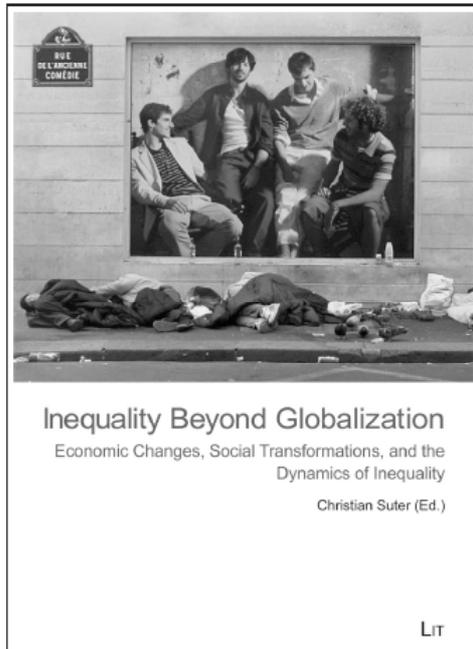


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Christian Suter (Ed.)

Inequality Beyond Globalization

Economic Changes, Social Transformations, and the
Dynamics of Inequality

This volume debates the complex nature of the relationships between globalization, social and economic transformations and growing inequalities. Employing a global, world-historical and comparative perspective, the 16 articles brought together in this volume deal with three central questions: Firstly, the question of the spatio-temporal evolution and variations of growing inequalities, secondly, the relative importance of globalization as compared to other factors explaining growing inequalities and, thirdly, institutional variations of inequality dynamics and globalization impacts.

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On the Evolution of Inequality in the World System

Volker Bornschier

Over the long history of human societies, material inequality has been on the rise, although mostly *within* societies. A distinct turning point occurred during the last two and a half centuries. In the wake of colonial expansion and the industrial revolution, by far the largest part of increasing world inequality was due to enormously diverging average income levels *between* societies. The article scrutinizes the process of “within” and “between” income inequality until the present. While the article focuses on material inequality, shifts in political inequality are also addressed. A new turning point in the history of world inequality occurred only recently as a result of the economic rise of populous emerging countries such as China and India. Also, four areas of open research questions are discussed in more detail before the article ventures to make seven forecasts. While polarization in world income distribution will continue, total inequality will remain rather stable, albeit at a historically very high level. This is because world stratification of incomes is changing its shape – from a stark pyramidal form that has evolved over the last centuries to an onion-like one, which took shape after the mid-1990s.

Introduction and outline

Social inequality is not just a central topic of sociology as an academic discipline, it is also an essential one. For sociology itself began as a discipline when social inequality was no longer seen as a natural phenomenon but as a social one. Ever since, sociology has dealt with the examination and critical analysis of the role that social constructs play in the conversion of diversity into notions of differential worth.¹

The concepts of diversity and worth – at least implicitly – also address the core values of modernity, namely liberty and equality. These two values cannot coexist as foundational values, and a compromise has to be negotiated. For if liberty is taken as a given, then it is logically incoherent to define equality as absolute equality, as such a definition would not allow for liberty to be guaranteed. But it is exactly the fact that the claim to equality is ultimately irredeemable which keeps the issue of equality alive in modern society. In the normative superstructure of western society the problem is solved by shifting the claim to equality towards a claim to justice, which itself implies equality in principle. If human beings are equal in principle, then their diversity is not a justification for unequal treatment or for the kind of

value statement that transforms diversity into a notion of differential worth. More than that, accepting justice as a core value means that unequal treatment or claims about differential worth have to be justified. From an anthropological/natural law perspective, such a justification can not be arbitrary but has to be based on rationality and thus on the concept of principal equality in spite of diversity. The topic that is discussed in modern society is therefore “just inequality.” These deliberations show that social inequality can not be reduced to the material domain – the sphere of socio-economic inequality. The opportunities for self-determination, i.e. the different degrees of freedom, have been and still are unequally distributed. Due to space constraints I shall only briefly touch on these kinds of inequality, discussing how they are influenced by the political form of democracy within countries and the distribution of power between countries.

The discussion is divided into three sections, beginning with a brief history of social inequality in the world system.² Section II addresses open questions and includes some initial answers, and the conclusion presents a forecast on how global social inequality might develop in future.

A brief history of social inequality in the world system since the industrial revolution

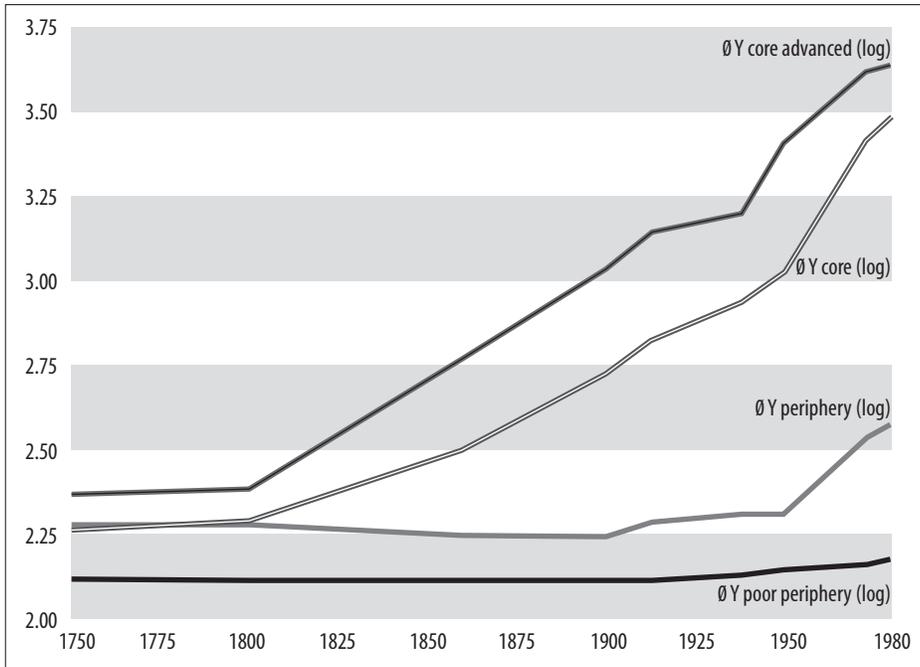
A look at the distant past and at developments until the turning point of 1945

The social world of 1750 was undeveloped. The level of political inequality, i.e. the lack of freedom to self- and co-determination, was enormous according to today's standards. Autocrats stood in the way of people's self-determination. In contrast, material inequality in the world system of the day was comparatively low by today's standards and organized in specific ways. It consisted of class and regional differences within individual societies. But there were no significant differences in the average income between major world regions such as China and Europe. Figure 1 illustrates this point, while also showing the subsequent dramatic divergence of average per capita income levels.

To determine if the social inequality that resulted from this development was just or not, we have to take into account the following fact: the industrial revolution – which, after starting in 18th century England, diffused widely across 19th century Europe and European settler colonies – can not just be seen as the history of modernization, where one or a few individual pioneers took off from the rest. For this development was accompanied by the second imperialist expansion of state power by the European colonial powers. The size of the colonially ruled population rose dramatically after 1800 – until then it had only been relatively small compared to the size of Europe's population.

The result was a double peripherization of increasing parts of the world's population – on the one hand in terms of the level of industrialization, and on the other

Figure 1: Polarization of average per capita income levels, logged income per capita in different groups (averages \bar{y}) from 1750 to 1980

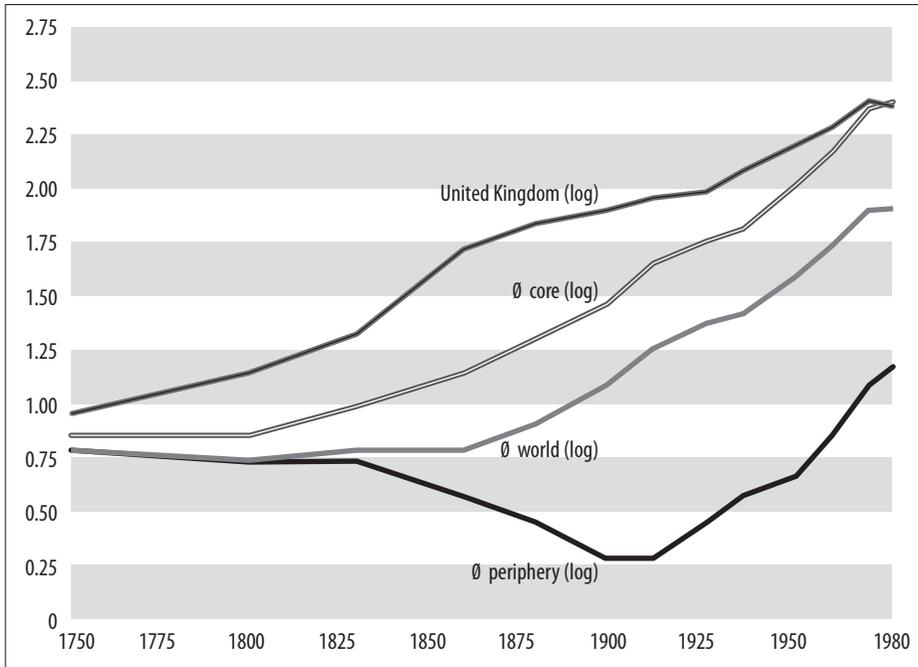


Notes: Country groups: advanced core, total core, total periphery and poor periphery.
 Source: The figure bases on the historical data from Paul Bairoch (1986: 203). For details, see also Bornschieer (2008: 417).

hand in terms of political domination / subordination through colonial subjugation. Not only did these two developments take place simultaneously after 1800, the political control of colonial powers also made it impossible for large parts of the world to rapidly catch up with the level of development of Europe and European settler colonies.

The result was a de-industrialization of large parts of the world, which is charted in Figure 2 based on historical economic data from Paul Bairoch (1982). This combination of unequal industrial modernization and imperialism, which lasted throughout the 19th century and right up to World War II, had an incisive effect on inequality structures and long-lasting consequences for the periphery’s ability to catch up. Together, the core countries thus enjoyed a monopoly in industrialization for a long period of time. The levels of industrial know-how and its institutional foundations

Figure 2: Industrialization and colonial rule: De-industrialization at the periphery, logged per capita levels of industrial output 1750 to 1980



Notes: Standardized: United Kingdom 1900 = 100. United Kingdom, averages (Ø) for total core, world, periphery.

Source: Based on historical data from Paul Bairoch (1982: 194, 302). For details, see also Bornschieer (2008: 408–10).

diverged enormously, and the obstacles to industrialization therefore remained at the periphery even after decolonization.

The structure of material inequality thus went through a dramatic change, as is shown by the data in Table 1 (upper part). While 87% of all material inequalities in the world were inequalities within societies in 1820, this ratio fell to 39% by the end of World War II. In other words: at the end of the classic imperialist era, 61% of all material inequalities in the world were inequalities in average wealth between societies, and this distribution continued into the 21st century. The more recent times are shown in the lower part of Table 1 and will be discussed below.

In terms of the history of inequality, the surveyed development during the colonial era meant a growing level of material inequality – and this, combined with

Table 1: Income inequality in the world and its components – between and within societies (1820–1992: Mean logarithmic deviation; 1988–2002: Theil-index)

1820–1992	Mean logarithmic deviation			Between in percent of total
	Total	Between societies	Within societies	
1820	0.422	0.053	0.370	12.6%
1850	0.485	0.111	0.374	22.9%
1870	0.544	0.162	0.382	29.8%
1890	0.610	0.217	0.393	35.6%
1910	0.668	0.269	0.399	40.3%
1929	0.690	0.334	0.356	48.4%
1950	0.775	0.472	0.303	60.9%
1960	0.766	0.466	0.300	60.8%
1970	0.823	0.518	0.304	62.9%
1980	0.850	0.528	0.321	62.1%
1992	0.827	0.495	0.332	59.9%
1988–2002	Theil-index of inequality			Between in percent of total
	Total	Between societies	Within societies	
1988	72.7	52.4	20.3	72.1%
1993	81.7	58.9	22.8	72.1%
1998	78.9	55.7	23.2	70.6%
2002	83.2	57.1	26.2	68.6%

Notes: The Theil-index of inequality is more sensitive to inequality in the upper and bottom region of the distribution than the mean logarithmic deviation. Therefore, the figures for the overlapping period in the two time series are not comparable. For decomposable inequality measures, see Bourguignon (1979). Note that the frequently used Gini-index of inequality is not decomposable in between and within components. *Source:* 1820–1992: Bourguignon and Morrison (2002: 731f, 734). 1988–2002: Milanovic (2005: 112); figures for 2002 from Branko Milanovic (unpublished), personal communication to Volker Bornschieer at the occasion of the Neuchâtel (Switzerland) conference “Inequality Beyond Globalization”, jointly organized by the World Society Foundation and RC02 of the International Sociological Association, June 26–28, 2008.

decreasing levels of political self-determination as a result of colonial subjugation, meant a double peripherization.

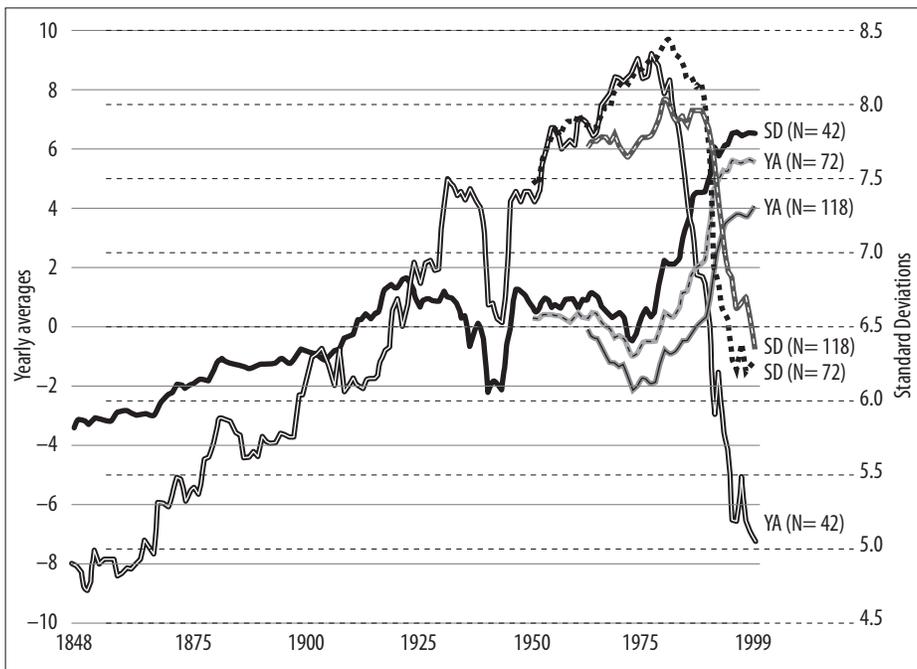
The turning point of 1945

The political inequality of global society was marked by two opposing developments since the turning point of 1945. Between societies, the level of political inequality decreased together with the large wave of decolonizations since the end of World War II, including the highly populated colonies such as British India in 1947 and Dutch Indonesia from 1945 to 1949.

Furthermore, the rise of a state-socialist counter-core during the Cold War on the one hand and the collective opposition of Third World countries on the other hand led to a change in the distribution of power among the world's nations. Seen in retrospect, the joint opposition of governments and heads of states from the Third World – the Non-Aligned Movement together with the Group of 77 – was an amazing phenomenon of collectivized counter-power that aimed to change the uneven distribution of political power in the world. This confrontation experienced a class struggle-style climax at the United Nations on 1 May 1974 – with the date meant as a symbol for the parallels between the struggle of nations of the South and the struggle of workers in developed countries of the North.

Within countries, however, no progress was made in terms of self-determination. On the contrary: the average level of democratization experienced a downward trend from 1945 to the low point in 1972. See Figure 3.

Figure 3: Democracy scores from 1848 to 1999 for three global samples of sovereign states, yearly averages and standard deviations



Notes: Country groups: 1) 42 states 1848–1999, 2) 77 states 1950–1999, 3) 118 states 1962–1999.

Source: Based on Polity IV data from Jagers and Gurr (1996, 2000). Figure constructed in collaboration with Hanno Scholtz. Facsimile taken from Bornschieer (2008: 164).

During this period when world society was being reshaped politically – with the definitive end of British world domination and the rising hegemony of the United States in the Western camp – the level of world material inequality stabilized for a while at an altogether high level of economic growth. The figures for the 1950s and 1960s show a brief hiatus in the secular rise of material inequality – rich democracies typically even exhibited a decrease in income inequality.

Changes of inequality within societies in recent times

The discussion will at first continue to focus on the economic downswing of the world economy from 1973 to 1992 and subsequently on the economic upswing of the 1990s.

The long global economic downswing from the 1970s until the beginning of the 1990s was striking when set against the background of the miraculous growth experienced in the decades following World War II. During the post-war decades until 1973, global per capita output rose by 2.9% a year, while the following two decades saw this figure drop to an average of 1.2% – a mere two fifths of the value measured during the long upswing.

The changes in inequality between 1973 and 1992 can be summed up as follows: in terms of political power distribution, the period since the 1980s exhibited an inverted trend compared to the first post-war decades. The distribution of power between nations became more unequal after the failure of the Third World movement and the disintegration of the state-socialist counter-core, while the average level of democratization within societies experienced a remarkable rise after ca. 1980.

Material inequality was mostly on the rise during this period, and now the increase was not just between countries but also within countries. Among a majority of countries (53%) with adequate data quality, I could observe a trend towards increasing inequality during the global economic downswing. Among another third of the countries I could observe a constant level of inequality, whereas a decrease of inequality could only be observed among 14% of the observed countries. See Table

Table 2: Increase of “within” inequality

Income inequality	1967–1992				1990–2000			
	World sample		OECD sample		Developing countries		Rich countries	
	Cases	%	Cases	%	Cases	%	Cases	%
Increasing	27	53%	9	56%	37	61%	14	68%
About constant	17	33%	5	31%	19	31%	4	19%
Decreasing	7	14%	2	13%	5	8%	3	14%
Total cases	51	100%	16	100%	61	100%	21	100%

Source: 1967–1992: Bornschieer (2002: 109, 124; 2008: 367). 1990–2000: Bornschieer and Hanno Scholtz, see Bornschieer (2008: 106–108, 374).

2. The increase in inequality was even somewhat more prevalent among rich democracies than in societies outside the OECD.

The proportion of the world's population affected by rising inequality, estimated at 87%, is considerably higher than the number of countries affected by rising inequality (53%), given that highly populated countries such as the People's Republic of China and India experienced an increase in inequality.

How did inequality within countries change during the renewed global economic upswing that set in at the start of the 1990s? The trend of increasing income inequality in most countries continued at a somewhat increased rate in the period from 1990 to 2000, and was again more pronounced in rich societies. See Table 2.

On the inequality between societies: Convergence or divergence of average material living conditions?

As already mentioned, all observed material inequality can be broken down into two components: inequality within societies and inequality between societies, with the latter being measured in terms of average income. Both components can then be used to determine global income distribution.³ When doing this, however, the highly unequal population numbers in the world's societies have to be accounted for.

Table 3 provides a summary of my annual results for a sample of 103 countries between 1980 and 1997. If each society is seen as a co-equal unit of observation, as is custom for societal comparisons, then a clear divergence of average incomes can be measured between 1980 and 1997, even when correcting the figures for purchasing power parity.

If, however, we weight the individual societies according to their population sizes – which is necessary if we want to determine a global income distribution – then we can observe a tendency towards convergence. However, Table 3 also reveals that

Table 3: Change in average income levels between 1980 and 1997, sample of 103 societies and 102 societies without the People's Republic of China

No population weights	Change of inequality between 1980 and 1997
Income per capita	+43.4%
Income per capita PPP	+20.1%
With population weights	
Income per capita PPP	-11.8%
Income per capita PPP, without China	+5.4%

Notes: The measure of inequality is the mean logarithmic deviation; PPP denotes purchasing power corrected figures for average income. All underlying time series show a remarkable continuous increase or decrease of the yearly observations of the mean logarithmic deviation from 1980 to 1997.

Source: Bornschier (2002: 111) and updates. Details in Bornschier (2008: 70).

this inversion can be attributed to one single society, namely the People’s Republic of China and its strong rise in average income, which began after 1980.

If one excludes China, then the differences between societies weighted by population sizes continued to grow slightly. As a result, a slight divergence in average income can be observed between 1980 and 1997. This diverging trend is even more pronounced if we exclude rapidly growing India from the weighted results.

For a welfare observation – i.e. how many human beings are affected? – the weighting by population numbers makes sense. In addition, the weighting draws a picture of international income stratification and contains information on how many people in the world live in different income layers – a topic I shall return to further down.

As shown in Table 3, the two population giants have a crucial impact on the charting of the development of world inequality. China accounts for 20.3% of the world’s population, while India accounts for 17% – the two population giants in other words share 37.3% of the world’s population (figures from 2005). In comparison: Switzerland and its four neighbours together account for only 3.3% of the world’s population. Internally, China and India are exhibiting a growing income gap – as mentioned briefly before. But they have been catching up noticeably in terms of average income, thanks to their high economic growth rates.

This is why I have taken a more detailed look at the question: convergence or divergence? In Table 4, I examine convergence/divergence during six five-year periods between 1975 and 2004. Four income layers are considered and population-weighted growth rates are calculated for these layers. China and India, however, are displayed separately. In this way, the following question can be answered: is there a convergence or a divergence in international income stratification if we disregard the two population giants?

Apart from China and India, the average living conditions in the world have diverged during four of the six periods between 1975 and 2004, even when weighting

Table 4: Annual economic per capita growth in different income layers, 1975 to 2004, controlling for the People’s Republic of China and India

Income groups without China and India	75–79	80–84	85–89	90–94	95–99	00–04
High	2.5%	1.1%	2.9%	1.5%	2.2%	1.8%
Upper middle	2.7%	0.3%	1.4%	–1.1%	0.9%	3.4%
Lower middle	2.4%	1.8%	1.7%	1.1%	2.1%	2.9%
Low	2.0%	–4.1%	1.0%	–0.5%	0.2%	1.3%
China and India	3.7%	6.1%	6.4%	6.6%	6.6%	6.6%

Notes: Income layers according to World Bank definition. Figures for the income groups population weighted.

Source: Computed in collaboration with Hanno Scholtz, data from World Development Indicators, World Bank, CD-Rom 2006. See Bornschier (2008: 102).

for population figures. In other words: the main mode of growth for the world population was divergence and not convergence – if you ignore China and India. The People’s Republic of China and India have risen relatively. The growth rates of their average per capita income levels were only slightly higher until 1980, after which they were considerably higher than any of the other four income layers. Despite their relative rise as a result of rapid economic growth, at the end of the statistical series they still remained in the group of countries with low income (as in the case of India) or in the group of the lower middle (as in the case of the People’s Republic of China).

A further important observation can be seen in Table 4: in the first decade of the 21st century, the economic growth of rich countries is for the first time outperformed by that of countries with middle incomes. What does this mean? Together with the relative rise of China and India, the recent past has for the first time witnessed a convergence between global income layers – a development, however, from which the poor countries (for the most part located in sub-Saharan Africa) are excluded. This convergence of populations stratified along average income layers is a historic first.⁴ For, historically speaking, the rich countries have always enjoyed the highest growth rate, as I indicated at the very beginning of this discussion. Now, the upper and lower middle income layers are catching up with the top layer, while the top and middle income layers are diverging from the bottom layer. If these trends continue, they will soon have striking consequences for the international profile of income stratification. I will return to this in my forecast.

Global income inequality, 1988 to 2002

This brief history of inequality will conclude with short comments on the most recent data on global income inequality that are available to us. The development of global inequality since 1820 and its constituents – inequality within societies and inequality between societies – has already been presented in Table 1. The lower part of Table 1 also presents a statistical series from 1988 to 2002, which was presented by Branko Milanovic (2005) from the World Bank. He kindly also provided me with his unpublished updates for 2002 in the context of an international conference, where we both participated in the closing panel.

World income distribution at first continued to rise after 1988, before stabilizing from 1993 onwards at a historically very high level. However, the trend of increasing inequality within societies continued without interruption. Nonetheless, the “between societies” constituent of inequality still accounts for the largest part of total material inequality in the world – even at the start of the 21st century and long after decolonization.

Brief conclusions

In the historical comparison, global material inequality has risen enormously. During the 1990s, world income distribution stabilized at a very high level. In the historical long-term comparison since 1820, world income inequality at first grew because of the divergence of average living conditions. In more recent times, income inequality within countries is starting to become the somewhat more important constituent of total world income inequality.

In most countries, income inequality was on the rise both during the global economic downswing (1973 to 1992) and during the recent global economic upswing since 1992. The figures for 1990 to 2000 even exhibit a slight growth in the trend of increased internal inequality, which is more strongly pronounced in rich societies.

In addition, it should be mentioned that political co-determination (level of democracy) has increased rapidly since the 1980s. See Figure 3. However, in the late 1990s and the first years of the 21st century, there have been increasing signs of a dismantling of democracy, as evidenced in Russia under Putin, Pakistan under Musharraf, Venezuela under Chávez and Kenya under Kibaki.

Open research questions and first answers

How can the renewed increase in inequality within societies be explained by theory?

The two classical models of the development of income inequality can not explain the renewed increase in inequality, as they forecast an inverted U-shape curve. The level of inequality should thereby first increase, after which it starts to decrease. One of these models can be attributed to the sociologist Gerhard Lenski, and the other to the economist Simon Kuznets (see Bornschier 1983, 2008: 375 ff.).

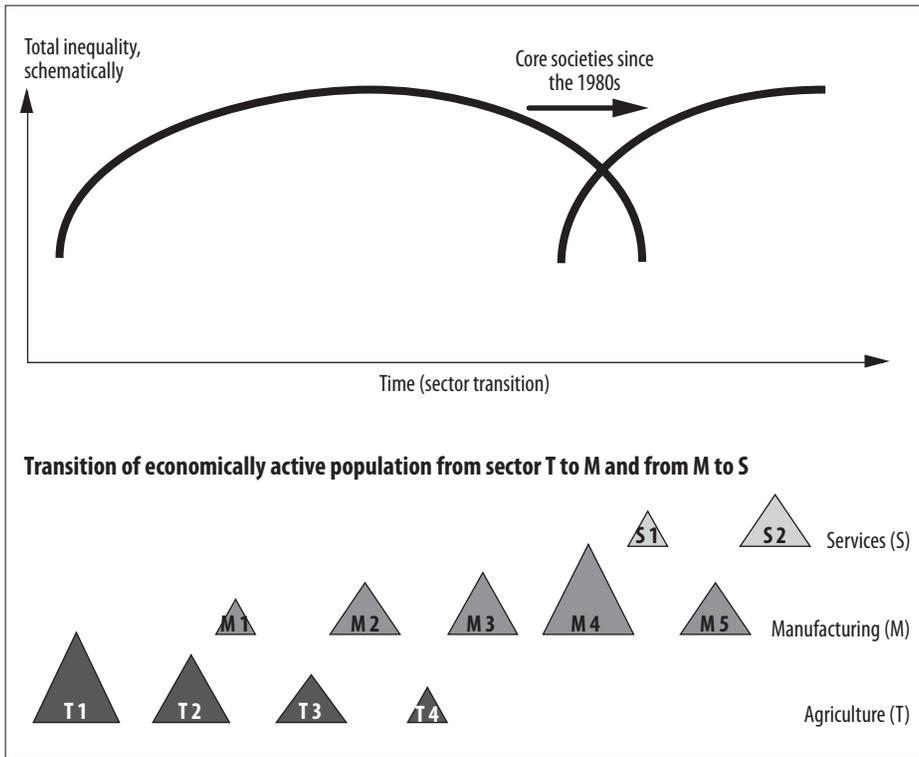
Lenski (1966: 437) argued that different types of society are defined by differences in productivity, different levels of surplus and the distribution of power. An increase in the complexity of production forms means that power has to be shared with the experts (middle class) and the workers. For Gerhard Lenski, one of the most important factors in the transition from agriculture to industry is democracy, which not only halts the trend of increasing inequality in the evolution of human societies, but also reverses it.

Undoubtedly the most famous interpretation is the one of the inverted U-shape curve, which was suggested by Kuznets (1955) on the basis of a two-sector model (traditional sector versus modern sector); see also Ahluwalia (1976) and Robinson (1976). With the help of decomposable income inequality measures, it can be shown that, according to the Kuznets argument, total inequality is made up of the inequality of both sectors and the difference between their average income levels; that total inequality is a quadratic function of the proportion of the economically

active population in the modern sector; and finally that (with constant inequality within the sectors and constant income differences between them) total inequality reaches a maximum when the economically active population is distributed circa evenly across the traditional and the modern sectors, and that it should decrease as people continue to move from one sector to the other (Robinson 1976, Bornschier 2008: 376).

Kuznets' two-sector explanation is as famous as it is controversial. However, the critics often miss the point in Kuznets' model, as he did not assume that inequality changes as a function of economic growth, but that it is influenced by the transition of the economically active population from one sector to another. However, the following criticism is justified: Kuznets' model does not account for marginalization – a prevalent phenomenon in the developmental process. People do leave the tra-

Figure 4: Bornschier's proposition: Kuznets curves with more than two sectors



Notes: Transition from traditional agriculture (T) to manufacturing (M) and from manufacturing to knowledge-based economy of the telematic era.

Source: Bornschier (2002: 115 ff., 121 f.; 2008: 385).

ditional sector, but they are economically not fully absorbed by the modern sector. In fact, an extensive informal sector forms around the urban centres. This issue will be addressed below.

Both classical explanations, though very famous, can not explain the previously presented empirical findings, as these show that inequality keeps being on the increase even on higher levels of development. According to Kuznets (1955) and Lenski (1966), this should not be the case. A first theoretical answer is provided by Bornschier's (2002) multiple sector model used to explain the continuing increase in inequality; see Figure 4.

The central aspect of the new model is that it considers the change in technological style. According to this model, it is not only important to consider the epochal transition from agriculture to manufacturing, but also a new transitional wave from manufacturing (M in Figure 4) to the new services (S) in the knowledge-based society of the telematic era. In this way, we are in a position to explain the resumed increase in inequality, which first began within the framework of the highly developed world: the so-called Great-U-Turn (see also Gustafsson and Johansson 1999 and Alderson and Nielsen 2002). In order for the new theoretical explanation in Figure 4 to be backed up by data, richer countries should be more strongly affected by increasing inequality than developing countries. The data presented above reveals such a tendency.

Empirical evaluation: Economic liberalization is not the sole reason for increasing inequality, other dualisms are more important and countermeasures are possible

Income distribution is determined by wide-ranging factors, and three core groups of variables should be considered when analyzing the magnitude and the increase in income inequality within and between countries, as well as worldwide.

Due to space constraints, this discussion can only briefly touch on the variables, which are bundled together in three groups (for details, see Bornschier 2002, 2008: 379–94):

1. Divisions within and between societies – dualisms as a result of economic globalization
 - transnational economic integration, especially through transnational corporations and national disintegration
 - more economic opening and deregulation
 - international migration of manpower
2. Divisions within and between societies – dualisms beyond economic globalization
 - due to the transition from agriculture to manufacturing as a prime source of employment
 - due to the transition to the new knowledge-based technological style

3. Political and trade-union countervailing powers
 - negotiation within capitalism versus competition capitalism
 - level of social security against the risks related to employment, age and illness
 - strength of trade-union counter-power

To address the open research question: numerous empirical studies have been published about these three groups of predictors, using several explanatory variables – studies to which I have contributed myself. But what is the relative weighting of these three groups? Today, this is no longer a completely open research question, but due to reasons of data availability, a clarification of the relative weighting has so far only been possible for rich democracies. These, however, have been analysed by an exemplary multivariate panel study by Arthur Alderson and François Nielsen (2002) – a combined longitudinal and cross-section study using 488 observations on income inequality between 1967 and 1992.

A brief summary of the empirical results

Alderson and Nielsen's (2002) results regarding the relative weighting of the three groups of variables are listed in Table 5.

The variable group 'transnational mobility of commodities and factors of production' has long been discussed in literature as one of the prime suspects for material inequality. Indeed, this variable group provides a substantial explanation for income inequality, whereby samples with a large presence of transnational corporations are always above the inequality curves charted in Figure 4 (see above).⁵

Table 5: The relative importance of three groups of predictors of income inequality: Simulation of maximum effects according to findings of Arthur Alderson and François Nielsen for 16 rich democracies

Three groups of variables, each represented by three indicators	Maximum impact on the Gini coefficient (times 100) as the dependent variable
Transnational mobility of commodities and factors of production ¹	8.2
Sectoral dualisms beyond economic globalization ²	20.0
Political and union countervailing powers ³	11.0

Notes: ¹ Variable group represented by three indicators: "foreign direct investment outflow/labor force," "southern import penetration" and "net migration rate." ² This variable group (Bornschieer considers six indicators, among others also the degree of diffusion of the new technological style) is underspecified in the Alderson/Nielsen analysis and represented only by the following three indicators: "% labor force in agriculture," "female labor force participation," and "secondary school enrollment." ³ Three indicators in this variable group: "wage-setting coordination," "decommodification of labor by the welfare state" and "union density". All predictors reduce income inequality.

Source: Computed on the basis of findings of Alderson und Nielsen (2002: 1286). Details in Bornschieer (2008: 379–394, 396).

Cleavages within and between societies as a result of dualisms beyond economic globalization: this variable group provides the strongest explanation and is more significant than the transnational economy variable group.

Countervailing powers: this variable group has a noticeable influence, similar to the level of influence determined by the transnational economy.

What do the results in Table 5 mean? That population cleavages due to epochal shifts within old dualistic frameworks (agriculture to manufacturing and services) and within new dualistic frameworks (as a result of the diffusion of the new technological style) are the largest variable in the prediction of income inequality. The impacts of economic globalization on inequality are clearly measurable, but they don't represent the main causal group. After all: political and trade-union countervailing power has a significant potential relevance. However, the research of Alderson and Nielsen deals with core countries, where state action is subject to effective democratic control and where the freedom of association is granted. The state's discretion to act – in terms of redistribution and compensation – is not guaranteed to the same extent throughout global society. And this is an important reason as to why countries at the periphery and semi-periphery are subjected to a higher level of inequality: the forces of the world economy and of sectoral change are not – or barely – met with the same level of countervailing power as in the rich democracies.

I hereby arrive at the conclusion that politics could play a central role in the limitation of inequality in market societies. But the idea that political action is essential for income distribution has been neglected in the discussions of recent years, even in core societies, and has for a long time been far too readily replaced by the questionable hypothesis that economic power has taken precedence over political power in the era of globalization – a trend against which one is supposed to be powerless. The influence of politics on income distribution is, of course, also manifested in the omission of political action, that is to say when possible countervailing action is forgone. As Gerhard Lenski (1966) put it accurately, social surplus is distributed according to power constellations – and these of course also include countervailing powers. As societal comparisons have shown, even the age of globalization allows for political influence, but it has not always been deployed efficiently. Ultimately, material distribution is a matter of political economy, and “political” is not just written first by accident.

Democratization and growing income inequality: How can this be explained?

The third area of open research questions is an extension of previously mentioned findings. Gerhard Lenski (1966) argued that different societal formations are characterised by differences in productivity, different levels of surplus and the distribution of power. An increase in the complexity of production means that power has to be shared with the experts (middle class) and the workers. For Gerhard Lenski, democracy becomes an important factor, as it reverses the trend of growing inequality.

Cross-section results that were developed by my team confirm the conjecture that the regulation of social inequality depends on the political form of democracy. Under more democratic circumstances, inequality is lower in a world sample of societies, even after controlling for the Kuznets argument – the curvilinear correlation between inequality and the transition of wage earners from traditional to modern sectors. According to these results, democracy is conducive to the convergence of material living conditions.

However, open questions arise when we consider the previously discussed parallel development of democratization and the further increase of material inequality in the time period since the 1980s. The prominent diffusion of democratic practices in the world after 1980 has already been mentioned. How can one explain that the period of increased democratization after 1980 was also a period of increased material inequality? This can not be explained by the Lenski argument, or even by the median voter theorem. Even the briefly mentioned cross section results tell a different story.

Different explanations have to be evaluated in future research, where the question should also be asked as to what extent increased self-determination opportunities make people more tolerant towards inequality as a result of having assumed a higher degree of economic freedom. But the following argument also has to be taken seriously: in the long term, a high and increasing level of inequality not only leads to the instability of democratic systems but also to a reversal of previously attained democratic levels. The examples from various regions in the world were already named: Russia, Pakistan, Venezuela, Kenya.

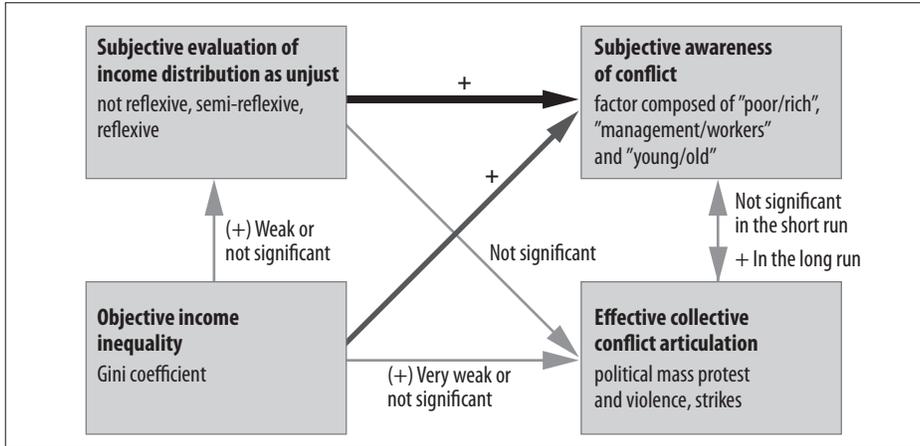
Inequality and conflict: No unconditional link

The mentioned findings that political countervailing power is possible, and that the profusion of the political system of democracy in principle provides the basis for countervailing power, could mean that inequality might produce the powers, through conflict, which also reduce inequality.

Social scientists have been preoccupied with social inequality as a source of conflict and rebellion as far back as the Greek philosophers. But to consider material inequality as an adequate precondition for conflict and rebellion is highly objectionable. Early empirically supported answers from our research, which is summarized in Figure 5, confirm this scepticism. The primary adequate conditions are the subjective awareness of inequality and the subjective evaluation of inequality as unjust, as the results from our large cross-national analysis reveal.

According to the results presented in Figure 5, objective income inequality is not significantly related to effective collective conflict articulations. Even the subjective evaluation of income fairness does not explain the level of real conflict manifestations. And, finally, even the subjective evaluation of inequality as unfair is not influenced by objectively measured inequality. How can this be explained? There may be

Figure 5: Objective income inequality, subjective evaluation of income distribution as unjust, subjective awareness of conflict and effective collective conflict manifestations



Notes: Results from cross-national analysis of 28 countries. The degree of boldness of the lines symbolizes the strength of empirical effects.
 Source: Bornschieer (2008: 110 ff.). Results in collaboration with Thomas Volken.

diverse reasons for this. The promise of a better future certainly plays a part, i.e. to have tomorrow, what the higher groups of reference already have today. For as long as economic growth is high and the promise seems credible, unequal distribution does not necessarily have to lead to an evaluation of inequality as being unjust. A high level of economic growth can thus be an effective buffer between objective inequality and the evaluation of it as unjust.

However, the subjective evaluation of income injustice also explicitly affects the subjective awareness of conflict – which at first only represents a latent conflict potential, which according to our research is also not related to conflict articulations, at least not in the short term. This, in turn, is due to several factors. For one, subjective conflict awareness can be met with interpersonal violence (violent criminality) or with a socio-political interest in change. The positive relationship between inequality and interpersonal violence (murder and manslaughter) is one of the most solid constants of the cross-national analysis. As can be expected, these types of reactions to inequality have no impact on the level of inequality.

However, for conflict awareness to be able to express itself as socio-political interest in change, additional preconditions have to be named, namely the processes of mobilization and collective action, where patterns of interpretation and ideologies play an important part. Opportunity structures also play an important part, including the costs of real conflict in an environment of harsh repression. Anyhow the

cross-national analysis does reveal a very moderate long-term relationship between conflict awareness and real political and industrial conflict – in other words then, when the necessary conditions are given a long enough time to come into being.

Why are relevant political reactions to inequality so weak according to these findings? As regards articulating socio-political interest in change, one has to remember that, since the 1980s, a large part of the criticism of global inequalities has been brought forward by transnational social movements, and these conflict articulations are mostly reformist and formally peaceful. What's more, under the conditions of democracy, subjective conflict awareness can be converted within a society into political action that is non-violent or comparatively free of violence. Various spectacular electoral shifts to the left in Latin America bear witness to this. Finally, another important reason for a changed evaluation of inequality is the change of the main mode of conflict culture after the fall of the state socialist counter-core. The rise of the ethno-nationalistic mood – which is among other things also clearly visible in the success of right-wing populist parties in rich democracies – with its strong emphasis of national or ethnic communities obscures the awareness and the critical evaluation of the level of inequality that is present within the projected and idolised national/ethnic community.

Brief conclusion

Global material inequality has increased enormously and is currently at a historically very high level. The historical responsibility of today's core can not be dismissed. One of the favourite topics of our profession – the level of inequality between human beings, its reasons and consequences – has generated a remarkable amount of research over the years. However, in spite of intense scientific investigations of the topic, central questions remain unanswered.

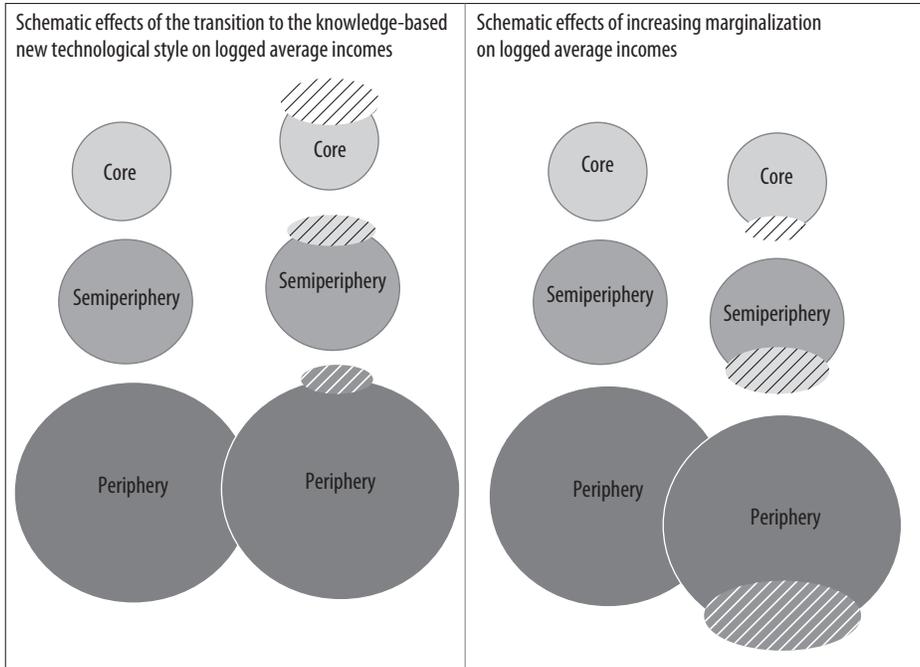
Forecast: How will worldwide inequality develop in future?

Predictions are precarious beasts, especially when they concern the future. Nonetheless, the preceding findings and theoretical guidance can help us make some forecasts.

First forecast: inequalities both within and between societies will continue to grow over the coming years, due to the continuing transition to the knowledge-based new technological style and due to increased marginalization. See Figure 6.

Figure 6 can be read as follows: if different income layers were to be subjected to a proportional growth of their average levels of income (i.e. to equal percentage-levels of growth), then the distances between them would remain the same on a logged scale. But the two mentioned causes – sectoral change and marginalization – don't lead us to expect this to happen. The transition to the new technological style, which allows for more growth, diffuses very unevenly and is more advanced in

Figure 6: Graphical demonstration that the two effects (sector transition and marginalization) together make for more within inequalities and at the same time for a polarization of income levels across countries



Notes: Country groups: 1) core, 2) semiperiphery, 3) periphery. The transition to the knowledge-based new technological style (left part) has a greater impact for the core, whereas increasing marginalization (right part) has a greater impact outside the core.
 Source: Bornschier (2002: 117; 2008: 382–84).

the core than in the middle and lower layers of world income stratification. This, on the one hand, leads to increasing inequality within societies – a phenomenon that is more pronounced in core societies. On the other hand, the growth rates, which have become possible thanks to the higher level of productivity of the new technological style, will differ according to how widely the new style has already diffused. The consequences are, on the one hand, a divergence of world income levels, and, on the other hand, a simultaneous increase of inequalities within societies.

The consequences of marginalization are the other way round; see Figure 7. Marginalization is a social problem in all three layers. But marginalization is more prevalent at the periphery – i.e. the lower of the world’s income layers – less so in the middle layer – the semiperiphery – and less still in the core. The result is a downward divergence of income levels, as the reduced economic productivity

Figure 7: Marginalization – a telling picture and the theoretical argument

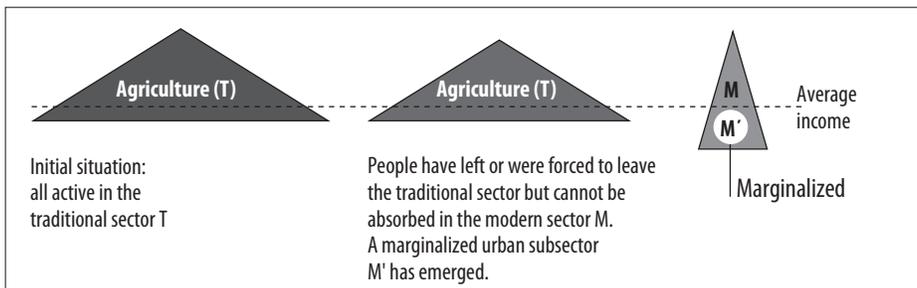
Skyscrapers and favela in São Paulo



The theoretical argument

Marginalization has an obvious impact on both within and between inequalities. Less recognized is its role for enduring internal inequality at later stages of the rural-urban transition. The argument is as follows: The classical Kuznets (1955) argument – further developed by Ahluwalia (1976) and Robinson (1976) – would suggest that total inequality starts to decline as soon as about more than 50% are outside the traditional sector. But this will only happen if there are considerable differences in overall productivity between the two sectors. See below: the weight of the quadratic term (c) which would make for a decline at later stages of the transition is only dependent on such a difference in productivity which is, however, unlikely due to increasing marginalization.

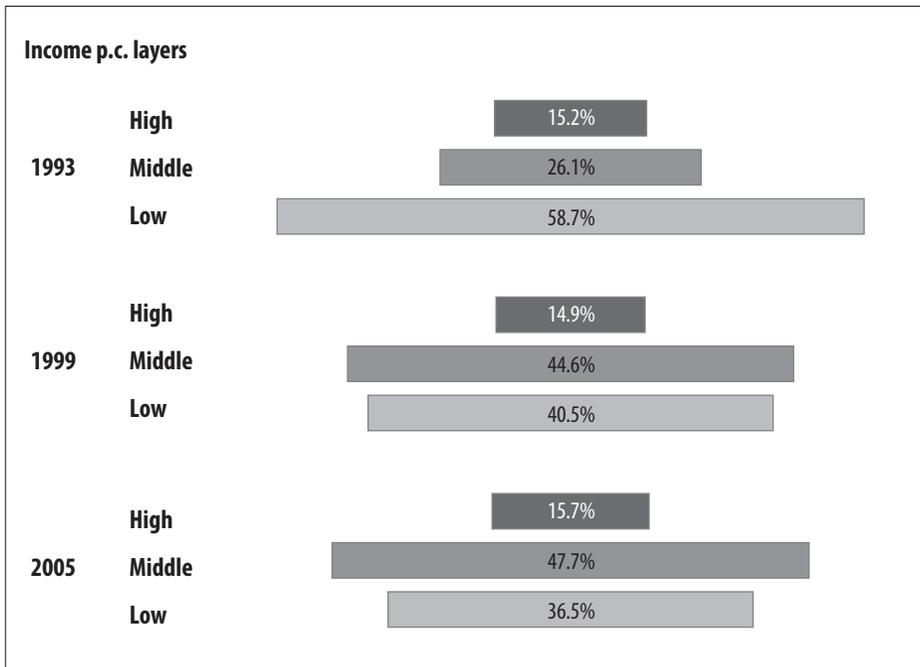
The curvilinear model in the Kuznets tradition can be written as: $s^2 = a + bx - cx^2$, where s^2 denotes the variance of the logged incomes and x the proportion outside the traditional sector. The coefficient of the quadratic term (c) is a function of the average income differences between the two sectors. Based on the work of Simon Kuznets, Sherman Robinson (1976: 437) has provided the mathematical proof.



Source: Details in Bornschier (2008: 376, 388).

that results from marginalization has the potential to diminish per capita economic growth levels. At the same time, marginalization increases internal inequality, and it does so more strongly outside the core. Less attention has been paid to the role of marginalization on enduring inequality as a result of continuing rural-urban transition; see argument in Figure 7.

Figure 8: The beginning shift in the shape of the world income stratification: Percentage shares of world population in three income layers, 1993, 1999, and 2005



Notes: Income layers according to World Bank classification.

In 1990 both China and India were still in the low income layer, i.e. at the bottom of world income stratification. In 1999 and 2005 China has switched to the lower middle income layer, whereas India still remained in the lower income layer. The likely soon shift of India to the lower middle layer will – other things being equal – reduce the population share in the low income group from 36.5% to about 21.5% while the population share of the lower middle layer will increase by India’s upward move. Therefore, the picture for 2005 in the figure is but a transitory one. In the years to come a world population structure of about the following kind will emerge: 16% in the top income layer, 64% in the middle income layer, and about 20% in the bottom layer – clearly an onion-like distribution.

Source: Bornschier (2008: 85).

Both these developments, which are outlined in Figure 6 and 7, lead us to the first forecast.

Second forecast: even though polarization within as well as between societies will remain the prevailing trend in coming years, total world income inequality may become stable at a very high level. The reason for this is the high level of economic growth in the highly populated countries China and India.

Third forecast: the shape of world income stratification will change, namely from the pyramidal shape that has developed over two centuries to an onion-shaped distribution, where the majority of the world's population can be found in the middle layers; see Figure 8.

Fourth forecast: if the above-mentioned growth differentials of recent times persist – and according to the latest figures this is the case – then not only will the distribution of population shares across the income layers change, but also the distance between the individual layers. The upper and middle international income layers will come closer together, while the distance between them and the bottom income layer will increase (not illustrated in Figure 8).

Fifth forecast: collective conflict reactions against inequality (i.e. potential negative feedback effects) are not likely to have a significant impact on the course of inequality, at least as long as economic growth remains high.

Sixth forecast: will class politics across national borders have a more significant role to play in countering inequality? Barely, as the necessary solidarity is hard to achieve. It is more likely that movements pertaining to reactionary, right-wing populist nationalism will increase, thus distracting the focus away from inequality within societies and projecting the latent inequality-driven class conflict onto the between-society system.

Seventh forecast: according to my assessment, the current world financial crisis is only a hiatus in the long economic upswing. In the longer run, however, the long global economic upswing will necessarily come to an end according to the long wave theory of economic cycles. This is when the conflict distraction addressed in the previous forecast could become a serious threat to world peace. In order to secure long-term world peace, inequality has to be contained.

Concluding summary with appraisals of fairness

Global material inequality has increased enormously over the course of more than two centuries. And the change I forecast for international income stratification means that there will be little more than a tentative reversal of the secular trend in the foreseeable future.

The historical responsibility of today's core can not be ignored. And this is central to a fairness appraisal. The double peripherization during the colonial era made countervailing action impossible, and led to unfair inequality – with considerable and long-lasting consequences. As a result, today's core societies for a long time

enjoyed a monopoly in industrialization, from which not only the colonial powers profited, but all of today's core societies. In addition, the advantages enjoyed by the entire core were by no means just material, but also allowed for the early development of economic and political institutions, which further strengthened the leading position of the core and made it enormously difficult for the periphery to catch up. Even if the fairness appraisal is unambiguous in view of this main axis of inequality – namely “unfair” – the question of responsibility can not be answered so easily. Can descendants be made responsible for the deeds of their ancestors?

But, at the very least, the people of the rich world today can be expected to not only meet the wish for development with understanding, but to support it on all levels by generously removing obstacles that could get in the way of international treaties.

Regarding the reasons of inequality within societies, I have pointed toward the role of politics: countervailing action is possible in principle. This is especially relevant when it comes to limiting marginalization. The issue here is undoubtedly unfair inequality. But who can one make accountable for it? For even under democratic circumstances, coalitions between the middle class and the relatively privileged sections of the lower class are easily made, making a political battle against marginalization difficult, if not impossible. The violent riots in South Africa in 2008 between black population groups were a brutal reminder of the fact that poor people can fight against even poorer people.

A further important reason for the inequality between as well as within societies that has been addressed above is the level of epochal transitions across production styles – at first from agriculture to manufacturing, and subsequently from manufacturing to the knowledge-based new technological style. In this way, inequality increases for a sustained period of time. Is a fairness assessment relevant here? Barely. Should we be advising against going down a path that at first leads to higher inequality, but which in the long run improves the material living conditions for everyone? Politics might be able to make the transition more bearable, but it can not totally abolish the consequences, which come in the shape of increasing inequality.

The topic of social inequality is central to the subject of sociology. Much research has been done on it, while open research questions and a look at the future are less common. I concluded by briefly addressing the question of fairness.

Acknowledgements

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Notes

¹ To this old topic of sociology world system analysis contributed an important novel perspective. Instead of focussing on inequality within nation states world system analysis addressed global inequality. The novel perspective – transnational integration in a core-periphery structure – benefitted much from authors of the dependencia school, like André Gunder Frank (1966), Osvaldo Sunkel (1970), Fernando Henrique Cardoso (Cardoso and Faletto 1971), Johan Galtung (1971). The core-periphery metaphor became incorporated into the world-systems analysis since the 1970s, especially by Immanuel Wallerstein (1974), Christopher Chase-Dunn (1981) and Giovanni Arrighi (Arrighi and Drangel 1986). For different approaches to social stratification and mobility in the world system, see Bornschier and Trezzini (1997).

² This article is limited to relative deprivation most often represented by income distribution and due to space limits does not address the widespread absolute deprivation – hunger as well as malnutrition, see Chen and Ravallion (2004), Kerbo (2006, 2009), Hillebrand (2008).

³ For the debate whether world income inequality is increasing or decreasing, see: Korzeniewicz and Moran (1997), Schultz (1998), Firebaugh (1999), Goesling (2001), Bourguignon and Morrisson (2002), Sala-i-Martin (2002), Milanovic (2005), Berger (2005).

⁴ André Gunder Frank (1998) was among the first to address this shift in his *ReOrient* book.

⁵ Over the years the numerous studies relating the impact of transnational corporations on national distributions of income have produced robust empirical findings, see Chase-Dunn (1975), Bornschier and Ballmer-Cao (1979), Bornschier and Chase-Dunn (1985), Herkenrath and Bornschier (2003), and the recent overview in Bornschier (2008: 591–605).

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