

Changes in the distribution of income over the last two decades: extent, sources and possible causes^{1 2}

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1. INTRODUCTION

The last twenty years have witnessed the spread of a new economic paradigm – generally referred to as “globalisation” - that advocates a rapid removal of barriers to international trade in goods and services, the opening up to foreign direct investments, the liberalisation of short-term portfolio flows, the creation of a standardised patents regime regulating technology transfers and intellectual property and a simplification of norms on international travel, visas and payment systems.

This globalisation of the world economy was preceded and made possible by the liberalisation of domestic markets that began in the early 1980s in many countries. For instance, the rise in foreign investments in the 1990s often consisted in the acquisition by multinationals of state-owned enterprises and could not have taken place without their prior privatisation and the parallel liberalisation of the labour market that allowed large job cuts in privatised firms. Likewise, the surge in short-term portfolio flows of the 1990s would not have occurred without the liberalisation of the domestic financial markets during the 1980s. Thus, both theoretically and empirically, it is often impossible to separate the effects of globalisation from those of domestic liberalisation.

The supporters of the new global market paradigm claim that this approach increases the export opportunities of poor nations, channels world savings to countries with low capital accumulation but high rates of return on investments, accelerates the transfer of modern technology to backward countries and – as a result of all this - improves global economic efficiency. They claim also that trade liberalisation may worsen inequality in the advanced countries importing labour-intensive goods but reduces it in the poor nations exporting them, and that similar effects are expected from the liberalisation of capital flows. In turn, most of the empirical literature maintains that the income distribution of most countries has remained broadly stable over the last fifty years. For instance, Deininger and Squire (1996, p.583) note that “...decadal averages of inequality indexes are relatively stable through time but differ substantially across regions/countries”. Likewise, Li et al. (1998) have argued that there is no evidence of a time trend in income inequality in 65 percent of the 49 countries they analysed over the period 1947-1992. Thus, most theoretical and empirical literature maintains that, at least in the developing countries, domestic inequality remained constant or declined.

Given all this, the paper reviews the trends in domestic (or within-country) income inequality over the last twenty years, i.e. the years of the current globalisation. To place such trends into historical perspective, the paper first analyses the changes in

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income distribution during the globalisation wave of 1870-1914 so as to emphasise similarities and differences between these two periods. The paper then shows that the conclusions of the standard theory and empirical literature about inequality changes often collide with a substantial body of evidence indicating that the past trends towards falling domestic inequality were reversed since the early 1980s in the majority of the developed, developing and transitional economies. Finally, the paper explores the causes of these changes and of the discrepancy between theoretical predictions and observed trends, by emphasising in particular the distributive impact of liberalisation and globalisation under conditions of poorly sequenced macro policies, incomplete markets, weak institutions, asymmetric information, widespread protectionism and structural rigidities.

2. INCOME DISTRIBUTION CHANGES IN HISTORICAL PERSPECTIVE

The years 1870-1914 witnessed an unprecedented integration between the countries of the Old and New World. Thanks to a steady decline in transport costs and pre-1870 tariff rates, the ratio of exports plus imports to GDP rose steadily in all countries of the Old and New World³ while the cross-country price gaps for a variety of commodities were cut up to 81 percent (Lindert and Williamson 2001). Meanwhile capital markets became much more integrated and international lending from the Great Britain, France and Germany to the New World and a few Asian countries increased 20 times between the mid 1850s and 1914 (Anderson 1999). Finally, during this period, 60 million mostly unskilled people migrated from the European periphery to the New World.

The inequality impact of these changes broadly conformed with the predictions of standard theory. To start with, the increase in migration and international trade led to a substantial reduction in the wage and income gap between the countries of the Old and New World, as globalisation increased the relative demand for and the remuneration of the abundant factors and reduced that of the scarce factors (Williamson 1996, Andersen 1999). Mass migration from the periphery of Europe to the New World appears to explain most (some eighty- percent) of the drop in the New World-Old World wage gap between 1870 and 1914 (*ibid.*). Trade expansion accounted for another 30 percent while the capital flows from the comparatively poor Old World to the comparatively rich New World generated a disequalizing but modest effect.

Secondly, globalisation caused a rise in within-country inequality in the rich countries of the New World and a fall in the poor ones of the Old World (Anderson 1999). In Great Britain, Ireland and Sweden, the ratio of unskilled wages to farm rents per acre rose following a drop in the supply of unskilled labour due to migration, growing labour demand in the export-led manufacturing sector and a fall in the prices of agricultural products due to cheap imports. The opposite effects were observed in the New World. As predicted by the standard trade theory, free trade drove up the returns to land in the commodities-exporting countries of the New World and to labour in the Old World countries exporting manufactured products. *Ceteris paribus*, these changes had a disequalizing effect in the first region and an equalising effect in the second. Likewise, migration drove up unskilled wages and down the rental-wage ratio in the Old World but caused the opposite effect in the New World. In addition, as migrants were mostly unskilled, migration caused a reduction in the skilled–unskilled wage

³ The only exception was the US where the trade/GDP ratio remained constant over this period.

differential in the Old World but a rise of the same ratio in the New World. In turn, the flow of European investments to the New World partially offset the local fall in unskilled wages, as they moderated the decline in returns to a growing supply of unskilled labour, and so retarded the rise in wage inequality, while having the opposite effects in the Old World countries that exported capital.

Thirdly, convergence of real wages among countries on the opposite sides of the North Atlantic was accompanied by a sharp divergence between their wage rate and that of the colonial nations. As observed also over 1980-2000, the globalisation of 1870-1914 was confined to a limited number of nations and did not manage to integrate into the world economy the now-developing countries. These were mostly bypassed by the expansion of trade, capital and modern technology i.e. factors that promote growth and convergence, while migrants from these countries were kept out of the centre by restrictive policies and the high cost of the move. The limited data on economic growth for countries such as India, China, Indonesia, Brazil, Mexico and Argentina confirm that – except for the latter - these economies experienced much lower rates of growth and higher volatility than the now-developed countries (*ibid.*). The reasons for this divergence are not yet fully understood but have likely to do with domestic factors – such as lack of infrastructure and limited human capital – and international factors such as the global division of labour under colonial rule and asymmetric access to international markets.

3. INCOME DISTRIBUTION CHANGES OVER THE LAST TWO DECADES

Much of the current debate is concerned with changes in global income inequality. However, from a policy perspective, changes in domestic inequality might be equally or more important. There are three reasons for this. First, between-country inequality is path dependent and is not easily modifiable by the policies of single countries with the exception of the US, China and India. Second, despite the development of international media and travel, within-country inequality is more “observable” than between-country inequality (that remains an abstract notion for most people) and, for this reason, possibly exerts a greater influence on economic agents than between-countries inequality. And, finally, most policy decisions affecting the income position of the citizens of a country are still taken at the national level. This calls therefore for greater attention on changes in within-country inequality.

3.1 TRENDS IN DOMESTIC INCOME INEQUALITY BY MAIN REGIONS

(i) The OECD countries: a reversal in inequality trends. The advanced market economies emerged from World War II with a relatively high income inequality. This, however, declined steadily between the 1950s and 1960s, and this trend continued during most of the 1970s as confirmed by a review of income distribution trends sponsored by the OECD (Sawyer 1976:26) that concluded 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 seem 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 a drop in the concentration of the pre-tax, pre-transfer income distribution.

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

Country	Canada (pre)	France (pre)	Germany (post)	Italy (post)	Japan (pre)	Holland (post)	U.K. (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: author's elaboration on data in Sawyers (1976), Notes: ^a 1965, ^b 1967, ^c ratio of the income shares of the top and bottom deciles.

Since the 1970s this trend was halted or reversed in most of the region. First, inequality started rising since the mid 1970s in the Anglo-Saxon countries, which were among the first to adopt neoliberal policies (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 to 1976.

The Scandinavian countries and the Netherlands were part of a second wave of countries where the inequality trend followed a U-shaped pattern, though in these countries the trend reversal took place 5-10 years later and was less marked. A third wave of countries - including Finland - experienced a gradual flattening of inequality starting around 1980 (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, to stabilize thereafter, as a result of the introduction of deficit control measures and the liberalisation of the labour market (*ibid*).

Despite its reputation for having achieved “growth with equity”, also Japan experienced a clear rise in income inequality during the last two decades. Before World War II, the country exhibited large income gaps between the rich and the poor. These were substantially reduced during the first three decades of the post World War II period, so that by the mid 1970s the Gini coefficient of net disposable income had fallen to 0.30 (Ozawa 1997). However, since the early 1980s, this trend was reversed and in 1993 the Gini coefficient stood at 0.44 (Table 2), only a bit less than the United States.

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)

Analyses for the subsequent years (Ostrom 1999, Fukui 2001 quoted in Smeeding 2002) show that inequality kept rising until 1999. These investigations underscore that this steady growth in inequality does not seem to be due only to the stagnation of the 1990s as

it was already evident in the boom years of the 1980s. In the 1980s, the rise in inequality was led by soaring land prices and the growth in the number of low paid women entering the workforce. In the 1990s, the rise in inequality was affected by the policy to end Japan's decade long economic slump by lifting restrictions on competition. That 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 swelled also as the economy's slide into recession increased bankruptcies and the attendant job cutting.

The above conclusions about the recent rise of income inequality in the OECD countries are confirmed by Smeeding (2002) who identifies too a U shaped pattern in the income inequality trend of the OECD countries, with the possible exception of Denmark and – in part - of Canada, France and Germany, where only modest rises were recorded (Table 3).

Table 3. Comparison between trends of inequality indicators over two sub-periods in the OECD

	Early/Mid 1970s to Mid/late 1980s	Mid/late 1980s to Mid/late 1990s
Australia	0	+
Austria	0	++
Belgium	0	+
Canada	-	+
Denmark	Na	-
Finland	-	+
France	-	+
Germany	-	+
Ireland	-	++
Italy	--	++
Japan	0	++
Netherlands	0	++
New Zealand	0	+++
Norway	0	++
Sweden	-	+
Switzerland	Na	+
United Kingdom	++	++
United States	++	++

Source: Smeeding (2002), Table 3; **Notes:** the symbols in the table refers to the % changes in income inequality indicators (mainly Gini coefficients) over the period considered. The meaning of the various symbols is the following: +++ (more than 15% rise), ++ (7 to 15 % rise), + (1 to 7 % rise), 0 (-1 to 1% rise), - (1 to 6 % decrease), -- (7 to 15% decrease), na (no consistent estimate available).

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), a high union density and high minimum wages (France) 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 a decline in unionisation (*ibid.*).

Other factors too contributed to the rise in income 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 rose since the middle 1970s–early 1980s in the OECD countries

(UNCTAD 1997). In addition, returns to financial capital increased in line with the adoption of the policy of high interest rates followed over the 1982-1993 period. High interest rates caused a rise in the share of GDP assigned to the financial rents particularly in countries with a large stock of domestic debt such as Italy and Belgium. Finally, the redistributiveness of budget operations declined, as the value of transfers fell relative to GDP and personal income tax became less progressive (Atkinson 2000).

(ii) A sharp rise of inequality in the former Soviet Bloc. In these countries, the inequality of the distribution of net disposable income fell up to the mid-late 1970s but flattened out or increased modestly during the mid-late 1980s (Atkinson and Micklewright 1992, Table 4). Since 1989, concurrently with the transition to the market economy, income concentration rose moderately in Central Europe (Milanovic, 1998) where earnings inequality widened less than expected and a comprehensive welfare state was kept in place. In contrast, in the former USSR and South Eastern Europe, Gini coefficients rose by an astounding 17-28 points, i.e. 2-3 times faster than in Central Europe (Table 4). In these countries, the transitional recession was very pronounced, social transfers declined, their composition and targeting deteriorated and privatisation was very inequitable (Cornia 1996).

Table 4. Gini coefficients of the distribution of various types of income, 1981 to 2002

Moderate to large rise	1981	1989	2002	Δ '89-02	Very large rises	1981	1989	2002	Δ '89-02
Belarus (GE)	....	23.4	34.3	11.7	Armenia (GE)	....	26.9	48.6	21.7
Czech Rep(NI)	20.5	19.8	23.4	3.6	Azerbaijan(GE)	27.1	27.5	50.8	23.7
Estonia (GE-NI)	25.1	25.3	35.9	10.6	Bulgaria (GI)	24.3	20.6	36.6	16.0
Hungary (NI)		21.4			Kirghistan (GE)	24.3	26.0	49.0	23.0
Lithuania(GE)	24.4	26.0	39.0	13.0	Moldova (GE)	22.9	25.0	42.6	17.6
Latvia (GE)	24.8	24.4	36.6	11.8	Romania (GE)	....	14.0	42.0	28.0
Poland GI-NI)	23.3	27.5	35.2	11.9	Russia (GE)	25.8	26.5	53.0	27.2
Slovakia (NI)	....	18.1	26.7	8.1	Ukraine (GE)	23.4	24.4	41.8	18.4

Source: author's calculation on a preliminary May 2004 update of WIID 1998. Notes: GE = gross earnings, GI = gross income, NI = net income. The use of GI or NI is preferable, particularly for the post transition years. However, there are only a few surveys on these variables, especially for the pre-transition years. The few available surveys on GI and NI confirm the direction and magnitude of the changes identified above on the basis of GE.

Rising *earnings inequality* seems to have played a central role in the surge of *income inequality* (Milanovic 1998). The rise in the wage gap has been attributed to the emergence of “scarcity rents” for professions undersupplied during the old system and to a physiological rise in returns to education following the liberalisation of the labour market (Rutkowski 1999). Such explanations, based on standard human capital theory, account however for about half of the observed increase. Earnings inequality has risen also because of the fall of minimum wages relative to the average, the expansion of a poorly regulated and inequitable informal sector, and mounting wage arrears. Another factor was a surge in wage dispersion across industries favouring politically influential sectors such as mining and power generation and penalizing state sectors such as health, education and culture where real wages declined sharply due to severe tax collection problems (Cornia, 1996). The apparent limited rise in capital incomes reported in the literature (Milanovic 1998) is the result of the undersampling of the new high-income groups and the underreporting of this kind of income in household budget surveys, as suggested by the growing discrepancy between the mean income per capita obtained from the national accounts and that computed on the basis of the household budget

surveys, and by the rise of private assets over GDP and their growing concentration in few hands. In view of this, in several countries of the region, the “true” distribution of income is likely more unequal than suggested by the data in Table 4.

(iii) 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, in the early-mid 1950s, Gini coefficients in Latin America ranged between 0.45 and 0.60, i.e. the highest in the world (Altimir 1996). This acute income polarisation was rooted in a highly unequal distribution of land and educational opportunities, that 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 disqualifying impact. In the 1970s, however, inequality declined moderately in most of the region except for the Southern Cone (*ibid*). The combination of a rise in inequality over the 1950s-1960s and of 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.

In the 1980s and 1990s, inequality in the region was affected by several external shocks, the recessionary adjustments introduced to respond to them, and widespread internal and external liberalisation. Altogether, the 1980s were characterised by highly regressive outcomes as inequality declined in only three countries (Colombia, Uruguay and Costa Rica) out of 11 (Altimir, 1996). The 1990s did not reverse this trend despite the return to full capacity growth and widespread external liberalisation. A review of inequality changes during this period based on 49 standardized and representative surveys for 15 countries covering 90 percent of the population of the region (Székely and Hilgert 1999) shows that inequality worsened in eight cases and stagnated in seven. An update of this study – including 76 surveys up to the year 2000 - shows that inequality rose in 10 countries and stagnated in seven (Székely 2003).

The income polarisation of the 1980s and 1990s was the result of fast inequality rises during recessionary spells and slow declines during periods of recovery (Cornia, 1994). One of the features of these rises region was a decline in the “labour share” in total income and the parallel rise in the “capital share”. For instance, between 1980 and the late 1980s, the labour share declined by 5-6 percentage points in Argentina, Chile and Venezuela and by ten in Mexico (Sainz and Calcagno, 1992). In several countries – as in Chile during the military dictatorship – the fall in the labour share was less due to the free play of market forces than to regressive policies that relaxed regulations on workers dismissals, restricted the power of trade unions, suspended wage indexation, cut public employment and restricted the coverage of the minimum wage while, at the same time, wealth and capital gains taxes were eliminated, profit taxes reduced and interest rates raised. Five trends emerged in the labour market as a result of these changes, the stagnation of the 1980s and slow growth of the 1990s. First, sluggish growth brought about a slowdown in jobs creation (Tokman 1986). Second, informal employment (in sectors where low wages are the rule) became much more common. Third, formal sector wages evolved less favourably than GDP per capita. Fourth, minimum wages mostly fell in relation to average wages. Fifth, wage differentials by skill level widened, particularly during the 1990s, in parallel with widespread trade liberalisation (Székely and Hilgert 1999). This review may be concluded by noting with Altimir (1996, p.59) that:

Under these new economic modalities (characterised 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 ...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.

(iv) China: a U-shaped trend in regional and urban-rural inequality. At the start of the Maoist reforms in 1953, the nationwide Gini coefficient of the distribution of household incomes stood at a high 0.56 reflecting a marked polarization 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 industry and development of an embryo of social security led to an egalitarian growth and a fall in income inequality, as suggested by the drop of the nationwide Gini coefficient to 0.31 in 1964 and 0.26 in 1975 (Table 5). This equitable distribution proved to be an asset for the success of the subsequent market reforms that, even when they are inspired by gradualism, unavoidably cause some rise in inequality.

Table 5. Evolution of the Gini coefficients of the gross income per capita and of the income gap in China, 1953-99

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	.....	....	...	.....	...	...
1975	0.26 ^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	.....	...	...	.....	...	...
1999	0.42 ^c	.....	...	...	.....	...	...

Source: State Bureau of Statistic for the years 1978-95, World Bank (2000) for all other years but 1999 that is taken from the World Development Indicators of the World Bank. **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 only illustrative of the broad level of inequality of that year; ^d refers to 1983; ^e refers to 1985.

The pro-market reforms introduced in agriculture since 1978 replaced the rural communes with an egalitarian family-based agriculture while introducing considerable price incentives for the farmers. The result was a sharp acceleration of agricultural and overall growth characterized by only a moderate upsurge in rural inequality and a halving of rural poverty between 1978 and 1984 (Gustafsson and Zhong 2000). In turn, the urban Gini coefficient stagnated at a very low level, as the introduction of various performance-related bonuses in urban-based state enterprises⁴ did not apparently lead to any visible rise of urban disparities. Social policy and industrial subsidies played an important role in sheltering the urban population from the price and stabilization reforms of the 1980s (Ahmad and Hussain 1991).

⁴ Industrial reforms were introduced starting from 1984

In contrast, inequality rose fast between 1985 and 1990 and very fast in the 1990s, the decade of rapid export-led growth (Table 5). This increase can be traced to a widening of the urban-rural gap driven by rapid urban-based industrialisation, export-led growth in the coastal area and neglect of the poor interior regions and agriculture (Ping 1997). For example, over 1993-8, the Chinese farmers suffered a 30 percent fall in the price of grains and a tripling of agricultural taxes. Such trends exasperated the urban-rural income gap and reduced the pace of rural poverty alleviation in relation to 1978-84, the years of agricultural-led growth (Gustafsson and Zhong 2000).

Public policy was a major determinant of this rise in income polarisation. The fiscal decentralization introduced in 1978 substantially reduced the possibility of the central Government to control regional inequality by means of transfers to poor provinces. The industrial and export-led policy - deliberately pursued in a regionally unbalanced manner - played an even greater disequalizing role, as it favored 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 investments.

(v) East and Southeast Asia: a more recent reversal of inequality trends. Many countries from this region are known for their past achievement in terms of rapid and equitable export-led growth. Yet, since the 1980s, and particularly since the early 1990s, inequality has been on the rise in most of the region. In Taiwan, Province of China, income inequality improved steadily between 1964 and 1980 thanks to a rapid expansion of employment among skilled and unskilled workers in the domestic and export sector. Over 1980-1993, however, the development of the skill-intensive sectors pushed up again – if moderately - wage inequality, while the share of capital incomes in the total surged in line with the development of large corporations and the escalation of land prices. By 1993, Taiwan, Province of China, had reached again the inequality level of 1964. Inequality trends in Hong-Kong and Singapore too show a U-shaped pattern, with fairly rapid inequality declines till the late 1970s, followed in the 1980s by moderate rises offsetting half of the earlier falls (Oshima, 1998). In the case of Hong Kong, for instance, the Gini coefficient of the distribution of gross income had risen again to 44 by 1998, up from 37 in 1979.

In South Korea, the Gini coefficient of the distribution of earnings declined steadily over time owing to a narrowing of wage differentials by occupation, gender and level of education (Fields and Oyo 2000). Both wage and income inequality rose again, however, in the aftermath of the 1997 crisis. The full-capacity unemployment rose from 1-2 to 4-5 percent between 1995-6 and 1999-2000 (KLSI, 2001), while the share of part time and daily workers in the total jumped from 42.5 to 52.5 percent and the wage spread by employment type widened. As a result, between 1996 and 1999, the labour share fell from 64 to 60 percent while the Gini coefficient of the distribution of earnings rose from 0.29 to 0.32.

Thus, with the exception of Thailand, the economies of Southeast Asia also appear to follow a pattern of inequality decline between the 1960s and the mid-1980s followed by a rise during the 1990s. As noted, Thailand is an exception, as her Gini coefficient of the distribution of total income rose steadily from 0.42 to 0.53 between 1975/6 and 1992 to stabilize during the subsequent three years. The inequality rise that began in the mid-late 1980s was explained by a surge in the share and concentration of non-farm

profits in the rapidly expanding finance, insurance and real estate (FIRE) sector in the Bangkok area (Isra 2000). Initial but incomplete evidence suggests that the Asian crisis raised inequality in both 1997 and 1998 (Pangestu 2000 and Knowles et al. 1999).

Indonesia also followed 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). The fall between 1964-5 and 1987 was mainly due to the recycling of part of the oil rent to the financing of the 'green revolution' that raised employment and production opportunities in agriculture, reduced rural inequality and fostered rural growth (*ibid.*). In contrast, the years from 1987 to 1996 – a period dominated by devaluation, tariff reform and financial deregulation - were characterised by the development of the urban-based manufacturing and capital-intensive FIRE sector, a slow down of agriculture, a widening of the urban-rural income gap, the retrenchment of rural development programs and, as a result, a rise in overall inequality from 0.32 in 1987 to 0.38 in 1997 (*ibid.*). The Asian crisis led to a marginal drop in inequality in 1997 and 1998 (Pangestu 2000 and Knowles et al 1999) as middle and high income people employed in the FIRE sector were the first to be affected. There is initial evidence, however, that inequality and poverty rose at a later stage among the urban poor – due to the recession induced by the crisis, the stabilisation measures introduced to combat it and the differential impact of price rises which affected the poor the most (Levinshon et al 1999).

Jomo (2000, p.18) summarised the reason for this widespread reversal in inequality trends in the region by noting that “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”. He noted further that while export orientation and fast growth helped reducing steadily the incidence of poverty, equity could not be achieved in the absence of effective mechanisms for redistribution.

(vi) The recent rise in inequality in the late liberalizers of South Asia. With the exception of Sri Lanka, policy reform was slow to come to the region and until the early 1990s the South Asian countries mainly followed inward-looking policies.

In India, the Gini coefficient of household consumption expenditure per capita fell from 0.36 to 0.31 over 1951-61, as a result of the land reform of those years and the introduction of measures in favour of low income groups. The Gini coefficient fluctuated then in the 0.29-0.32 range until the introduction in July 1991 of the first IMF reform programme. With the gradual liberalisation of the economy brought about by these reforms, GDP growth accelerated to 5.6 percent, up from 5.3 percent in the 1980s. Such growth was, however, highly concentrated in the urban sector, by region and income group. Thus, while rural inequality stagnated, the Gini coefficient of the urban distribution of income rose from 0.34 to 0.36⁵ over 1991-7, the urban-rural income gap widened and the growth rate of the Indian states diverged (Jha 2000). Similar trends were identified by Deaton and Drèze (2002, p3) who, after carefully adjusting the data

⁵ Many argue that such moderate increase in inequality contrasts with the rapid accumulation of financial and other assets suggested for instance by the rising capitalisation of the Mumbai stock market, and likely reflects the undersampling of new high-income groups in the National Sample Survey – as possibly suggested by the growing divergence between the average consumption per capita measured on the NSS and national accounts.

for the effects of changes in questionnaire design⁶ between the 1993-4 and 1999-2000 rounds of the National Sample Survey (NSS), note:

‘ There has been a marked increase in inequality in the nineties, in several forms. First, there has been strong ‘divergence’ of per-capita expenditure across states, with already better-off states....growing more rapidly than the poor states. Second, rural-urban disparities of per capita expenditure have risen. Third, inequality has increased within urban areas in most states. The combined effects of these different forms of rising inequality are quite large.’

The nation-wide effect of these trends was that the Gini coefficient of the distribution of consumption expenditure per capita rose from 29.7 to 37.7 over 1990-97.

Also in Sri Lanka, Bangladesh and Pakistan the inequality trends seem so have followed a U-shaped pattern. In Pakistan, the Gini coefficient declined moderately from 0.39 to 0.33 during the growth years of 1963-1973 but then gradually climbed back to reach 0.41 in 1992-93 (Oshima, 1998). This U-shaped pattern is more clear 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 rose during spells of slow growth and declined during periods of expansion and that social policies had only a limited effect in moderating 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 relevant explanations of the surge in inequality. In turn, in Bangladesh, the inequality reversal was more pronounced in the rural sector where an initial drop of 7 Gini points was followed by a rise of 12 points. For the country as a whole, the Gini fell from 37.7 in 1963 to 33.4 in 1977 to rise to 43.0 in 1996. And in Sri Lanka, the Gini coefficient of gross household income fell from 47 to 35.3 in 1973 to climb back steadily to 48 in 1996.

(v) Sub-Saharan Africa: falling urban-rural gap, but rising intra-urban and – at times - intra-rural inequality? Conclusions about inequality changes in Sub-Saharan Africa are tentative, as – despite improvements in data availability – there are still few nations with at least two nationwide comparable surveys covering the last twenty years.

Up to 1980s, inequality in the region was mainly due to the urban-rural income gap inherited from the colonial era and reinforced by the urban bias of post-colonial policies. A concise summary of this viewpoint is provided by the 1999 World Bank’s Madagascar Poverty Assessment quoted in Eastwood and Lipton (2000, p. 25):

‘[I]n the mid-1970s .. interventionist economic policies [were] characterised by widespread nationalisation, extensive price and marketing controls which were particularly severe in the agricultural sector, extremely high tariffs, high taxation of agricultural exports, a chronically overvalued exchange rate, and a public investment programme that gave priority to large capital-intensive projects with low returns, while neglecting investments in .. rural infrastructure and the social sectors. These policies favoured urban over rural areas, where most of the poor live .. The legacy of these policies has been a relative decline of agriculture ... Not surprisingly, not only did poverty increase in this period but so did inequality.’

⁶ The main changes in questionnaire design concerned the ‘recall periods’. While the 1993-4 National Sample Survey relied on the usual “30-day recall” questionnaire, the 1999-2000 one adopted different recall periods for different classes of goods.

The 1980s were characterised by the massive application of adjustment programs aimed at improving the rural terms of trade, stimulating agricultural exports and reducing urban-rural inequality, while the 1990s focused also on external liberalisation. On average, these reforms succeeded in liberalising the economy, devaluing the real exchange rate (which fell on average by 30 percent over 1980-1998) and opening up the African economies, as signalled by the rise from 51 to 62 percent in the regional import plus export ratio to GDP (Kayizzi-Mugerwa 2000).

The policy reforms of the 1980s hit the hardest in the urban sector that generally experienced a drop in its terms of trade and large income falls. The rural areas were less affected or gained in absolute terms. Thus, in most cases, the urban-rural income gap was reduced by a process of “equalising downward” (UNCTAD, 1997). While intra-urban inequality tended to rise, intra-rural inequality rose in countries – such as Kenya - characterised by a high land concentration (Table 6) or where the recovery was peasant-based but failed to reach the remote areas due to inadequate infrastructure or the collapse of marketing arrangements - as in Zambia (Mc Culloch et al 2000) - while it improved in countries such as Mozambique and Uganda characterized by a peasant agriculture rebounding from years of civil strife (Bigsten 2000).

Table 6. Gini coefficients of the distribution of income in the rural, urban and overall economy

Country	Year	Rural	Urban	Overall
Cote d'Ivoire	1970	.....	....	0.53
	1985			0.39
	1995			0.37
	1998			0.45
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: WIID, UNU/WIDER, Helsinki (www.wider.unu.edu), Kayizzi-Mugerwa (2000), Bigsten (2000), Mc Culloch et al (2000)

The narrowing of the urban-rural income gap and the improvement of overall inequality following structural adjustment, however, has depended on the extent of the “pass through” of the benefits of devaluation to the rural producers, the efficiency of private trading, continued subsidisation of inputs and stable trends in international prices. In this regard, Eastwood and Lipton (2000) find no evidence that the equalizing effects of structural adjustment on the rural-urban income gap prevailed over disequalizing forces such as the better education of the urban residents which allowed them to exploit more rapidly new opportunities in the wake of price liberalisation; the shift induced by trade

and financial liberalisation to manufacturing and services, i.e. activities that are, by definition, urban-based; and persistent bias in investment and social spending.

This fifty-fifty picture is broadly confirmed by a review of the 1990s changes in the distribution of household expenditure for Ethiopia, Uganda, Zimbabwe, Ghana, Madagascar, Zambia and Mauritania (Christiaensen et al 2002). The study finds that rural inequality declined in 5 cases out of 7 thanks to domestic trade liberalisation, changes in agricultural procurement policies and greater macroeconomic and political stability. In contrast, urban inequality rose in 4 out of 7 cases while overall inequality rose in three cases and fell in another three. The changes recorded were generally quite modest though this apparent stability hides considerable churning at the micro level.

3.2 ECONOMETRIC ANALYSIS OF WITHIN-COUNTRY INEQUALITY

The above discussion suggests that, during the last two decades, domestic inequality rose in the majority of the countries analyzed and that such rise often represented a reversal of the declining inequality trend observed during the first three decades of the post World War II period. These conclusions were tested formally by Cornia with Kiiski (2001) who extracted from the November 1998 version of WIDER's World Income Inequality Database (WIID) 770 reliable Gini coefficients from the mid 1950s to the mid 1990s for 73 countries⁷ accounting for 80 and 91 percent of the world population and GDP-PPP. These data are derived from fully documented, comparable and representative surveys of the entire economy and refer to "per capita household income" in 52 countries, "per capita consumption expenditure" in nine and "gross earnings" in 14. Each time series makes use of the same income concept for the entire period analysed and was interpolated with linear and quadratic functions that allow to capture eventual trend reversals. For each country, the best functional form was selected on the basis of the most significant t statistics and, as a subordinate criterion, the highest R². The results of these trend estimates are summarised in Table 7.

Table 7. Trends in income inequality from the 1950s to the mid 1990s for 73 countries.

	Sample countries in each group	Sample countries in each group	Sample countries in each group	Sample countries in each group	Share of population of sample countries	Share of GDP-PPP of sample countries
	Developed	Developing	Transitional	Total		
Rising inequality of	12	16	20	48	59	78
which:						
U shaped	.....	.....	.....	29	55	73
Constant inequality	4	10	0	14	36	13
Falling inequality	2	7	2	11	5	9
Total	18	33	22	73	100	100

Source: Cornia with Kiiski (2001)

These results broadly confirm the conclusions arrived at in section 3.1. Inequality was found to have risen in 48 of the 73 countries analyzed, including in large economies such as the USA, UK, China, several large Latin American nations and Russia. Inequality was found to have remained constant in 16 countries and to have declined in

⁷ Of these 73 countries 34 are developing, 23 transitional and 16 from the OECD. Except for Africa, these countries account for 84 to 98 percent of the population and 82 to 98 percent of the GDP-PPP of their respective regions. For Africa, the six countries included in the regression analysis account for 18 and 32 percent of the total population and GDP-PPP. In turn, lack of consistent time series did not allow to include in the sample any country from the Middle East.

nine including some small countries (Bahamas, Honduras and Jamaica) and a few medium ones (including Malaysia, South Korea). The inequality increase was near universal in the economies in transition and the OECD but less general in the developing countries (column 4 of Table 8). However, the November 1998 version of WIID extends only up to 1995 and does not reflect therefore the inequality changes intervened during the last 7-8 years that were characterized by a shift in the locus of growth from the rural to the urban sector, an increase in North-South capital flows, the financial turmoil and contagion emanating from the several financial crises and so on. Because of this, the results in Table 8 do not reflect the most recent changes intervened in India, Cote d'Ivoire, South Korea, El Salvador and the Philippines – i.e. countries that experienced inequality reversals over the last few years (section 3.1). These five countries were, thus, separately moved to the “rising inequality” category. In this way, of the 73 countries in the sample, 53 experienced a surge in income concentration over the last 20 years. Among the developing nations, those experiencing a rise went up to 21 out of 33, with seven still showing no trend and five displaying falling inequality.

The observed upsurge in the Gini coefficients in the 53 nations exhibiting growing inequality was moderate (less than 5 points) or high (5-10 points) in about 35 countries though in 9 of them the rise occurred from high initial levels. Rises of 10-20 points were recorded in 14 countries and of more than 20 points in three states of the former Soviet Union. While inequality upsurges of 3-5 points from low initial levels may spur economic growth, large increases (as in the former USSR) or moderate increases from already high levels (as in Latin America) possibly affected negatively poverty alleviation and economic growth.

4. SOURCES OF THE RECENT CHANGES IN INEQUALITY

Most of the mainstream literature on the causes of the recent inequality changes focuses on a single uniform factor, i.e. a rise in wage differentials by skill level, a trend that is attributed to greater immigration and trade liberalisation (which increased the supply of unskilled workers in developed countries, with the effect of depressing their wages), or to the impact of skilled-biased technical change.

By focussing exclusively on the wage distribution, such literature neglects the impact of changes in the factorial distribution of income and in redistribution through taxes and transfers. Yet, a decomposition of the changes in the Gini coefficient of the disposable income by component (wages, profits, rents, interest and transfers) suggests that a rise in overall disposable income could be due to a rise in “capital share” or to a fall in the “labour share” or “transfers share”. It could also be due to changes in the degree of inequality of the distribution of each of these kinds of income explained by a variety of factors including rising asset concentration (due for instance to changes in the inheritance tax), or changes in factors remunerations (due to wage reforms or shifts in interest rates and land rents) or changes in social norms concerning the desired extent of redistribution and its targeting. Finally, a spatial decomposition of overall inequality would show in turn that a worsening of overall inequality might be due to a growing regional or rural-urban income disparity.

Though data about changes in these areas are only fragmentary, the overall evidence suggests that part of the distributive changes of the last two decades may be explained by shifts in factor shares, rising spatial inequality and changes in the wage differentials unexplained by the human capital theory. For instance, based on Atkinson (2002) who showed that in the UK the income share of the top 1% of the population (60 percent of

whose earnings is constituted by capital incomes) rose over 1979-2001 from 21 to 34 %, one can tentatively infer that the capital share rose by at least 8 percentage points during this period. Likewise, evidence from case studies included in Cornia (2004) suggests that similar trends have emerged in five developing countries. For instance, in Turkey the combination of large budget deficits financed through open market operations and financial liberalisation raised substantially the interest rate on the public debt and the share of budgetary resources allocated to its servicing. In turn, South Africa experienced a significant redistribution of labour income towards profits, rents and other property incomes, as indicated by the rise of the share of property income from 18 percent in 1981 to 30 percent in 2000. In India, the rise of overall inequality mentioned in section 3.1 resulted also from a rise in capital incomes driven by the rapid growth of the urban-based service sector, and particularly of its FIRE component. Scattered evidence in this regard is available in the literature for countries as different as Chile, Argentina, Mexico, Venezuela, Thailand, Russia, Uzbekistan, the USA, Canada and Japan.

5. CAUSES OF THE RECENT CHANGES IN INEQUALITY

What factors explain the trends illustrated in sections 3 and 4?. One can propose three sets of alternative explanations:

5.1 AN AGGRAVATION OF THE TRADITIONAL CAUSES OF INEQUALITY.

The first – and least plausible – explanation of the recent increase in income disparity focuses on an exasperation of the traditional causes of inequality. Yet, changes in this area cannot explain the recent deterioration of domestic income distribution for the reasons briefly discussed hereafter.

In developing countries, high land concentration has been and remains a major cause of rural and overall inequality. Yet, this factor cannot explain the deterioration in income distribution recorded during the last two decades. Indeed, during the last 50 years the weight of agriculture in total output and employment has fallen everywhere, while between the 1950s and 1990s land reforms redistributed latifundia and state land to poor farmers in at least 27 developing countries and in several transition economies. As a result, highly disequalizing land rents have declined. Second, while countries well endowed with mineral resources are known to exhibit a considerable income and asset inequality, such “curse of natural resources” hardly explains the upsurge in inequality of the last two decades, as the “mineral rent/GDP ratio” has systematically declined in practically all countries since the late 1970s (Cornia with Kiiski, 2001). Third, the same conclusion applies – with some qualification – to an hypothetical aggravation of the “urban bias”. Indeed, a recent review of the extent of such bias in the globalised world (Eastwood and Lipton 2000) finds no evidence of its systematic aggravation: while it increased in post-1984 China, Thailand and Indonesia it declined in Latin America and parts of Africa.

Finally, a worsening of inequality in education is also unlikely to offer a sufficiently general explanation of the recent widespread deterioration in the distribution of income. In fact, while an increasingly more unequal access to education contributed to the surge of income inequality during the last twenty years in Latin America, this does not seem to have been the case in the other regions. In the latter region, the rise in the average number of years of education recorded during the last two decades was accompanied by mounting inequality in the distribution of educational achievements – as public policy emphasised the reduction of illiteracy (a measure that reduces educational variance)

together with a rapid expansion in the number of university graduates (a measure that raises educational variance) (Morley 2000). In Africa and, to a lesser extent, the former Soviet Union the difficulties experienced in sustaining primary and/or secondary education and the surge in private higher education will likely have a disequalizing impact on the future distribution of human capital, but hardly affected the distribution of human capital in the 1980s and 1990s. In Africa, in addition, three quarters of the workforce is still engaged in simple tasks and even a future polarisation in educational achievements may have only a limited effect on the distribution of income for some years. In contrast, the East and Southeast Asian and Middle Eastern educational policy, focused on an expansion of universal secondary education and so helped – *ceteris paribus* - reducing educational inequality and wage concentration.

5.2. TECHNOLOGICAL CHANGE

A second – neither theoretically satisfactory nor sufficiently general – explanation referred to in the literature as the “skill bias technical change hypothesis” ascribes the recent rise in domestic wage and income inequality to technological change. The latter - it is argued - generates a demand for highly educated workers that chronically outstrips its supply and so creates scarcity rents for this group, while at the same time it reduces the demand and wage rate of unskilled workers. While market forces may indeed generate this kind of pressure, 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 expansion and differential access to education. In this regard, international comparisons suggest that whether the relative earnings of educated workers rise relative to that of less skilled ones depends not only on technology but also on government’s investments in secondary and higher education and educational loans. For instance, Murphy et al. (1999) compare the situation of the US (where governments invested little in public education, and the wage premium for college workers rose by over 20 percent between 1980 and 1995) with that of Canada (where this ratio remained constant owing to considerable public investments in education and training). Murphy et al. conclude that, while technological change does raise the relative demand for educated workers, governments control powerful policies for counteracting the unwanted inequality side effect of technical progress.

It is also argued that – even assuming a balanced evolution of the demand and supply of new skills – new technologies generate an earnings distribution more skewed than that emanating from old technologies. Especially in the service sector and some industrial branches, new technologies replace unskilled labour with skilled labour and capital and so affect the labour share in total income and the wage spread. In support of this argument, the World Bank (2000) suggests that the shift towards a capital- and skill-intensive production observed in the OECD countries in the 1970s and 1980s was matched in a number of developing countries in the 1990s. Yet, this viewpoint cannot apply to the many developing countries where either inequality started increasing ahead of the decade of technological modernisation or, as in Africa and Eastern Europe, low investment rates have retarded any significant technological upgrading. Thus, with the exception of a few fast-growing, middle-income countries, the evidence in support of such thesis seems, on balance, weak.

5.3 DOMESTIC AND ESTERNAL LIBERALISATION

The third – and probably most relevant - set of explanations pivots around the disequalizing impact of liberalisation and globalisation policies. Mainstream theory posits that these reforms mainly generate favourable effects on inequality. Their real-life impact is, however, complex and conclusions may differ not only because of differences in the specific circumstances of the countries, periods and policies analysed, but mainly because the theoretical models on which these predictions are based rest on highly unrealistic hypotheses that hardly reflect a real world of incomplete markets, asymmetric liberalisation and information, weak institutions and structural rigidities. Conscious of all this, the equity impact of each of the policy instruments and of the overall liberalisation-globalisation package are reviewed hereafter. For each instrument, the predictions of the received theory are first discussed. These are then compared with the observed inequality trends in different types of countries, while possible explanations of the discrepancy between theory and outcomes are discussed at the end of the section.

(i) Trade liberalisation. Trade theory based on the Hercksher-Ohlin (HO) theorem predicts that trade liberalisation leads to greater specialisation and a rise in national income in participating countries, following a more rational worldwide allocation of production inspired by the principle of comparative advantage. In labour-abundant countries, trade liberalisation is expected to switch production from capital-intensive and inefficient import-substitutes towards efficient labour-intensive exportables. In turn, the Stolper-Samuelson theorem posits that such shift leads to the convergence in the prices of goods and factor remunerations. Because of this, domestic inequality is expected to decline in countries endowed with an abundant labour supply and to rise in those with an abundant endowment of capital, as the demand for and remuneration of the latter (that exhibits an unequal income distribution) will increase, while the demand and remuneration of labour (that is distributed more equitably) will fall.

The evidence on the impact of trade liberalisation on inequality is, however, mixed. On the one side, several studies point to a favourable effect. As noted in section 2, the trade liberalisation of the 19th century raised domestic inequality in the rich New World countries but reduced it in the poor Old World ones. Likewise, in an analysis of the determinants of inequality in 35 small developing countries Bourguignon and Morisson (1989) conclude that the removal of trade protection in manufacturing reduced the income of the richest 20 percent of the population and raised that of the bottom 60 percent. Similar conclusions are arrived at by Wood (1984) in the case of the East Asian exporters of labour-intensive manufactured goods. On the other side, an equally important literature points to opposite conclusions for a broad range of countries. For instance, wage inequality was found to have increased in six of seven Latin American countries that liberalized trade, as well as in the Philippines and Eastern Europe (Lindert and Williamson 2001). In turn, an analysis on 38 developing countries for the years 1965-1992 found that trade liberalisation benefited the top 40 percent of the population while affecting negatively the bottom 40 percent who were hit by the greater terms of trade fluctuations typical of an open economy (Lundberg and Squire, 1999). Another study (Savvides 1999) shows that the most open developing countries experienced a rise in inequality between the 1980s and the early 1990s and that there is a positive correlation between the income share of the poorest quintile and trade protection.

How can one explain these conflicting findings and the frequent discrepancy between empirical results and theoretical predictions? To start with, it must be underscored that the HO theorem holds under restrictive assumptions that concern trade between two

countries producing two goods with two factors (capital and labour) and using the same technology that remains constant over time. The model also assumes no economies of scale, efficient factors markets (characterized by no restrictions to factors mobility and full employment of all factors), balanced trade and symmetric trade liberalisation by all trading partners. Yet, in the real world, trade takes place in a multi-country, multi-factors and multi-goods context in which several or even most of the of the above assumptions do not hold. Hereafter alternative explanations of why inequality may rise on occasion of trade liberalisation are tentatively provided:

- *Changing relative endowments of countries participating in multi-country, multi-factor and multi-goods trade.* The limitations of the 2x2x2 HO model are most obvious when considering the case of trade among countries whose relative comparative advantage and production structures evolve over time because of the decision of some of them to change their trade policy. Country A, for instance, may have a comparative advantage in terms of unskilled labour in relation to country B but not of C which has – however – not yet liberalized its trade regime. Thus, a decision to liberalize exports by the latter may generate distributional consequences for A. In particular, the prediction that A will experience a reduction in inequality due to greater trade with B is unlikely to be verified as her labour intensive exports will be displaced by those of C. It may even happen that – because of C’s decision to liberalize trade - A will specialize instead in the production of goods with a medium-high skill and capital content with the effect of worsening her wage distribution. This is what happened in the 1990s on occasion of the entry into the world market for labour-intensive manufactures by China and other low-wage economies that affected the exports and comparative advantage of middle-income countries from Latin America, Eastern Europe and South East Asia in these sectors.

- *Liberalisation in countries specialising in the export of primary commodities.* This sector is subject to considerable price shocks – both because of sudden variations in global demand as well as because of “fallacy of composition” problems caused by the growing number of suppliers entering a saturated market. Over the past two decades, these price shocks reduced the trade/GDP ratio in most commodity-producing countries despite the liberalisation of their trade regime (Birdsall and Hamoudi 2002). These price collapses reduced not only their export receipts but also their import capacity, inducing in this way a decline in employment and earnings in the import substituting sector without a corresponding rise in the export sector, with negative effects on the distribution of income. This problem is often compounded by the rigidities faced in these countries when having to reallocate resources towards the export sector following trade liberalisation, owing to weak institutions, lack of infrastructure and human capital, narrow credit markets and poor governance.

- *Trade liberalisation in countries with an unequal distribution of the abundant factor.* The standard model fails also in the case of countries exporting primary commodities produced by means of an abundant factor that is unequally distributed. While an increase in land-intensive agricultural exports may reduce inequality in countries with egalitarian agrarian structures, it would raise it in countries dominated by *latifundia*. Indeed – due to the labour surplus prevalent in the rural labour market – it is unlikely that an increase in the demand for agricultural workers raises the subsistence salary in line with the increase in export receipts.

- *Trade liberalisation and the import of skill-enhancing investment goods.* One of the key assumption of the HO theorem is that the production technologies utilized by the

trading countries are not affected by trade itself. Yet, trade liberalisation can enlarge the access to previously restricted technologies or, by relaxing foreign exchange rationing, raise the imports of capital intensive investment goods. Because of capital-skill complementarities, this “skill-enhancing trade” causes an increase in the demand for and wages of skilled workers and a fall in the demand for and wage of the unskilled ones.

- *asymmetric trade liberalisation and protectionism among the trading partners.* Another assumption of the basic trade model is that trade liberalisation concerns all trading partners. However, in the case of low-tech African and Asian exporters, trade liberalisation has led to unsatisfactory export growth not only because of weak domestic conditions but also because of persistent protectionism in OECD countries. Furthermore, the latter countries have not abandoned the policy – forbidden under WTO rules – of subsidizing entire sectors of agriculture and of exporting its products at prices much lower than their cost of production. Thus, in most cases, unilateral liberalisation combined with restrictive trade practices in the trading partners can raise inequality and poverty in low tech exporters from developing countries.

- *Trade reorientation following capital account liberalisation.* Another explanation that has received so far little attention concerns the interaction between trade and capital account liberalisation. Sudden inflows of foreign capital can entail the appreciation and increasing instability of the exchange rate, shifting in this way the composition of domestic demand towards cheap imports and away from domestic products while rendering exports less competitive (Taylor 2000). All this, encourages the restructuring of production via a reduction in formal employment and wages and greater reliance on outsourcing, i.e. measures that reduce the absorption of unskilled labour and increase wage inequality.

(ii) liberalisation of Foreign Direct Investments (FDI). The predictions of economic theory about the distributive impact of FDI are similar to those of international trade. In low-wage, labour-abundant countries, ‘greenfield FDI’ accelerate capital accumulation and in this way raise the demand for and (under certain conditions) the wage rate of unskilled workers. FDI may also offer better employment conditions and higher wages to all workers – regardless of their skill level – than in the informal or domestic formal sector. The distributive impact of ‘brownfield FDI’ is less straightforward, as the possible long term gains in efficiency have to be weighted by short term retrenchments in employment that may cause adverse distributive impact.

Evaluations of changes in wages and employment conditions in TNCs-controlled firms and export processing zones provide however mixed results about the impact of FDI. Te Velde and Morrissey (2002) found that FDI raised wages of different skill levels in four of the five East Asian countries analysed. In Mexico, in contrast, the increase in wages due to FDI was significantly lower for the unskilled than for the skilled workers (Alarcon and McKinley 1996). And a study of the distributive impact of FDI in developing countries (Milanovic 2002) found no significant relation between the FDI/GDP ratio of the recipient countries and the income shares of various deciles.

Also in this case, one is thus faced with the problem of reconciling the conclusions of the theory with those of an inconclusive evidence. Hereafter are provided some tentative explanations of the FDI-inequality relation that may understand these inconsistencies:

- *Sectoral composition of FDI*: The theoretical advantages mentioned above are most often observed in labour-intensive manufacturing branches such as textile, apparel, food processing, furniture, toys, beverages, assembly operations and so on but are less evident in the capital-intensive manufacturing, utility and mining sectors. In these sectors, production requires a lot of capital, some unskilled labour and few skilled workers. This reduces the demand for and wages of unskilled labour. Second, the high volatility of commodity prices and employment conditions in the resource sector reduces the incentives to invest in education, thus affecting negatively the long term distribution of income. Third, income inequality in the mining sector is usually very high as the ownership of mines is usually highly concentrated and as the mining rent can be captured by the élites with considerable ease. Therefore, FDI in these sectors are likely to raise inequality both through labour market and political economy mechanisms.

- *Substitution effect and “business stealing”*. Even when the FDI go to the labour-intensive sector, their net effect on employment and income distribution has to take into account their impact on the local economy. This is especially important when the output of the FDI is sold on local markets that used to be supplied by domestic firms that risk in this way of being displaced by FDI that would so cause losses of jobs in the labour-intensive informal sector. Because the latter is likely to have a lower labour productivity and higher employment coefficients per unit of output than the foreign firms, a full displacement of their output tends to worsen the distribution of income.

- *North-South plant relocation and skill-biased technical change*. A further refinement of the basic model concerns the technology that a multinational seeking lower wages is likely to transfer to a developing country. While such technology may be considered of low-skills intensity for an advanced nations, it might be relatively skill-intensive in the developing country hosting the new FDI. For instance, the outsourcing of production through the FDI from the US to the *maquiladora* sector in Mexico generated a drop in the demand for unskilled labour in the US (and so contributed to the rise in the skilled/unskilled wage gap) and a simultaneous increase in the demand of what is considered skilled labour in Mexico, thus raising wage and overall income inequality in both countries (Feenstra and Hanson 1997).

- *Systemic effects in a world of mobile capital and immobile labour*. The mobility of capital and immobility of labour may generate strong competition among developing countries simultaneously attempting to attract a fixed amount of FDI. All these countries may thus engage in a “race to the bottom” by which all of them make concessions to the multinational companies in the field of taxation, subsidies, labour and social security legislation, minimum wages and so on that – in the end – may affect either the distribution of private or public consumption or the welfare of workers. While wages in the multinational sector tend to be higher than in local firms, these wage and employment benefits will be felt only in the countries where FDI have finally taken place. In the countries bypassed by FDI, the ex-ante concessions made to attract them may have generated costs unmatched by benefits.

(iii) international financial liberalisation. Mainstream theory maintains that capital account liberalisation raises investments, employment, labour productivity and growth in countries with low capital accumulation but high rates of return on investments and an abundant supply of cheap labour. All this raises employment and - possibly - wages in the developing countries receiving these funds, with favourable effects on equity. In

addition, the liberalisation of portfolio flows would permit the diversification of the financial assets of domestic investors leading to a balancing of the risk profile of their portfolios and thus affecting favourably the saving rate of the developing countries.

Contrary to these predictions, the empirical evidence points to a widespread deterioration of income inequality on occasion of both inflows and outflows of these funds, as vividly documented by a growing number of examples in the 1990s. With rare exceptions, these measures – and particularly the liberalisation of portfolio flows - generated a sharp social impact. How to account for this discrepancy ? Possible explanations include:

- *Appreciation of the real exchange rate on occasion of large inflows.* Large inflows of funds relative to the domestic assets generally cause an appreciation of the real exchange rate that reduces employment in the export sector, shifts resources from the tradeable to the non-tradeable sector and encourage subcontracting and wage cuts in the tradeable sector to preserve profit margins (Taylor 2000). Countries can attempt to control the appreciation of the exchange rate via a costly sterilisation of part of the inflows or through regulation, but both measures work up to a point.

- *Credit booms and intersectoral allocation of portfolio flows.* Large inflows of portfolio flows tend to be invested not so much in agriculture or labour intensive manufacturing but rather in those activities in the FIRE sector that have high short-term rates of return and a perceived low risk profile. These sectors, however, tend to employ medium-highly skilled workers whose wages tend therefore to rise together with the skilled/unskilled wage differential.

- *Sudden capital outflows and financial instability.* The impact on inequality is also mediated by the tendency of capital account liberalisation to augment the frequency of destabilising financial crises with real effects (Caprio and Klingebiel 1997). Left to themselves, deregulated financial systems do not perform well owing to problems of incomplete information, markets and contracts, herd behaviour, panics, weak supervision and speculation on asset prices.

The distributional impact of financial crises is negative, particularly in countries with weak labour institutions and social safety nets, as underscored by Galbraith and Lu (1999) who found that in Latin America and Asia financial crises raised inequality in 73 and 62 percent of the time while no impact was evident in Finland, Norway and Spain. Diwan (1999) arrives at similar conclusions on the basis of panel data showing that the labour share contracts markedly and permanently in the wake of financial crises. In an study on Latin America, Behrman et. al. (2000) find that the strongest wage disequalizing component of the overall reform package was the liberalisation of the capital account. Some analyses have argued that during the first phases of such crises, income inequality may fall as the first people to be affected are the comparatively better paid workers of the FIRE sector. Yet, analyses based on micro data show that the medium term impact on inequality - transmitted via differential employment, wages and price effects - affect the lower deciles especially hard (Levinshon et al 1999).

(iv) Domestic financial liberalisation. Domestic financial liberalisation inspired by the “financial de-repression hypothesis” was one of the first policies introduced in many developing countries since the middle-late 1970s. The theoretical arguments in support of this reform are that it leads to financial deepening, greater competition, private credit expansion and the creation of bond and stock markets, i.e. measures that by increasing financial intermediation raise the saving, investment and employment rate, with likely

positive effects on the distribution of income. Yet, the empirical evidence points to favourable effects in the OECD and a few developing country but to negative ones in most low income nations. How does one explain this contradiction between theory and empirical evidence?

- *Policy sequencing problems: financial liberalisation in the presence of large budget deficits.* In many cases, financial de-repression was introduced in the presence of large budget deficits that could no longer be financed by forcing commercial banks to absorb government debt at artificially low interest rates. To finance their deficit, governments were therefore obliged to create domestic bond markets on which to sell large amounts of treasury bills. Because of their lack of credibility and the considerable volume of the issues, interest rates often rose markedly in both nominal and real terms, with this increase being quickly transmitted to the rest of the financial sector. This shifted the distribution of income in favour of lenders who generally belonged to high income groups and against borrowers who belonged also to the low income group (Cornia and Lipumba 1999 and the cases studies reviewed therein).

- *Failure to create competition in the domestic financial sector.* Contrary to expectations, the liberalisation and privatisation failed – especially in the 1980s – to raise competition in the financial sector. While the balance sheets of banks improved, in most cases the industry was transformed from a public into a private oligopoly, as signalled by highly disequalizing rises in real rates and spreads after liberalisation. Even the entry of foreign banks did not raise competition, as these concentrated on a few low-risk customers while neglecting most other potential borrowers (*ibid*). All this meant that the expected credit expansion was much lower than expected and that the poor continued to be excluded from the formal credit market.

- *Weak regulatory capacity, financial instability and mounting banking crises.* Financial liberalisation was introduced without a prior strengthening of the regulatory and supervisory capacity of public institutions, Central Bank included. In several cases, the norms on the opening of new banks were relaxed beyond the usual prudential standard. In Latvia, for instance, a bank could be established in the early 1990s with only 20.000 US\$. In Nigeria, domestic financial liberalisation coincided with the resignation of part of the Central Bank staff who moved to the private sector to open new – and difficult to regulate – financial institutions. In sum, financial deregulation led in many cases to a highly disequalizing increase in financial instability, as signalled by the rise in the frequency and severity of financial crises in recent years (Caprio and Klingebiel 1997).

- *High US interest rate policy.* In many countries, the financial sector was deregulated in the period 1982-1993 during which the US Federal Reserve followed a policy of high interest rates. Such policy and the IMF habit of demanding large increases in interest rates in adjusting countries fuelled a worldwide rise in real rates to well above the secular trend of 2-3 percent. All this had the effect of pushing several governments into a vicious circle in which the rate increases augmented the cost of debt servicing, which further pushed upward deficits and indebtedness. In a number of middle income and industrialized countries with large stocks of debt, this policy raised the cost of servicing the public debt to almost 15 per cent 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. Financial deregulation appears therefore to have raised the rate of return on financial assets and the share of GDP

accruing to non-wage incomes and fuelled the redistribution of labor income to holders of state bonds via the budget.

(v) The liberalisation of the labour market. Neoclassical labour theory suggests that the liberalisation of wage formation is likely to generate a rise in both employment (as enterprises are more willing to hire workers at lower wages) and wage dispersion (as workers with higher human capital or experience receive higher salaries than in the past). The net distributive impact of these mutually offsetting effects is indeterminate and depends on their relative significance. A second prediction of the neoclassical theory applied to dualistic labour markets is that the abolition of the minimum wage and other regulations in the formal sector raises employment therein and reduces the formal-informal wage gap, a beneficial outcome in countries with a small labour élite employed in a capital-intensive sector and a large low-wage informal sector.

Yet, with few exceptions in some East Asian countries, the evidence of the last twenty years points to a dominance of the negative over the positive effects. For instance, as noted in section 3.1, the liberalisation of the labour market in Latin America was accompanied by slow employment creation, growing informalisation, an erosion of minimum wages and mounting overall wage inequality. This findings are confirmed by Behrman et al. (2000) who show that wage differentials rose in 18 Latin American countries after the liberalisation of the labour market. Similar patterns were observed in the OECD and transitional countries and, lately, South Korea (section 3.1). In Eastern Europe, the fall of minimum wages relative to the average correlated closely with the rise in earnings inequality (Cornia 1996). In contrast, as noted in section 3, earnings concentration did not increase in the OECD and other countries such as Colombia which preserved collective bargaining institutions, adequate minimum wages and social protection systems. Possible explanations of the gap between facts and theory include:

- *Adverse effects of changes in labour institutions.* A first problem with the received theory is that the abolition of minimum wages might not stimulate labour demand, as the slope of the demand curve in a particular range can be rigid, while it increases poverty and inequality. A second problem is that, while the control of trade unions may be seen as a way to reduce labour market rigidities, a low rate of unionisation may also affect social cohesion, incentives and industrial relations.

- *Erosion of 'reference norm' and the rise of the P90/P10 ratio.* Mounting wage inequality following liberalisation was also found to be associated with a rapid surge in the highest wages, rather than by falls in the bottom wages, a fact unexplained by the human capital theory but possibly related to the expansion of the finance, insurance and real estate (FIRE) sector and to changes in social norms on the remuneration of highly skilled people. For instance, recent rises in wage inequality in the US and UK might be explained by the spread of 'the winner takes all' remuneration packages for top professionals and greater recourse to stock options for executive compensation.

- *Labour market liberalisation with an open trade and capital account.* In Latin America and the former Soviet bloc, the liberalisation of the labour market coincided with the opening up of foreign trade and capital movements. As noted in 5.3 (iii), the difficulties caused by this on the export front led to wage compression and the shift of labour either towards the high-wage non-tradeable FIRE sector or to low-wage informal subcontracting, with the effect of increasing wage inequality.

(iv) Tax reforms. The tax reforms introduced over the last twenty years were mainly motivated by the desire to reduce trade taxes, so as to promote a more efficient international allocation of resources, and simplify unnecessarily complex and inefficient tax regimes characterized by a large number of taxes, deductions and exemptions. In addition, the progressivity of wealth and direct tax rates was to be reduced – so as to reduce efficiency costs and stimulate supply responses, as suggested by the Laffer curve. At the same time, a greater accent was placed on horizontal equity by eliminating exemptions and improving collection. In this new tax regime, the revenue decline caused by the reduction in trade and direct taxes on corporations was to be compensated by the broadening tax base resulting from the elimination of exemptions and the introduction of the VAT.

The impact of these reforms has varied from country to country but the general trend is towards lower yields and progressivity, i.e. trends that affect inequality. In an analysis of whether tax changes contributed to the rise of income inequality in the United Kingdom, USA, Sweden, Canada, Germany and Finland during the last fifteen years, Atkinson (2000) notes that the tax schedule became less progressive in all countries, though in Germany, Finland and Canada this was accompanied by a broadening of the tax base which offset the negative effect of lower progressivity. As for the developing countries, the net impact of recent tax reforms also varied from country to country. Yet, a recent panel study by Chu et al.(2000) points to an average drop of one percentage point in the tax/GDP ratio over the 1980s-1990s period (as opposed to a rise by 1.6 points between the 1970s and 1980s), a decline in the importance of direct taxes in the total and a fall in overall tax progressivity that correlate with the rises in inequality. In reviewing the impact of tax changes in Latin America, for instance, Morley (2000) notes that the effect of these changes were to shift the burden of taxation away from the wealthy and towards the middle and lower classes.

What are the explanations of these trends that conflict at least in part with the results expected on the basis of the tax theory summarized above? No detailed analysis is available in this field but the following hypothesis can plausibly be advanced:

– *Limited impact of tax broadening.* A first explanation is that the broadening of the tax base (via reduced exemptions and greater efforts at tax collection) yielded limited effects on revenue generation and horizontal equity, possibly because of institutional weakness and political economic factors. Under these circumstances, the expected negative effect of the reduced progressivity of direct taxation prevailed.

– *Dominance of non-graduated VAT.* In many countries indirect taxes now generate the greatest share of total revenue. When applied at a unified rate to all transactions, such taxes are known to generate regressive outcomes, while when differential rates are used for inferior goods an elements of tax progressivity is preserved. This approach was however applied only seldom.

(viii) Impact of the overall liberalisation-globalisation package. Mainstream theory predicts that the overall reform package – made up of policy components generally expected to generate favourable effects – generates a positive impact on inequality.

While limited to only few studies, the empirical evidence about the impact of the overall packages provides however a fairly different picture. In an analysis of 18 Latin American countries over 1980-98, for instance, Behrman et al (2000) found that the overall reform package had a significant short-term disequalizing effect on wage

differentials, the intensity of which, however, declined over time. They also found that the strongest impact was due to domestic financial reform, capital account liberalisation and tax reform. Trade openness had, on balance, no effect on the wage spread, possibly because many effects cancelled each other out.

Similar results were obtained by Székely (2003) who analysed the relation between policy reform and inequality on a panel of 19 Latin American countries over the period 1977-2000. The study finds that while trade reform does not affect the income share of the bottom three deciles, financial liberalisation reduces them significantly. In turn, reforms in the field of taxation, labour market and privatisation did not appear to impact the income share of the poor. Yet, when analysing the impact of the reforms on the Gini coefficient, the disequalizing impact of financial and other reforms stood out clearly while, at the same time, trade openness appeared to reduce inequality significantly.

A third overall evaluation of the overall package is provided by a review of 21 reform episodes in 18 countries (13 from Latin America plus India, South Korea, Turkey, Russia and Zimbabwe) during the last two decades (Taylor 2000). Income inequality was found to rise in 13 cases, remain constant in 6 and improve in two. Virtually without exception, wage differentials by skill level rose following liberalisation, as a result of a reduction of employment in the modern sector, a rise in productivity and wage concentration by skill within the same, the reallocation of excess labour to the low-paying non-traded sector (informal trade, services and traditional agriculture) and a rise of inequality within the latter. In turn, Cornia with Kiiski (2001) evaluated the impact of liberalisation on an overall reform index developed by the World Bank on a sample of 32 developing and transitional economies for the years 1980- 95. The study suggests that while the reform package had an overall disequalizing effect, this was more pronounced in the economies of the former Soviet bloc, probably on account of their institutional weakness, but less marked in the countries with a high initial levels of inequality.

Finally, an analysis of the poverty impact of IMF-World Bank stabilisation and structural adjustment programs (Easterly 2001) found that these moderated the rise of poverty during output contractions, possibly because of the cushioning of the crisis through Bank-sponsored, adjustment-related social safety nets. However, the study found also that, during spells of economic expansion, Fund-Bank programs reduced the poverty alleviation elasticity of growth in relation to those of “home-grown” programs, suggesting in this way that Fund-Bank programs entail a worsening of income inequality during this phase of the business cycle (Table 8). For instance, in China – a country with medium inequality and no Fund-Bank program - poverty incidence fell over 1990-2 by 3.8 percent for every point of GDP growth, while in 1995-6 Colombia - a country with high inequality and a Fund-Bank adjustment loan – experienced zero poverty reduction for every point of GDP growth (Table 8).

Table 8. Poverty elasticity of growth for different Gini coefficients and IMF- World Bank adjustment loans per year

Gini coefficient	Average number of IMF-World Bank adjustment loans per year During survey spell		
	0	0.5	1.0
30	-3.8	-2.7	-1.7
45	-2.9	-1.9	-0.9

60	-2.1	-1.0	0.0
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Source: Easterly (2001), Table 3

It must be emphasized that the above studies provide reduced form estimates of the “policy reform–inequality nexus” that do not permit to trace the causal linkages between liberalisation, globalisation and income distribution. Yet, the limited evidence reviewed above and other evidence that cannot be presented here for reasons of space (Atkinson and Brandolini 2003) suggest that – especially in economies with weak domestic institutions – the overall liberalisation package may lead to a deterioration in domestic income inequality owing to the incomplete switching of resources from the non-tradable to the tradable sector, an event that entails a fall in modern sector employment, a rise in wage differential within the same and a swelling of the informal sector, as well as a decline in the wage share and a parallel rise in the capital share linked to increasing banking and financial instability and changes in the labour market and taxation. Of the six components of the liberal package, capital account liberalisation appears to have the strongest disequalizing effect, followed by domestic financial liberalisation, labor market deregulation and tax reform. The equity effects of privatisation and trade liberalisation appear to have varied, with favourable effects in some types of countries and negative ones in others.

6. CONCLUSIONS

Today’s globalisation shares some common features with that of 1870-1914 but also differs substantially from it. While domestic inequality fell in the country of the periphery during the first globalisation, it rose in the vast majority of them during the recent one, including in many exporters of labour-intensive goods. There are three tentative explanations for this. First, contrary to the experience of the first globalisation, limited migration to the advanced nations – the main source of equalisation of the global and domestic distribution in poor countries last century – did not help equalising the distribution of income in poor countries. Second, international financial flows have become less stable and more disequalizing than a century ago. And third, the recent inequality trends were also influenced by the introduction of domestic reforms – such as those of the labour market, financial sector and taxation – that reduced the labour share and raised wage differentials.

In this regard, it appears that the standard theory is often unable to predict the inequality impact of internal and external liberalisation, as it is based on simplified models pivoting around highly restrictive assumptions that do not take into account the impact of institutional weaknesses, structural rigidities, incomplete markets, asymmetric information, persistent protectionism and the complexity of trade and finance in a multi-country, multi-goods environment. This theoretical weakness comes at a high cost. Indeed, while liberalisation and globalisation policies may generate positive effects in countries with strong markets and institutions and a favourable position on world markets, their theoretically-inspired but premature and poorly-sequenced implementation under conditions of incomplete market and institutions and a dependent position may generate adverse distributive outcomes.

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