Inequality on the rise?

An assessment of current available data on income inequality, at global, international and national levels.

Background document for the WESS 2013

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December 2012
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Summary

1. Inequalities at national level are increasing in developed and developing countries, despite some exceptions in Latin America.

2. Inter-country inequalities were increasing until recently, but convergence of national mean incomes between developing and developed economies has been more evident in the last few years (before the global financial crisis in 2008).

3. International inequalities present a similar pattern than inter-country inequalities, when excluding populated countries such as China and India. The general picture of international inequalities will continue to be influenced by developments in these two countries, including in the aftermath of the global economic crisis.

4. In recent times, global inequalities have in fact increased due to the higher effect of inequalities within countries. Although national GDP per capita may have seen some convergence, inequalities within countries have increased as much.

5. There are many driving forces behind recent inequality trends that are summarized at end. Depending on how inequalities will be linked to other chapters, it will be relevant to discuss some of these driving factors in detail.

6. A last section discusses the implications of inequalities for sustainable development, which may be relevant for other chapters in the WESS.
1. Inequalities within countries, clearly on the rise:

- Income inequalities in OECD countries have been increasing in recent years in almost all countries.

In OECD countries, the Gini coefficient rose on average from 0.29 in the mid-1980s to 0.316 in the late 2000s. It rose in 17 out of the 22 OECD countries\(^1\), including in some of the already high-inequality developed countries, such as the United States and the United Kingdom, but also in some countries with traditionally low inequality, such as the Scandinavian countries (see Figure 1). Inequalities increased more substantially in Finland, Germany, Israel, Luxembourg, New Zealand, Sweden, and the United States. There are few exceptions to this general trend: in Turkey, Greece, France, Hungary, and Belgium, inequalities have either remained stable or declined.

Figure 1: Gini coefficient in OECD countries between 1980s and late 2000s

Another key measure that confirms the rising inequality in almost all OECD countries is the widening gap between the income share of the bottom and top deciles of the population. Between mid-1980s and 2008, real disposable household incomes (income after taxes and government transfers) of the top 10 per cent of the income distribution grew faster than of the bottom 10 per cent, 1.9 per cent a year comparing with 1.4 per cent a year respectively\(^2\). The income of the richest households has therefore been faring

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\(^1\) Long-term data series are available only for those 22 countries.

much better than the income of the poorest households, but also better than middle income households. 

In 2008, before the global economic crisis, the income of the richest 10 per cent of the population was 9 times higher than the poorest 10 per cent, on average across OECD countries. That gap is however considerably smaller in Scandinavian and some Eastern European countries, such as in Norway, Denmark, Slovakia and Slovenia, where the income of the richest 10 per cent is 5 times higher than the poorest 10 per cent. In contrast, the income of the richest 10 per cent is 27 times higher than the poorest 10 per cent in countries such as Mexico and Chile.

In large emerging economies, inequalities are high and have been also increasing in the past two decades.

Income inequalities have been increasing significantly in emerging economies between early 90s and 2008, reflecting the concentration of income among top earners (see Figure 2).

The Gini coefficient increased by 24 per cent in China, 16 per cent in India, and 4.5 per cent in South Africa, compared to 5.5 per cent in OECD countries on average, between early 1990s and late 2000s. Brazil is an exception to this general trend, as the Gini coefficient decreased by 9 per cent. During the same period, the ratio of the top decile to the lowest decile of real household income has also fallen considerably in Brazil: from a proportion of 79 times higher to 50 times higher.

Figure 2: Income inequalities in emerging economies


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4 Brazil, China, India, Russia, and South Africa.
Income inequality trends in large emerging economies show that strong economic growth has not benefited all segments of the population similarly. Despite important improvements in poverty reduction, particularly in China, income distribution has deteriorated in general. Household income has become more concentrated among top earners and as a consequence inequality levels increased. The trend of rising inequality is widespread in Asia, affecting 11 countries, which cover 82 per cent of the region’s population. This has been a less favourable trend when compared with other developing regions that have experienced declining inequalities, during the last decade.

In Brazil instead, as several Latin American countries, inequalities were declining during the last decade. Social programmes – targeting human capital through education and health services, as well as cash transfers – and labour improvements have played a major role in reducing income inequalities, since 2000 in particular.

Inequality levels are also particularly high in large emerging economies, especially when compared with OECD countries (see Figure 2). In Brazil and South Africa, where Gini coefficients are the highest, the gap between the rich and the poor is also significant. The income of the richest 10 per cent was respectively 50 and 47 higher than the poorest 10 per cent of the population, in the late 2000s. A similar situation is observed in Africa and in Latin America in general, which have experienced higher inequalities than other developing regions.

In China and India income inequalities are lower, but there are still higher than the OECD average level. In developing Asia as a whole, more than 12 out of 37 countries have high levels of inequality, with Gini coefficients over 0.4. Nevertheless, Gini coefficients are lower in Asia than other developing regions. However, it is important to have in mind that inequality calculations are based on per capita expenditure in Asia, while they are based on per capital income in Latin America. In the later, they tend to run higher than expenditure based inequalities.

In sum, inequalities within countries have been clearly on the rise in a majority of countries during the passed two decades until 2008. It seems that the income of top earners has increased faster widening the gap between the richer and the poorer. It is still relatively early to assess the impact of the global economic crisis, but most likely it has aggravated the distribution of income. Considering that wages and salaries have been a main driver for the rising income inequalities before the crisis, the loss of millions of jobs has clearly deteriorated the income of the middle class. In addition, many OECD countries have given priority to fiscal consolidation, increasing tax rates while cutting social spending, which reduces disposable income of poorer groups and will play negatively on the distribution of income. However, it is less clear how incomes at the top will evolve and its effect on inequalities.

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7 Ibid
8 Bolsa Familia in Brazil and Progreso/Oportunidades in Mexico.
2. World inequality: inter-country and international declining, but global inequalities on the rise

There are different methods and indicators to measure world inequality. They do not measure exactly the same type of inequality and depending on the method used inequality levels and trends will differ. In order to fully assess the current situation and its recent trends, it is important to look at several approaches.

A first approach will focus on the inequality between countries, i.e. on differences between the average per capita incomes of countries. Such inequalities can be calculated using average per capita incomes of countries un-weighted (inter-country) or weighted (international inequalities) by the population.

A second approach is to focus on inequalities between individual citizens of the world, taking into consideration the inequality between and within countries.

**Inter-country/international inequalities recently declining**

The first approach is to look at income inequality between countries to see if they are converging or diverging. This approach uses data on income per capita for each country, considering that everyone within each country receives the same average income.

The basic method is to treat all countries equally, without take into consideration their population size (inter-country inequalities).

An alternative method is to weigh country values by population (international inequalities). However, this method is also misleading, since one big country such as China or India will influence the overall convergence or divergence, hiding the reality of many other smaller economies.

Figure 3: Inter-country and international inequalities (taken from Milanovic (2010)).
Concept 1: Inter-country inequalities
Concept 2: International inequalities
There has been a general consensus that inter-country inequalities have increased between 1950 and 2000, and especially since the 1980s. In other words, mean incomes between countries have diverged, despite the considerable economic growth in Asian countries after the 1980s. In fact, after the 1980s many other developing regions faced serious economic challenges, while developed economies were growing fast. Several developing countries were facing deep debt crisis (Latin America in particular), Eastern Europe and the ex-Soviet Union experienced a decline in income, and Sub-Saharan Africa continued to lag behind.

According to recent studies\(^\text{11}\) there was a turning point after 2000: divergence between national mean incomes has stopped or even reversed. This was influenced by rapid growth in several developing and transition economies during the period 2001-2006: African countries grew around 4 per cent annually; Eastern European countries grew around 6 per cent; and Latin American countries grew around 3 per cent. However, it is worth pointing out that many countries have diverged, while others have converged.

- The trend in international inequalities has been less consensual, as different data sources reveal different results. In the World Bank-WDI report of 2006\(^\text{12}\), inequalities have been declining since early 1960s and even more abruptly after 1990s until 2000. In the WESS

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2006, international inequalities decreased only after 1980s until early 2000s, after an upward trend between 1960 and 1980. The main difference between these two perspectives on inequality trends lies on different data sources\textsuperscript{13}.

Considering that China and India account for almost half of the world population, the overall picture of international inequalities will be highly influenced by these two countries. When China is left out for instance, global inequality rises continuously until 2000, following a similar pattern than inter-country inequalities (see Figure 3). In other words, with the exception of East and South Asia, international inequalities were increasing between developing countries and developed countries\textsuperscript{14}. Finally, the divergence trend was happening between developed and developing countries, but also between developing countries.

However, after 2000, there has been a downward trend in international inequalities, even when China is not part of the equation (see Figure 3). As explained earlier for inter-country inequalities, developing countries have been growing at a faster pace than developed countries, catching up with their income level. In addition, the downward trend for international inequalities is even steeper than inter-country inequalities, mainly due to another Asian economic engine, India.

Despite the recent convergence trend between developing and developed countries, international inequalities remain historically high (see Figure 4). For instance, the GDP per capita 19-fold between 1820 and 2001 in developed countries, while the performance of the rest of the world was much more modest: the mean income of Latin America was multiplied by 8, in Asia by 7, and in Africa only by 3.5\textsuperscript{15}. It is also worth mentioning that international inequalities are much higher than previously estimated when the new PPPs are taken into consideration\textsuperscript{16}.

Figure 4: National, international and global inequalities in a historical perspective

\textsuperscript{13} In the World Development Report 2006, Gini coefficients are calculated based on disposable income data from household surveys, while in the WESS 2006, Theil coefficients were calculated based on GDP per capita data from Maddison 2001.
\textsuperscript{15} Ibid.
\textsuperscript{16} There were important revisions in PPP exchanges rates in 2005, particularly for China and India. The recalculations of international inequalities based on the new PPPs revealed higher Gini coefficients than previously thought. Milanovic (2010).
In addition, the convergence trend has been quite short in historical terms. It is still difficult to assess how inequalities will evolve after 2008. On the one hand, the global crisis may affect the rapid convergence momentum of the last decade. On the other hand, developing countries may continue to grow faster than developed countries. Ultimately, the effect of the global crisis on international inequalities will depend on the expansion rate of GDP per capita in China and India: if it is not higher than developed economies, international inequalities may increase.

- **Global inequality on the rise and much higher than national inequalities**

Global inequality has been the subject of intense debate, as different data sources show different levels and trends. A main difference in inequality estimations occurs when using household surveys\(^{17}\) instead of GDP data compiled by Maddison\(^{18}\), as a source of income data. The methodology developed by Milanovic\(^{19}\) seems so far the most accurate to assess global inequalities. However, the source of income data is based on household surveys, which only exist for recent years for a large number of countries (since late 1980s).

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Between 1988 and 2005, global inequality shows an upward trend, contradicting many other studies\(^{20}\) that had observed a downward trend during the same period\(^{21}\). The Gini coefficient of global income inequality increased from 0.68 in 1988 to 0.70 in 2005. However, within this period, Gini estimates do not follow a linear pattern: in particular, there is a slight decrease between 1993 and 2000\(^{22}\).

The new record in global inequality in 2005, with a Gini coefficient above 0.7\(^{23}\), clearly indicates that global inequalities are larger than inequalities within countries. In addition, it is worth underlining that in the same year, the top decile of the global population controlled more than 55 per cent of global income, up from 51.5 per cent in 1988.


\(^{21}\) The contradictory observations between Milanovic’s study and others are mainly explained by a better estimation of national inequalities. Household surveys allow for a better estimation of urban-rural inequalities in China and India, which has major repercussions on the final results for within country and global inequalities.

\(^{22}\) But the mean log deviation for the world would have increased without China and India, consistent with the consensus in the literature that international inequality declined in this period thanks largely to these two countries.

\(^{23}\) Taking into account the new PPPs. The latest estimate of domestic price levels provided by the International Comparaison Program in 2008 revealed higher domestic price levels for several countries. An increase in price levels reduces income levels measured in PPPs and GDP numbers including for China and India, which influences the overall picture. This has led to new estimates for poverty headcount and inequality. Inequality levels are higher than what had been published in the WDR 2006.
In sum, most of the global income inequality after 1929 (see Figure 4) can be explained by the “between-country” inequality component: the share of that component represented 2/3 of global inequality in 2000. This reflects the fact that average national incomes per capita became increasingly unequal throughout the twentieth century. Therefore, inequality between individual citizens of the world is mainly determined by their country of residence. However, the share of the “within-country” component has been on the rise, confirming the significant rise of national inequalities in both developed and developing countries.

3. Drives of recent trends in income inequality:

There are many factors contributing to recent rising inequalities: some are related to the globalization process, while others are more directly determined by new market forces and national policies. [In addition, there are underlying factors related to unequal opportunities (ex-ante factors), which are not discussed for the moment.]

At global level:
- Globalization is often underlined as a main driver for the growing income inequality. However, there are divergent opinions on the role played by trade integration on inequalities [which may need deeper analysis, in case that discussion is to be included in the WESS 2013]. On the one hand, the economic globalization has contributed to strong economic growth in many developing countries, reducing inequality between countries and poverty levels at national level, due to higher demand for unskilled workers. On the other hand, trade integration (liberalization) has benefited disproportionately workers from specific industries, increasing inter-industries wage inequality, but also higher skilled workers, affecting inter-occupational wage inequalities. This has been observed in both developed and developing countries. However, this will also depend on national employment protection legislations.

- Although financial integration can potentially help the poor in accessing finance, it has been also argued that the financial dimension of the globalization has played an important role in widening the gap between individual citizens of the world. Financial sectors in developed countries grew rapidly, particularly since 1990s, but few people have enjoyed the income gains, as the winning sectors did not generate many jobs. In addition, in the 2000s when excessive and risky mortgage lending took place in the US, but also in other OECD countries, a limited number of persons benefited from very high returns.

- Productivity gains from technological progress (which can also be associated to globalization, since it is related to production off-shoring) benefited disproportionately high-skilled and high-educated workers (as well as capital income), influencing income distribution. This is evident in both developing countries, particularly in Asia, and developed countries. In addition, capital income share increased faster than labour

27 Idem.
income share. In developing Asia for instance, the abundance of labour relative to capital, has contributed to the declining labour income share. Since capital is less equally distributed, this has contributed to rising inequality29.

At national level:
- Regulatory reforms in labour markets towards higher flexibility are also considered a main driver of household income inequality. In OECD countries30, new regulations favoured the increase of part-time jobs and a decline in collective-bargaining arrangements, which in part may have increased labour opportunities. However these reforms are identified as main labour market changes contributing to the deterioration of income distribution. For instance, minimum wages declined in relatively to median wages in many countries, during the last two decades. In addition, top earners have in general benefited from higher compensations in labour markets [in the financial sector for example]. By contrast, in Brazil for instance, a higher minimum wage has had a considerable impact on inequality reduction. According to some scholars, it accounted for 36 per cent of the decline in inequality between 2001 and 200531.

- In addition to labour market regulations, changes in tax and transfer systems have not been able to compensate for the higher market income inequality. In Brazil, instead, even if higher income from work explains 70 per cent of the reduction in inequality between 2001 and 2008, social programmes are considered the second most important factor32. The conditional cash transfer programme to poor households – Bolsa Familia – for instance, and other social programmes have increased during the passed decade.

- In emerging economies, the segmentation of labour markets is still an important factor contributing to high inequalities. Workers in informal labour markets have low paid jobs and are not included in social protection schemes. That may explain in part different income inequality trends in Brazil and other countries such as China, India and South Africa. In this last group of countries, informal employment has increased, while it decreased in Brazil. However the relationship between informality and inequality is not straight forward and it is argued that the shrinking informal sector in Brazil is not per se responsible for inequality reduction. Education could be more relevant in explaining income inequality33. In Brazil, several authors identified the reduction in educational inequality and a drop in returns to education, as major factors of inequality reduction during the last decade34.

- Demographic changes: a considerable body of research has demonstrated that growing income inequalities are also related to changes in family structures35. There are more single-headed households with and without children today, which have to face higher expense levels per capita and less saving capacity. The ageing population has also been

29 Idem.
35 Idem.
identified as a driver for inequality, in particular in OECD countries. Older persons have a lower disposable income than the working age population. And since the share of the older population is increasing, inequalities are rising. However, these factors may not contribute to inequalities, as much as labour market conditions.

4. Income inequality implications for sustainable development (for the rest of the report):

Why world and national inequalities matter for sustainable development?

1) There has been an important debate about the impact of rising inequalities on national economic instabilities that led to the global economic crisis in 2008. Higher-income groups have increased their share of the overall income, in detriment of lower income groups. Since higher-income groups spend less proportionally than lower income groups, the overall aggregate demand declined. Low-interest rate policies were introduced to spur consumption, which contributed to higher household debt beyond sustainable levels. At the same time, top earners/investors have taken advantage of high returns, contributing to asset-price bubbles.

2) Absolute income may matter less than relative income for well being and sustainable consumption. Some scholars have considered that global inequalities are less relevant, considering that the priority is poverty reduction. However theories of relative deprivation underline the importance of psychological factors in the appreciation of one’s wellbeing. In that case, inequality levels, including at global level, might be an important issue for sustainable development, and sustainable consumption in particular. Individuals across the world can compare their living standards and imitate consumption patterns, which are not always sustainable.

3) The relation between unequal societies and nutrition is not consensual. However, there has been some evidence that the proportion of the population with obesity is higher in developed countries with higher income inequality. It is not totally clear what explains this relation, but the psychosocial effects of social position or relative income may contribute to behavioural and/or physiological processes leading to obesity. In that case, public policies promoting greater equality may contribute to reducing and preventing obesity, and complement policies designed to promote good nutrition and physical activity at individual level.

4) Wide economic gaps between countries may prevent poorer countries from taking full advantage of the globalization process, as they will not utilize their full economic potential. This is a loss for the world economy, while harming national economic growth in developing countries, as well as their efforts to eradicate poverty and other sustainable development goals.

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Progress in achieving the Millennium Development Goals will also be detracted by high inequalities within countries; in particular, inequalities between urban and rural areas.

5) Economic inequalities determine political influence, both at national and global level. The economic power and political tend to be reinforcing. In this sense, the rules of governing global markets are likely to be less advantageous for developing countries, as they tend to have less weight in the negotiation processes. This has been an important challenge already identified in 2002 in the Monterrey Consensus, which has not progressed much since then.

At national and local level, income inequalities may prevent lower income groups to influence political decisions, affecting social cohesion. In recent years, social unrest has been on the rise in many countries, in particular where income, social and political inequalities are higher. In addition, violence tends to rise in highly unequal societies.

6) Widening income inequalities increases migratory pressures, since people can increase their income by changing location. This is an important issue at global level, but also at national/local level, since urbanization has been accelerating at a fast pace, increasing the number of people living in informal settlements. This will have implications for sustainable urbanization and rural development.

7) There are also intrinsic reasons to tackle inequality at global and national level, in line with human rights principles. Concerns for equity, at national and global level, have been more evident in recent years. There is a sense of unfairness that is increasing, including the context of the recent crisis that may determine how societies may develop in the future.

References:


