

# Globalization and Inequality

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## Definitions and Concepts

**I**N our efforts to understand the state of inequality today, we need first to define the key concepts and terms. Most crucially, we need to distinguish between international and global inequality in order to avoid terminological confusion. I explore these two concepts throughout the essay. Here it suffices to say that international inequality denotes the inequality between nations, more exactly between mean incomes of nations. Global inequality (also known as ‘world inequality’), on the other hand, is an inequality between individuals in the world regardless of their nation, regardless of where they live. In other words when measuring global inequality, we see the entire world as if it were one country.

In this essay I will utilize three concepts of inequality in order to explore the patterns of *international* and *global* inequality and map out changes in inequality over time. I will call these three different ways of assessing inequality Concept 1, Concept 2 and Concept 3.

### Concept 1 inequality

Concept 1 measures *unweighted international inequality*. As previously explained, international inequality measures the inequality between mean incomes of different nations. This sort of inequality is captured in statements like ‘the mean income in the United States is higher than the mean income in Pakistan’. In measuring this inequality, we generally rely on national accounts, that is Gross Domestic Income (GDI) of the countries. We compare the GDIs of countries to each other to grasp Concept 1 inequality. Because populations of countries are left out, Concept 1 is unweighted international inequality. Notice also that inequality *within* countries is ignored.

### Concept 2 inequality

Concept 2 inequality is similar to Concept 1. Like Concept 1, Concept 2 measures international inequality by relying on the representative income of a country: GDI per capita. Differently from Concept 1, however, Concept 2 takes into consideration the population of countries. In these calculations China's weight is approximately 20 per cent of the world rather than, as in Concept 1, having the same weight as any other country. Consequently, when calculating the inequality of Concept 2, the role of China and India would be very important. To make the difference clear, note that Concept 1 inequality is akin to the UN General Assembly: there is one ambassador for each country and each country is represented by its GDI per capita. In contrast with Concept 1, here we have 6 billion ambassadors (the world's population) and all the ambassadors from, say, China display the mean income of China, all ambassadors from India display the mean income of India and so forth. Hence with Concept 2, each country would be represented in accordance with its population but it would be still represented by ambassadors having *representative* incomes of their nations – not actual incomes of people who live there. Thus Concept 2 also ignores differences in incomes within countries.

### Concept 3 inequality

The final type of measurement we will rely on to explore inequality in this chapter is Concept 3 inequality. Concept 3 denotes *world inequality* or *global inequality*. Differently from international inequality, this concept captures inequality between individuals. To use the previous metaphor, we dispense with ambassadors: every individual enters into the calculations with his/her actual income. The only source of data from which we learn about people's incomes is household surveys. Ideally, we should have a world household survey to find out what is world income distribution. But short of that we have to use individual country's household surveys, collate them and derive a world distribution of income across individuals. This further differentiates Concept 3 from the other two Concepts: it relies on an entirely different source of data, income distribution data obtained from household surveys. Thus the data requirements are much more formidable than they are for Concepts 1 and 2 where we need respectively only one variable (GDI per capita) or two (GDI per capita and population). This huge jump in the data requirement makes the move from Concept 2 to Concept 3 even more problematic because of the difference between disposable income from household surveys (our welfare aggregate in Concept 3

**Table 2.1 Three concepts of inequality summarized**

	<b>Concept 1: unweighted international inequality</b>	<b>Concept 2: weighted international inequality</b>	<b>Concept 3: global or world inequality</b>
<i>Main source of data</i>	National accounts	National accounts	Household surveys
<i>Unit of observation</i>	Country	Country (weighted by its population)	Individual
<i>Welfare concept</i>	GDI per capita	GDI per capita	Mean per capita disposable income or expenditures
<i>National currency Conversion</i>	Market exchange rate or PPP exchange rate		
<i>Within-country distribution (inequality)</i>	Ignored	Ignored	Included
<i>Source: Milanovic (2005)</i>			

calculations) and national accounts data from which we get our GDIs per capita. The largest part of the difference is definitional: household disposable income is after-tax income and it excludes publicly provided health, education and other government services and goods. The latter are, of course, included in Gross Domestic Income. Another part of the discrepancy comes from the undersurvey of rich people and their income sources (mostly property income) in household surveys. These sources are better captured by national accounts simply because rich people are loath to fully reveal their actual income to survey enumerators. These points will be discussed further. Table 2.1 summarizes the three Concepts and their sources of data.

## Patterns of Inequality

Let us now see how Concepts 1, 2 and 3 have moved over time in order to explain the changing patterns of inequality. I will start with a historical perspective before discussing the contemporary patterns of inequality. This historical perspective applies primarily to Concepts 1 and 2. We do not know much about how Concept 3 has moved over time simply because we lack the relevant data on household surveys. Since incomes or expenditures from household surveys are not available for a historical period, we shall focus on a briefer period, 1988–98.

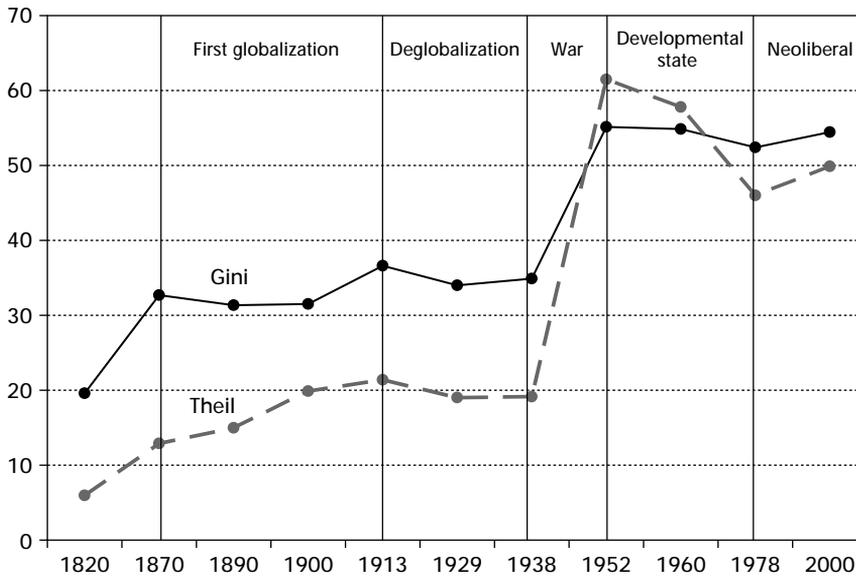


Figure 2.1 Concept 1 inequality, 1820–2000

Source: Calculated from Maddison (2004)

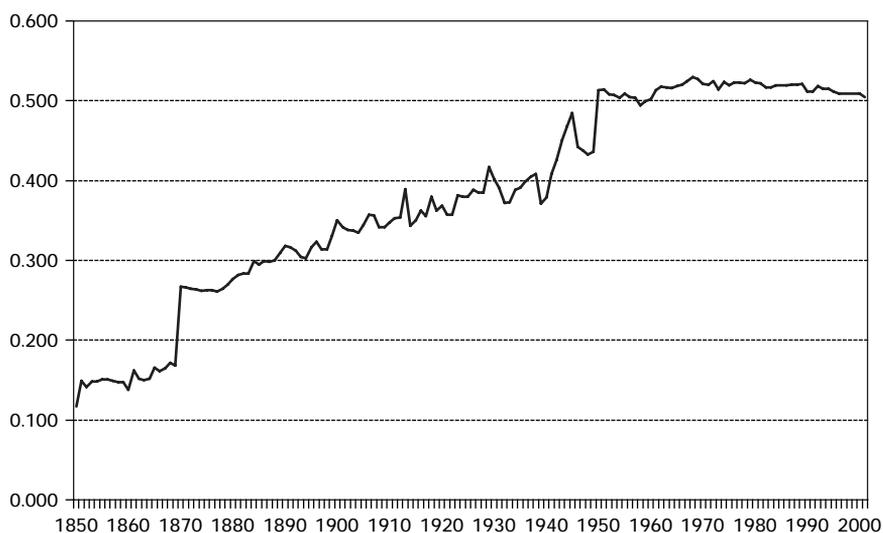
### Historical perspective

Figure 2.1 displays the historical movement of Concept 1 inequality. This figure, based on Maddison (2004) GDI per capita data which are the only source of long-run historical income statistics, shows that between 1820 and 1870 international inequality was on the rise. The increase is present whether measured by the Gini coefficient or Theil Index.<sup>1</sup> Inequality also ascended during 1870–1913, although it declined or stabilized during the inter-war period of ‘deglobalization’, 1913–38. Following this period, we witness a sharp increase in Concept 1 inequality between 1938 and 1952. This is related to the Second World War and the fact that some of the rich countries (United States, Australia, New Zealand, Argentina) did very well while most of the rest of the world lost out. From roughly 1952 to 1978, Concept 1 inequality remains at the same level as measured by the Gini and declines rather substantially as measured by the Theil Index. For the less developed countries, this was the period associated with decolonization and application of import substitution policies including a strong role of the state. For the rich world that was the period of unmatched growth that became known as the ‘Golden Age’. But despite the rich world’s fast growth, there was clearly, on average, a catch up of poor and middle-income countries or income convergence; it proved short-lived. Starting from around 1978, the beginning of the ‘neoliberal

regime', there is a sharp turnaround and Concept 1 inequality rises whether measured by the Gini or Theil.

Figure 2.1 demonstrates that Concept 1 inequality has generally been on an upward trend from 1820 up to today. This finding tells us that differences between mean incomes of countries are much greater today than they were some 200 years ago. It is also true that our sample size has gone up because originally in Maddison's data we had approximately only 35 or 40 countries, but over time the number of countries has increased to 50, 60 or 80. Today we have more than 150 nations in the sample. Thus a *part* of the increase in Concept 1 inequality can be explained by the increase in the sample size (that is, in the number of independent states in the world). But, it is important to emphasize that only a part of the change can be attributed to this factor. If we were to take only the countries for which we have data over the entire period 1820–2000, we would still find that international inequality of this sort has been on the rise.

When we use Concept 2 inequality, we observe a different picture. Here, I use the same data as I did for Concept 1 inequality above, viz. the same GDI per capita data from Maddison (2004) and the same countries, but this time around the data are weighted by population. I will discuss later some pitfalls of the data on China but let us assume here that these data are reliable. Figure 2.2 demonstrates the historical journey of Concept 2 inequality. As this figure shows, during the period from 1850, which is the first year in the figure, to about 1950, which represents a



**Figure 2.2** Concept 2 inequality (Gini coefficient), 1820–2000

Source: Calculated from Maddison (2004)

peak, there is a clear upward trend. From the mid-1950s to today, Concept 2 inequality remains broadly stable (or just slightly decreasing). This finding is confirmed by Bourguignon and Morrisson (2002).

### Contemporary patterns of inequality

Now let us move from this very brief historical sketch to a focus on what inequality is today, analysing the period 1950–2000. To paraphrase a well-known dictator, Figure 2.3 illustrates the ‘mother of all inequality disputes’. The essence of the dispute is about what happened to inequality roughly between 1950 and 2000.

Figure 2.3 examines inequality during this period using the three Concepts of inequality. As we see from the figure, unweighted international inequality – the Concept 1 inequality – has gone up. Of particular importance to note is that it has been going up over the last 20 years. Moreover, we see that the ‘watershed years’ 1978–80 – the term coined by Paul Bairoch (1997) – characterized by rising oil prices and real interest rates, the onset of the debt crisis and the beginning of the Thatcher and Reagan rule in Great Britain and the United States, were at the origin of this unmistakable upward trend which has persisted ever since.

Concept 2 inequality charts a very different course. As figure 2.3 shows, Concept 2 inequality has declined over precisely the same time during which Concept 1 inequality rose. Moreover Concept 2 inequality begins its downward trend exactly around 1978–80. The decline is driven by the fact that China has grown very fast ever since 1978 when the responsibility system was introduced in the countryside and communes were dismantled by the Deng Xiaoping regime. China was a very poor country with a huge population, and as people in China have become richer overall inequality in the world has tended to go down. The role of China is crucial, as it becomes clear when we calculate Concept 2 inequality without China: we see that inequality of this sort has been stable or even rising (see the dotted line in figure 2.3). In sum, *inequalities between countries have been rising since around 1978, although population-weighted inequality between countries has been decreasing since 1978 thanks to growth in China and more recently in India.*

Let us now look at global inequality, Concept 3. Based on my own calculations, figure 2.3 displays three dots – years 1988, 1993 and 1998 – that capture global inequality. These three dots are based on household survey data. There are some important points to highlight here. To begin with, we cannot really extract similar data for the past because we do not have household surveys for many important parts of the world (China, the Soviet Union, most of Africa) for any years before the early 1980s. As we see in figure 2.3, these three years do not follow a pattern: there is first a strong increase in inequality followed by a



**Figure 2.3** The three concepts of inequality, 1950–2000

Source: Calculated using World Bank WDI data

more modest decline. The gap between global inequality (the three dots) and weighted international inequality is explained by inequality within-nations. We can write it out as,

$$(1) \text{ Global inequality} = \text{Concept 2 inequality (or between-country inequality)} + \text{within-country inequality}$$

Overall, the three dots inform us that *inequality among people in the world today is extremely high, though its direction of change is unclear*. The Gini Index of inequality between people in the world lies between 62 and 66. A Gini of 62, which is a very high number, is a higher level of inequality than what is found in any individual country: for instance, Brazil’s inequality is in the upper 50s level; South Africa is in the low 60s. This level of inequality is perhaps unparalleled in world history. If such extreme inequality existed in smaller communities or in a nation-state, governing authorities would find it too destabilizing to leave it alone, or revolutions or riots might break out. The fact that such extreme levels of inequality exist on the global level perhaps causes us to react against it relatively less severely.

A number of different forces impact upon global inequality, causing a very complicated pattern to emerge. First, fast economic growth in China and India – populous nations that were very poor and are still relatively poor – pushes world inequality down. Second, the relative decline of many poor and middle-income countries has the opposite effect: it contributes to global inequality. Third, higher inequality

within large nations, such as the United States, China, India, and Russia, adds to global inequality, pushing the dots in figure 2.3 further upwards from the line that captures Concept 2 inequality. Thus as one force reduces global inequality, the other one or two increase it.

Regionally, the last 20 to 25 years have been characterized by the following basic trends: China and India pulled ahead, Latin America and Eastern Europe – the middle-income countries – declined, and Africa's position became even worse. The rich world (Western Europe, North America and Oceania) grew relatively fast. As for within-nation inequalities, they increased almost everywhere. *We are witnessing the Africanization of poverty*, since most of the African nations are now extremely poor and many of them are actually poorer than they were in 1960. The correlation between being poor and being African is probably stronger than ever in recorded history. Another interesting fact is that, for the first time since the early nineteenth century, all Latin American nations are poorer in per capita terms than the poorest West European country (Portugal).

The complicated way in which different forces impact upon global inequality should encourage us to avoid broad generalizations. The difficulty of saying what happens to global inequality stems, in part, from the fact that it is hard to calculate because it requires access to detailed household survey data from most countries in the world. While there is no dispute that global inequality is extremely high today, there remains a debate on the direction of change in global inequality as well as on the significance and meaning of this putative change. We would also like to draw some sort of causal link between globalization and global inequality. This is exceedingly difficult because globalization affects differently the growth rates of GDIs per capita of poor and rich nations, within-national inequalities in poor and rich countries, and may influence differently the populous and small nations. Sometimes these effects may work in the same direction, for example if greater openness helps accelerate growth of poor countries and reduces within-nation inequalities, and sometimes they may offset each other, for example if openness helps poor countries but widens their internal income distributions.

## The Three Concepts Explored Further

### Why inequality between countries matters

Before we explore the relationship between the three concepts of inequality and how they are related to globalization, let us briefly address one question that the debate on inequality raises: why does

inequality between countries matter? The convergence hypothesis, grounded in growth economics, posits that poor countries should grow faster than rich countries, whether controlling for other factors (so called beta convergence) or even unconditionally (so called sigma convergences). The latter is no different to our Concept 1 inequality which as we have seen, *pace* economic theory, has rapidly increased during the last two decades. Since we expect from economic theory that convergence should take place, the question becomes why it did not. Some authors claim that it did not because some countries were not really 'globalizing' so only those countries that follow 'globalization friendly' policies should be considered and they are, these authors claim, converging (Sachs and Warner 1997; World Bank 2002; Dollar and Kraay 2001). Evidence disproves these claims: economic policies (including those that can be included under the heading of 'globalization-friendly') are much more similar today than they were 20 or 30 years ago.

The pertinent question then becomes why there is a divergence of outcomes while economic policies converge. I believe that the currently available studies do not allow us to come up with a definitive answer to the question. There are several possible explanations however. According to one explanation (Mukand and Rodrik 2002), divergence of outcomes may coexist with convergence of policies if the same set of policies (basically, of the Washington Consensus type) is applied in different institutional settings. Since efficiency of policies is not independent of the environment where they are applied, the same policies will produce inferior outcomes in countries that are institutionally very different from the advanced market economies. According to Mukand and Rodrik, some poor countries would have been better-off had they followed a 'heterodox' mix of policies, that is policies not identical to the ones contained in the Washington Consensus package. This is because a heterodox mix might have been more appropriate for their conditions. This is how Mukand and Rodrik explain China's and India's success since neither country followed the dominant paradigm *à la lettre*. Another explanation is that recent technological progress has been characterized by economies of scale. In such a world, diminishing marginal productivity of capital, on which the convergence hypothesis rests, no longer holds. On the contrary, marginal productivity of capital may be greater in more capital-rich countries – which then of course implies divergence.<sup>2</sup>

Beyond its potential implications for the convergence theory, inequality between countries matters for other reasons too. Inequality between nations is important for migration issues, for instance. Concept 1 inequality may matter also if countries represent distinct cultures and modes of life. If we believe that cultures have some intrinsic value in themselves, then we might feel discomforted by the

idea that there are huge differences in income or unbridgeable differences of wealth between nations so that the nations that are in decline might over time disappear. However, a social Darwinist view of the world might refute the importance of this argument. The point is that inequality between countries does not only matter in terms of assessing the efficacy of our current set of development policies, it may also have important social repercussions.

### How solid is the Concept 2 inequality decline?

In my analysis Concept 2 inequality derives its significance because it is the lower bound to Concept 3 inequality. Concept 3 inequality is critical if we want to know what is happening to the income of individuals in the world, but, as I said before, oftentimes we lack the necessary data to calculate it. Given such difficulties with data, some authors have used a shortcut to Concept 3 inequality by calculating Concept 2, the population-weighted international inequality. They have done so because (a) Concept 2 inequality accounts for a large part of global inequality, and (b) it can be calculated relatively easily with the knowledge of only two data points for each country (GDI per capita and population). Notice that at the extreme, Concept 2 inequality becomes global inequality: to see this, break the countries into finer and finer partitions continuing all the way to a situation where each individual is a country. Then, clearly, Concepts 2 and 3 coincide.

We can move somewhat in that direction (raising as it were the lower bound to global inequality) by breaking large countries into their provinces and rural/urban areas. If after doing this, we find that this new more detailed Concept 2 inequality has been more or less stable over the last two decades, then Concept 3 inequality cannot have gone down. The reason is as follows: we know that the within-component (see equation 1) of global inequality has gone up during the last two decades driven by the almost unanimous increase in within-national inequalities.

So let us see how the previously calculated Concept 2 decline is affected by data modifications and improvements. We can recalculate Concept 2 inequality by doing three things. First, we can use alternative GDI per capita data for China. The data on the Chinese GDP remains subject to intense debate amongst specialists. While most economists agree that the current levels of Chinese GDI are accurate, they disagree about the historical statistics, and in particular about the officially claimed growth rates. The problem with them is that if they are extrapolated all the way back into the past, the 1952 level of China's GDI per capita becomes unreasonably, and even impossibly, low: less than \$PPP 300 at 1990 prices. It is very difficult to believe that

**Table 2.2 Change in Concept 2 inequality between 1985 and 2000 using different data sources and finer partitions (in Gini points)**

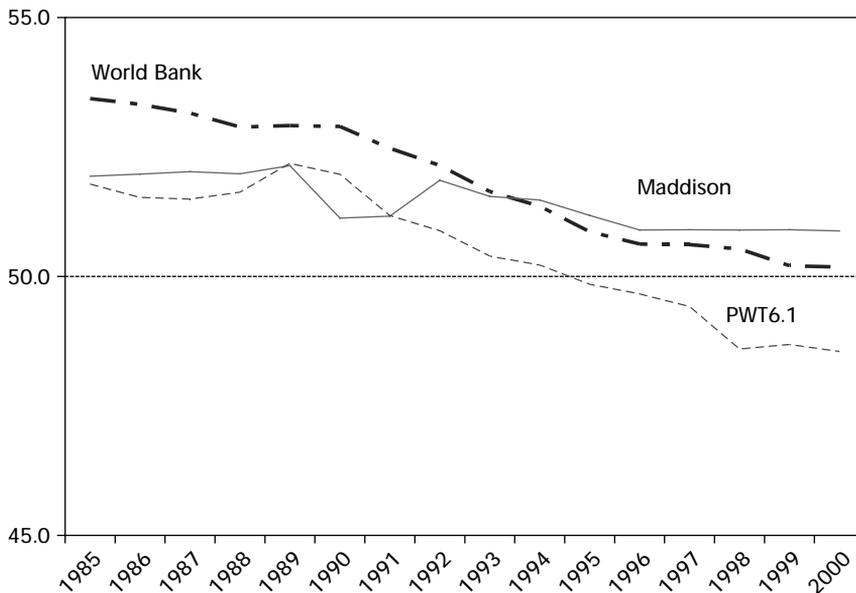
	World Bank data	World Bank data except Maddison for China	Maddison data
<i>Whole countries</i>	-3.3	-1.9	-1.1
<i>Populous countries<sup>a</sup> divided in states or provinces (the rest unchanged)</i>	-3.8	-2.3	-1.5
<i>Adding rural-urban divide for China</i>	-3.3	n/a	-1.0

<sup>a</sup> 'Populous countries' are China, India, United States, Indonesia and Brazil.  
Source: Calculated from Maddison (2004) and World Bank *WDI*

China, which indeed was poor, was below the subsistence level (on average). Thus Maddison's 2004 data, based on his detailed study of long-run Chinese growth (Maddison 1998), display lower growth rates than the official Chinese sources.<sup>3</sup> If China was less poor in the 1950s, 1960s, and so on, then its catch up with the rich world was less, and the decrease in Concept 2 inequality was less too. If we recalculate Concept 2 using all the same World Bank data as before, except for China for which we use Maddison's GDI numbers, the decline of Concept 2 inequality which was 3.3 Gini points previously becomes only 1.9 Gini points (see table 2.2 and figure 2.4). This shows the extreme sensitivity of Concept 2 and global inequality calculations to the assumptions about Chinese growth.

Second, we can assess the firmness of the data on Concept 2 inequality by breaking five most populous countries (China, India, United States, Indonesia, and Brazil) into their provinces/states. In addition, we know that for both China and India there are serious and apparently growing rural-urban disparities. By taking an aggregate number for China, we fail to show the inequality which exists between rural and urban areas or between poor and rich provinces. So we can further break each Chinese province into rural and urban parts, using of course for each province mean rural and mean urban income. What we do thereby is to vastly improve the precision of our estimates: rather than using one GDI per capita number for China, we now use either 28 numbers (means for each province) or even 56 numbers (28 provinces times two – for rural and for urban). The same is done for the other four countries: for example, instead of one value for the United States, we have fifty.

Third, we can broaden our coverage of countries. World Bank data have a more restricted country coverage because a number of war-torn or 'excluded' countries like the Congo, Sudan, Cuba, North Korea, Afghanistan and Somalia are not part of the database. This omission,



**Figure 2.4** Concept 2 inequality recalculated using three different GDI databases

Source: Calculated from Maddison (2004), World Bank WDI and Penn World Table 6.1

however, is not random: these are mostly poor countries and their inclusion raises Concept 2 inequality and may also slow down its downward slide (since these countries have tended to fall further behind the rich world, thus adding to inequality). Maddison data do include all these countries: for example, in 2000, Maddison data include 160 countries while the World Bank data include only 138 countries.

Figure 2.4 demonstrates the sensitivity of Concept 2 inequality to different data sources as well as the remarkable importance of China in these calculations. If we use Maddison's data, we find – between 1985 and 2000 – only a minimal decrease in Concept 2 inequality of 1.1 Gini points (see table 2.2). This is less than a third of the decrease as calculated using World Bank numbers. Finally, if we break the five most populous countries into their provinces/states and use the rural-urban divide for China, Maddison's data yield a decrease of only 1 Gini point. This finding suggests that Concept 2 numbers are not as firm as we originally might have thought. Another important implication is that the likelihood that Concept 3 inequality decreased over the 1985–2000 period is also significantly less; if Concept 2 inequality – which is the main driving force behind a possible decrease in global inequality – went down by only 1 rather than by 3.3 Gini points, it is quite possible, even likely, that the increase in within-national inequalities offset this decline, and that global inequality remained about the same.

This last point is illustrated in table 2.3. It displays the within-component of global inequality. It increased between 1988 and 1998 by 0.8 Gini points, about as much as Concept 2 inequality, according to Maddison's data, has gone down.

There also remains a technical issue, to which I alluded above. There is a discrepancy between the movements in national accounts and movements in household survey data, making comparisons of results using the two sources difficult. In some calculations of global inequality which are not based directly on household surveys, the authors (e.g., Bhalla 2002 and Sala-i-Martin 2002) mix GDI per capita data from national accounts and some fragmentary (quintile) distributions from household surveys. Thus they apply to a distribution not of its own mean but a mean derived from another source (national accounts). As explained before, GDI is by definition greater than household disposable income. In addition, the difference is magnified because of inadequate coverage of property incomes by household surveys. Call this total difference between GDI per capita and mean household per capita income  $d$ , consisting of  $d_1$ , the definitional difference, and  $d_2$ , the difference due to the survey of inadequate coverage. Both  $d_1$  and  $d_2$  are composed of income sources that are predominantly received by the rich. Then assigning  $d$  across the board to everybody (as these authors do) artificially boosts incomes of the poor and reduces global inequality. These calculations, despite their pretence, are merely thinly disguised Concept 2 inequality calculations.<sup>4</sup>

India has become somewhat of a cause célèbre in this respect because there the discrepancy between national accounts and household surveys has been particularly pronounced in the last ten years. GDI per capita has been growing faster than the household survey mean. The use of GDI per capita and distribution shares derived from surveys therefore produces lower poverty rates than the 'normal' procedure (i.e., the use of both distributions and means from surveys). However, even in this instance, Picketty and Banerji (2005) show that 20 to 40 per cent of the discrepancy can be explained by the under-reporting of high incomes. In short, we need to be very wary of a blind application of national accounts data to household surveys. The

**Table 2.3 The within-component of global inequality (in Gini points)**

Year	Gini Index
1988	13.7
1993	14.5
1998	14.5

*Source:* Milanovic (2005)

approach is simply inconsistent because it mixes up two different aggregates and ignores their differences.

### Inequality Between World Citizens Today

Having explored the relationship between different concepts of inequality, we can revisit the 'true world inequality' – the Concept 3 inequality and where it stands today. As emphasized before, we find extreme inequalities today. Earlier in the chapter I indicated that the world inequality today varies between 62 and 66 Gini points and emphasized how such levels of inequality surpass the disparities seen in some very unequal countries, such as Brazil and South Africa. Table 2.4 shows the evolution of global inequality in three different years (recall our three dots in figure 2.3 above). Global inequality calculated using current exchange rates (displayed in column 3) is even greater: its Gini is probably the highest ever recorded, around 80.

The ratios displayed in table 2.5 below show the extreme levels of contemporary inequalities. These ratios help us understand the significance of a Gini of 62–66. If we look at incomes expressed in international dollars received by the various fractiles of the distribution, we

**Table 2.4** Global inequality, distribution of persons by \$PPP and dollar incomes per capita

	Gini Index	
	International dollars (\$PPP)	US dollars
1988	61.9 (1.8)	77.3 (1.3)
1993	65.2 (1.8)	80.1 (1.2)
1998	64.2 (1.9)	79.5 (1.4)

Gini standard errors are given between brackets.

Source: Milanovic (2005)

**Table 2.5** Share of total global income received by various fractiles of global distribution

	Top	Bottom	Ratio top-to-bottom
<i>In \$PPP</i>			
5%	33%	0.2%	165–1
10%	50%	0.7%	70–1
<i>In current US dollars</i>			
5%	45%	0.15%	300–1
10%	67.5%	0.45%	150–1

Source: Milanovic (2005)

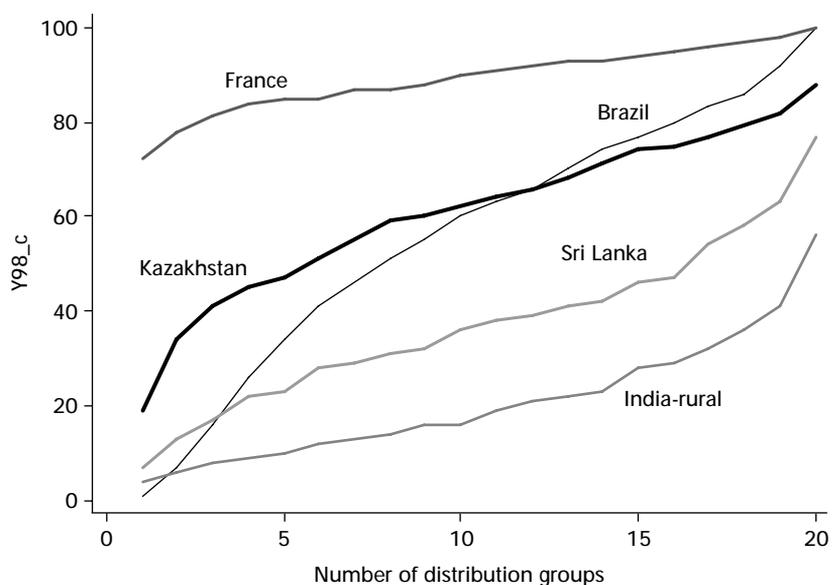
find that the top 5 per cent of highest earners in the world receive one-third of the world income, whereas the bottom 5 per cent receive only 0.2 per cent. Consequently, the ratio of the top 5 per cent to the bottom 5 per cent is 165 to 1. Differently, the top 10 per cent of people in the world get around one-half of world income, leaving the remaining 90 per cent of the world's population the other half of the global income. If we do the same calculations in US dollars, the ratio of the top 5 per cent to the bottom per cent becomes 300 to 1.

### **Key determinants of global inequality summarized**

In discussing the three concepts of inequality, this chapter has already touched upon the contradictory movements which influence global inequality today. Here, I expand upon these discussions before offering policy recommendations. In order to understand inequality today, we need to focus on the interaction between: (a) the rich countries of the West; (b) urban incomes in China and India; and (c) rural incomes in these two countries. It is necessary for us to separate China and India into urban and rural categories because the urban-rural income gap in both countries, and indeed in most Asian nations such as Indonesia and Thailand, is large and has been growing rapidly. Thus if mean incomes in urban China and India increase fast enough, they will move closer to mean incomes of the rich countries in the West. That would be good news for world equality. However, if urban incomes in China and India increase very fast but people in rural China and India fall behind, then we have an offsetting effect, namely, rising differences between these two parts (urban and rural) that add to global inequality. This is particularly so because we are talking about massive numbers of people: 800 million rural dwellers vs almost 500 million urban in China, and 750 million rural vs 300 million urban in India. The crucial thing for global inequality is then how these three 'components', (a) to (c), evolve.

### **Position of people from different countries in the global income distribution**

We need also to compare the distributions of different countries. This is, as we shall argue below, especially pertinent when making policy recommendations. We do this in figure 2.5 which plots the position of each 5 per cent (ventile) of different countries' distributions in the global income distribution. Consider the line for France. We calculate the mean income (in international dollars) of each French ventile from the lowest (first) to the highest – arrayed on the horizontal axis – and then find their positions in global income distribution. The bottom ventile of the population in France represents people with the lowest



**Figure 2.5** The position of different countries' ventiles in global income distribution

Source: Calculated from World Income Distribution (WYD) data, at <http://econ.worldbank.org/projects/inequality>

incomes in France. In terms of world distribution of income, they are placed around the 72nd percentile of the world. This statistic tells us that the poorest Frenchmen are actually richer than 72 per cent of people in the world. The top 5 per cent of people in France (and also in the rest of Western Europe and the United States; not shown here) are in the top percentile of the world. Let us now look at the distribution (by ventiles) in rural India (bottom line in figure 2.5). Even the richest 5 per cent of people in rural India are poorer than the poorest 5 per cent of people in France. These findings have the following policy significance. If there is aid from a richer to a poorer country, when income distributions do not overlap at all it is very difficult *not* to transfer from a richer person to a poorer person. In other words, the chance of a regressive transfer is very small. If one argues in favour of some transfer of income from the rich to the poor then these are relatively easy situations since the danger of a mistransfer (regressive transfer) is almost nil. One could tax a Frenchman around the median of income distribution and distribute aid to rural India randomly: there would be no danger of a regressive transfer.

In making transfers from rich to poor countries, we can use results from the figures, for example figure 2.5 as our guidance (obviously, the position of each country can be charted): for instance, the distribution of Kazakhstan can be used as a proxy for transition countries.

In figure 2.5, the Brazilian distribution presents a very interesting case. Brazil's distribution essentially mimics the world (world distribution would have been a straight line). Brazil approximates the world because the poorest people in Brazil are poorer than almost everybody else and the rich people in Brazil are as rich as rich Western Europeans and Americans. This is a crucial piece of information because, if we envisage a transfer from France to Brazil, we run the risk of making a regressive transfer unless appropriate targeting is made. In other words, there are countries for which the likelihood of conducting a regressive transfer is not negligible: for instance, it could well be that somebody who is in the bottom decile or quintile in France subsidises the income of someone who is richer than himself in Brazil. The perception that aid is misguided in the sense that the middle class in rich countries transfers a portion of its income to the rich people in poor countries is responsible for a great deal of resentment against aid. While only at times accurate, this perception contributes to the aid fatigue. The key lesson to take from figure 2.5 is that income distribution of the recipient country must be taken into account when decisions on aid are made: given an equally poor country and lack of knowledge regarding targeting of transfers a country with more equal distribution should be preferred.

### The Future of Global Inequality

Where is global inequality heading? Lucas (1998) and Firebaugh (2003) argue that we are likely to experience 'inequality transition' and that global inequality has peaked so that we can actually expect a decline. This will happen because the effects of the industrial and technological revolutions will spread gradually across the globe evening out incomes. The repercussions of the industrial revolution, which originated in England and later encompassed Western Europe before broadening to Northern America and elsewhere, are today felt in China and India. Lucas and Firebaugh essentially argue that because Concept 2 inequality drove global inequality since the Industrial Revolution and since this type of inequality has been on the decline for the last 30 years,<sup>5</sup> then Concept 3 inequality should follow the same trajectory.

I find the Lucas and Firebaugh argumentation problematic for several reasons. First, as already discussed, policy convergence has not led to income convergence and the 20 years of recent history demonstrate this point. Second, the authors present a static view of technological progress. There have been many technological revolutions since the industrial revolution, most recently the computer revolution. Thus we might have poor countries catching up in some

areas while rich countries carry on with further technological innovations in others and the gap between the two increases rather than narrows. Third, the expectation Lucas and Firebaugh set out depends on the decline in Concept 2 inequality. Yet as I have suggested the downward slide in Concept 2 inequality hinges on one set of numbers for one country, China. These numbers themselves can be questioned, and more importantly the future evolution of the Chinese economy (particularly since the country still needs – one would expect – to democratize) remains a matter of speculation, not a certainty.

Although we have gained some understanding of inequality today, we have not yet addressed the most important question: does global inequality matter?

### Does Global Inequality Matter?

Some commentators put forward that global inequality really does not matter because it is too abstract an idea and the world lacks government, an entity that should, in principle, be in ‘charge’ of inequality. It even lacks ‘global polity’ that would, through political pressure or persuasion, raise the issues and effect change. But the situation in which we find ourselves today is not much different from the situation in which people found themselves prior to the creation of nation-states. As long as there were disparate groups of individuals who hardly interacted at all, living in small hamlets and villages, there was no concept of a nation. Without this mental concept, inequality does not matter because there are only very few people (those from the village) to be compared against. It is only once a mental concept of what constitutes a nation is born (or created) and there is a government that governs that nation, people may begin to compare themselves to others from the same nation. Similarly, as the world becomes more globalized, the concept of one world will become much more acceptable. As we increase our awareness of the globe as a whole, poverty and inequality elsewhere will affect many more of us than they do today. In this regard, global inequality matters, not the least because the globalization process itself increases people’s awareness of each other and highlights income differences.

So much for the change in mutual awareness and creation of global polity. But one could still argue that inequality does not matter because people are only interested in their own welfare and not in the welfare of those who are better-off.

So what is the correct utility function then? Asked in another way, are we interested only in our own consumption or income, or does relative consumption/income matter too? Two different quotes capture the

opposing answers to this question. On the one hand, Anne Krueger (2002) remarks that: 'Poor people are desperate enough to improve their material conditions in absolute terms rather than to march up the income distribution. Hence it seems far better to focus on impoverishment than on inequality.' Krueger claims the only thing which matters is one's own income and incomes of others are immaterial. The implication here, drawn explicitly by Feldstein (1999), is that people who take into account other people's incomes are full of envy and their preferences should not concern us. On the other hand, we have a quote from Simon Kuznets (1965) that advocates a position that opposes Krueger's. He contends that 'one could argue that the reduction of physical misery associated with low income and consumption levels . . . permit[s] an increase rather a diminution of political tensions.' Kuznets goes on to explain that these 'political tensions' stem from 'the *political misery* of the poor, the tension created by the observation of the much greater wealth of other communities'. Long before the days of the current globalization, Kuznets captured that people are social animals. Although we are concerned about our absolute income first because we have essential needs, such as food, clothing and shelter that have to be satisfied, we are also concerned about our own income compared to that of others. Recent empirical studies confirm this concern with one's relative position as soon as the essential needs are satisfied (see Graham and Felton 2005; Frank 2005). Whether we believe that this concern with other people's income is grounded in the desire for fairness or in envy, the key and the only relevant point is that we are not indifferent to other people's incomes. This is where globalisation comes in. If, as hypothesized, globalization increases awareness of what other people are receiving, then to a person living in a poor country, the income with which he or she would normally be satisfied may no longer seem enough. The very process of globalization might influence our perception and our satisfaction with a given level of income. This is a crucial point: as the process of globalization unfolds how much will it influence our perception of our own position in it? If it does, maintaining large inter-country income differences becomes more and more difficult. But in the face of greater mutual interaction between people and declining travel costs, the rich world will have to become a fortress in order to keep the poor people out; but this is almost impossible. So, what else can be done?

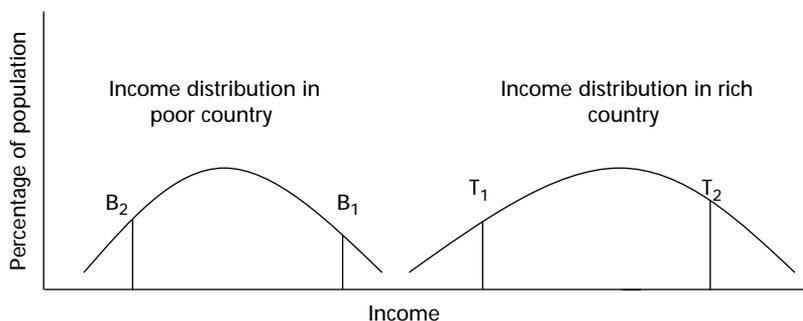
### What Can We Do About Global Inequality?

There exists a litany of literature on the remedies for global inequality, but I would like to make one more radical proposal. Some of the usual recommendations to alleviate global inequality include changing the

rules of the international trading system to benefit the poor. The removal of agricultural subsidies in rich countries is one such change. Like some other authors in this volume, I also believe that changing the WTO rules and ensuring the decision-making at the global level is more democratic, not least transforming the current voting rights in the IMF and the World Bank, would be very important. We can also think about special programs for Africa (for instance on combating AIDS).

My own, perhaps more radical, proposal to reduce global inequality is to establish 'global transfers', a concept akin to a 'global safety net'. If we really think of the world as a whole, we have to start thinking about an arrangement that would constitute a very modest *global* safety net. But if we do so, we also need some rules for the functioning of this safety net. I envision the first rule of this global safety net to be the 'Progressivity 1 Condition': transfers should flow from a rich country to a poor country. This is not a controversial point, as obviously transfers already flow from rich to poor nations. Second, we should also require that transfers at the global level satisfy the same conditions that within-national transfers are supposed to satisfy at the national level, that is that they should be 'globally progressive'. In other words, we need to ensure the transfers go from a richer person (taxpayer) to a poorer person (beneficiary). It is not desirable, for instance, for a middle-class Frenchman to make a transfer to somebody who is very rich in South Africa or Brazil. This is where national income distributions and the data displayed in figure 2.5 become relevant.

The third condition that should govern global transfers is to preserve 'national progressivities'. Progressive transfers at the global level should not worsen national distributions. Taxation should not only be 'globally progressive' but also be sensitive to 'national progressivities'. To illustrate this point examine figure 2.6 below.



T = tax payer B = aid beneficiary.

**Figure 2.6** Globally progressive transfers

In this figure we have T (tax payer) and B (aid beneficiary) across the two distributions, with the rich country (obviously) on the right and the poor country on the left. Now a transfer from  $T_1$  to  $B_1$  does satisfy the axiom of 'global progressivity' because the person in the rich country is better-off than the beneficiary B. Yet such a transfer would also make national distributions in *both* countries worse simply because the tax would be borne by somebody who is relatively poor in the United Kingdom or France and benefits would be received by a person who is relatively well off in an African nation. Globally progressive transfer is compatible with making both national distributions (of the participant countries) more unequal. This is not desirable. We would like to ensure that we tax rich people in rich countries in favour of poor people in poor countries because only then can we hope to improve the distributions within-nations. This would probably also help reduce the opprobrium in which aid is currently held in some quarters. All in all, paying attention to 'national progressivities' requires that tax payers from the rich world that finance global transfers should indeed be rich even within their own countries, and that the beneficiaries should be poor even within their own (poor) countries – a transfer should flow from  $T_2$  to  $B_2$ .

These three principles of global transfers – 'progressivity 1', 'global progressivity', and 'national progressivities' – need to be coupled with a supranational taxation authority which would collect taxes and distribute aid. The first component of this proposal (taxation) is easy to understand, as we have already had a number of writers argue for a Tobin tax – a global tax assessed on some particularly income elastic commodities or activities. The tax would be paid by the globally (and nationally) rich. The second part of the 'equation' concerns the allocation of thus collected money, that is disbursement of aid. We have already explained the key principles which should govern it, but if we are thinking about 'global tax' we must also accept 'global aid', that is aid that flows directly to the poor individuals in poor countries without their government's intermediation. If some sovereignty is conceded by the rich countries to the new global safety net agency (due to the vesting of taxing rights in the agency), then some sovereignty must be conceded by the poor countries as well. Rather than their governments being recipients of aid, aid would go directly to citizens. The global safety net should introduce a relationship between the global authority and individuals in poor countries or poor people wherever they are.

In other words, we would like to eliminate the filter of state-to-state relationship because we know that this filter has not been very successful. This change in approach to handling global inequality is necessitated by the lessons of the past. I have already outlined the need to

adopt a global approach to global problems. In addition, we know that development approaches done in the fifties and the sixties have not been successful. We also know that structural adjustment has failed to deliver. We thus need direct transfer of purchasing power; we need to give money to people who are unemployed or people who are very poor, handicapped, sick and generally disenfranchised. Such transfers of money already take place in rich countries. We simply need to apply this on a global level. This idea dawned on me more than a decade ago when I observed the situation in Russia and the plight of Russian pensioners. Both the ethical and pragmatic approach to dealing with the problem of pensioners would have been to earmark money for pensions instead of lending to the Russian government and letting corruption suck it away. An international organization, like the one we have in mind here, could have simply used the existing infrastructure of the Russian state, pension rolls, and distributed cash grants to some 20 million Russian pensioners. And citizens would have fondly remembered receiving cash aid from the international community rather than blaming that same international community for transferring funds to corrupt leaders. The same principles could be applied today to give cash grants to (say) mothers of all kids under a certain age in a state in Nigeria or to all landless peasants in a district in India.

The approach I advocate here is based on four simple principles:

- 1 *symmetry*: global agency limits sovereignty of both rich and poor nation-states;
- 2 *grants*: transfers are pure grants but they are not charity;
- 3 *cash*: money is disbursed to individuals in cash; and
- 4 *categorical targeting*: instead of trying to implement fine-grained targeting, cash grants should be disbursed to vulnerable categories of people.

### Notes

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- 1 Both Gini and Theil are commonly used measures of inequality. The Gini coefficient ranges from 0 (all recipients have the same income) to 1 (or 100 as expressed in percentages) when only one recipient takes the entire income. The Theil Index of entropy begins at 0 (perfect equality) but does not have an upper bound. Obviously, the greater the value of each index the greater the inequality. However, Gini is more sensitive to what is happening around the mode of the distribution and Theil is more sensitive to the extremes.

- 2 A very common example mentioned is that a computer scientist working in isolation in a poor country will be less productive than if he worked in the Silicon valley.
- 3 The latter are basically also reproduced by the World Bank.
- 4 For a critique, see Milanovic (2002).
- 5 Although, as we have just seen, this is dubious too.

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