behrman, Birdsall and Szekely (2000) explore a variety of factors that can erode the theoretical advantages of trade liberalization in Latin America. They focus, among others, on the limited advantages enjoyed by such region in the export of labour intensive goods in relation to those enjoyed by low-wage economies such as China and other Asian economies. Altogether, they find no statistically significant relation between trade liberalization and wage differentials. A big difference between Latin America in the 1990s and East Asia in the 1960s is precisely the competitive pressure arising out of the opening up to world trade of Asia's large, low-wage manufacturing exporters, such as Bangladesh, China, India, Indonesia, and Pakistan, which had in the past been largely closed to trade. As a result, middle income countries no longer have a comparative advantage in labour-intensive exports and have shifted towards skill-intensive exports in markets where however they face stiff competition from the advanced economies.

Domestic financial sector reform has been one of the first structural changes introduced in many developing countries. It began in the mid 1970s in Latin America, spread to Africa and Asia in the 1980s and Eastern Europe in the 1990s. These changes in regulatory policies were conducive to private credit expansion but, with inadequate bank regulation and supervision in most countries, exacerbated the risk of banking crisis. Domestic financial liberalization, the 1982 rise in US interest rates, and the IMF policy of demanding large increases in interest rates in crisis countries, fuelled a worldwide rise in real interest rates well above the secular trend value of 2-3 percent. For instance, in Canada, the US and the UK, real interest rates rose from an average of -1 percent in 1976 to around 5-6 percent over 1982-4 (Atkinson, 1998). And, in the Philippines, the rise was from -0.2 to 10.7 percent between 1980 and 1992.

All this had the effect of forcing several governments into a vicious circle, whereby the rise in interest rates augmented substantially the cost of debt servicing, which further pushed deficits and indebtedness upward. In a number of middle income and industrialized countries with a large stock of debt, this policy raised the cost of servicing the public debt in the early-mid 1990s levels to almost 15 percent of GDP (UNCTAD, 1997). The net effect of all this was disequalizing as in developing countries tax incidence is broadly proportional while ownership of financial assets is highly concentrated. In Turkey, for instance, the Gini coefficient of the bank deposits was close to 0.7 in the 1980s (ibid.). Financial deregulation thus led to a substantial increase in the rate of return to financial capital, an increase in the share of GDP accruing to non-wage incomes and the redistribution via the budget of labour income to holders of state bonds. Atkinson (1998) remarks that, since 1980, non-labour incomes have increased in five of the G7 countries (with rises of 5 percentage points or more in Italy, Japan and West Germany and 10 in France), in parallel with a climb in interest rates.

Domestic financial liberalization was followed by the liberalization of the capital account. In a growing number of countries such measure has generated a sharp economic and social impact. This is in part due to the 'disciplining' effect such liberalization has on the policy (especially tax and redistribution) decisions of governments and the demands of organised labour, partly due to the real appreciation of the exchange rate which shifted resources to the

non-tradable sector and increased subcontracting and wage cuts in the tradable sector (Taylor, 2000).

Financial deregulation is also a cause of growing instability, as signalled by the rise in the frequency and severity of financial crises in recent years (Caprio and Klingebiel, 1996). Left to themselves, deregulated financial systems cannot perform well owing to problems of incomplete information, markets and contracts, herd behaviour and weak regulatory institutions. Recent evidence (Galbraith and Lu, 1999) points to the relation between liberalization of the capital account, financial crises and pursuant changes in earnings inequality, particularly in countries with weak labour institutions and social safety nets. In Latin America and Asia, for instance, financial crises raised inequality in 73 and 62 percent of the time, while Finland, Norway and Spain experienced a sequence of banking and financial crises without experiencing increased inequality thereafter. Diwan (1999) arrives at similar conclusions on the basis of international panel data of the share of labour income in GDP. In a subsequent paper he finds that capital account restrictions help maintain the labour share once financial crises occur Diwan (2000). In an empirical study on Latin America, Behrman, Birdsall and Szekely (2000) find that the strongest disequalizing component of the overall reform package was precisely the capital account liberalization.

Even in periods of output expansion, distribution may deteriorate because of the impact of reforms promoting wage flexibility, reduced regulation and an erosion of minimum wages, unionization and collective bargaining.¹⁰ The impact of the liberalization of the labour market is often compounded by the removal of barriers to capital movements, which increase the bargaining power of capital in its negotiations with both labour and the government. The liberalization of the labour market was expected to generate fast employment growth and some increase in wage dispersion. The overall distributive impact was to depend on whether the 'wage inequality effect' or the 'employment creation effect' prevailed. However, the impact may be also influenced by other considerations. For instance, the abolition of minimum wages might not always stimulate labour demand while there is evidence that it increases poverty and inequality. In addition, while demobilization of labour may be seen as a way to reduce labour market rigidities, a low rate of unionization may affect social cohesion, incentives and industrial relations.

The evidence indicates that inequality has risen in most countries which have liberalized their labour market. In Eastern Europe, the fall of minimum wages relative to average wages and in absolute terms is closely associated with the rise in earnings inequality (Cornia, 1996). Behrman, Birdsall and Szekely (2000) show that in 18 Latin American countries wage differentials rose after the liberalization of the labour market. In the USA, the erosion of the minimum wage is estimated to explain about 30 percent of the rise in earnings concentration while the fall in unionization accounted for about 20 percent of the total increase in earnings inequality (Gottschalck and Smeeding, 1997). In contrast, as noted in section 2, earnings concentration did not increase in countries with collective bargaining institutions, adequate minimum wages and social protection systems. The

¹⁰ The real minimum wage in Kenya, Uganda and Zimbabwe in the mid 1990s was 60 percent of the level of the early 1980s, while in Latin America it either declined or remained lower than their 1980s with the only exceptions of Colombia, Costa Rica and Chile (van der Hoeven, 2000). Cornia (1996) illustrates the widespread decline in minimum wages in the European economies. Similar evidence is available about the rate of unionization, which has dropped frequently during the era of liberalization and deregulation.

liberalization of the labour market can push up earnings inequality also through a surge of the highest wages, a fact possibly related to the expansion of the FIRE sector and to changes in remuneration norms (Atkinson, 1999), and in the interindustrial wage dispersion not justified by differential rises in labour productivity (Cornia, 1996).

The inequality impact of the deregulation of the labour market is less clear in countries with segmented labour markets and social security systems covering only the formal sector and with already high wage inequality (Argentina, Zimbabwe, and India before the 1990 liberalization). In these countries, the overall employment effect due to the downsizing of the capital-intensive formal sector might be distributionally beneficial.

Past studies of the net fiscal incidence of government tax and transfer operations in developing countries have shown that the state played a positive, though generally limited, role in redistributing income from the upper to the lower strata (De Wulf, 1975). This redistribution was the result of the broad proportionality of taxation and of the moderate progressivity of public expenditure. A recent review of studies on tax incidence by Chu, Davoodi and Gupta (2000) offers an even more favourable view as out of 36 country studies examined taxation was progressive in 13, proportional in 7, regressive in another 7 and trendless in 9 while direct taxes were found to be progressive in 12 cases out of 14. In low-income agrarian countries with a narrow tax base, the scope for redistribution is more limited, though even in these countries there are examples, such as the states of Tamil Nadu and Kerala in India, of well targeted, low cost transfer systems that are able to lift the income of the very poor and reduce poverty incidence.

The potential for redistribution rises with the level of development and is greater in middle income economies following a pro-poor political economy. In 1990-1, for instance, the Chilean government raised the tax/GDP ratio by 2 points (following a raise of the VAT and the introduction of a surcharge on the personal income tax) generated additional revenue of \$800 million and utilized it for highly pro-poor transfers. The result was that the share of consumption of the poorest quintile rose from 3.3 (before transfers) to 6.4 percent (after transfers) (Schkolnik, 1992). In industrialized and some transitional countries redistribution reduces substantially inequality and poverty (Palmer *et al.*, 1988). In Finland, for instance, the Gini coefficient of the distribution of factors income rose from 39.0 to 46.6 rose between 1991 and 1993, but that of disposable income remained unchanged at around 21, pointing to a marked increase in the redistributive role of the tax and transfer system during a crisis period.

Though no comprehensive analysis is available, tax systems appear to have evolved not only towards much needed simplification, but also towards lower progressivity. In the 1980s and the 1990s, tax reforms replaced direct taxes and trade taxes with indirect taxes. While the progressivity of direct taxation has been reduced everywhere, greater accent has been placed on horizontal equity, by eliminating tax exemptions and tax holidays. The net impact of these reforms has varied from country to country but the trend is generally towards lower progressivity. In reviewing the impact of tax changes in Latin America, for instance, Morley (2000) notes that the effect of these tax changes were to shift the burden of taxation away from the wealthy and towards the middle and lower classes.

In addition, in several countries changes in the level and composition of public expenditure have reduced its redistributiveness. For instance, the share of interest payments in total public expenditure rose in many countries as a result of the deregulation of the financial sector. For Latin America as a whole, interest payments increased from 9 percent to 19.3 percent of total expenditure between 1980-1 and 1985-7 alone, and in Mexico they climbed from 13 to 49 percent (Ebel, 1991). In Turkey, in turn, interest payments on the public debt rose from two to ten percent of GDP between 1988 and 1998 (Yeldan, 2000). The move to 'fine targeting' through means testing of cash transfers and social services, moreover, often compounded the problem. While such an approach may reduce the leakage of the benefit to the non-poor, it generally worsens income distribution.

In transitional and other economies, income inequality may have also been influenced by a sharp rise in asset concentration. The empirical evidence in this regard is fraught with measurement problems (Honkkila, 1997). In many developing countries, furthermore, privatization has been less wide-ranging and its impact difficult to ascertain. There are several examples of distributionally favourable privatization programmes in agriculture, as in the case of the distribution of collective herds in Mongolia, of the communes land in China and of state land in Armenia and Romania. However, confusion in land titling following land decollectivization, with poor communities least able to protect their rights led to rises in asset and income inequality in some African countries (as Guinea-Bissau and Mozambique). Effects were distributionally favourable also in the case of the privatization of housing.

Privatization of indivisible large industrial assets, instead, has proven more complex. The empirical evidence in this regard is fraught with measurement problems, but points to a sharp rise in assets and, to a lesser extent, income concentration (Honkkila, 1997). The worst outcomes are observed in the economies in transition where ill-designed insider privatization programmes led to the concentration of state assets in the hands of former managers and of a small financial élite—as typically exemplified by the case of Russia. The other main developing region involved in privatization was Latin America. In this region, the way privatization of utilities affected equity has depended on the sale price of state assets, on the (rising) prices of the services supplied by the privatized utilities and through the employment impact of restructuring. Morley (2000) suggests that privatization of utilities in Latin America hurt mainly the middle class which was at the same time the main user and producer of the subsidized services of the state enterprises.

Impact of the overall liberalization package

The above review has shown that in several instances the introduction of orthodox policy reforms in the field of stabilization, domestic deregulation and external may have generated adverse distributive outcomes. Altogether, of the main six policy components of the structural reform reviewed above, capital account liberalization appears to have had the strongest disequalizing effect, followed by domestic financial liberalization, labour market deregulation and tax reform. Privatization was found to be associated with rising inequality in some regions (Eastern Europe and former Soviet Union) but not in others (Latin America and China), while trade liberalization had insignificant or disequalizing effects. The review has emphasized also that the impact on inequality varies substantially depending on the specific instrument and region analysed, as well as depending on the

structure and initial level of inequality of the economies considered. Concrete statements about the impact of policy reform and on the eventual mitigation measures must therefore be country-specific and be based on in depth case studies making use of time series analyses.

The empirical literature on the quantitative impact of the overall liberalization-globalization package is limited and confined mainly to Latin America and the transitional economies of Eastern Europe and the former Soviet Union for which the synthetic reform indexes are available. Behrman, Birdsall and Székely (2000) assessed the impact of the overall liberalization-globalization package (proxied by a synthetic index measuring the intensity of the reforms, as well as by specific indexes for each main reform area) on wage differentials for 18 Latin American countries over 1980-98. They found that the overall package had a significant disequalizing effect on wages which, however, declined gradually over time. Broadly similar evidence is provided by a review of the effects of liberalization and globalization during 21 reform episodes in 18 countries (13 from Latin America, three from Asia, Russia and Zimbabwe) during the last two decades (Taylor, 2000). The study finds that inequality rose in 13 cases, remained constant in six and improved in two. In contrast, somewhat different results are arrived at by Morley (2000) in a similar review of the distributive impact of policy reform in Latin America. All studies indicate that each policy instrument may have a distinct effect.

Hereafter we attempt to test empirically whether the shift towards ‘Washington Consensus policies’, which has occurred since the early-mid 1980s in a large number of countries, has increased income inequality over the last two decades. To this regard, we regress the changes in overall policy reform over the 1980-95 period on the changes in income inequality over the same period in 32 developing and transitional economies.¹¹ We derive a synthetic index of policy reform (REFINDEX) by taking the simple arithmetic average of the sectoral policy reform indexes developed by the World Bank for a large number of developing and transitional economies. These indexes summarise the progress realized until the mid 1990s in the six policy areas discussed earlier. The synthetic index (as well as its components) vary between 1 (no reform) and 6 (complete policy reform). Changes in distribution are proxied by the difference in the Gini coefficient of the total final net disposable income between 1980 (or nearest year) and 1995 (or nearest year). We also introduce in the regression three additional variables: first, the initial (1980 or nearest year) values of the Gini coefficient ($GINI^0$), as even strong reforms are likely to generate a less marked increase in Gini coefficients in countries with high initial levels of inequality (in fact the Gini coefficient is bounded within the 0.18-0.65 range, and not the 0-1 range). The data in Table 10 clearly show, for instance, that the high inequality countries of Latin American experienced comparatively modest rises in inequality in spite of the adoption of radical reforms. We thus expect that high initial Ginis reduce the disequalizing effect of policy reform. Second, examination of the scatterplots indicated that the disequalizing effect of policy reform is stronger in the economies in transition of the former Soviet

¹¹ Argentina, Azerbaijan, Bangladesh, Brazil, Bulgaria, Chile, Colombia, Costa Rica, Czech Republic, Dominican Republic, El Salvador, Guatemala, Honduras, Hungary, India, Indonesia, Malaysia, Mexico, Pakistan, Panama, Philippines, Poland, Russia, Senegal, Slovakia, South Africa, Tanzania, Thailand, Tunisia, Turkey, Ukraine and Venezuela.

Union (but not of Central Europe) where the ‘systemic transformation effect’, greater institutional weakness, and lower quality of the policy introduced (as in the case of the Russian privatization) have heightened the disequalizing effect of the Washington Consensus policies. We deal with this problem introducing in the regression a dichotomous DUMMY-FSU variable. We also add a DUMMY-LAC to reflect the specificity of the reform process in Latin America and the Caribbean. In this region, liberal reforms were particularly intense and were characterized by fast progress in the liberalization of the domestic financial sector and of capital account transactions, the importance of which may not likely be captured by the overall reform index REFINDEX.

The regression made use of robust standard errors estimators and specified as dependent variable the increment of the logs of the Gini coefficients between 1980 and 1995. The results confirm a statistically significant impact of policy reforms on the increase in Gini coefficients, a strongly significant effect of the FSU-dummy variable and a weak one (significant at the 16 percent level) of the Latin America dummy. The initial level of inequality ($GINI^0$) enters in the regression with the right sign and at a significant level of probability. The F test is highly significant—suggesting that the overall specification cannot be rejected—while the R square is a satisfactory 0.54.

$$\Delta \log GINI = -0.53 (0.86) - 0.23 \log GINI^0 (2.51) + 0.13 REFINDEX (3.07) + 0.32 DUMMY-FSU (3.95) + 0.07 DUMMY-LAC (1.43)$$

As the function is non-linear, we have computed the impact of changes in the reform index on the Gini coefficient, everything else being equal. The results show that the Gini coefficient would rise by 9-10 percent of the initial level when the reform index moves from 1 (no reform) to 3 (medium reform level) and by 14 and 17 percent in case of a rise of the reform index to levels 5 or 6 (i.e. a highly or totally liberalized economy). This means that in a medium inequality country (with Gini of, say, 0.30-0.35) medium progress on the liberalization front raises the Gini coefficient by around 3 points while strong liberalization causes a rise of between 4.5 and 5.5 percentage Gini points. Stronger effects would of course be expected in the countries of the former Soviet Union and to a considerably lesser extent by those of Latin America.

These results alone obviously do not allow to draw firm conclusions on the inequality impact of policy reforms à la Washington Consensus. Much more work is needed, especially to refine the indexes which measure the extent and quality of specific reform tools as well as their interaction within a given overall package which is likely to synthesize offsetting effects in many cases. Yet, this simple regression analysis offers an additional element of support to the argument about the disequalizing effect of liberalization-globalization policies.

6. Conclusions

This study has argued that over the last twenty years inequality has risen by various extents and from very different initial levels in two thirds of the countries with adequate information. Such findings are based on a ‘review of the reviews’ of the literature on inequality and on an analysis of trends in Gini coefficients for 73 countries with time-consistent information. The finding about the widespread rises in inequality over the last

twenty years and the frequent reversal of declining inequality trends since the late 1970s *contradicts* a common view of the literature which claims that within-country inequality has remained stable over the post-WWII period.

Our paper offers also some suggestions on the sources of such increases in inequality. While the current debate normally focuses on market-determined changes in wage differentials, it needs to be emphasized that recurrent factors associated with the recent increase in inequality include: a decline in the labour share and a correspondent rise in the capital share; a rise in the concentration of market incomes unexplained by the normal play of market forces but ascribable to market distortions and policy changes (such as the erosion of minimum, informal and public sector wages, growing wage arrears, abandonment of traditional remuneration norms) and political-economic factors (such as wage increases unrelated to productivity changes in politically strong sectors such as energy and mining in the transitional economies); and the weakening of redistribution following the reform of the tax and transfer system.

The study has also argued that while the ‘old causes’ of inequality explain the high cross country variation in the level of inequality, they cannot account for its widespread increase in a large number of developed, developing and transitional economies during the last twenty years. Thus, with the exception of rising educational inequality in Latin America and sub-Saharan Africa and of the adoption of skill-biased technical progress in some medium-high income countries, the main source of the recent increase in inequality is to be found in the adoption of Washington Consensus-type policies. However, the effects of these policies vary from one instrument to another, the extent of the initial inequality and the economic structure of the country considered. The paper has argued that the conclusion that liberalization-globalization often have adverse distributive effects does not entail that these policies are inherently inefficient. But it certainly signals that their premature, poorly-sequenced and unselective implementation under weak institutional and incomplete market conditions has may lead to substantially worse results than expected on the basis of the restrictive conditions posited by standard theory. Once more, the example of the negative distributive effects of the Russian and Ukrainian insider privatization come to mind.

While moderate rises from a low level of inequality can be pro-growth and pro-poor, with few notable exceptions,¹² the large inequality rises or moderate rises from high initial levels of the last twenty years (i.e., over half of all rises observed, see Table 10) have been accompanied by a slowdown in growth and stagnation in poverty rates. At the moment, high inequality remains a major impediment to growth and poverty alleviation in many economies in transition of Europe and Asia, Latin America, sub-Saharan Africa and, even, in some of the Southeast and East Asian economies known for having achieved in the past growth with equity.

Unless the orthodox economic paradigm evolves in a distributionally favourable manner in the years ahead, in several countries current inequality trends are likely to depress growth, reduce the poverty alleviation elasticity of growth (Birdsall, 2000), and prevent the

¹² These include China where, however, large inequality rises over the 1990s have to a good extent resulted from growing geographical rather than social inequality.

achievement of the growth and poverty alleviation targets. Commitment to pro-poor growth requires therefore not only the removal of the old causes of inequality but also that alternative structural, macroeconomic, distributive and external policies with a more favourable distributive impact are designed and incorporated in a revised development approach, which we can term together with Stiglitz (1998) ‘the Post-Washington Consensus’.

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