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Income inequality and the Indian case

A general and country-specific analysis

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Introduction

Income inequality has been the centre of attention of the global debate on inequality since the last century and it has become more and more important as decades went by. Today more than ever, income inequality is a critical issue. The South of the world is on its way of catching up with the North and, consequently, income inequality between countries is shrinking. On the other side, though, income inequality within countries is increasing, because globalization and technology are pushing more and more shares of the population at the margins of the society. As a matter of fact, global inequality is going down just because the first trend outpaces the second, but we can't expect that this will continue for a long time still. In many developing and underdeveloped countries, the gap between the bottom and the top of the income distribution is enlarging. Keeping in mind that this is not consistent with the economic theory, the topic will be the main issue of this paper.

I will start the first chapter by giving a broad definition of inequality and by making the distinction between economic inequality and social inequality; while the former refers to income and wealth distribution, the latter focuses on distribution and access to resources. Then I will explain the two main ways of looking at inequality: either outcomes or opportunities, in an attempt to underline that policies must address both in order to be efficient. The distinction has led to different approaches, each with different focal points. I chose four to analyse, two for inequality of outcomes and two for inequality of opportunities. In particular, early development approaches rest on the well known Kuznets inverted U-curve development hypothesis, which led to believe that a trade-off existed between income inequality and economic growth. After having asserted that this idea was not totally true, today's line of thinking focuses mainly on the relationship between inequality, growth and poverty, believing that in order to reduce income disparities, growth must lift up especially the poorest shares of the population. This is the inclusive growth approach. As for inequality of opportunities, the capability approach states that income inequality is not alone sufficient to explain different levels in wealth and standards of life and that the same income doesn't necessarily translates into equal opportunities for everybody. Other factors need to be taken into account, peoples' capabilities above all. Lastly, the equity approach mainly tries to erase those horizontal inequalities (race, gender ecc…) that constantly impede some groups and individuals to achieve superior opportunities, because of predetermined background circumstances.

In the second chapter I will give some insights about recent trends of income inequality together with the most efficient methods to measure it. In particular, I will explain in detail how the Gini coefficient works, before analysing inequality trends both across and within countries. After this, it should be clear how income inequality between countries is decreasing, while income inequality within countries is increasing. The third paragraph of the chapter will be dedicated to the functional distribution of income, meaning the way in which income is distributed between capital and labour. Here, the trend is toward a lower share for labour at the advantage of capital. After this, I will reserve a section to fiscal redistribution and the way in which it can be used by governments to dampen the effects of income inequality, before explaining the concept of horizontal inequalities and how they systematically prevent certain groups to advance in life.

In reality, labour market composition and labour policies are not the only causes of economic differences, but there are other fields of disparities that, if not managed properly, significantly contribute to widen income inequality. In particular, we can identify four different areas of interest: gender, education and health, technological change and the rural-urban divide. This will be the subject of the third chapter. The gender gap will be analysed in terms of education and health first, and just then there will be an overview of female's condition in the labour market. What arises from this study is that in spite of progresses in education, women systematically earn lower salaries respect to men, given also the job segregation that is going on in the global labour market, which is confining women in the low paid branches of the service sector. Education increases the amount of an individual's skills, therefore raising productivity once inserted in the labour market and boosting economic growth. That's why better human capital translates into higher salaries for more educated workers. Worldwide, many countries are now able to provide universal basic education, but in the developing world significant shares of the population and especially the most disadvantaged households still lack this fundamental right. This is concerning if we also consider that improvements in secondary and tertiary education are taking place at the advantage of the wealthier, creating even more inequality. Education is more important today than it has ever been, because it makes the difference in the ability to adapt to technological change or not. Technology (ICTs and automation especially) is identified as skill biased when it requires skilled workers in order to be used in the production. Technological advancements are generating two main effects. First, salaries of high skilled workers have been increasing steadily respect to those of low skilled workers. Second, middle skilled occupations are now being performed by machines or by workers with higher skills. This has not only increased the wage of the latter, but has also driven down the earnings of both middle and low skilled workers. If countries don't find a way to provide everybody with knowledge and access to technology, inequalities will continue to rise. Lastly, the chapter will be closed with an analysis of the rural-urban divide. Urbanization is growing rapidly and this is exacerbating inequalities. Cities inhabitants often benefit from more resources and investments for education, health care, sanitation. But there is also a strong division of labour between rural and urban areas: while the majority of the rural population is still employed in agriculture, the industrial sector and, especially today, the service sector are mainly found within big cities. Therefore, there is a strong income inequality between the two areas. Moreover, disparities are higher in urban areas respect to rural areas, indicating a strong unequal distribution of resources in the former. Indicative in this sense is the growth of the population living in slums, as we will see.

The focus of this whole work will be found in chapters four and five. In chapter four I will present the most known theory of international trade, the Hecksher-Ohlin and Stolper-Samuelson models. While the model states that an higher degree of trade openness is expected to decrease the Gini coefficient in developing countries, I will actually try to demonstrate that this is not what is happening today at the global level. India is the practical example I will bring in support of my confutation in chapter five. Since it's opening up to international trade, the country has experienced an alarming upsurge in inequality. The analysis will reveal that the phenomenon of the "missing middle" is one of the main reasons behind the dualism of the Indian labour market, which caused the marginalisation of the manufacturing sector and the growing importance of the service sector in the economy, with a sharp hike in top incomes. Moreover, there are other factors embedded in the society that continue to negatively affect inequality in the country. For example, women's conditions are still dramatic because of strong patriarchal customs and traditions and the caste system on which the Indian society is built excludes significant share of the population from both societal and economic life. Going deeper in the field of non economic inequalities, I will scatter trough the trends involving technological change, education and health and the rural-urban divide (with a brief overlook to Indian slums), in order to understand how they all contribute to this high income inequality and where the country is going in terms of fighting it.

Finally, the last chapter will be dedicated to a general set of policies that developing countries can apply in order to reduce disparities.

Chapter I. THE CONCEPT OF INEQUALITY

The concept of inequality is quite difficult to define, because it involves a number of elements, mainly differences in the level of income, of consumption, in the access to health care, in the level of education and in the life expectancy. In particular, there is inequality if there are differences in the level of welfare derived from these factors.

Furthermore, inequality is the result of the interconnection between economic inequality, which involves income and economic wealth, and social inequality, which refers to the unequal distribution or access to the resources available to a particular group or society.

The discussion on inequality has led to two main views: one that focuses on disparities in the level of income or health and educational attainment, among others (inequality of outcomes), one that focus on the unequal access to markets (labour market…) or public social services (education…), among others (inequality of opportunities). Even if it's unclear what causes what, the two views are deeply interconnected and they seem to reinforce each other. Inequality of outcomes states that people's initial income matters when it comes to the opportunity of being successful in life and if this is true, than income inequalities should be levelled in order to ensure that everybody gets equal starting conditions. Only then equal opportunities could be achieved. The second view underlines how the background state of things (on which people have absolutely no control) significantly influences the possibility of some individuals and groups of achieving superior opportunities. Determinant factors are age, sex, race, disability, urban or rural location, ethnicity, origin, religion, economic status and other status. These differences form the so called horizontal inequality, which is inequality among different groups of the population. In this prospect, inequality of opportunities generates inequality of outcomes. "Specifically, the inequality of opportunity is that part of the inequality of outcomes (such as income) attributed to differences in individual circumstances such as race, gender and ethnicity. The rest is attributed to differences in 'talent and effort'."[1]

The national dimension of development policies plays a key role in this scenario: the right mix of policies must suit the peculiarity of each specific country, tackling both inequality of outcomes and inequality of opportunities.

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[1] Humanity Divided: confronting inequality in developing countries, United Nations Development Programme, United Nations report, United Nations, November 2013, p.16

1. **INEQUALITY OF OUTCOMES**

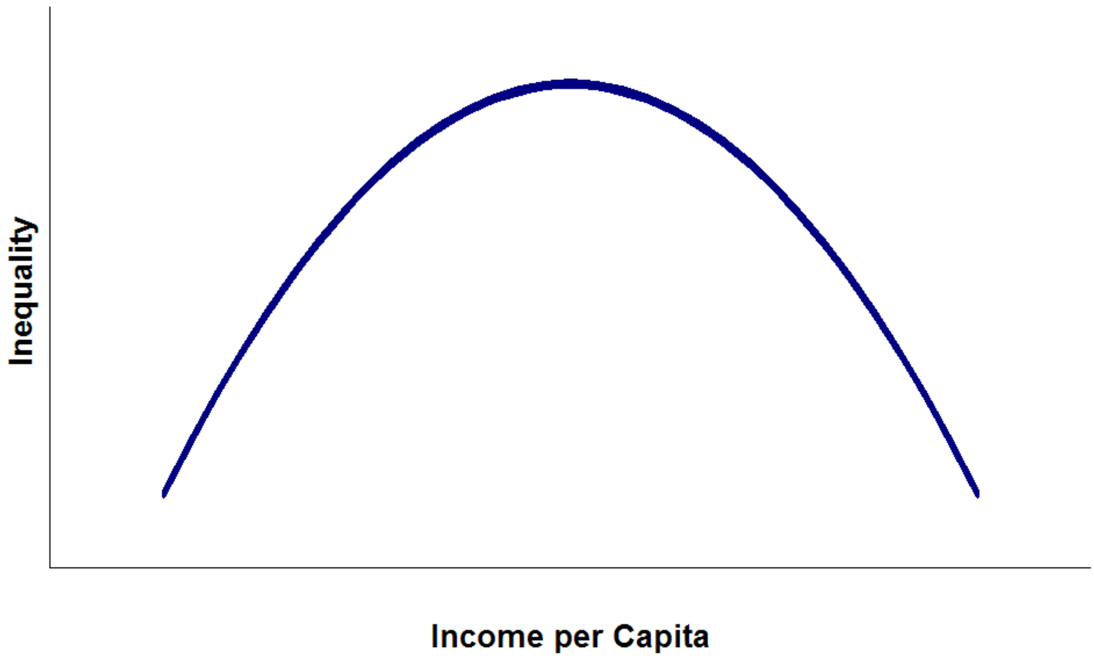
1.1. EARLY DEVELOPMENT APPROACHES

The discussion around income inequality started to flourish during the 1950s of the last century. Worth mentioning is in particular Kuznets with his inverted U-curve hypothesis (1955). The hypothesis rested on two conjectures:

- Very different incomes between rural agriculture and urban industry labour;
- Higher inequality within the urban industry than within rural agriculture.

The importance of industry, which was the sector with greater inter-sectorial disparities, would have likely raised and, as a consequence, also the income gap between the two sectors of the economy would have, given that workers moved from the labour-surplus sector (agriculture) to the labour-demanding sector (industry). According to Kuznets, inequality was to take on a reversed U-curve, which represented three stages of development (Figure 1): during the first stage of industrialization and urbanization of the society, the GDP per capita rises and so does inequality; while the country keeps on the path to development, it enters the second stage, with education and social protection extended to an always larger share of the population; lastly, in the third stage income per capita starts to increase again, but inequality decreases, thanks especially to more political power of the lower-income class.

Figure 1: The Kuznets curve



Source: www.google.com

Kuznets believed that the reason behind the fall of inequalities during the last stage of development was due to the growth of the economy, the earning of bargain power of the lower income groups and the fact that they became more organised, thanks to the integration in the urban society. “It was this social transformation that was at the basis for a trend break in the income distribution of a country.”[2]

Kuznets derived his conclusions after observing the rising and falling of inequalities in the United Kingdom and in the United States during the XIX century. In the US, in particular, the richest 10 per cent of the population owned 50 per cent of the total assets of the country in 1770; this percentage raised to 70-80 per cent at the end of the XIX century, before falling again to 50 per cent in 1970. It has also been observed that the same trend had been going on in all the Western countries. Unfortunately, recent studies conducted in France and in the US have found evidence that this decreasing inequality in the XX century has nothing to do with economic growth. It is actually related to the shocks that between 1915 and 1945 hit the owners of assets, like for example the two World Wars and inflation, and to new fiscal institutions, in particular a progressive tax on income (1914) and on successions (1901).

The Kuznets curve, though, inspired the main topic of the ideas going on in that period. It was believed that it existed a trade-off between economic growth and income distribution, at least in the first stages of development, and the focus of these early approaches was exactly this relationship. As a result, development policies had to point towards economic growth and, particularly, they had to impact on the structure of growth, in order to change it.

These theories started to be questioned after the ascertainment that inequality had started to increase again during the Eighties. Many studies found evidence that growth had no effect on income inequality and different development paths started to be seen has the cause of the spread of inequality in many countries. The fact that in different countries inequality rose in different periods (during rapid growth or during depression, for example), drove the attention to the peculiarities of these countries. It also started to be believed that increasing inequality would off-set the effects of economic growth.

All of this said, a truthful point remains. There may not be a trade-off between income inequality and economic growth, but it is undeniable that the two are linked.

[2] Humanity Divided: confronting inequality in developing countries, United Nations Development Programme, United Nations report, United Nations, November 2013, p.19

That's why policies need to change the structure of growth in order to tackle income inequality and make sure that always more population can benefit from the overall advancement of the economy.

1.2. INCLUSIVE GROWTH

Today's thinking is quite different and it rests on the interconnection between inequality, growth and poverty. Inclusive growth can be defined as "growth that is accompanied by lower income inequality, so that the increment of income accrues disproportionately to those with lower incomes"[3]. This view point is mainly concerned with ensuring the access to unbalanced benefits of growth to a bigger share of the population. In order to reduce income disparities, growth and equity tools must be used and this poses the question of which policy mix to adopt, considering that inequality is linked to two other concepts: growth and poverty.

We said that the early development approaches state that development policies must change the structure of growth in order to decrease inequality and this remains true even today, where it is fundamental to ensure that the income of the poorest increases and, at the same time, that countries follow a strategy of long-term growth. Institutions also play a key role. Plus, reducing inequality may also have important consequences on poverty, with some measures being more effective than others (increasing the lowest incomes would have the highest effect). Then, the focus must be on "growth with as much inclusiveness of the poorest as possible."[4]

2. INEQUALITY OF OPPORTUNITIES

2.1. CAPABILITY APPROACH

> "The problem of concentrating on inequality of incomes as the primary focus of attention is that the extent of real inequality of opportunities that people face cannot be deduced from the magnitude of inequality of incomes, since what we can or cannot do, can or cannot achieve, do not depend just on our incomes but also on a variety of physical and social characteristics that affect our lives and make us what we are."[5]

[3] Humanity Divided: confronting inequality in developing countries, United Nations Development Programme, United Nations report, United Nations, November 2013, p.23

[4] Humanity Divided: confronting inequality in developing countries, United Nations Development Programme, United Nations report, United Nations, November 2013, p.24

[5] Amartya Sen, Inequality Reexamined, 1992, p.28

During the 1970s, it started to be believed that development couldn't just be shrank to reducing income inequality and enhancing growth. Other factors mattered, capabilities, in particular. Capabilities didn't just cover people's personal abilities, what they were able to do, but also the freedom of conducting the life they wanted, to choose one kind of life over another. That's why what really concerned the human capability approach was the enrichment of people's quality of life through development.

Income inequality wasn't enough to explain differences in standards of life, because the link between income and freedom depended on circumstances on which, most of the time, individuals don't have control on:

- Personal heterogeneities: physical characteristics that make people's needs different, like age, gender and disabilities;
- Environmental diversities: climactic conditions can trifling a certain level of income;
- Variations in social climate: social conditions (public health care, pulic educational systems, percentage of crimes…) influence people's functionings (what they value doing or being);
- Differences in relational perspectives: material requirements linked to certain behaviour vary between communities, according to uses and customs (certain type of clothing to appear in a decent manner in public…);
- Distribution within the family: the household income impacts on individual achievements.

In this way, the theory underlines that the same level of income doesn't necessarily translate into equal capacity for everybody. That's why this set of conditions should be balanced in order for everyone to have the possibility to pursue the life they value the most and to achieve their functionings. It is true that reducing income inequalities is not sufficient to ensure equal opportunities, but it is also true that high income inequality can prevent people's to access opportunities to improve their lives.

2.2. EQUITY APPROACH

The equity approach was inspired by the human capabilities approach and it rests on the attempt to erase disadvantages from the background conditions on which people have no control, but that significantly design their actions and outcomes. Some categories constantly faced inferior economic, social and political opportunities respect to others. So, equity embedded both equal opportunities and avoidance of poverty in outcomes. The first principle referred in particular to the idea that a person's accomplishments should be a consequence of its own work and capabilities, without any interference of predetermined conditions such as race, gender, family's background and so on; the second wanted to avoid the impoverishment in outcomes, especially concerning health, education and consumption.

Social, economic and political inequalities propagate throughout time, so that future generations will end up inheriting previous disparities. These are the so called inequality traps, that have negative effects on growth and development. First of all, inequality traps alter the dynamics of the market, causing market failures. For example, some people may not able to access credit because of their social origin, in spite of the fact that they own the skills and the brains. Furthermore, governments and society are organised according to the distribution of power and influence. Thus, the most powerful and influential could trick institutions into preserving their own interests, discouraging those at the bottom of the line to actively participate in the economy (for example, the poorest could have no incentives in investing), generating even more inequality.

In this optic, policies had to tackle three main fields: human capital, with more investments; justice, land and infrastructures, by giving access to more and more shares of the population; markets, by ensuring fair play. Investing in human capital would bring benefits to the economy, both in terms of productivity and social cohesion; eliminating the barriers that blocked some groups to benefit from capital, better jobs and market products, and financial services was fundamental to build a more egalitarian society.

Important in the equity approach was the concept of absolute deprivation of outcomes. The result of this view was that communities had to protect the share of their population who fell under an established threshold; in other words, the most vulnerable people inside the society. The problem rested on where to set this threshold. In fact, the percentage of poor (absolute deprived) changed according to where the line was drawn. For example, the absolute number of poor got from 1.4 billion in 1981 to 0.97 billion in 2004, if the threshold is US$1 per day. But, if the threshold is US$2 per day, then the absolute number of poor went up in every country, with the exception of those in East Asia.

Modern studies have also focused on the role of discrimination and prejudice, in order to understand group-based inequality, such as between ethnic and racial groups. The social stratification theory states that prejudice is hidden in group status. When the submissive groups start asking for more rights, the dominant group feels threatened and prejudice becomes real. This underlines the central role of relative power: the most powerful group can shape ideology, norms and even social institutions in order to convince others of their superior role.

Other studies also pin the gender division of labour on social stratification (social and economic relationships classified in hierarchical ways), given the differences between men and women. Even though gender stratification varies according to the level of women's economic power, in many countries women aren't allowed to perform activities that generate resources, clearly favouring men.

It seems clear after examining all these theories, how outcomes and opportunities are closely interconnected. That's why they can't be examined separately, but a true inequality-reduction policy must get a grip on both. Furthermore, to reduce inequality is also crucial to identify the share of the population, the groups, the segments that would benefit more from an equity increase. In the early stages of development, the focus had been on the distribution of income between labour and capital, while inclusive growth has a particular attention for the poorest. Inequality of opportunities approaches have mainly posed their attention to the social and background conditions that perpetuate inequality through time and space, including racial and gender disparities. In conclusion, all elements must be put together in order to efficiently work towards equality.

Chapter II. MEASURES AND TRENDS OF INCOME INEQUALITY

Income inequality is a measure of the distribution of income across households or individuals in an economy. Different units can be taken into account to explain this distribution:

1. Household income distribution, which is the distribution of income across households within the economy; it can be further split up into:
   a) Primary income distribution: it's the distribution of household income before taxes and subsidies;
   b) Secondary income distribution: it's the distribution of household income after taxes and addition of transfer payments;
   c) Tertiary income distribution: it's the distribution of household income that takes into account benefits from public expenditure, after taxes and subsidies;
2. Functional income distribution, which is the distribution of income between the factors of production (labour, capital and land).

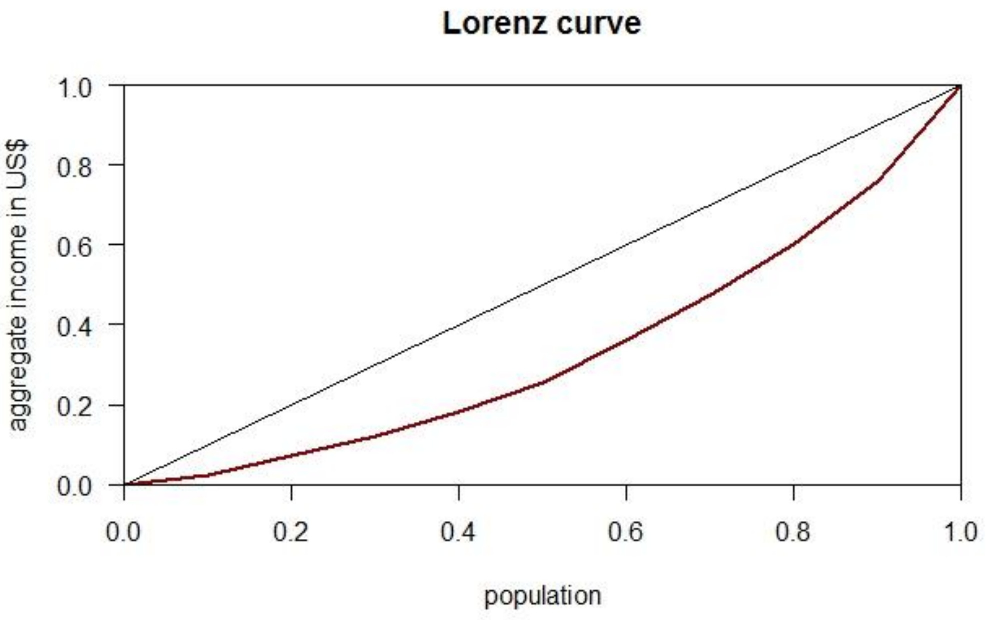
Many ways to compute income inequality have been developed, but there are two main ones. The first method divides the population into groups, in order to compute a mean income or the level of wealth for each one. It uses deciles: the first decile represents the 10 per cent poorest households, the second decile represents the next 10 per cent and so on, until the last 10 per cent is reached, which represents the richest households. According to this mechanism, it is also useful to employ centiles, in order to identify, for example, the richest 1 per cent of the population. The second indicator is the so called Gini index (or Gini coefficient), which usually accounts for income inequality within countries, but that can also be used to measure income inequality at the global level. The Gini index has been developed in 1912 by Corrado Gini and uses percentiles in order to understand the distribution of income in a population. The range is between 0 (or 0 per cent) and 1 (or 100 per cent), where 0 stands for perfect equality and 1 for perfect inequality. This simply means that in a country with Gini equal to 0 everyone earns the same income, while in a country with Gini of 1 one person earns all the income and the rest of the population gets nothing. It is important to underline that, for how useful the Gini coefficient is, it is not an absolute measure of inequality. In fact, two countries with very different GDP per capita can have close (or even the same) level of Gini, if income is distributed inside the two countries in a similar way.

According to the OECD, the United States and Turkey both had Gini coefficients of 0.39-0.4 in 2016 (using 2010 dollar terms), even though US's GDP per person was more than double of Turkey's. The Gini coefficient is represented using the Lorenz Curve, which is plotted in a graph in which the horizontal axis represents the share of the population (in percentage) and the vertical axis represents the cumulative income (in percentage). Thanks to this representation we can know the exact percentage of income earned by a specific part of the population and we can derive the measure of inequality. The Gini is simply the difference between the area below the line of perfect equality and the area below the Lorenz curve, all divided by the area below the line of perfect equality. In other words, the more the Lorenz curve gets away from the line of perfect equality, the more unequal is the country under consideration.

Let's make a practical example. Suppose that country A's population has been divided into deciles and that we know the amount of income earned by each one, as follows:

Decile	**D1**	**D2**	**D3**	**D4**	**D5**	**D6**	**D7**	**D8**	**D9**	**D10**
US$ per year	12	23	25	32	35	54	57	63	80	120

Therefore, the Gini coefficient of the distribution of income in country A is more or less 0,33 (R self-estimate) and the Loren Curve is presented below:

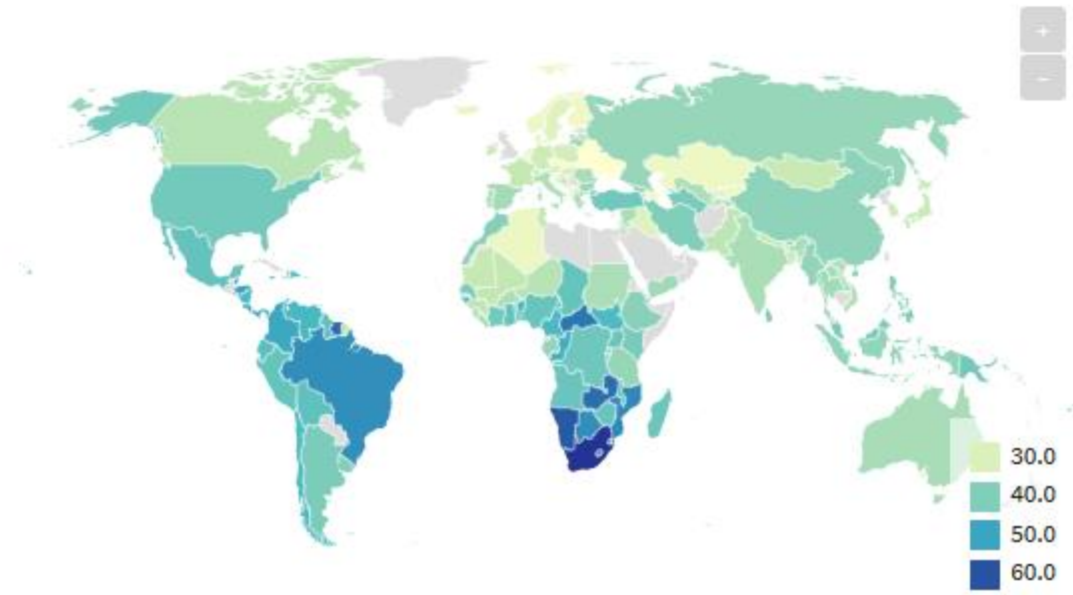


Source: R (self-estimate)

The black line is the so called line of perfect equality, while the dark red line is the Lorenz Curve. From the graph, we can for example understand that the 40 per cent of the population earns less than 20 per cent of the income of the country, or that 80 per cent of the population earns more or less 60 per cent of it.

The Gini coefficient by country at the world level is shown in Figure 2. Darkest colours signal higher coefficients, and vice versa. It’s important to keep in mind that the estimations refer to the most recent Gini index, which vary from country to country.

Figure 2: Gini index by country



Source: Investopedia (2020)

Note: the grey areas signal lack of data

Income inequality is affected by both variations in income inequality across and within countries, which have shown different trends recently: income inequality between countries has been declining (even though it remains considerably high), while income inequality within countries has continued to increase. It follows that within countries inequality is today the main source of inequality to consider.

1. ACROSS COUNTRIES

When analysing income inequality across countries, we must distinguish between two dimensions: relative and absolute. For example, consider two people living in country A in 1987: one earns 1US$ a day, the other 10US$ a day. Country A experiences a rapid growth so that, in 2015, the first person earns 8US$ per day and the other earns 80US$ per day. The relative income growth is the same, but the absolute growth has gone up.

So, measuring relative income means comparing income in relation with other members of society. In relative terms, income inequality between nations is falling down. After a period of growing disparities, with a Gini index of international inequality (calculated using population-weighted national incomes per capita) of 63 in 1980, mean incomes are converging at the global level, with a Gini coefficient of 53 in 2010. This decline can be attributed to the rapid growth of the Asian countries. Also, it is important to adjust the GDP for the weight of the population, in order to have truthful information about the current state of things.

In spite of this, absolute income inequality, which measures differences in income in money terms, still remains high. Low income countries are growing at a faster pace than high income countries, but the gap in the mean GDP per capita is growing, too (about $27.600 in 1990 against over $42.800 in 2018). "The average income of people living in the European Union is 11 times higher than that of people in sub-Saharan Africa; the income of people in Northern America is 16 times higher than that of sub-Saharan Africans."[6] When people think about well-being and life conditions, inequality is perceived in absolute terms and that's why the distinction between absolute and relative income inequality is so important.

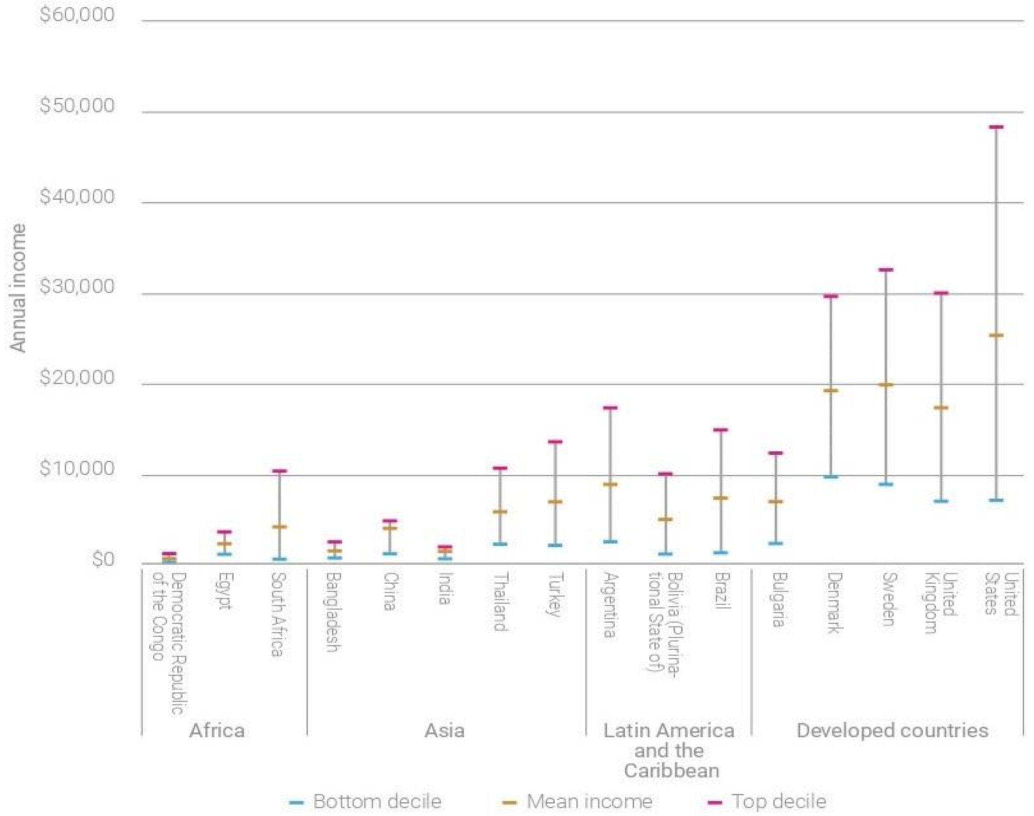
What is also important is to look at the composition of the world population in terms of income, which is substantially bottom, middle and top classes. While top classes have seen their income share increasing fast, bottom and middle classes have experienced a very slow increase. Interesting to notice that according to UNDP calculations based on Solt data, in 2009 upper middle income countries were the only ones for which the Gini index decreased between the early 1990s and the late 2000s. A study of the World Inequality Lab conducted in 2017 has found out that income share of the top 1 per cent of the global population will decrease only if within

[6] World Social Report 2020: Inequality in a rapidly changing world, United Nations Department of Social and Economic Affairs, World Social Report 2020, 2020, p.22; calculations are based on gross national income (GNI) per capita, calculated using purchasing power parity (PPP) exchange rates at constant 2011 international dollars from the World Bank World Development Indicators database, available at: http://databank.worldbank.org/data/source/world-development-indicators.

country inequality starts to decline. If nothing changes, this tiny part of the population will increase its share of income from 20 per cent in 2016 to 24 per cent in 2050, while those at the bottom 50 per cent will enjoy unchanged shares of income.

Plus, evidence shows that huge differences can be found among people at the bottom and at the top of the income distribution across countries and that people at the bottom may be even poorer in countries with high GDP per capita. In the United States, the bottom decile is poorer than the bottom decile of Denmark, Sweden and United Kingdom, despite a higher mean income in the US (Figure 3).

Figure 3: mean incomes, top and bottom income deciles of selected countries in 2015



Source: United Nations, World Social Report 2020: Inequality in a rapidly changing world

2. WITHIN COUNTRIES

During the last three decades, income inequality has increased in both developed and developing countries, but the trends have not been linear. On the contrary, there have been periods of growing inequality and periods of decreasing inequality, which have also differed across countries.

Between the end of the XX century and the beginning of the XXI century, the only world regions that experienced a decrease in the household income inequality (as measured by the Gini coefficient) were Latin America and the Caribbean and Africa. In Latin America, that still remains the region with the highest disparities, this decline was due especially to Argentina, Brazil (which traditionally has endured very high inequalities) and Mexico. In Africa, income inequality decreased in many countries, but in South Africa inequalities continued to rise since the apartheid and in 2015 it was the country with the highest Gini. The high unemployment and the polarization of the labour force, with large gaps in wages, basically offset the economic growth and the introduction of social assistance programmes on a larger scale.

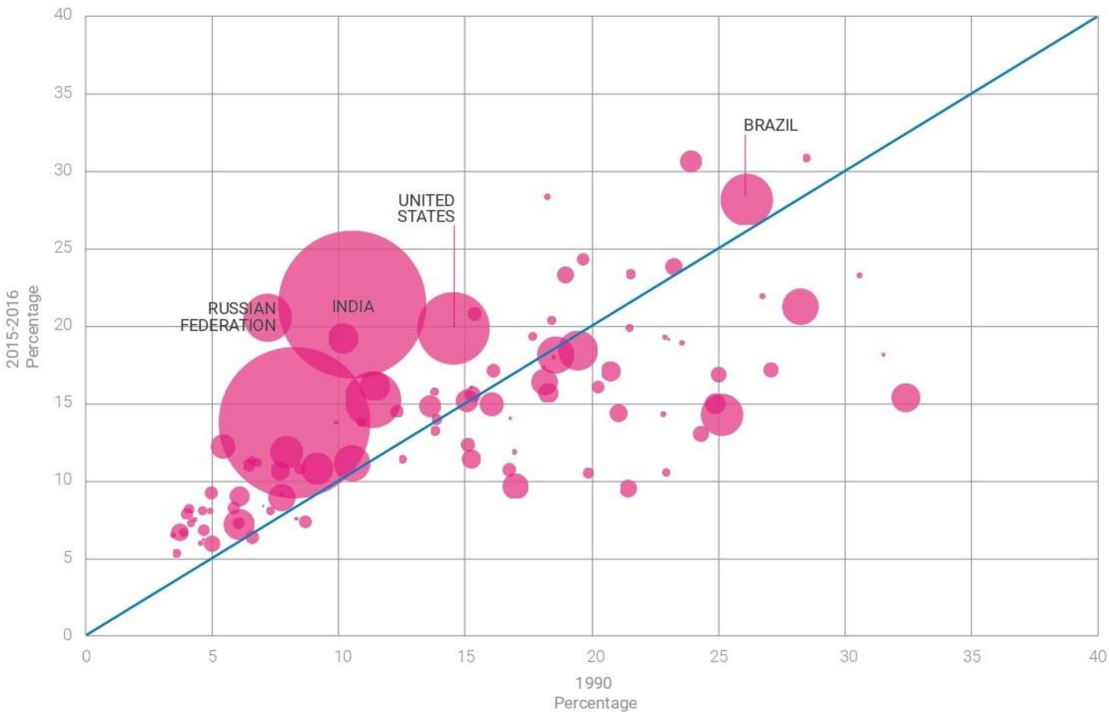
Household income inequality has gone up in many developed countries as well, like OECD countries, in most European transaction economies and in some Asian countries. China and India, which together host the majority of the world population, have experienced a severe growth in inequality, a trend that is consistent with what has been going on in the rest of the world, where the most affected where exactly the most populous countries. China, in particular, has seen its income inequality rising in both urban (from 23 in 1990 to 37 in 2013) and rural areas (from 30 in 1990 to 40 in 2013).

It appears clear, now, how different regions went through different phases of increasing or decreasing inequality. From 2010 inequality started to grow again in Argentina, Brazil and Mexico, while it started to decline in China from 2008. Furthermore, the Gini index has also stabilized since 2008 in developed countries.

The Gini, though, doesn’t tell us anything about who detains specific shares of income. Other indicators are useful to understand if it is concentrated in the hands of the bottom, middle or top class. In the last decades, income has converged more and more towards the top 1 per cent of the population in many countries, such as China, India, the Russian Federation, the United States, Thailand, Turkey and the United Arab States. Even those countries that experienced a decrease in the Gini coefficient for a certain period, like Brazil, actually had an increase in its top 1 per cent income share.

A contribution to the reduction of the income share of the top 1 per cent and the top 10 per cent of the population in most high income countries was given by the economic and financial crisis in 2008, that also shrank wealth-income ratios. The problem is that the income share of the bottom 10 per cent of the population dropped, too. Greece, Ireland and Spain suffered the greatest labour-income loss within developed countries. Plus, always concerning the bottom share of the population, between 2011 and 2016 two different trends can be observed: in some countries, the income of the poorest 40 per cent grew at a more rapid pace than that of the whole population, while in other countries the income of the bottom class has fallen. “For example, average incomes grew faster in the United States than in France in 2011-2016. However, the incomes of the bottom 40 per cent grew more slowly than average in the United States but faster than average in France. Based on this indicator, France has made progress towards reducing inequality and leaving no one behind while the United States did not.”[7] Figure 4 shows the increase in income that the top 1 per cent experienced in many countries between 1990 and 2015.

Figure 4: share of income earned by the top 1 per cent, 1990 and 2015



Source: United Nations, from World Inequality Database. Available from: https://wid.world/data/

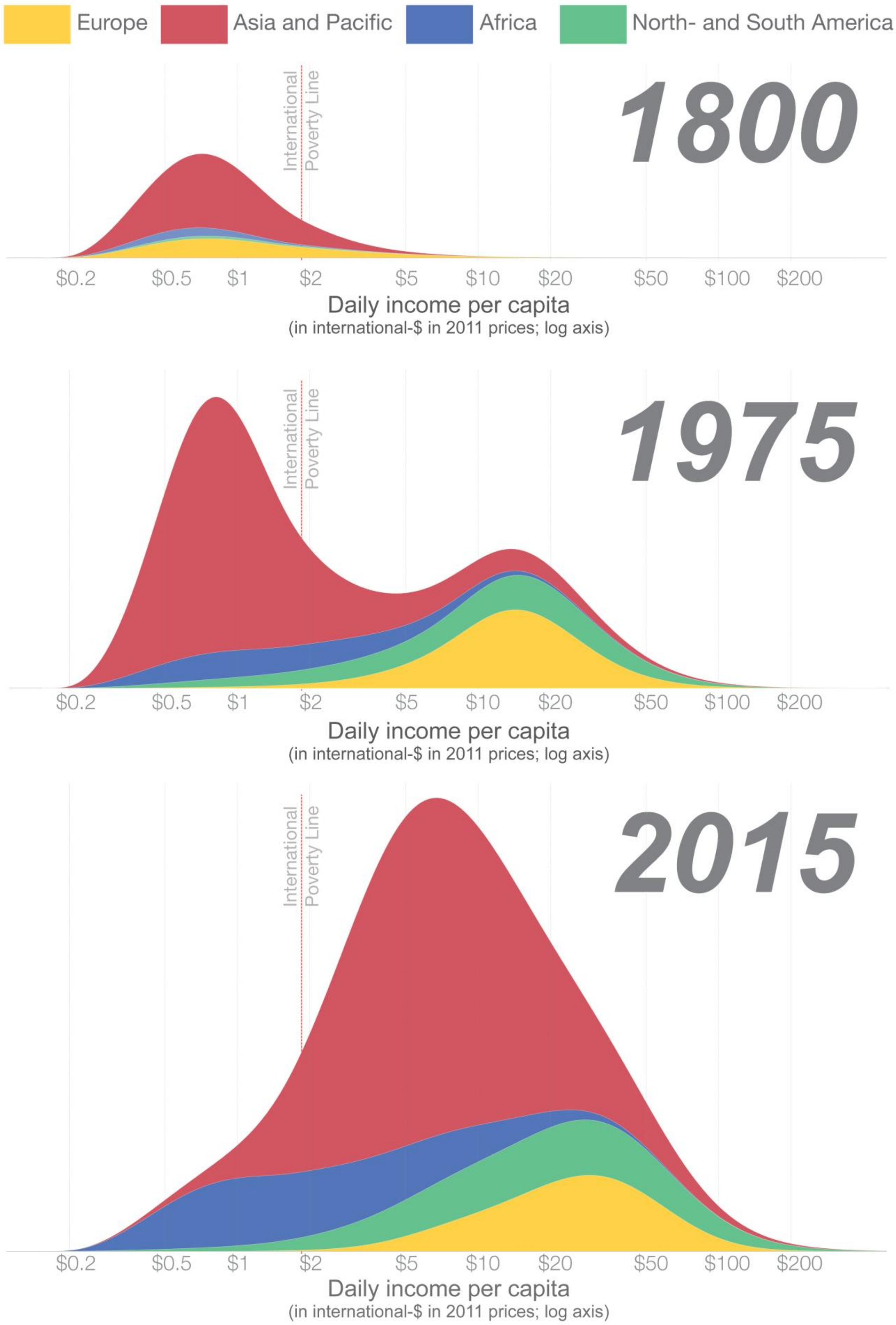
Figure 5 illustrates the global income distribution in 1800, in 1975 and 2015:

- In 1800 the majority of the population lived below the threshold of poverty;
- In 1975 the income distribution was “bimodal” and the world had become even more unequal. It was divided into a developing part, whose population lived below the international poverty line, and a developed part, whose population was far richer;
- In 2015, poverty decreased thanks to an increase in income. In many developing

[7] World Social Report 2020: Inequality in a rapidly changing world, United Nations Department of Social and Economic Affairs, World Social Report 2020, 2020, p.30

countries incomes grew faster than in developed ones (convergence).

Figure 5: global income distribution in 1800, 1975 and 2015

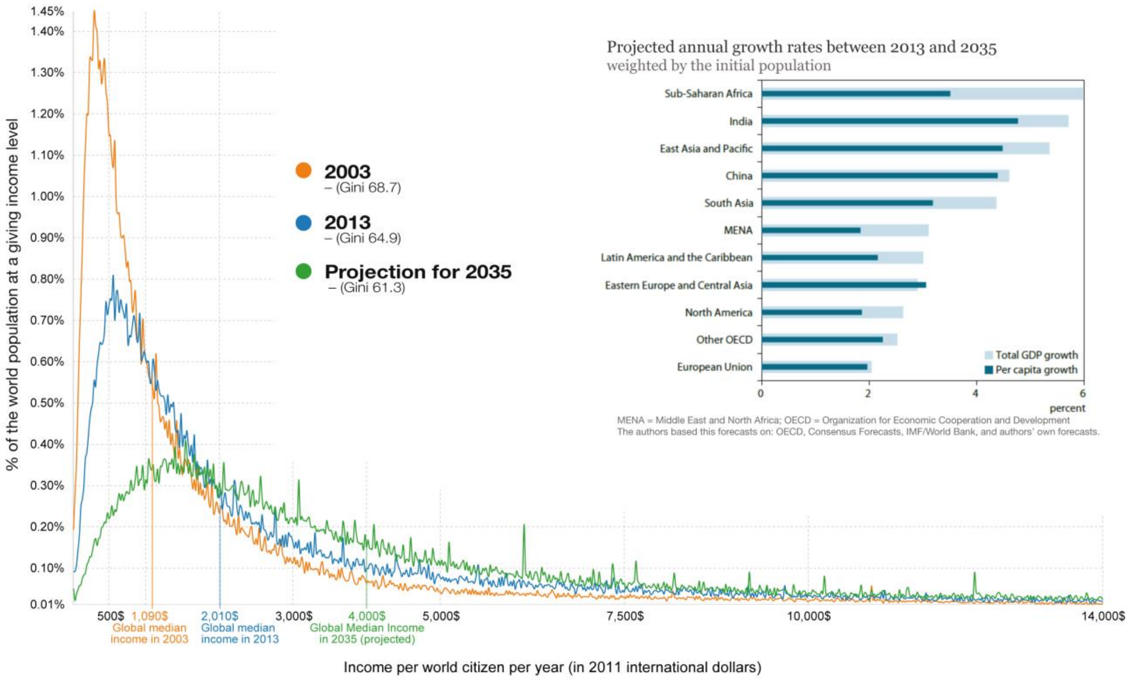


Source: Our World in Data

Note: income is calculated according to inflation and purchasing power parity adjustment; the international poverty line (threshold of extreme poverty) is provided by the United Nations;

Figure 6 shows the global income distribution in 2003, 2013 and the projection for 2035. The Gini decreased between 2003 and 2013, while the global median income increased. It's important to notice that the share of the population earning higher incomes has increased, even if the majority of people keeps having the lowest incomes. According to the projection, if the growth rates will be the ones in the right blue box, the Gini will continue to decrease, while the global median income will continue to increase.

Figure 6: global income distribution in 2003, 2013 and projection for 2035



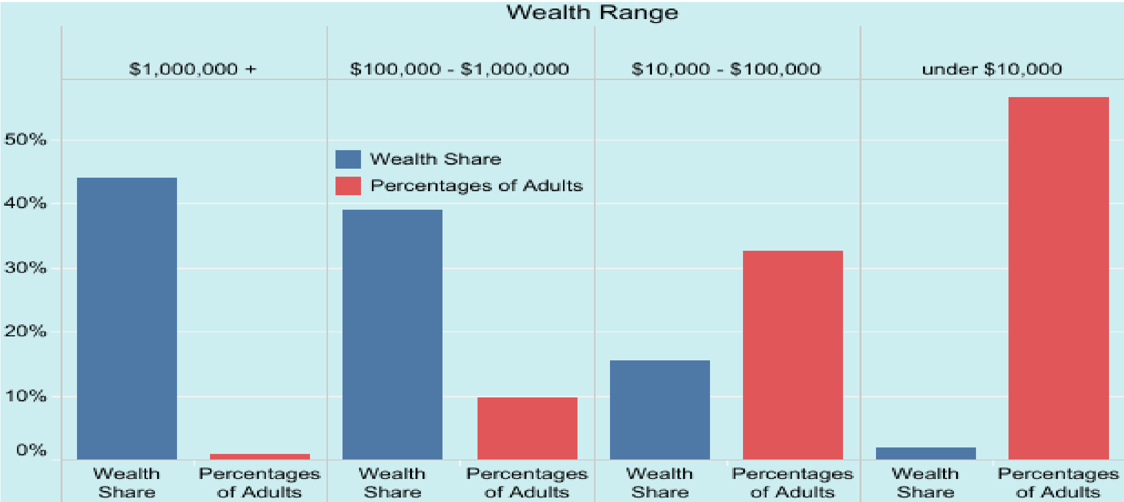
Source: Our World in Data, through Thomáš Hellebrandt and Paolo Mauro (2015), The future of worldwide income distribution, working paper

3. LABOUR AND CAPITAL DISTRIBUTION

Inequality can be defined as the gap between who owns capital (means of production) and consequently receives its profits and interests, and who, instead, can only count on its own work and on the wage that derives from it. In this view, inequality is simply the result of the unbalanced distribution of the capital ownership, which is part of the so called household wealth. In 2018, the richest 10 per cent of the world population owned 85 per cent of the global wealth and the top 1 per cent owned a little less than half this percentage, while the bottom 50 per cent had less than 1 per cent: it's pretty clear how wealth is more unequally distributed than income.

Figure 7: global adult population and share of total wealth by wealth group, 2019

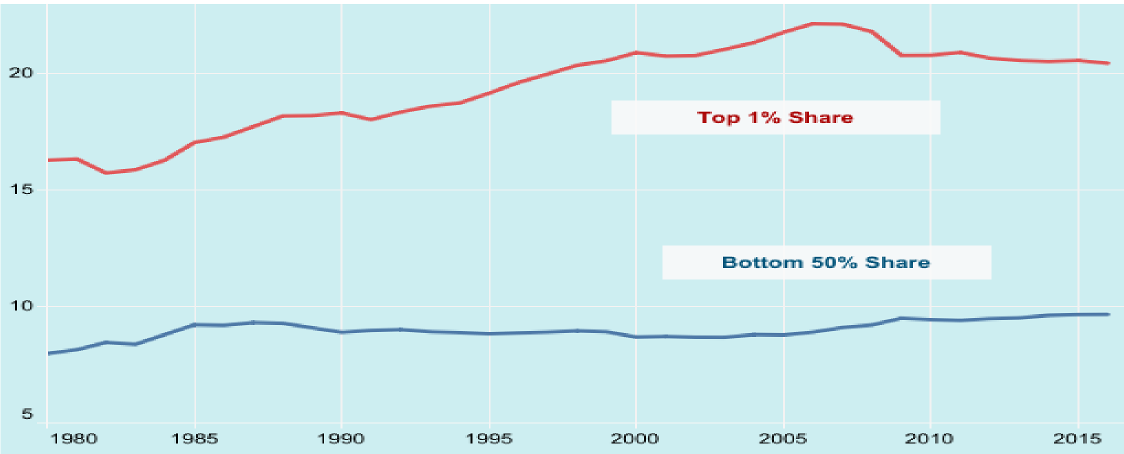
The richest 1% owns 44% of the world's wealth



Source: Inequality.org, through Credit Suisse Global Wealth Report, 2019

Figure 8: share of global income going to the top 1% versus the bottom 50%

The global 1% captured twice as much growth as the bottom half



Source: Inequality.org, through World Inequality Lab, World Inequality Report, 2018

The way in which income is distributed between labour and capital is called functional income distribution, which is important to understand given the fact that labour has fallen farther behind capital in the last twenty years and if we are not able to explain this change, than we won't be able to properly analyse inequality trends. Plus, functional income distribution also impacts on the distribution of household income before taxes and subsidies (primary income distribution), so that it is necessary to know how income is generated in the production process. To determine the share of capital on the total income generated by a company, let's suppose that the production process has fixed coefficients: to produce one unit of a good, one unit of capital and n units of labour must be used. Now, it is simply a matter of redistributing the good between the owner of the machine and the n workers, which will depend in general, from the relationship between capitalists and workers in terms of power. Let's now add the possibility to switch the proportion of labour and capital. In particular, by adding more workers to the production process, it is possible to produce always a little bit more, so that the production shifts from capital intensive to labour intensive. In this case, the prices of capital and labour will determine both the production and the employment level.

During the 1980s, it started to be believed that countries had to stabilise their economy and move towards market liberalization, but these policies intensified inequality. In developing countries, restrictive monetary policies slowed development and increased unemployment; financial liberalization made imports more convenient then the local production, weakening economies even more. The use of fixed exchange rate mechanisms and free-floating exchange mechanisms reduced wages (especially those of the bottom population), because developing countries were more exposed to currency depreciation. What became central in the political discussion was stabilising the economy by controlling inflation and cutting expenses, independently from the field in which these cuts took place. Thus, less investment in infrastructures and public services, like health and education, made sure that development and redistribution were left aside.

Labour market policies adopted in this period, that should have driven inequality down, actually had the opposite effect. In particular, in many countries minimum wages are still too low to positively impact on inequality. Plus, better labour productivity hasn't translated into higher salaries and, from 1995 to 2014, many countries experienced a decline in workers' wages as a share of the GPD, that hit particularly those in the middle and in the bottom of the income distribution, since they rely mainly on labour income. Furthermore, both developed and developing countries have seen the wage gap between richest and poorer increase dramatically. Two causes underlie this: first, there has been an increase in temporary and part-time jobs. People who work under these type of contracts not only earn less than traditional workers, but they are also the first to be fired in times of crisis. In addition, workers are less protected because of the drop in the wages of middle-level skilled employees (administrative jobs, sales jobs ecc…); second, the escalation of top salaries has been exponential. In 2016, top chief executive of the best 350 firms in the United States gained 224 times more than the average employee.

If governments don't put in place efficient policies in terms of wage increases and taxes on wealth, the share of labour in income will continue to fall, while the share of capital will keep rising, mainly because of slower economic development, that will increase the return on capital to outmatch the economic output.

4. FISCAL REDISTRIBUTION

Inequality within countries is affected by both exogenous factors, let them be economic, social, political and environmental, and by national institutions and policies. Thanks to taxes and subsidies, governments can dampen the negative effects of inequality. More deeply, the modern fiscal redistribution is a mix of taxes (income tax, VAT…), transfers (minimum wage, pension, unemployment benefits…) and public expenditure (education, healthcare…). There are two types of taxes: progressive, such as direct income and property taxes, and regressive, like sales taxes. But only the first category is actually efficient in tackling disparities. The redistributive effects of these measures, in fact, influence the market income (income before taxes and transfers) and the disposable income (income after income taxes) as a consequence, on the basis of two components: the degree of progressive taxation and the possibility to benefit from subsidies and public services for people living at the bottom of the income distribution.

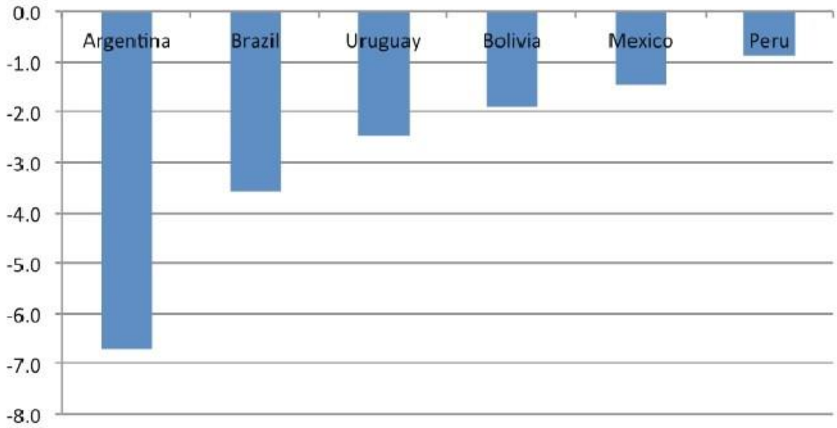
Developed countries relying on fiscal redistribution seemed to meet slightly positive results. Using the Gini coefficient, we can observe that Belgium, Denmark, Finland, Ireland and Slovenia were able to use subsidies and taxes to reduce inequality by more than 35 per cent; but other countries, such as Japan and Switzerland, have seen a less than 20 per cent decrease. However, in the last three decades, inequality in disposable income has increased because of the increase inequity in market income, that has not been compensated by a more redistributive system. In developed countries, the system has become less progressive, given the fact that taxes on top incomes fell from 1981 to 2015; a decrease that started again in 2009, after an illusion of recovery in 2008

Concerning developing countries, trends have been different before the XXI century: some managed to reduce inequality, but others have seen it grow because of the inefficiency of the public expenditure system and the escalation of regressive taxation. The situation changed since 2000, when it appears that more countries were able to reduce primary income inequality.

Moreover, the ability of reducing the Gini coefficient between primary and secondary income distribution it’s easier in developed than in developing countries, because initial inequality isn’t the determinant factor: differences in the secondary income distribution are largely dependent on national policies and institutions, too.

Evidence also point to the importance of transfers. A practice that has had some significant impact on reducing inequality in developing countries is governments transferring cash to the poorest shares of the population. Figure 9 shows how subsidies contributed to the reduction of income inequality in six Latin America countries. In Asia, conditional cash transfers have been applied in Bangladesh, Cambodia, Pakistan, Indonesia and Philippines. These subsidies are part of a larger project that includes better education and health care, which could be fundamental in the fight against poverty and inequality in the continent.

Figure 9: cash transfers and inequality (decline in Gini percentage)



Source: United Nations, Humanity Divided: confronting inequality in developing countries, UNDP report, through Lusting (2012)

Governments, in fact, enter in the picture also in terms of expenditure programmes, that impact on the tertiary distribution of income. In particular, expenditure programmes in the social sectors, such as education and health in developing countries, but also sports events and art expositions and others in developed countries, are said to be progressive when they invest for the majority in goods and services which poor households benefit more from. In both developed and developing countries, money spent on social welfare actually helped to reduce income inequality between disposable and final income (tertiary income).

5. HORIZONTAL INEQUALITY

Income inequality is not just influenced by functional income or by government taxes, subsidies and expenditure. A significant part of this displacement is to be brought back to disparities between different social groups, identified with culture, age, gender, race, religion, geographic location and others. This is what we call horizontal inequality. Furthermore, the two components do not always go in the same direction. Governments putting in place policies with the aim of a more equal society for everybody, could end up without variations in the income inequality gap, while efforts to decrease income inequality don't end up in better opportunities for all disadvantaged groups unconditionally.

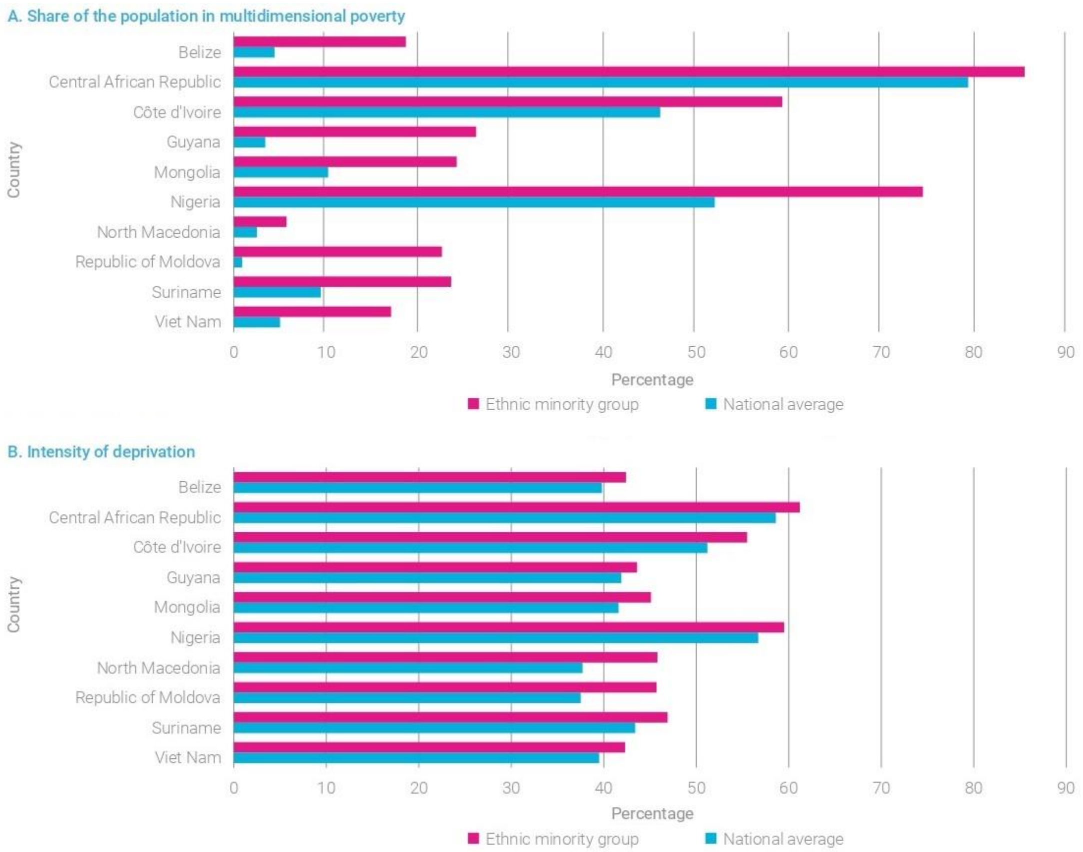
Here some evidence to support the thesis: at the beginning of the XXI century, while racial inequality only accounted for less than 15 per cent in developed countries, it rated from 50 to 70 per cent of the total in South Africa and from 30 to 50 per cent in Paraguay, Panama and Guatemala. Furthermore, South Africa experienced an increase in income inequality, while racial disparities diminished; the income growth that Mexico experienced in the last years has been higher for non-indigenous than for indigenous population.

The persistence of extreme poverty in some segments of the population is still significant, in spite of the decrease in the poverty rate of the last three decades. Concerning this topic, it's important to underline three facts. First, horizontal inequality drives some groups easier into poverty; second, these groups go through a more marked poverty than others; third, these groups remain in poverty for a longer time and it's even harder for them to step out of poverty. It has been demonstrated that a social division based on caste, ethnicity and religion actually increases the possibility of long-standing poverty, with the concrete risk of extending this condition to the future generations.

People who belong to these groups often end up at the society's margins because of the concatenation of several detrimental factors that reinforce each other, causing even more damages. For example, in developing countries, we can identify rural areas, health and education as three disadvantages that are badly interconnected. Ethnic minorities usually live in rural areas, where there are inferior school systems and little or no access to health care. Thus, not only there is a gap between people living in rural and urban areas, but this gap is even present if we confront people who belong to the same ethnic group: minorities living in rural areas actually have lower levels of education respect to those living in urban areas.

The situation gets even worse for women, who experience a deeper exclusion, in particular from the labour market, because of the interaction of both ethnicity and gender. In Bolivia, Brazil, Guatemala and Peru, it's plausible that women with African or indigenous descendent earn $1 less per hour than men of the same ethnic group or than men and women in the rest of the country. A further example can be found in the investments in health care, education and childcare, which usually go for the majority to boys rather than girls.

Figure 10: multidimensional poverty by ethnicity in selected countries around 2010



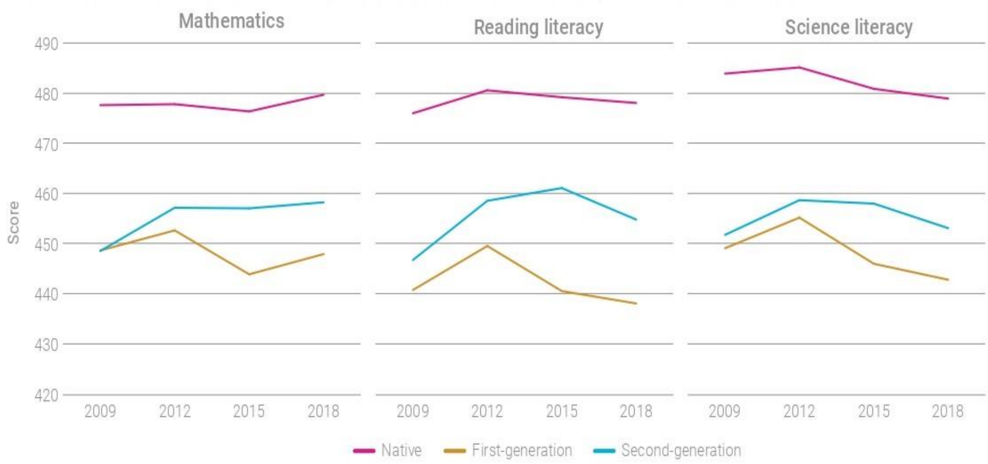
Source: United Nations, World Social Report 2020: Inequality in a rapidly changing world; calculations by the Oxford Poverty and Human Development Iniative.

Note: Ethnic groups represented: Maya (Belize), Hausa (Central African Republic), Gur (Côte d'Ivore), Amerindian (Guyana), non-Macedonian or Albanian (North Macedonia), Roma (Republic of Moldova), Kazakh (Mongolia), Indigenous/Amerindian (Suriname), non-Kinh (Viet Nam).

At this point, it should be clear how not only wealth and opportunities are unequally distributed around the globe or inside a country, but that there is inequality even within households. Figure 10 shows how multidimensional poverty rates are higher than average for many ethnicity groups and how these groups actually suffer from a more profound poverty.

The topic of horizontal inequality has become central in the global discussion during the last years. Thus, some improvements were accomplished, from wider access to primary education and health care to extensive representation of minority groups in politics. Unfortunately, still a lot remains to be done. Following the path of primary education, access to secondary education is growing across developing countries, too, but not enough. The Programme for International Student Assessment has proved that children of immigrants perform worse in certain subjects than those with native parents (Figure 11) and this underlines the fact that increasing school attendance is not alone sufficient. The quality of education must improve as well.

Figure 11: proficiency scores in mathematics, reading and science literacy, by origin of student, 2009 to 2018



Source: United Nations, World Social Report 2020: Inequality in a rapidly changing world; calculations based on PISA data.
Note: data reported for 49 PISA-participating countries.

Another factor that impacts significantly on education is the household socioeconomic status: households who rank higher in the income distribution obviously have more resources to invest for their children’s future. Anyway, it can’t be said that there is a trade-off between health and education and income, employment or wages. In developed countries, women are usually more educated than men, but they still earn lower salaries and they are usually low employed.

In conclusion, despite worldwide efforts to close gaps in opportunities, which have had some positive effects, horizontal inequalities are still evident and pervasive.

Chapter III. THE IMPACT OF NON ECONOMIC INEQUALITIES ON ECONOMIC INEQUALITY

In practice, income inequalities hold a strong interrelation to non-economic disparities. That's why it is fundamental to analyse the changes that are going on at the global level in non-monetary domains. Four fields are worth mentioning: gender, education and health, technology and location.

1. GENDER INEQUALITY

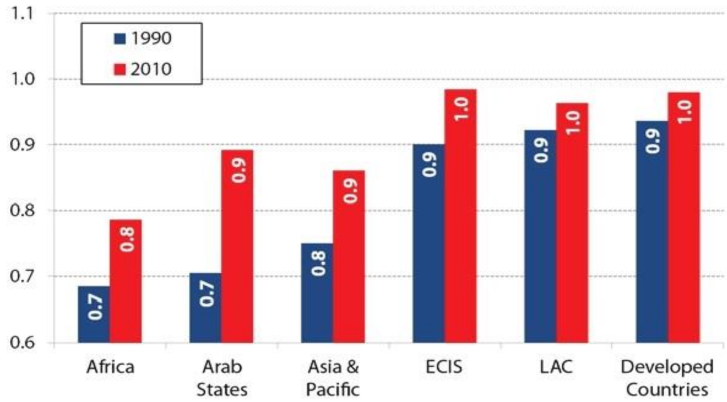
Gender inequality is something that persists in many parts of the world. While some countries made progresses in narrowing the gap between men and women (even if it hasn't closed yet), others didn't perform so well in this field.

Gender disparities are reflected in three main areas. Capabilities refers to the starting point in economic life and includes education and health conditions. It is a crucial precondition for achieving gender equality, especially in economic terms, where it should lead to a decent life for both individuals and households, as regard to jobs, salaries, credit and wealth in general. This is the so called livelihoods. The elements that shape both capabilities and livelihoods can be controlled: empowering people allows them to make their voice heard in every aspect of society (household, workplace, public institutions), therefore tailoring the environment to their specific needs. Men and women have the same abilities, but differences in these three domains actually put a stop to women's potential. Given less employers' choices, economies suffer from less production capacity and economic advancements. It appears that the GDP went down from 10 per cent in developed countries to more than 30 per cent in South Asia, Middle East and North Africa, as a consequence. Plus, when women actually take an active part in the economy, all things equal, they still don't receive the same compensation for their efforts.

Gender differences in the capabilities field shrink the possibility for women to achieve men's levels of wealth, also because it contributes to the creation of norms and stereotypes. For example, less investments for girls' education embeds the belief that women are less intelligent and can develop less skills. In the last decades, substantial progresses have been made all around the world in terms of gender disparities in school enrolment, especially in literacy and primary education. In these two fields, in fact, between 1990 and 2015 gaps were mostly closed in many regions, with the exception of

Africa, Middle East and Central Asia and Western Hemisphere. So, what becomes more important today is to analyse the gender gap in secondary education, which should help women not to be segregated only in low paid occupations. Figure 12 shows the difference of female/male ratio in the total years of education, in 1990 and 2010 and for selected groups of countries. All the regions considered made progresses in education, with those which started worst off (Africa and Arab States) that improved the most.

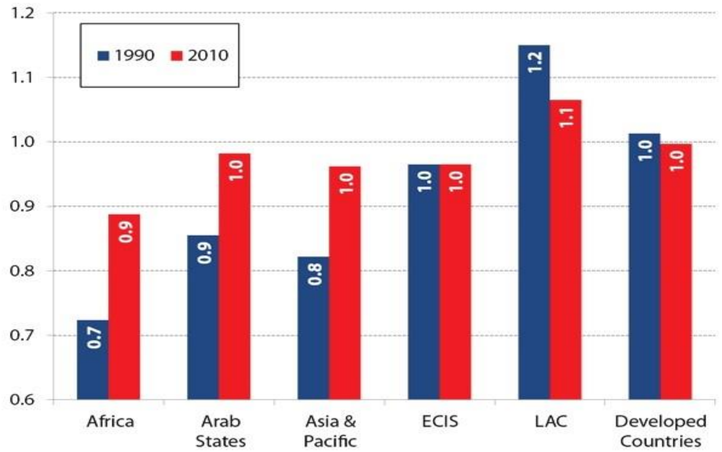
Figure 12: regional trends in F/M educational attainment ratios, 1990 and 2010



Source: United Nations, Humanity Divided: confronting inequality in developing countries, UNDP report; through Barro and Lee (2010) dataset.

In Figure 13 we can see the secondary enrolment measured by the F/M ratio for selected countries, between 1990 and 2010. The world appears to be more equal from this point of view, too.

Figure 13: regional trends in F/M secondary enrolment ratio, 1990 and 2010



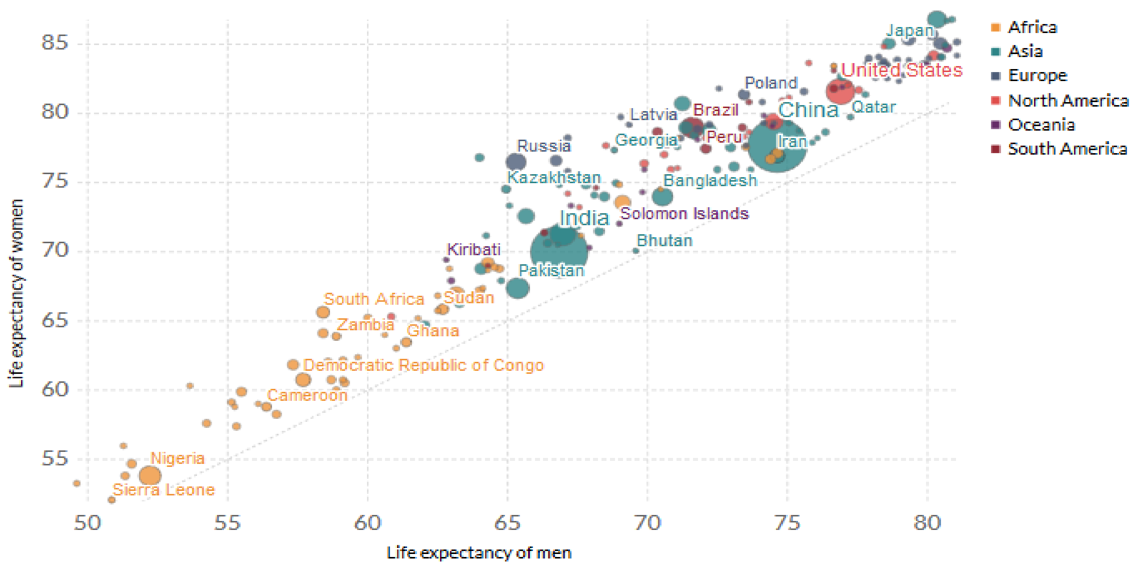
Source: United Nations, Humanity Divided: confronting inequality in developing countries, UNDP report; through World Bank data.

What is important to notice is that Africa, Arab States and Asia and Pacific were able to increase the ratio, while in Latin America and the Caribbean it actually decreased; in the other regions it remained steady. Particularly impressive are the progresses made in Asia and the Pacific, if we consider that in 1980 only 65 per cent of female population attended secondary school.

Plus, tertiary education has gone far, too, with women now more luckily to be enrolled than men, except for Africa, which continues to have difficulties to keep up.

Regarding health, life expectancy appears to be higher for women than men at the global level, as shown in Figure 14, but other indicators, such as maternal death and adolescent fertility (the number of births per 1000 women between 15 and 19 years old per year), remain unfavourable. Sub-Saharan Africa registers the highest rates, even if the trends have been decreasing from 1980 to 2014 globally. In particular, if women are more likely to get pregnant during adolescence, they are more unlikely to finish school and, consequently, to enter the labour market with a significant skills bag, exacerbating both inequality in education and labour participation.

Figure 14: life expectancy of women versus life expectancy of men, 2015



Source: Our World in Data

In spite of the fact that women account for almost 50 per cent of the world's population in working age, only half of them actually engage in the labour market (the proportion of men is 80 per cent). Plus, especially in developing countries, women are pushed in the informal sector, where they experience lower salaries and higher risk of job losses. Female participation is also significant in routine tasks jobs, which are those at higher risk of being replaced by automation. In addition, the majority of females perform unpaid childcare and housing activities. All of this impacts not only on the current state of living, but also on the future, given that women who earn less (or nothing) today will get lower annuities, increasing the probability of poverty scenarios.

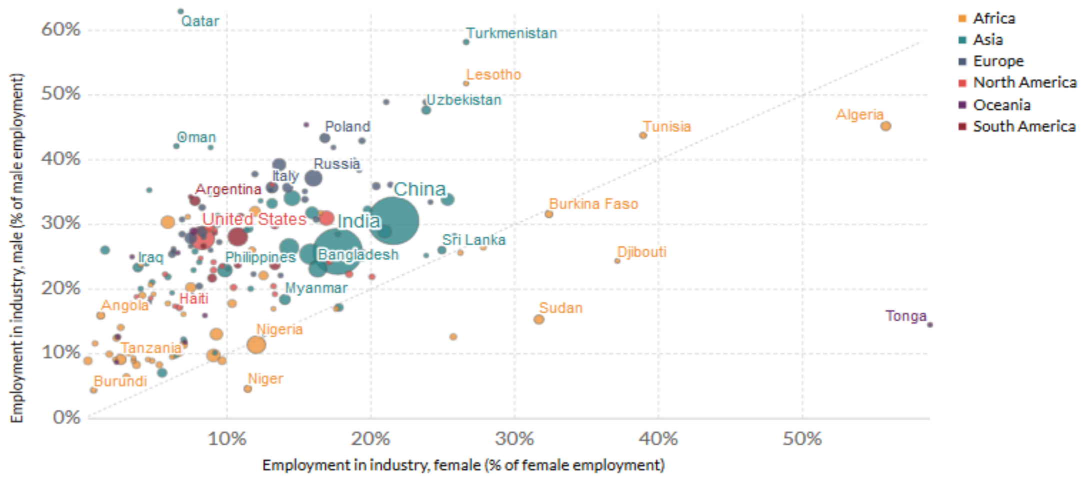
Important to notice that, according to the International Monetary Fund, not only women employed in paid occupations receive lower salaries, but they are also a minority when it comes to entrepreneurship. Female's empowerment in recent decades seems to not have translated into equity in wages. "The gender pay gap, defined here as the gap in average wages paid to women compared to men, is a major cause of an overall lifetime income gap between men and women."[8] This gap varies according to regions and countries (even if it is positive everywhere) and it's more or less 24 per cent for the world as a whole. In 2009 the majority of the OECD countries registered a difference between men's and women's wages of at least 15 per cent in favour of men. A study conducted by the World Economic Forum in 2016 brought to light that women earn on average half than men's. In this contest, poverty becomes almost an ordinary condition for females, given that their salaries are often insufficient to provide for basic goods and services. Furthermore, the gender pay gap distorts the power distribution within households. In fact, it's hard for women to express their preferences on purchasing decisions and empower themselves if they are systematically confined in low wages and inferior quality activities. In some countries, women can't work if the husband doesn't give them permission. Plus, the absence of basic legal rights stops almost 3 billion women worldwide to have the same employment opportunities than men.

Men and women tend to be employed in different sectors of the economy and this job segregation accounts for a significant part of the gender differences in salaries. Beyond paid and unpaid labour, the other significant aspect is the labour market composition, where the industrial sector enlists the major share of male workers. Globally, the percentage of women employed in the industrial sector has been declining since the 1990s, except for Africa. As in Figure 15, it's clear the preponderance of men in this sector. Two features are worth mentioning here. First, it appears that a phenomenon of "defeminisation" is going on, particularly in middle income countries: as the share of capital in the production increases and these countries become richer, the

[8] Tackling The Gender Pay Gap, from individual choices to institutional change, United Nations Entity for Gender Equality and the Empowerment of Women, UN Women, 2016, p.1

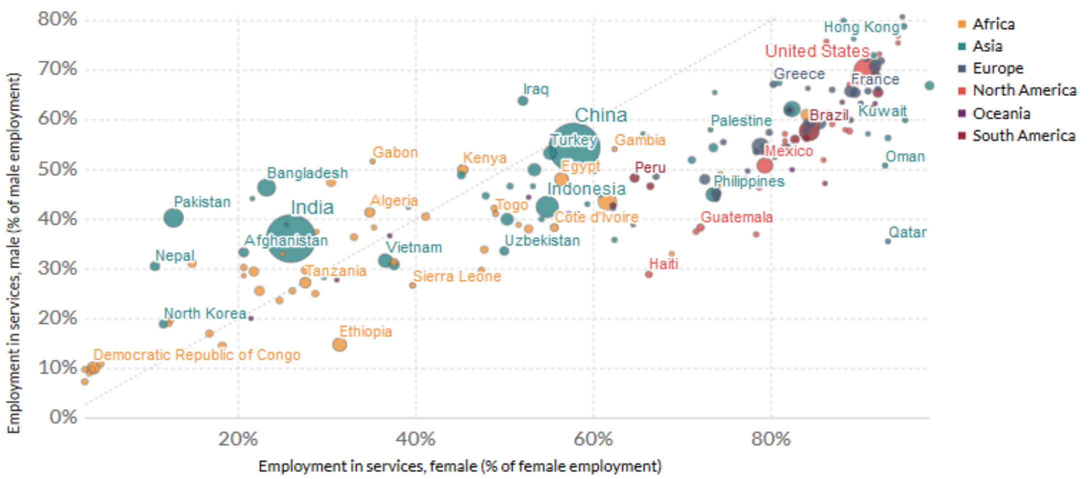
share of women in manufacturing decreases. Second, in industrialized countries, the so called "family responsibility discrimination" is progressively excluding women from capital intensive companies. Women with family commitments are thought to leave work with more frequency then men and, therefore, are seen as unable to acquire high skills. A situation that reflects not only stereotypes, but also on insufficient gender protection policies. This general state of affairs in the industrial sector pushed female employees into the service sector, which has significantly lower salaries and, consequently, negatively contributed to reduce the gender wage gap. In Figure 16 the preponderance of female active population in the service sector can be observed, even if with some exceptions.

Figure 15: share of male vs female employment in industry, 2017



Source: Our World in Data

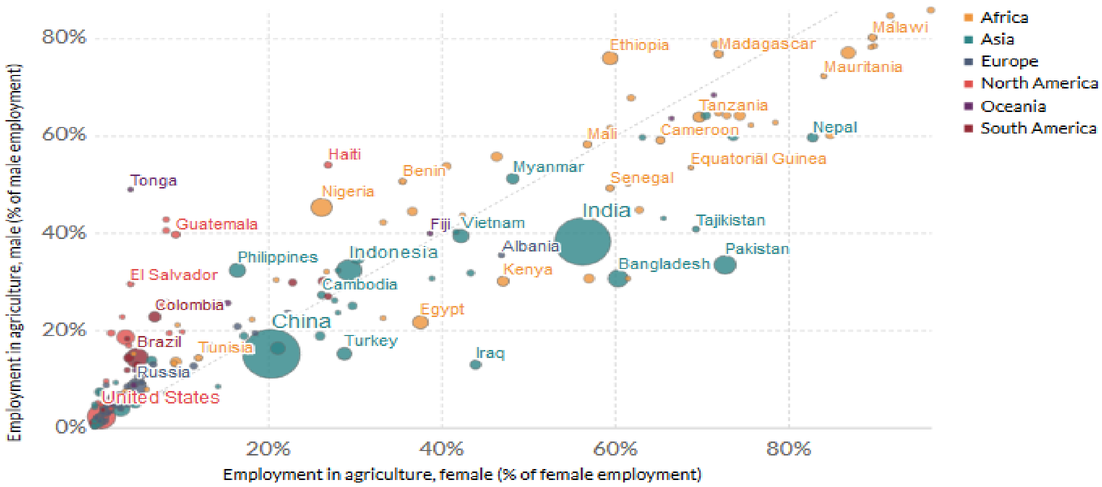
Figure 16: share of male vs female employment in service, 2017



Source: Our World in Data

Female presence has increased also in agriculture, but the sector remains quite equitable, as in Figure 17.

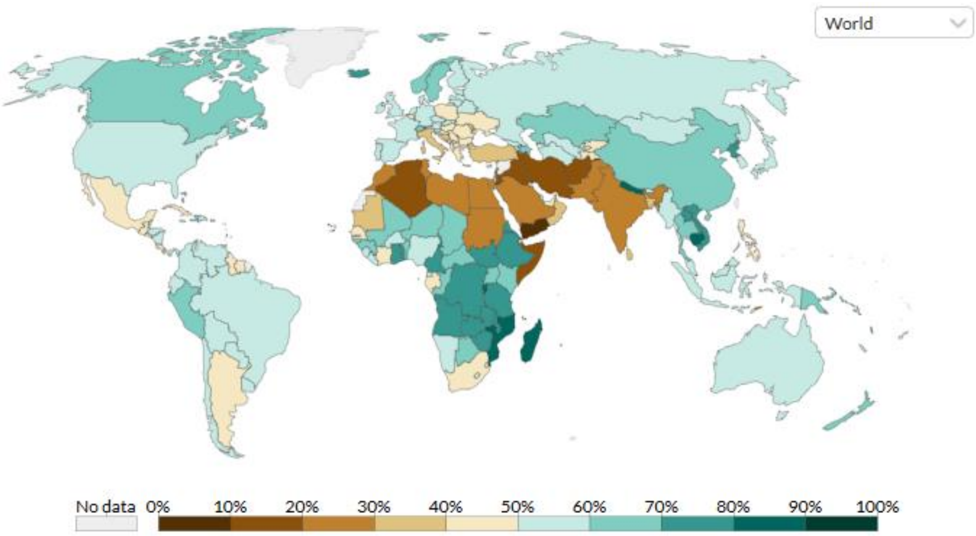
Figure 17: share of male vs female employment in agriculture, 2017



Source: Our World in Data

The fact that advancements in gender education haven't significantly affected differences in gender wages is causing negative effects on both women's life and growth opportunities for the economy of different countries, especially underdeveloped and developing ones. Improvements in education are not alone sufficient to ensure equality in employment: in reality, many countries that were able to eliminate gender disparities in schooling still lack female participation, as shown in Figure 18.

Figure 18: female labour force participation rates, 2017

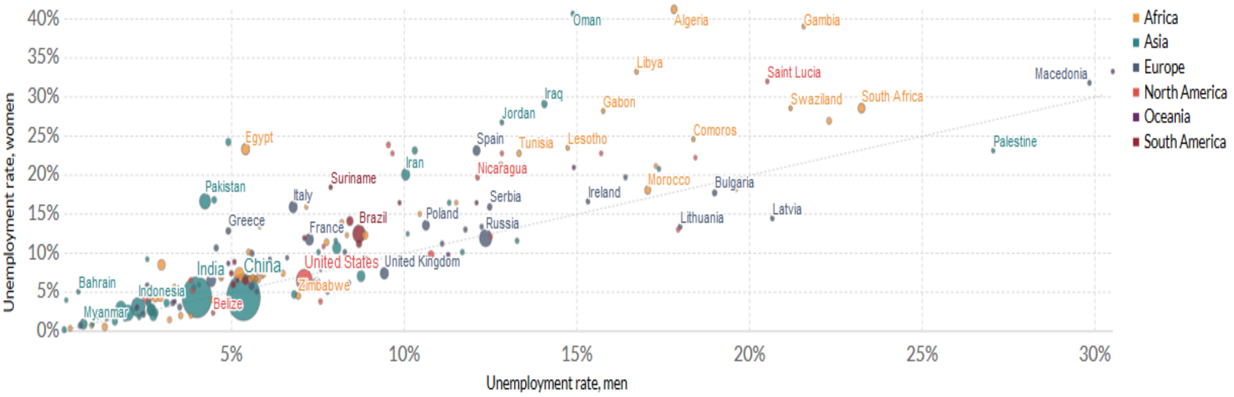


Source: Our World in Data

Even if the percentage of women engaging in the labour market has been increasing recently and the wage gaps have decreased in many countries, the differences worldwide are still far from equity.

Figure 19 and Figure 20 are useful to understand the trends in gender unemployment gaps. In general, in almost 30 years it seems that women's unemployment has been decreasing. Asia made the highest progresses, even if the trends are different across countries, while in Europe it seems that a reduction in female unemployment has been accompanied by an increase in male's. In North and South America there is not a significant change, because male and female unemployment rates decreased more or less of the same share, but especially in Latin countries the trends differ (Brazil actually has seen an increase in women's unemployment). Africa has gotten worse.

Figure 19: unemployment rate, women vs men, 1991



Source: Our World in Data

Figure 20: unemployment rate, women vs men, 2017

Source: Our World in Data

Women are worse off in the financial sector, too. According to the World Bank, in 2008 only 65 per cent (globally) owned a bank account against 72 per cent of men, with even higher numbers in low and middle income countries; furthermore, only 40 per cent of women is able to get a loan granted, a fact that, together with low quality jobs and poor wages, has repercussions on wealth, land and housing possession.

But the widest gaps are found in the agency (empowerment) field. The fact that women are way less represented in national, regional and local public institutions is a "deadly weapon". Women conditions improve overall when there is an higher female presence in politics, because of more investments and programmes to support and secure their empowerment and rights. Promoting equality in this domain could, therefore, boost gender parity in the other ones, especially in livelihoods, calling for greater governments attention.

2. EDUCATION AND HEALTH DISPARITIES

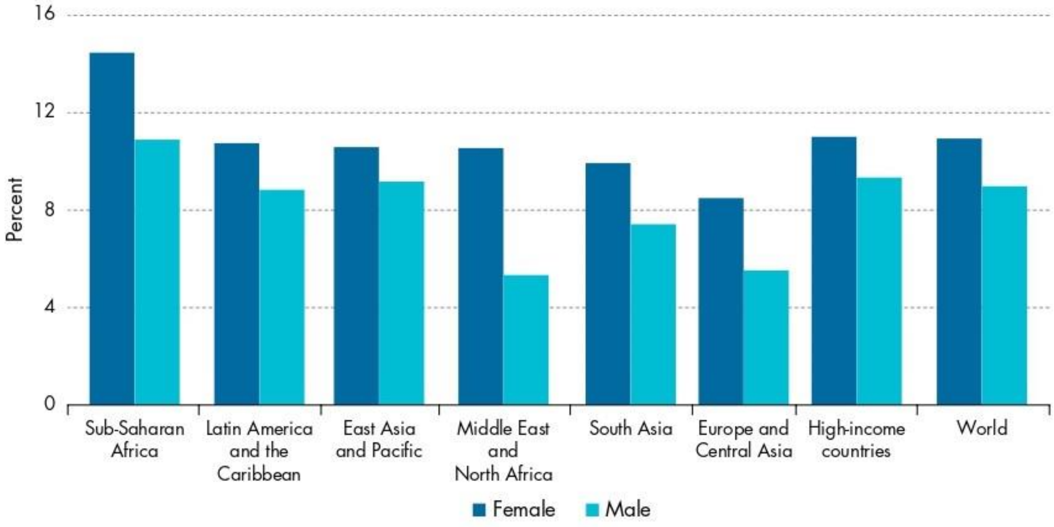
In "Capital in the twenty-first century", Thomas Piketty stated that investments in education have a significant positive impact both on the labour force and on productivity. As a matter of fact, education decreases income inequality and boostes growth in the long run, through better human capital and advancements in the production process. At the beginning, wages and income disparities widen, but as more population engages in higher levels of instruction, the skill premium, which is the difference in salary between low and high educated workers, will fall. Even further, education reflects not only on the economic sphere, but also on people's health and freedom of choices.

The effect of education on income is remarkable: it appears that "each additional year of schooling typically raises an individual's earnings by 8-10 percent."[9] This happens because more time spent studying allows people to acquire new skills, which will improve productivity once they are inserted into the economy. Figure 21 shows that more schooling is associated with higher salaries in every region of the world.

The probability of being fired is lower for high educated workers and, even when this happens, the time spent looking for employment is reduced. In developing countries, being more educated means having more chances of engaging in full time activities in the formal sector.

[9] Learning to Realize Education's Promise, World Development Report 2018, 2018, World Bank Group, p.39

Figure 21: median percentage increase in wages associated with each additional year of schooling



Source: Learning to Realize Education's Promise, World Development Report 2018, 2018, World Bank Group; through WDR 2018 team.

Note: calculations based on 1992-2012 data.

Worldwide, people who attended more years of school usually don't start smoking or drinking, they pay attention to what they eat and they don't become addicts, explaining how schooling improves not only the quality of life but also its duration. In the US, for example, individuals who completed high school have prospects of longer and healthier lives (evidence of this kind are found in Europe, too).

Worth mentioning is also the fact that higher education is associated with lower crimes, both in adults and teenagers. Evidence on youths who didn't complete school in the United States, United Kingdom and Mexico support this thesis.

For women, more school attendance reduces both fertility rates and the probability to get pregnant in young ages, but also rises their power inside the household. In fact, more educated women earn higher wages and this gives them the possibility to have control over their life and future. Thus, this work compensation makes it harder for them to leave the labour market. Peru, Brazil, Colombia, Malawi and Kenya have seen youth pregnancies drop after the introduction of subsidies for education and, together with Brazil, Turkey has seen lower fertility rates associated with increases in women's years of school.

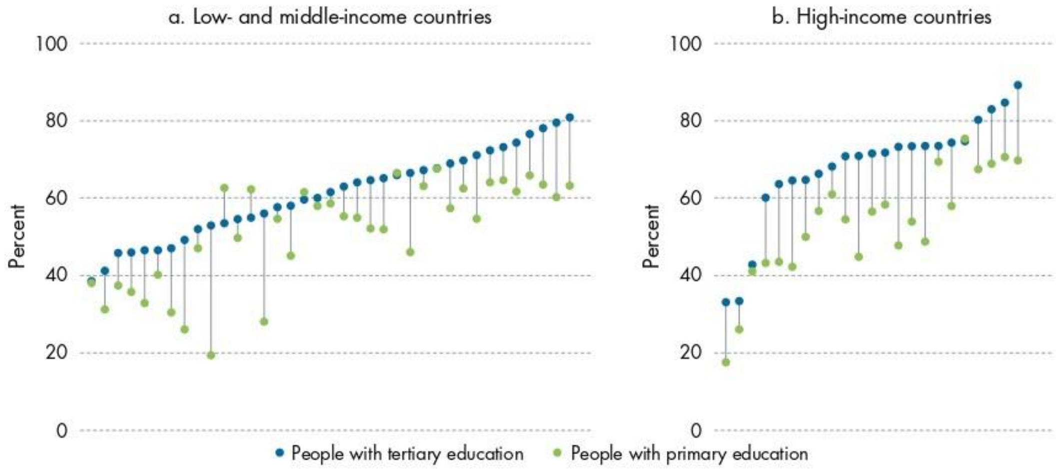
Women's education is also associated with better education and standards of life for their children. This is part of a more general result, which indicates that children of educated parents have more probabilities of attending school. As a consequence, they will earn higher wages as workers, given also the development of skills that will allow them to adapt to changing work environments and, in particular, to technological advancements. The fact that individuals' incomes within households are linked generates a spiral of intergenerational poverty, which education can therefore help eliminate.

As highlighted before, expanding education enriches countries of human capital, boosting economic growth, from which the whole society can benefit. When development especially lifts up the poorest shares of the population, income inequalities are reduced. The fact that everybody has access to basic instruction affects the capabilities to bring technology into play: in developed countries, technological progress can be the tool to sustain a pre-existing growth, while developing and underdeveloped countries can ultimately obtain the knowledge to tap into the already accessible technologies. If it's true that investments in infrastructures, health and education in the last decades have helped countries prosper, also the opposite it's correct: economic growth canalises more resources into education, health and infrastructures. Countries in East Asia which showed the most progresses in schooling (and consequently training of human capital), are also the ones who have experienced the quickest growth. Between 1970 and 2010, South Korea was able to double the mean years of schooling and to extend basic education to almost the entire population, reducing significantly even the gap between men and women. Investing in quality by increasing both training and wages of teachers has been an important strategy, too. Since progresses have been made even in secondary and tertiary education, the country has also registered increased income per capita and reduced health issues.

Education is positively related to democracy as well, as shown in Figure 22. More educated citizens not only recognise the importance of living according to democratic principles, but also engage more in civil and political activities, fostering better institutions and services through a thoughtful use of public money and resources.
A clarification is a must at this point: while scholars could attend the same years of school (schooling), they could actually end up with different outcomes (learning). Worldwide, and especially in least developed countries, children from disadvantaged households and locations acquire less knowledge and skills respect to others and this impacts on their future income. Addressing this issue is fundamental, because the effects of universal basic expertise on the economic output will be enormous, especially

in middle income countries.

Figure 22: percentage of population that believes it is "absolutely important to live in a democracy", 2015.

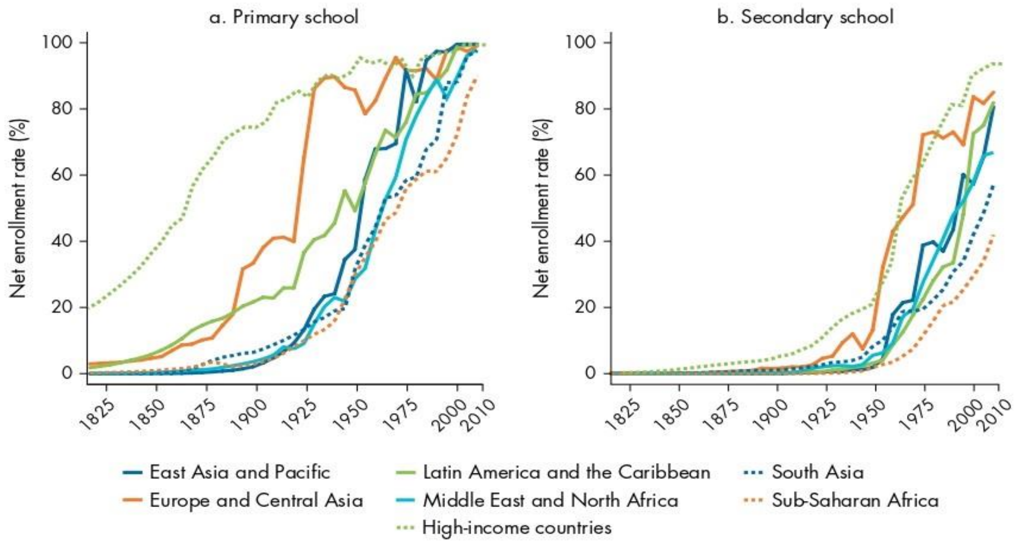


Source: Learning to Realize Education's Promise, World Development Report 2018, 2018, World Bank Group; through WDR 2018 team; through WDR 2018 team and data from the World Values Survey 2015.

Worldwide, trends in education are positive. Especially in low and middle income countries, schooling has increased at an unseen rate (Figure 23) and faster than high income countries. While in Sub-Saharan Africa and South Asia the primary access rates where respectively 68 and 47 percentage in 1970, by 2010 these rates reached 100 per cent. Zambia increased by 75 per cent the enrolment in secondary education in just 10 years (2000-2010), while it took Morocco only 11 years to achieve an increase in female schooling access that the United States pulled off in 40s (from 57 to 88 per cent, more or less). Consequently, the gap in education between low and high income countries appears to be narrowing (even if in South Asia a significant part of the population has no education).

Progresses have been made also in women's education, with girls who have even outmatched boys in secondary education in some developing countries, but gender parity is still far away. West and South Asia and Sub-Saharan Africa account for the majority of the world number of girls (62 millions) who still have no access to schooling. In many developing countries, even when women start school, usually an average of 10 per cent doesn't complete it.

Figure 23: net enrolment rates, 1820-2010



Source: Learning to Realize Education's Promise, World Development Report 2018, 2018, World Bank Group; through WDR 2018 team, data from Lee and Lee (2016).

Without any doubts, primary education has seen the most progresses in the last decades and this has led to improvements in secondary education, too (Sub-Sahara Africa remains behind). In spite of this, low income countries still need to walk a long road to achieve the levels of high income countries, given the fact that the completion gap was above 60 per cent in 2016. As for developing countries, the situation is a little strange. Here, while some shares of the population are still out of primary education, the trend is toward progresses in secondary and tertiary education.

In general, while children from the richest households have seen their position get better, those from the poorest ones still lack both primary and secondary education. In low income countries, the problem is even wider, because many kids drop out of school. In Pakistan and Mali this happens in primary schooling, while in Peru and Indonesia the phenomenon occurs afterwards. In every country, the background conditions of the household significantly impact on the chances of children, not only in terms of completing school, but even in starting it. In some regions, ethnicity is an additional factor that detriments education. In Latin America, for example, indigenous communities have higher percentages of children who work during school age. The duality between urban and rural areas contributes to disparities in educational opportunities as well: people living in urban areas benefit from more funding for schools compared to those living in rural areas in many parts of the world. Taking income, gender, ethnicity and location separately, they all have negative effects on education, but the situation gets even worse if you put two or more of these factors together: by reinforcing each other, they widen inequalities.

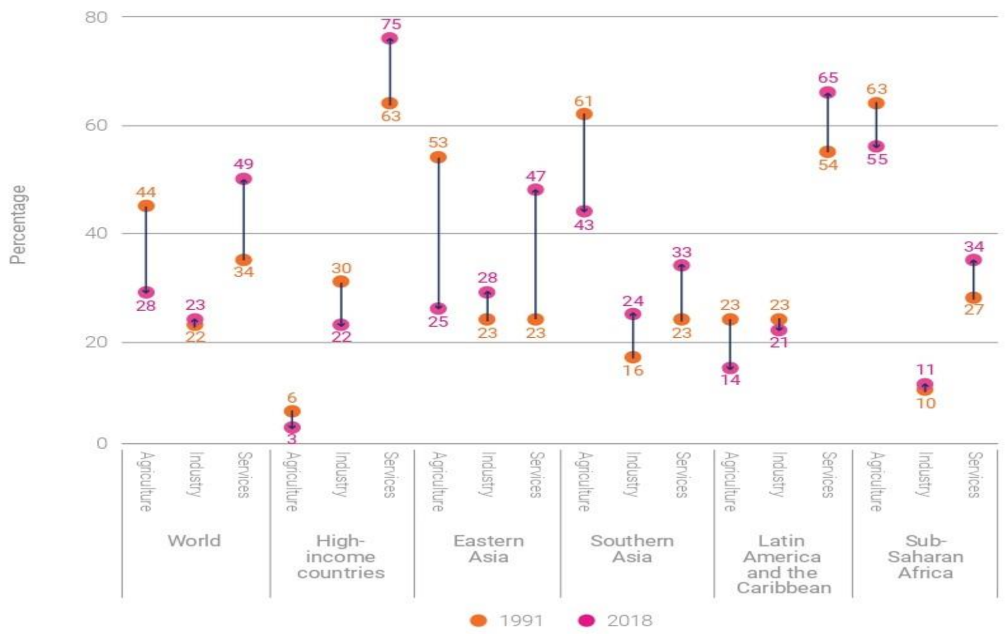
In poor households, considerations on whether to send children to school or not involve especially the trade-off between costs and benefits, where the costs could be both the money required and the possibility and time to reach the school, and the benefits could include especially an higher salary after school completion. In this optic, to have more chances of achieving superior education levels, only one or some children could be enrolled in school. Therefore, cutting school direct costs could boost education, like Uganda example demonstrates. In the country, this strategy increased primary enrolment rates and decreased drop outs. What is also fundamental is to increase the perceived returns from education, on each level of schooling, in order to raise awareness of its importance. Especially for those at the bottom of the income distribution, it’s hard to give up on something today if they don’t truly believe that the game is worth the risk. In particular, if they are not convinced that more years of school translate into higher future income, then they will not invest in their children’s education. Plus, they will not send their kids to school if the educational system is identified as of inferior quality.

In conclusion, today, in spite of the advancements made, too many differences still persist. Progresses in education are not alone sufficient and the fact that educational policies have often missed to address the different needs of the various shares of the population is causing inequalities to persist, especially in developing and underdeveloped countries. Here, the increase in education of the last 50 years has been accompanied by the exclusion of some groups, based on income, location, gender, ethnicity. As a matter of fact, while many low and middle income countries have invested in secondary and tertiary education, poor households are still left out of primary education; governments’ budget devoted to schooling is higher in developed countries than in developing and underdeveloped countries. What’s even more concerning is the fact that the quality of education has not kept pace with rising years of school: learning outcomes are worsening, while many children are still unable to achieve the minimum levels of reading and writing. Improving the quality of education is fundamental in order to achieve better learning outcomes and to ensure the possibility to acquire the same level of knowledge and skills to everybody. No one can be left behind anymore.

3. SKILL BIASED TECHNOLOGICAL CHANGE

In the last few centuries, technological change has been improving the people's quality of life over the world. Development was fuelled by the introduction of new technologies in the production process: better efficiency and higher productivity translated into more products and services and higher salaries for workers. Nevertheless, structural changes came along together with technological process. The first industrial revolution forced developed countries to undertake a shift: agriculture lost ground in favour of the manufacturing sector first, and the service sector later on. Least developed countries which undertook the transformation process were usually able to do it at a faster rate, but many remained excluded. In sub-Saharan Africa, in particular, the agricultural sector is still predominant. It's plausible that these countries will change the traditional scheme by jumping directly to the service sector, skipping the transition to manufacturing.

Figure 24: total employment shares by sector and by region, 1991 and 2018 (percentage)



Source: United Nations, World Social Report 2020: Inequality in a rapidly changing world, through calculations based on ILOSTAT data.

As a consequence of this evolution, the share of agricultural workers has been going down globally. Figure 24 shows that the share of agriculture in the total employment went from 44 per cent in 1991 to 28 per cent in 2018: a difference of 16 percentage points. At the same time, the share of the service sector increased, thanks to breakthroughs in digital technologies and ICTs, in particular, and accounted for almost 50 per cent of the total employment in 2018.

In developing countries, the coming of new technology in the second half of the last century also propelled another change, this time in the jobs demand: low skilled workers, who performed mainly routine tasks, were either substituted by machines or replaced by high skilled workers. As a consequence of the intensification of skill bias, the wages of college graduated workers increased in comparison to that of high school graduated workers (college wage premium).

The nature of work is changing in response to technological change. Firms efforts have been more and more concentrated on finding the most profitable technologies, because of the globalization of the value chain. Prioritizing profits, it seems clear why companies have been more inclined to employ skill biased or labour saving technologies. "This suggests that globalization and technological progress are reinforcing one another, widening income inequality in many countries, both developed and developing."[10] Today, these new technologies include digital technologies, especially ICTs, and automation, but also new organization and management techniques.

Skill biased and labour saving technologies allow, respectively, to increase the productivity and the demand of skilled workers respect to unskilled workers, and to employ less labour in the production. What's concerning is that they affect both the composition of the labour force and the workers' income, including the income of those with different skill levels. In developed countries, wages of high skilled workers have increased exponentially respect to those of low skilled workers, even if better and longer education has boosted the supply of high skilled workers. Given that technology has been identified as the main driver of this change, technological development in these countries can be labelled as skill biased.

The share of income in labour has been declining in both developed and developing countries, mainly because of labour saving technologies. In many developed countries, it appears that employers have been incentivized to substitute labour with capital in the production process, given that ICTs and automation have caused a decline in the price of capital goods respect to other goods, making capital (or labour saving

[10] World Social Report 2020: Inequality in a rapidly changing world, United Nations Department of Social and Economic Affairs, World Social Report 2020, 2020, p.62

technologies) more convenient. Moreover, technological progress has given birth to technology giant firms, such as Facebook, Amazon, Apple and Google. These companies caused a decline in the labour share, because thanks to technology, they were able to increase their mark-up and, at the same time, to decrease the importance of labour in producing value for costumers. In this optic, it might be necessary to revise anti-trust policies in order to prevent unfair competition and the increasing concentration of market power in just a few firms. But the emergence of technology is central even in developing countries. Here, global value and supply chains have made it easier for developed countries to off-shore phases of the production processes. Usually, these tasks are not only capital intensive in the strict sense, but are also more capital intensive then the tasks that least developed countries normally perform. As a consequence, the labour share in income dropped in these countries, too.

In order to understand income inequality it's important to analyse one of its major components, which is wage inequality. Wage inequality has increased, and so did income inequality, due to technological advancements, because managers have begun to earn absurdly high salaries and because of the so called race between education and technology, which implies that high skilled workers will earn higher salaries respect to low and middle skilled workers, if the education rate increases less than technology, which is exactly what has happened in the last years. The chief executives of S&P 500 companies gain $14,5 million in 2018, against the $40.000 of the other workers, according to the American Federation of Labor and Congress of Industrial Organizations. In 1967, the 10 largest publicly traded firms in the US produced oil and gas, movies, cars and telephones, while in 2017, 7 of these 10 spots were occupied by technology and financial companies. This indicates that the world wealth is no more controlled by traditional capitalists, but it's in the hands of new players who have the ability to innovate either products, business models or both.

A strong polarization in the labour markets is going on at the global level. Since the advent of labour saving technology, high skilled workers have climbed the ladder of the income distribution, while many jobs have been rendered obsolete or useless. Routine intensive activities have been the most affected: since the 1990s, the percentage of middle skilled positions (sales and administrative) has declined in both developed, especially United States and Europe, and developing countries (with the exception of China and Ethiopia, that have actually experienced an upsurge in middle skilled occupations). Just to make an example, in 1980 high skilled workers gained from 25 to

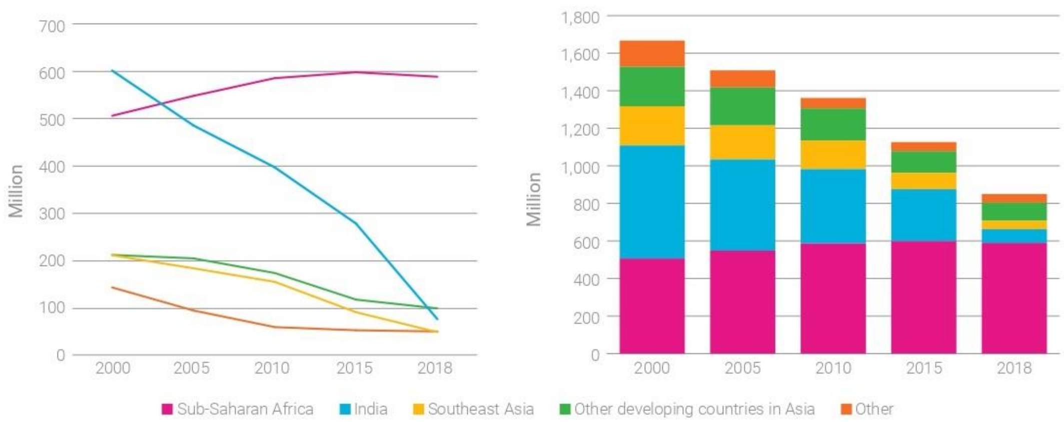
50 per cent more than middle skilled workers. Two effects can be identified: a displacement effect, which means that some activities that were once exploited by people are now being performed by machines, and a productivity effect, which means that the population demands an higher quantity of goods and services, as a consequence of the increase in income of high skilled workers.

At this point, given the fall in the demand for middle skilled workers, the decrease in their wages in relation to those of high skilled workers should seem pretty consistent. What may be surprising is the decrease in low skilled workers salaries, given that skill biased technology seems to have pushed up the demand for these less educated workers. The cause underlying this paradoxical effect is to be found once again in the fate of middle skilled workforce: given the fact that many jobs have been lost in this category, a lot of workers might be induced to accept occupations that are low skilled, pushing down wages of low skilled workers (the supply increases more than the demand). This would explain the increase in the wage gaps. Evidence can be found in the United States, where it appears that in big cities, urban workers who were once employed in middle skill jobs are now performing tasks that require a significant decrease in the degree of skills, consequently earning low skill salaries (Autor, 2019). Furthermore, according to a recent OECD study, the ratio between the first and the last deciles of the wealth distribution was lower 40 years ago in developed countries. In the US, this ratio went up from 3,66 in 1973 to 5,07 in 2017 (OECD, 2019). A study conducted in Germany, Poland and Spain discovered that the labour market polarization (changes in occupational structure) is the main reason for growing wage inequality in Europe, while other factors, such as labour market characteristics (gender, age…) and returns to education remain marginal (Bussolo, Torre, Winkler, 2018). If the recent trend keeps going on, middle skill activities, especially those that are routine based, face a concrete risk of vanishing, especially in most developed countries.

Luckily, the negative outcomes of technological advancements are not unavoidable. If technology is made available to every segment of the society and the prices of goods and services obtained with new technologies are driven down, Governments have the power to shift from an increasing unequal to a more equal society, where development benefit everyone and not only the top shares of the income distribution. There are three main policies to begin with. First, inclusive education systems can ensure equal opportunities for all. Compulsory education for everybody is not enough anymore, because technological progress calls for a continuous upgrade of workers skills and knowledge. Plus, new educational programmes could help align the workforce with the new tasks required by machines (use, test, oversee…). Second, technology has opened up new employment options, often under non-standard contracts (part-time, temporary employment…). Today, social protection systems must evolve in order to address the new needs of both workers and households. Lastly, it is crucial to ensure that everyone in the community has the knowledge of the new technologies and the opportunity to access them, both across and within countries. The exclusion of some shares of the population can be overcome by investing in connectivity infrastructures.

Just to give a few insights, electricity and Internet are two basic services that a significant part of the population still lacks today. As shown in Figure 25, the electric network has grown since 2000, but especially in developing and least developed countries, a significant part of the population was left aside in 2018.

Figure 25: levels and trends of people worldwide without access to electricity, by selected countries and regions, 2000-2018



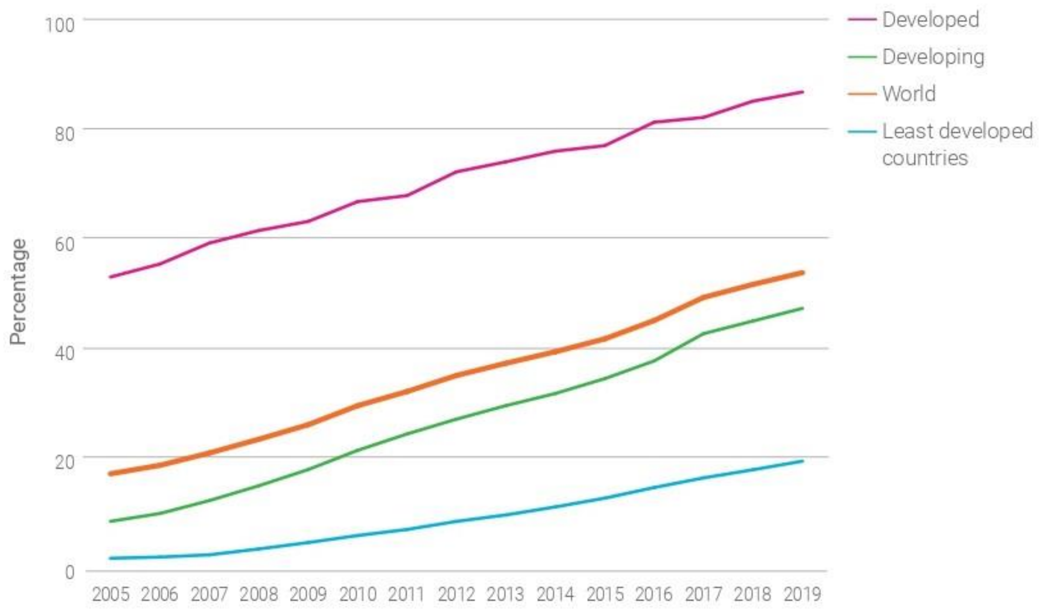
Source: United Nations, World Social Report 2020: Inequality in a rapidly changing world, through International Energy Agency (2019).

Note: "other developing countries in Asia" includes Bangladesh, Democratic People's Republic of Korea, Mongolia, Nepal, Pakistan, Sri Lanka; "others" includes Algeria, Argentina, Bahrain, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Egypt, El Salvador, Guatemala, Haiti, Honduras, Iran, Iraq, Jamaica, Jordan, Kuwait, Lebanon, Libya, Morocco, Nicaragua, Oman, Panama, Paraguay, Peru, Qatar, Saudi Arabia, Syrian Arab Republic, Trinidad and Tobago, Tunisia, United Arab Emirates, Uruguay, Venezuela, Yemen.

As for the Internet, disparities are found according to the level of income. Figure 26 shows that in 2019 in developed countries, more than 85 per cent of the population had an Internet connection, against not even 20 per cent in least developed countries.

One of the reasons for these disparities is the different cost of access: in developed countries, in fact, the Internet costs are just 3 per cent of GNI per capita, while in least developed countries, these costs rise over 30 per cent.

Figure 26: percentage of the global population with access to the Internet by country groupings, 2005-2019



Source: United Nations, World Social Report 2020: Inequality in a rapidly changing world, through the International Telecommunication Union (2019).

The footprint of inequality can be enlarged by disparities in Internet access, given its application in many other technological fields. A study conducted in Kazakhstan brought to light how gaps in ICTs access are one of the main reasons for the increase in income inequality in the country.

Developed and developing countries are uneven also when it comes to financial institutions: high income countries have an higher rate of bank accounts then low and middle income's, and disparities are found among groups within countries, as well. Even if developing countries have made some progresses, the gap is still significant and this prevents certain individuals and households to save money, level consumption over time, and shield themselves in times of crises, such as high unemployment or bad harvest.

Another area worth mentioning is the application of new technologies and Internet in the health system. In particular, when health care is supported by technology, information and diagnosis can be broadly and quickly shared, increasing the percentage of healthy workers in the economy.

When properly managed and used, technology has actually the power to boost growth and development and to build more inclusive societies. But nothing can be achieved without proactive policies and inclusive institutions at regional, national and global levels. In this scenario, research and development become central, especially to invest in technologies that can create new job opportunities and help reducing wage gaps globally.

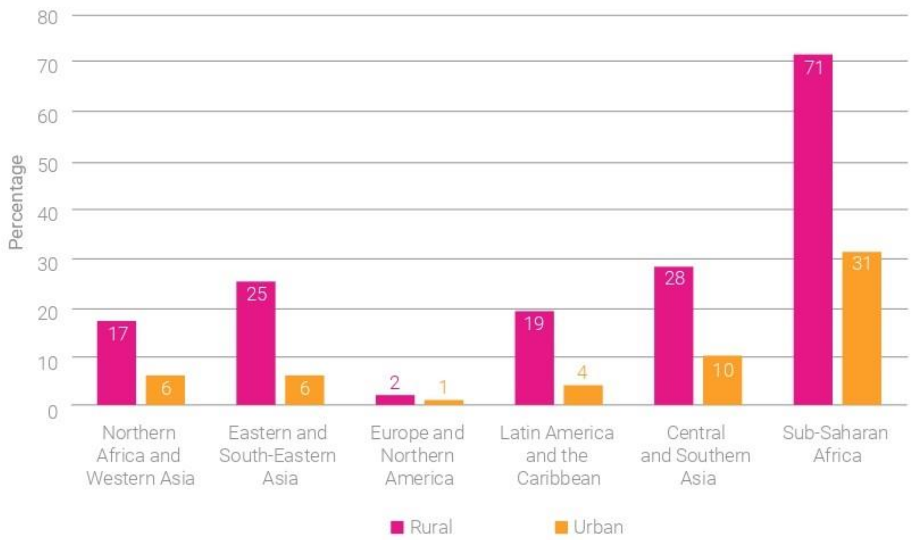
4. URBANIZATION: OPPORTUNITY OR PITFALL?

In the last decades the world has seen a rapid growth in urbanization. The fact that activities and investments are more concentrated in large cities is creating a dualism in terms of disparities related to location, which are called spatial inequalities. This division can be easily seen by comparing urban and rural areas, but it’s also pervasive within urban areas. In fact, the majority of the poor population is concentrated in parts of the cities that suffer from far less resources and this creates a cycle that is hard to break. Spatial inequalities, though more severe in developing countries, have been increasing also in developed ones. Low income countries often have a level of poverty comparable to that of the poorest regions of middle income countries, according to the Multidimensional Poverty Index. For example, the poor areas of Argentina and Mexico present a gap in the GPD per capita, which is 16 times higher in rich areas. From 1995 to 2008, in Europe, income and job losses fuelled the growth divergence between metropolitan and small manufacturing cities. Furthermore, the economic and financial crisis caused an heterogeneous picture in terms of real GDP per capita and labour participation, given its different spatial damages according to the country.

In spite of economic growth, investments in infrastructures and technology improvements, some areas are unable to reduce inequalities, both in terms of opportunities and resources. To be more specific, in many countries, different circumstances (resources endowments, weather conditions etc.…) influence the outcomes of different areas, resulting in the concentration of development policies in the richest parts of the nation, which become even richer. All of this explains why spatial inequalities are so important in the overall inequality framework of a country: in some African countries, it accounts between 60 and 40 per cent of the total inequality.

Globalization shifted the attention from between countries to within countries inequality, which is today more persistent than in the past. Thus, the dualism between urban and rural areas has become central in the global discussion on spatial inequalities. Urban population usually benefit from more (and better) jobs and services, such as health care, clean water, housing, schooling and infrastructures in general. "As a result, at least 80 per cent of people living in poverty are found in rural areas, even though rural areas account for only 45 per cent of the world's population."[11] Figure 27 shows that multidimensional poverty was higher in rural then urban areas globally in 2018.

Figure 27: Percentage of population living in multidimensional poverty, by region, 2018



Source: United Nations, World Social Report 2020: Inequality in a rapidly changing world, trough calculations based on the Oxford Poverty & Human Development Initiative's global Multidimensional Poverty Index 2018.

Note: results are not weighted by population size; regional averages based on information for 13 countries and areas in North Africa and Western Asia, 10 countries in Eastern and South-Eastern Asia, 17 in Europe and Northern America, 20 in Latin America and the Caribbean, 12 in Central and Southern Asia, 42 in sub-Saharan Africa.

The divide between urban and rural areas is present in developed countries, too, even if the poverty rates are very low. Anyway, if we consider that better transports infrastructures have allowed significant shares of the population to move out of cities without giving up their jobs, we can understand that something is actually changing. In developing countries, little advancements have been made, too. Some poverty

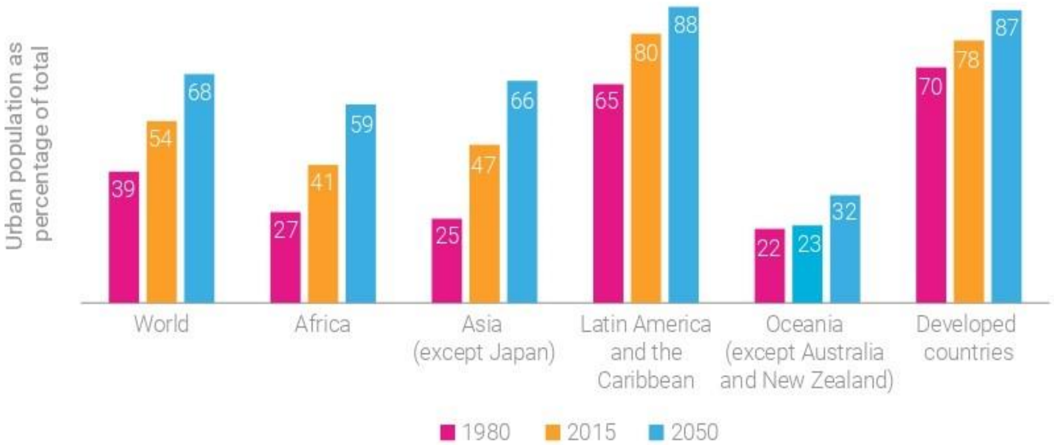
[11] World Social Report 2020: Inequality in a rapidly changing world, United Nations Department of Social and Economic Affairs, World Social Report 2020, 2020, p.110

indicators, such as secondary education and electricity, have been progressing at a quicker pace in rural areas, while others, such as better sanitation, have been following the opposite direction. Furthermore, these trends vary significantly across countries: while Bangladesh was able to reduce the gap in electricity between 1998 and 2016, in China it continued to rise until 2007. In summary, many countries are on the right path to close the rural-urban gap, but disparities remain high and call for better and quicker interventions. In conclusion, it’s fundamental to measure spatial inequalities using different indicators, which may enlighten different trends.

Another element that has come to the surface in recent years is the line dividing rural from urban areas, which is not so transparent anymore. New tools and databases are needed. For example, it appears that in India, people living in highly populated areas and employed in industrial or services occupations, are actually included in the rural communities.

The urbanization rate has grown fast in the last decades, with the majority of the world’s population today living in urban areas and, in particular, in large cities. Figure 28 shows the levels of urbanization in selected years and the projection for 2050, for different regions and for the whole world. Given that many countries experienced high urbanization in the past (developed countries and Latin American and the Caribbean), the rate today is slower and is expected to continue to decrease while more areas of the world become urbanized.

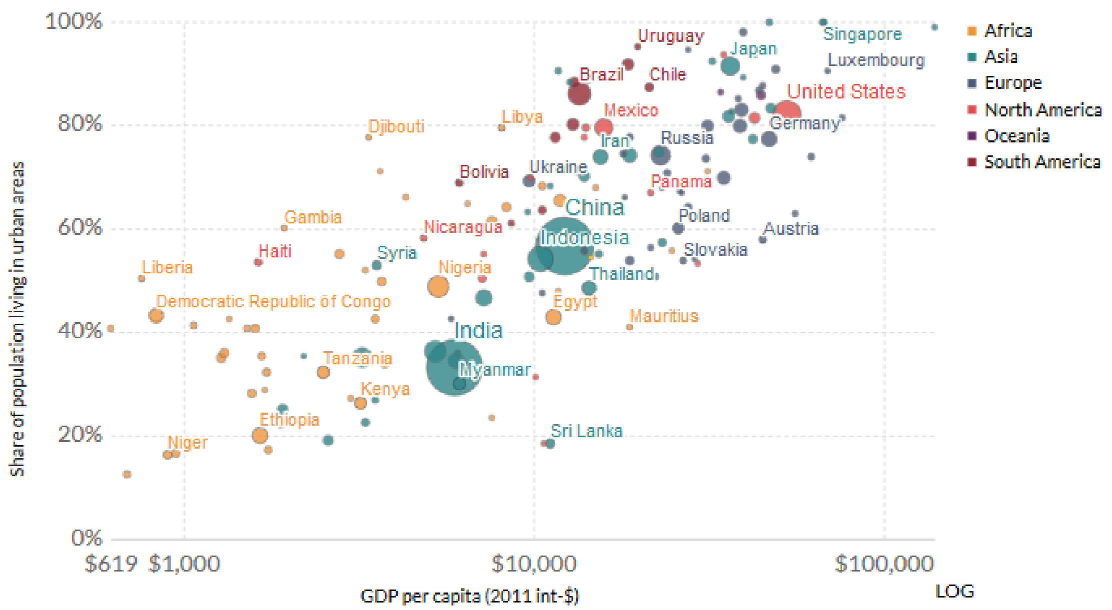
Figure 28: levels of urbanization in 1980, 2015 and projections to 2050



Source: United Nations, World Social Report 2020: Inequality in a rapidly changing world, through United Nations, World Urbanization Prospects: The 2018 Revision.

Nevertheless, United Nations projections show that the share of the population living in urban areas will rise from 4.4 billion to 6.7 billion in the next twenty years (2020-2050). Africa and Asia, which are urbanizing faster than the rest of the world, will produce the biggest slice of this increase (2 billion people, more or less). Two main reasons lay underneath this change: first, people have been moving out of rural areas since the first industrial revolution and this tendency is going on today, as well. Thus, a fall from 3.4 billion to 3.1 billion between 2015 and 2050 is expected in the rural population; second, especially in developing countries, a high urban population growth is a key component of development. Figure 29 shows that there is also a positive relationship between urbanization and economic development: as countries become richer, they tend to become more urbanized.

Figure 29: urban population vs GDP per capita, 2016



Source: Our World in Data;

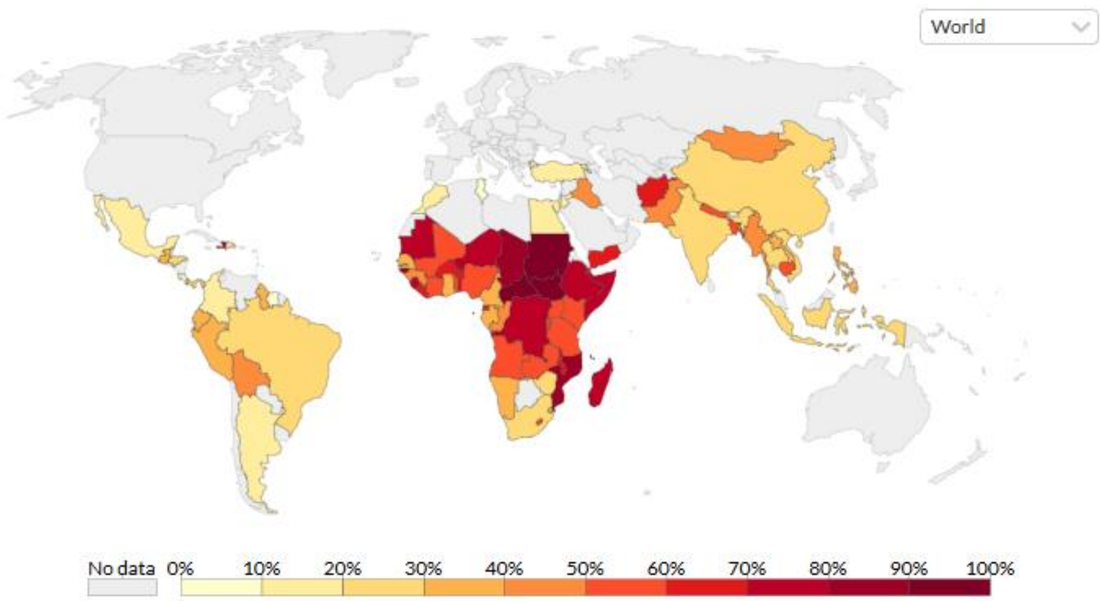
Note: GDP per capita is measured using 2011 US$.

Going deeper, the Gini index is usually higher in urban than in rural areas, indicating that inequality is more marked within cities, especially in developing countries (China was an exception in 2014, with a difference of 3 percentage points in favour of urban areas). Cities host a variety of opportunities, but the unequal distribution of resources generates inequality in many fields, which usually reinforce each other. Urban social exclusion embeds inferior or no access to health and schooling infrastructures, which rebound on job opportunities and quality, and so on wages, which have repercussions on housing, and so on. Spatial inequalities also impact on life expectancy: in London, longevity can vary up to 20 years according to the neighbourhood.

In the political field, low income inhabitants face more obstacles in both being heard and represented, with the consequence that middle and high income citizens can actually influence institutions into preserve their own interests, causing even more divisions, in both urban and rural neighbourhoods.

Analysing by city size, what is evident is that larger cities tend to host less poverty than middle and small cities, just like middle cities host less poverty than small cities. In fact, in big cities there is a higher concentration of basic services that improve significantly the quality of life of their residents. In developing countries, less populated cities are home of 58 per cent of the population and are growing fast, but the phenomena identified with the name of metropolitan bias made sure that larger cities actually received the majority of the resources. In spite of this trend, a positive relationship exists between city size and economic inequality. Evidence are found in Latin America and the Caribbean, China, United States.

Figure 30: share of urban population living in slums, 2014



Source: Our World in Data

But it’s not just the size of the population that makes the difference: culture, history and policies matter, too. That’s why economic inequality differs significantly across cities of the same country. In China, Shenzhen and Beijing host the same number of citizens, but Shenzhen Gini index is more than double of Beijing's. If local policies ignore the issue of inequality, urbanization is likely to lead to increasing exclusion and disparities within the same metropolitan areas, therefore exacerbating disparities. One evidence can be found in slums, where people experience from one to five forms of deprivation, which are: no access to clean or running water or health care services, not enough space for living or secure and safe houses, no security of tenure. In 2016, more than 1 billion people lived in these conditions, according to the United Nations. Figure 30 shows the share of global urban population living in slums in 2014, divided by countries. However, it's important to keep in mind that the biggest share of the poor population still lives in rural zones, therefore calling for growth policies to be put in place in these areas.

"Inequalities in urban areas are largely determined by the way in which cities are, or are not, designed, planned and managed."[12] When urbanization is carried out without guiding lines, basic services and standards of living do not reach everybody, leaving some shares of the population out of the process and, therefore, creating inequalities. This holds particularly for developing countries, where cities are growing fast. Anyway, there are some policies that governments can put in place to avoid the negative consequences of urbanization. Most of the time, urbanization forces the already disadvantaged residents to relocate in the poorest neighbourhoods. Consequently, it becomes essential to ensure that everybody has basic rights to housing and land property in the optic of inclusion, with a special attention to women, and to provide low cost accommodation alternatives. A step further could be to create public spaces within neighbourhoods where different groups can coexist. Another important public intervention is to ensure that everybody has access to essential services, including transports throughout the city; health care and clean water will ensure public health, while transports will increase the possibility to benefit from better jobs and political and social participation, reducing gaps between different areas. This last intervention is related to the improvement of education and employment, which involves not only compulsory and of quality learning, but also the implementation of programmes for workers to upgrade their skills and knowledge, either internal or external of companies. One more point requires making sure that the expansion of cities

[12] World Social Report 2020: Inequality in a rapidly changing world, United Nations Department of Social and Economic Affairs, World Social Report 2020, 2020, p.123

borders doesn’t come at the expenses of rural and agricultural land, which will deprive rural inhabitants and lead urban suburbs into poverty, therefore rising differences.

Inequality in urban settlements results from the concatenation of disparities in a variety of fields, such as the provision of public goods and services, access to decent occupations and wages, opportunity to secure housing and land rights not only for middle and high income, but also for low income and poor citizens. That’s why national and local governments need to work together to create more equal urban societies, especially in least developed countries. Governments transfers, local taxation and public-private partnerships, along with development banks, can ensure a flow of resources which can potentially be spread to everybody, reducing inequalities and boosting development at the same time. Even more, these policies should account for gender, race, income and any other horizontal inequality, in order to satisfy the specific needs of each group.

Chapter IV. THE ROLE OF GLOBALIZATION

In order to fuel economic development, countries can rely both on specific features and on common elements. A key role for growth is played by technology and organizational structure and by the capacity to gather and exploit the factors of production, being machines, tools and infrastructures (material) as well as education, training and know-how (non-material).

The possibility to tap into the technological expertise and to access the markets of the developed world brought about by globalization is boosting the rapid growth of developing countries, which are on the path of catching up with the North. As a consequence, inequality between countries is shrinking. This would be positive, if not for the fact that the other component of inequality, inequality within countries, it's actually increasing in many regions of the world. Today, inequality at the global level is going down just because the decrease in inequality between countries overcomes the increase in inequality within countries. But will it always be the case?

In this sense, it's useful to have a look to what the economic theory says about the relationship among international trade and income inequality.

1. THE HECKSCHER-OHLIN AND STOLPER-SAMUELSON MODELS

The Heckscher-Ohlin model is the simplest model of international trade theory. The basic assumption is that some countries are abundant in labour and others are abundant in capital. This difference in factors endowment implies that when a country enters the international market as a consequence of globalization, it exports goods and services in which it has a comparative advantage. Thus, developed countries will export products that are rich in capital and skilled labour, while developing countries will export more unskilled labour intensive products.

This idea was further developed by Stolper and Samuelson, who introduced the role played by factor prices. In particular, if wage is the price of labour, this implies that in developing economies wages should increase, given the increase of labour in the production, while the price of capital should decrease, given the decrease in the use of capital in the production. Thus, the distribution of income should improve in developing countries and we expect the Gini coefficient to go down. The opposite will occur in developed economies, where the price of capital should increase compared to wages and the Gini coefficient should therefore go up.

2. WHAT IS REALLY HAPPENING

As said above, inequality within countries has increased in the decades between the 1980s and 2010, both in developed and developing economies. The analysis stops just after the economic and financial crisis of 2008, since many countries (especially developing ones) actually lack sufficient data after that date. Studies conducted on OECD countries brought to light that the Gini coefficient rose between two and four percentage points in many of them, like for example the United States, Italy, Germany, the United Kingdom, the Netherlands and even in the Scandinavian countries, notably known for their equity. Furthermore, wage inequality has gone worse, too. The reason is to be found in the two forces at work on the wage distribution: while the top wages have been dragged up from the middle, the bottom wages have been dragged down. France is an exception of this trend. Here, in fact, it seems that minimum wage laws and the upsurge in payroll costs actually counteracted the rise in income inequality. The same can be said for the Eastern Europe countries, where, after the completion of the transaction to market economies, inequality slowed down. This picture of developed economies should make us understand that, in spite of general trends, each country actually follows its specific journey. Plus, the picture seems coherent with the theory above.

Income inequality also increased in many developing countries since the last two decades of the last century, especially in those economies who have been experiencing a sustained growth. China is the often cited example. In the Asian giant inequality rose between the 1980s and the 2000s, but this should not surprise given the fact that China was experiencing severe market reforms as a consequence of its transition from a planned economy. What’s concerning is that, opposite to what happened in Eastern Europe, inequality in China didn’t stop rising after the adjustments, but, instead, it continued steadily. Even more, disparities where not only confined in certain parts of the country as a consequence of industrial development at the expenses of rural areas, but it actually spread throughout the territory and to the economy as a whole. While in the majority of the Asian countries income inequality remained quite stable, China’s experience can be found in countries such as Bangladesh, Indonesia and, in particular, India.

The same heterogeneity can be observed in Africa. Here, some countries experienced an increase in income inequality, others a decrease, still others a linear trend. In particular, those economies which have been growing the most are also those that underwent the most acute upsurge in inequality. Nigeria, Kenya, Ghana and Ivory Coast are included in the latter.

A world region where the Kuznets curve can be applied is Latin America. Here, inequality dropped at the beginning of the century, after twenty years of sharp increase due to the adjustments reforms urged by the International Monetary Fund and the World Bank to solve the balance of payments crisis that was undermining the development of the area. Consequently, some countries have been able to decrease income inequality and to reach levels never seen before. Significant is the case of Brazil, which is the country that has made the most progresses in narrowing disparities since the 2000s. Unfortunately, in the majority of Latin America inequality is still substantially high.

To sum up, the South of the world is moving toward an upsurge in income inequality, but different countries are going through different experiences here, as well. Moreover, developing countries which have become central in the global scenario have seen, contrary to the thesis of the economic models above, the share of income going to capital increase since the 1990s. This group includes, among others, China, India, South Korea, Mexico and Turkey.

"It does indeed seem as if the growing openness of national economies to trade in goods and services, the movement of capital and technical know-how, and the emergence of new actors in this trade, have dramatically transformed national economies across the globe."[13] Globalization took all these changes to the surface, along with some other indirect features which are at the basis of the rising in income inequality within countries. Various elements impact on the income distribution within a country: the capacity to accumulate factors of production, such as capital and labour, demand and supply, taxes and subsidies, markets regulation and technological change. In order to understand the trend toward higher inequality, it's important to consider not only globalization and its effects, which represent a common evolution of the environment for countries, but also policy programs that were undertaken by groups of countries in response to these external changes. Plus, for the purpose of this thesis, I have decided to focus mainly on developing countries, given that the relationship

[13] The Globalization of Inequality, François Bourguignon, 2015, p.73

between globalization and the rise in inequality here actually contradicts the economic theory.

In emergent nations, the restructuring and modernization of their economies boosted economic development, thanks to trade openness and the role played by northern countries with foreign direct investments. For example, in the Asian countries which experienced the wider growth, namely China, Hong Kong, Singapore, Taiwan and South Korea, the expansion of the distribution field for the manufacturing industry given by international trade played a major part in their evolution. Trade openness in developing countries caused a shift of labour from low wages, agricultural and handmade jobs, to middle and high wages industrial jobs. Surely an important advancement for income distribution. It must be said, though, that jobs at the very top of the distribution remained excluded from this evolution, with the consequence that, for example, in the Asian tigers there was no significant impact on the income latter.

This said, in countries such as China and India, economic growth has been accompanied by a rising income inequality. Of course, many factors (apart from globalization) were at play. As mentioned earlier, China was an economy in transition and, as in the European former socialist economies, the increase in inequality was far from unexpected. Still, this doesn't explain why the trend hasn't reversed or, at least, stopped. In contrast, recently, the country has improving the economic conditions of those at the higher ends of the income distribution, because of two factors: on one side, the formation of a fresh entrepreneurial class; on the other side, the higher demand for skilled workers. Plus, China interregional differences have gone worse since the beginning of the transition in the 1980s, and this can be a consequence of economic development, that tends to benefit those areas and cities in which the industry grows. More or less, India went through the same situation. According to the Heckscher-Ohlin and Stolper-Samuelson models, the share of the population that should be most favoured by the opening up of emerging countries national markets to global trade are those at the bottom of the income distribution, which are unskilled workers, given the increase in the demand for unskilled labour. But the examples of China and India, above other countries which started to export labour intensive goods, actually contradict this result. It actually seems that progresses in those industrial sectors which develop thanks to export can take place without direct changes in industrial wages. This happens when these wages are determined by the external environment and set at an higher level respect to those of the agricultural sector, for example. If this is the case, then the expansion of trade ends up benefitting only manufacture workers and capital owners, worsening inequality by leaving everybody else behind. In this scenario, international trade openness boosted growth by disproportionately favouring capital over labour, both in countries that invested in the manufacturing industry of labour intensive goods and in countries that, instead, kept sustaining the raw materials field. In the latter, in particular, the international demand pushed prices up, once again to the advantage of capital owners, sometimes even represented by national governments. Furthermore, the richest global share of the population has increased its profits because of the funding that big companies have put into place in developing countries which are either low-cost labour abundant or rich in natural resources (or both). Given that increasing profitability is the main force driving globalization, the fact that the capital share of income has been growing at the expenses of that going to labour shouldn't be really surprising, even if this contradicts the economic theory.

Technology is a tool that impacts on people's lives today more than in any other historic period. The rate at which information and communication technologies, especially, have been spreading throughout the globe in the last decades has forced countries to change their economic structure in order to make space for these new instruments. The fact that technology has brought significant benefits in many sectors of the economy and has improved productivity, induced many firms to invest in the production of capital and skill intensive goods and services. The direct consequence has been an upsurge in the demand for skilled workers, who are namely those who are able to use the modern technology, and in their income. At first sight, one may think that this change has been going on only in developed countries, but the simple fact that innovations are free to spread in today's globalized world, means that the same changes have been experienced by developing countries, as well. In this sense, technology is an exogenous force. But globalization increased the degree of competition between companies and competition is the main driver of innovation. Therefore, trade openness accelerated the advancement rate of technological progress and the remuneration of the factors connected to it. In this sense, technology is an outcome of globalization.

Technological progress is also responsible for the spike in top incomes that has been seen recently. For example, the introduction of ICTs in the financial sector has increased the quantity of operations and made it possible for financial skilled traders to get very high remunerations. The same happened to the top managers of multinationals. Once again, this phenomenon hasn't took place only in developed economies. As a matter of fact, for example, technological advancements increased the Chinese billionaire share of the population as well as the earnings of the Bollywood actors and cricket players.

Globalization also led to the equalisation of the standards of remuneration, which allowed for a more unbound mobility of highly skilled workers. This is something that contributed to the increase in incomes of those at the top of the distribution. The explanation is simple. If the owner of a big Asian company is looking for a manager, he can easily look outside the boundaries of its own country to find it. The fact is, if the salary that the Asian company offers is not more or less the same of the one that the manager already earns, he will not move.

Reasons for increased inequality explained above are all the direct result of the way in which the international market works. “Certain shocks (technological advances, the development of trade, the opening up of emerging markets) have hit the global economy and national economies, modifying the quantity of goods and services exchanged or produced, as well as affecting employment, prices, and wages.”[14] This changes of the global environment, in particular, hit on economic institutions, modifying both the disposable income, because of modifications in the tax system, and the market income, because of the evolution of the markets mechanisms.

The debt crisis that started in the 1980s in Latin America caused harsh damages to the whole developing world. The International Monetary Fund and the World Bank were forced to draw a correction programme, which introduced structural adjustment policies on the economies interested by the crisis. Unfortunately, these reforms of the economic institutions had some serious negative effects. First of all, they were detrimental for poverty, given that economic growth decelerated as a consequence of these policies. Second, the downsides of lower development actually hit harder on the bottom and middle shares of the population, with the top classes that remained almost excluded. In conclusion, the social costs were high and the programme had more side effects than benefits. In the following decade, many countries experienced an upsurge in inequality, especially in Latin America. States were compelled to apply a set of free market directives, named Washington Consensus, which included commercial and financial liberalization, deregulation of goods, services and labour markets, privatization, cuts in social spending, just to mention a few. Many of these interventions

[14] The Globalization of Inequality, François Bourguignon, 2015, p.91

were already being applied by developed countries, for example the deregulation of both the financial sector and the labour market. The first was supposed to boost economic growth through increased competition, and, apart from the fact that the development of financial instruments actually caused the rising of top incomes respect to the rest of the distribution and that it was the main cause of the 2008 crisis, it's unclear if it had more positive or negative effects on the world economy. In the labour market, some unfavourable consequences clearly pushed income inequality up. For example, the obsolescence of unions and the drop in minimum wages compared to the rest of the wage distribution that has been experienced by some OECD countries. Anyway, other elements surely contributed to worsen the situation. There are reasons to believe that inequality would have risen in Latin America independently from the reforms implemented, given the crisis that was pervading the region. If we take the example of Argentina, the picture is coherent: in 2001, the country decided to face the crisis on its own and gave up on international aid. The economic growth that followed the crash was remarkable, but the same can't be said for inequality: the Gini coefficient rose of 0,4 percentage points between 1999 and 2003.

This said, it is undeniable that some of the reforms imposed by the international financial institutions actually worsened income inequality in many countries. Worth of mention are the elimination of price subsidies for both farmers (input and output) and consumers (basic goods), privatization, that increased the price of some services, and the cut of social spending especially for education and health. The Washington Consensus programme also slowed down growth in the African continent, even if the distribution of income suffered less here than in Latin America.

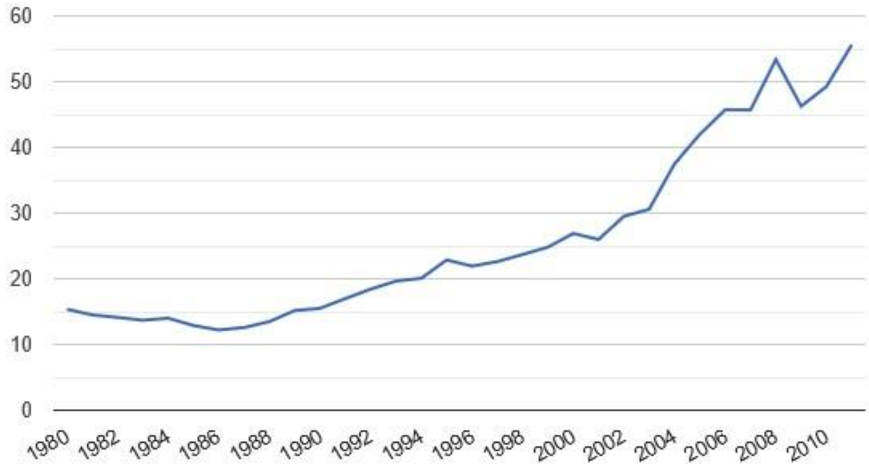
The Asian situation was slightly different and heterogeneous: while some countries went through a decrease in inequality, especially in the 1980s, others experienced an increase. In spite of these opposite trends, the structural changes in Asia actually allowed for a rapid return to sustained growth everywhere. Once again, in China and India, in particular, to identify the real cause in the upsurge of income inequality is complicated. For sure, two factors were crucial: the development process and the opening up to international trade and to market forces. Still, it's hard to split the two to understand which one was responsible to what and to which extent, given that they are concatenated.

In conclusion, what we can extrapolate from this picture so far is that the rise in economic inequality experienced in the majority of the developing world in the last decades is not just the outcome of economic growth as explained by the Kuznets curve (which could actually fit the evolution of both China and India, where urban industrial areas have been those which underwent the primary advancements). Certainly, progress contributed to the negative trend, but it doesn't account for the whole phenomenon. A major role has been played by globalization and its consequences on the economic structure of single countries. This said, it's fundamental to underline the heterogeneity of experience between countries which drives us to the conclusion that internal policies and institutions do matter in counteracting the global changes. The fact that some developing nations in all the three continents of the global South, namely Latin America, Africa and Asia, were able to adopt economic reforms that actually neutralized the rise in inequality brought by international trade and the opening up of domestic markets is significant in this sense.

Chapter V. THE INDIAN CASE

A peculiar development path makes India an interesting special case. The country grew from the economic point of view during the 1980s and, especially, during the 1990s, but this development has spread unequally among the population. As a consequence, inequalities increased ever since the beginning of economic liberalization. Figure 31 shows the degree of Indian trade openness, as measured by the sum of exports and imports as a share of GPD. It's clear how the weight of imports and exports increased since 1980.

Figure 31: India Trade Openness, 1980-2011



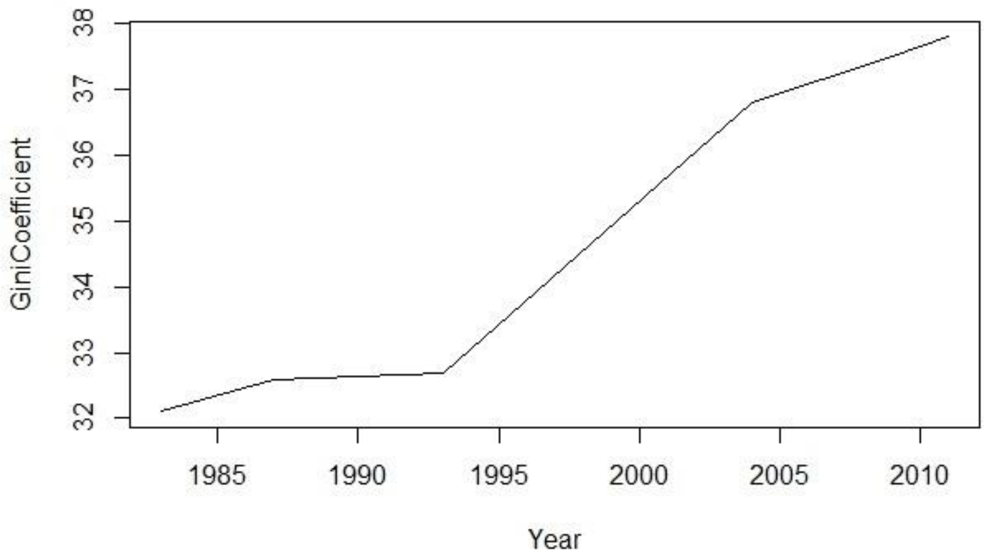
Source: www.theglobaleconomy.com

When a country opens its economy to global markets, income distribution changes in order to favour exports instead of imports. If redistribution mechanisms are not in place, trade liberalization can increase inequality instead of decreasing it. In fact, according to estimates of the World Bank, income inequality increased during and after trade liberalization in India. The cause underlying is to be found in the skill biased development of the country: the opening to global trade has favoured activities which employ high skilled workers, negatively affecting low skilled ones, who were mainly engaged in agriculture. Plus, labour intensive productions have been substituted by imports. Moreover, trade openness increases the cost of labour, meaning wages, in developing economies and this encourages a growth lead by capital intensive tasks. The Indian growth has mainly contributed to the spread of financial services and telecommunications, which account for a significant share of the rise in the country's

GDP, but do not employ a lot of labour, and didn't create a significant number of new jobs in other sectors. In particular, the majority of the active population appears to still be employed in low paid activities, either agriculture, manufacturing or service related. A significant feature of the Indian economy is the dualism of the labour market in some major sectors, where we find either low productivity occupations or high value, high productivity jobs.

India's experience, therefore, contradicts the economic theory based on the Hecksher-Ohlin and Stolper-Samuelson models and, hence, is consistent with what has been said in Chapter 4. Figure 32 shows the increase in the Indian Gini coefficient during the period pre and post reforms undertaken by the country: it was 32.1 in 1983 and arrived at 37.8 in 2011. Plus, the coefficient has been estimated to be 47.9 in 2018.

Figure 32: India Gini Coefficient, 1983-2011



Source: R; self-estimate based on data from the World Bank

Data on consumption reveal the same trend: the ratio between urban and rural consumption rose from 1.62 in 1993-1994 to 1.96 in 2009-2010. The top urban decile was the one who benefited the most from the situation, given that the income gap widened even more in comparison to both the bottom urban decile and the bottom rural decile.

Moreover, the Indian labour market is built on different categories, defined by workers characteristics. The majority of the working population is self-employed, especially in urban areas, with only a minor share who actually earns a wage in the strict sense. Among the latter we find either regular workers, who are hired by contract for a certain period of time, or casual workers, who perform the job only when it is needed and are predominant in rural areas (but they can be found in urban settlements, too). For casual workers, the variation in wage inequality has been very little and going down, while for regular workers inequality has seen an upsurge in the second decade of reforms. Furthermore, inequality is much wider in the wages of the latter, as shown in Table 1.

Table 1: Gini coefficient for regular and casual daily earnings, 1983-2004

	1983	1993	2004	1983	1993	2004
	Regular workers			Casual workers		
Rural	0.451	0.409	0.485	0.318	0.276	0.274
Urban	0.374	0.384	0.477	0.353	0.308	0.298
Total	0.419	0.4	0.484	0.329	0.288	0.282

Source: Employment and Inequality Outcomes in India, Dipak Mazundar

Some factors contribute to determine wages for the two labour categories. The most important is a human capital variable, education, which accounts for the major part of the inequality between regular and casual workers. In fact, the earnings of workers with higher degree of education have increased substantially since the 1980s, while those of workers with lower education actually went down in the first decade of reforms. Given that casual workers are paid only for the days of real work, the number of working days turns out to be the second most important determinant of wage inequality. Also the industry and the state of residence play a role. The latter, in particular, should not surprise to have an higher weight for casual workers, given their preponderance in rural areas, where the possibility to work is often subject to environmental circumstances, such as weather conditions and soil productivity, which differ from region to region.

India’s approach to growth led to this general economic picture, but there are other specific non economic characteristics, social norms, costumes and traditions, embedded in the country’s culture, which affected and continue to affect inequality, both of outcomes and of opportunities. India’s inequality is the result of interrelated and concatenated factors that touch every aspect of the economy and the society. This will be the following subject of study, together with a brief look to the economic reforms undertaken after Independence and a deep analysis of the labour market.

1. THE HISTORICAL PATH

Due to the policies of the English government during the colonization period, the country that presents itself at the dawn of Independence in 1947 has got a very underdeveloped economy. The handicraft sector has gone backwards because of the higher emphasis that has been put on the rural agricultural sector, that, though, focuses mainly on export outputs, while the industrialization process is oriented towards productions that enrich the United Kingdom. Therefore, the first years as an independent state are characterized by political and economic instability, with food crisis, lack of raw materials, especially jute and cotton, and high inflation.

This complicated situation is the reason behind the Indian adoption of an adjusted socialist model, that will dominate the country's economic structure until the 1980s. While the traditional framework presents only two sectors, the Indian one actually employees four in order to emphasize the role of both services and handcraft, which together absorb the majority of workers. The industrial field is also split in four: two sectors are strictly controlled by the central or regional governments, civil industries have a public predominance and one sector is left to private control. Plus, the state reserves itself the right to nationalize firms for national interests. Regional policies prioritize the most advanced areas, affecting significantly the geographical evolution of the country, and at the same time there is the will to stop the expansion of big firms in favour of small enterprises. The result is a mixed economic model, in which a strong public sector allows the state to control the economy and to plan industrial investments, while the private sector is strictly license regulated, with the aim of putting a threshold on both the level of production and on exports.

The role of planning (especially for investments) increases exponentially between 1955 and 1985: for the central government, these expenses will arrive to represent 75 per cent of the state budget if we include the payment of the debt interests. The public sector progressively expand its importance at the expenses of the private organized sector: its share of national income rises to 25 per cent, with 7 million employees in 1960 (against 5 for the private sector) and 21 million in 1970 (against 7 for the private sector). The weight of the public categories is especially evident in some sectors, such as minerals, energy, transports, communications and banks, where the private presence is basically inexistent. In the agricultural and manufacturing sectors the government adopts indirect modes of control, especially through price policies and supply of the production factors.

Anyway, this model, contrary to what was expected, brings scarce economic results, with an annual income growth rate of just 3.5 per cent, which translates into a miserable 1 per cent annual growth rate of the income per capita. During this first period of independence, the Indian economy suffers from multiple food and payments crisis, especially as a consequence of bad monsoons and of the oil crisis, and from political instability.

It's from 1980 that we can start talking about a true Indian economic development, with an average growth rate of almost 6 per cent. The structural change of India, which begins its transaction from a socialist planned economy to a democratic market economy is a consequence of the oil crisis that hits globally in this period and forces the Asian country to turn to the International Monetary Fund to ask for help. International aid is granted to India in return for a more flexible regime which involves especially macroeconomic stabilization and structural reforms. This deal marks the beginning of the Indian global economic integration and, in particular, of its trade liberalization. On the internal side, industrial licenses are gradually taken down with the aim of opening to global competition. On the external side, imports and exports are progressively liberalized to favour the modernization of the industrial sector. The benefits on the economy are soon to be seen: the income per capita reaches a growth of 3.3 per cent per year; investments are strongly redirected towards the private sector; the quantity of exports increases and the import of new and more efficient machinery pushes up the productivity of the manufacturing sector; the service sector becomes more dynamic; agriculture grows thanks to the so called "Green Revolution", which involves the introduction of better seeds, chemical fertilisers and a modern irrigation system. Unfortunately, this development goes side by side with an expansive budget policy, which soon becomes unbearable given the upsurge in the public debt and its interests. The consequence is a payments crisis at the beginning of the 1990s.

In spite of this, the last decade of the XX century is characterised by an accelerated economic progress, with a rate of growth between 6 and 8 per cent per year and an income per capita of 4 per cent. The opening up of the economy keeps going on with the abolishment of licenses in many sectors (with the exception of those on consumer goods, that will be progressively removed), the elimination of the limits on the quantity of outcome produced, for both import and export purposes, and a significant reduction in custom duties (from 400 per cent in 1990 to 20 per cent in 2005). A further liberalization of the investments brings advancements in many areas and in particular in the banking and information technology service sectors, which will know a growth higher than 10 per cent in 2004 and that, along with manufacturing and commercial services, will drag the Indian economic development in the following years. The opening to foreign direct investments has been gradual and accelerates after 2004, given that many Indian firms were being acquired by foreigners. The same gradual process took place for capital, both coming in, attracted by the Indian potential for growth, and out of the country, especially considering that many Indian businesses were being lured from profitable investments outdoor. Some public companies started to be privatised. Exports of goods and services increased progressively over the years as a consequence of the orientation towards global markets and the nation seemed to enter the era of mass consumption. Plus, public debt decreased so much that India was able to start repaying some of its international obligations and to step out from the condition of country on an assisted development process. Furthermore, in 1992 India adopted a flexible exchange rate regime.

2. REGIONAL DIFFERENCES

India has experienced a sustained economic growth in the last four decades. In spite of this, the country is one of the worst off in the world (even in the developing world), both in terms of income inequality and social inequalities. In 2011, six over twenty eight states (Maharashtra, West Bengala, Gujarat, Uttar Pradesh, Andhra Paradesh, Tamil Nadu) generated more than half of the overall Indian GDP. In such a vast nation, it is expected to find differences across the territory, in terms, for example, of soil productivity, climate conditions and endowments of raw materials, all of which impact on the growth path of a state. But, given that some mineral resources rich countries are among the least developed ones, it can be concluded that the preconditions mentioned above only account for a small part of the existing gap.

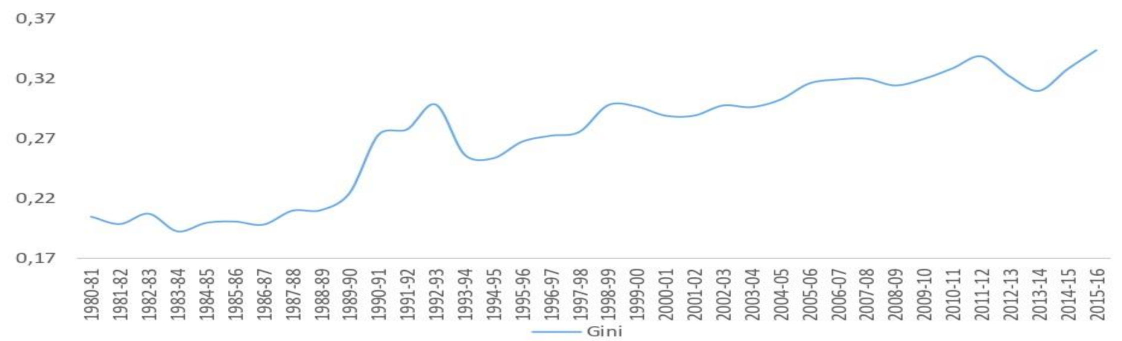
The crucial point is represented by the various policies that followed Independence, which widened regional and state disparities. Two mechanisms, in particular, played a key role. The first regards a disproportionate division of resources. In market economies, in fact, investments (domestic and foreign) and human capital tend to flow towards advanced regions or states, leaving the already disadvantaged ones in an even worse condition. And this happened in India, too. Between 1991 and 2002, “the top 10 Indian states attracted more than 63 per cent of total foreign direct investment in India. In contrast, the bottom 10 states together received less than 1 per cent of total FDI."[15] The second concerns the role of the central government, which was supposed to redirect some monetary resources through transfers, in order to correct the divergences. But this didn't happen and, therefore, contributed to increase regional inequalities.

The "Green Revolution" in agriculture was expected to stress the gap between states to some extent, but it was taken for granted that this would have narrowed down as soon as the benefits of the changes would have spread to the whole territory. Unfortunately, this was not the case, especially in the period that followed the reforms, which has actually seen a regression in many states.

In the industrial sector, manufacturing in particular, growth has been disappointing both in terms of employment and contribution to the Indian GPD. Moreover, the advancements have been heterogeneous and geographically concentrated. Not only is the western region towing the sector, but it has also increased its share of value added in the production, while the eastern region has seen its own decreasing, together with investments and number of workers.

In the service sector, which has developed strongly since the opening up of the Indian economy, there is a strong dualism: on one side, low paid, low productivity services; on the other side, highly paid, high productivity services. The latter are concentrated in urban areas, a division that can only widen regional disparities.

Figure 33: Per capita inter state inequality, 1980-81/2015-2016



Source: Inequality trends and dynamics in India, the bird's-eye and the granular perspectives, Hai-Anh Dang and Peter Lanjouw, United Nations Univeirsity, UNU-WIDER Working Paper 2018/189, December 2018

[15] Inequality in India: A Survey of Recent Trends, Parthapratim Pal and Jayati Gosh, DESA Working Paper No. 45, July 2007, p.22

Figure 33 shows the increase in inter-state inequality measured by the Gini coefficient of per capita income weighted by state population. As a matter of fact, the regional gap is destined to enlarge without adequate interventions to address it, therefore slowing down the Indian potential for growth.

3. THE TERTIARY SECTOR

It should be known by now that while a country takes on the path of economic progress, the labour market composition should change, with a shift from agriculture to industry and just after that, when the industrial sector experiences a sustained growth and the transaction is completed, start to invest in the service sector and, especially, in its high paid branches. Nevertheless, India skipped the intermediate step: the peculiar feature of its development is represented by the marginalisation of the manufacturing sector which occurred alongside with the growth of the tertiary sector. Between 1993 and 2004, agriculture employment declined by 6.5 per cent, but just 1.1 per cent of this change went to manufacturing. The rest was mainly absorbed by services. Table 2 shows the composition of the labour market by sectors of employment, their growth and their share of national income. The average rate of growth between industry and services is not so different, but if we look at their contribution to the Indian GDP is clear how much the tertiary sector has increased its importance respect to the secondary sector.

Table 2: Sectoral composition of growth, 1983-2004/05

	Average growth rate (in %)		Share of GDP (in %)		
	1983/84-1992/93	1993/94-2004/05	1983/84	1993/94	2004/05
Real GDP	5.22	6.23	100	100	100
Agriculture	3.56	2.71	37	30	20
Industry	5.6	6.59	24	25	26
Services	4.62	7.97	39	45	54

Source: Employment and Inequality Outcomes in India, Dipak Mazundar

If it's true that employment in manufacturing has been basically steady during the two decades of reforms and that the decline in the number of workers in agriculture mainly shifted to the service sector, it is also true that the tertiary sector had already been growing in terms of employees way more than manufacturing in the 1970s. It's exactly this, the employment stagnation in manufacturing and the steady advancement of services, that distinguish India's development from other countries, even those Asian ones who started their transaction in recent years. These nations, in fact, have seen their tertiary sector increasing its number of workers, but the same has been occurring in manufacturing, which actually took in between 33 and 50 per cent of the decline in agriculture.

This sharp growth of services in India has increased income inequality within the sector. In fact, while the bottom share of the distribution shows a slightly better situation in terms of expenditure per capita in all the three sectors of the economy, the rise for the middle and top classes in the tertiary sector is far more evident. Table 3 gives an idea of the situation by showing the sectoral Gini coefficient.

Table 3: Contribution to inequality of households by sector of activity, 1983-2004/2005

	Gini coefficient		
	1983	**1993-94**	**2004-05**
Primary sector	0.078	0.071	0.051
Secondary sector	0.081	0.076	0.065
Tertiary sector	0.191	0.235	0.262

Source: self relaboration from Employment and Inequality Outcomes in India, Dipak Mazundar

The data show a decline in income inequality in the agricultural sector, especially in the first years of the XX century, and a stable decrease in the industrial sector. What must be underlined is the sharp hike in inequality in the tertiary sector, especially between the 1980s and the 1990s.

So, advancements in the service sector account for a significant part of the Indian economic development, but at the same time they played a key role in increasing income inequality in the country. Two main reasons lay under this trend. First, the dualism of the sector, in which high incomes in the financial and business sectors are opposed to low incomes traditional and subsistence activities. Second, the Indian labour market has not been able to create enough jobs since its opening to global trade. Given the stagnation in employment growth in manufacturing, the excess of manpower in the agricultural sector has not been absorbed, and this surplus of unskilled workers has been redirected towards the low paid activities of the service sector, increasing inequality within the sector itself and in the overall economy, by pushing down wages of those already working in this category. Moreover, higher levels of education for workers in the tertiary sector translated into higher income levels here respect to both primary and secondary sector for every quintile of the income distribution, exacerbating economic inequalities.

By looking at the composition of the sector, we discover that of the 6 per cent increase in jobs since 1980, just a little more than 1 per cent was due to higher employment in the top income occupations, the majority of this change being imputable to more traditional categories, such as hotels and restaurants, trade and communications. This means that the rise in inequality wasn't restricted to financial or business or insurance activities, but it must have spread to other fields, such as consumer services, driving up the number of high income occupations.

Another specific characteristic of the Indian growth experience is the high labour productivity in the service sector, which actually exceeds that of industry. In fact, a study conducted among China, Thailand, Malaysia, Indonesia, and India over the period 1960-2002, revealed that these two specific elements, meaning the evolution of the tertiary sector and its high productivity, are found only in the latter.

4. THE MANUFACTURING SECTOR

A dual composition is found also in the manufacturing sector and this is another peculiar feature of the Indian growth path. This trademark of industrial development is characterized by two facets. First, a "missing middle", consequence of two clusters of employment: either small firms or big size companies. Second, a consistent gap in the economic performance of the two groups. In India, small firms that employ from 5 to 9 workers are opposed to large companies that account for 500 or more job seats. Furthermore, the policies of the Indian government haven't encouraged upward mobility from small enterprises in order to give birth to a medium size group, therefore widening the dualism in manufacturing. As a consequence, the variation in both wages and productivity between the two groups are higher in India then in the rest of the Asian continent: in 2008, the ratio of production between small and large firms was 1 to 8 in India, against an Asian average of 1 to 3. Negatively affecting productivity, polarization has driven down growth in manufacturing. The strong income inequality that generated from this process made employment opportunities in the tertiary sector more appealing, increasing not only the number of workers but also its value added, therefore booming progresses in the category at an unexpected rate. Unfortunately, though, the high inequality within the sector and its increasing importance in the overall growth of the country has contributed to widen inequality in India, as said in the previous paragraph.

The unpredicted slow growth of the industrial sector in India can be traced to the structure of its manufacturing sector. The supply of skilled labour depends on both education and training, but for a vast country like India, it's also fundamental that industry is widespread over the territory and not concentrated in specific areas. In fact, when the latter happens, the society faces significant costs that negatively affect the income distribution. Plus, the differential in wages found according to the company size and connected to the different levels of education of skilled workers should be emphasised.

"Given the heterogeneity of wage and productivity levels in the non-subsistence sector, the future growth of labour demand, and the segment of the labour market in which jobs are being created is a matter of critical importance."[16] In a market oriented economy, jobs creation in a specific sector is a function of both the cost of labour and the demand for the goods that are being produced. If the growth of employment happens mainly in the small size and low wages activities, labour will be cheap, but the fact that these sectors are able to satisfy only a minimum part of the demand means that also production levels will be low, considering also that the income of these workers wouldn't increase enough. On the opposite side, when the employment growth is generated in big size companies, wages will be consistently higher, because the activities they perform are built around new technology, which increase productivity and demand highly skilled workforce; but at the same time there is usually less employment. What can be extrapolated from this picture is the so called market segmentation. Industrial products serve two opposite markets: low income consumers (the majority of the population), which demand low quality products, provided by small scale suppliers, and high income consumers (a small fraction of the population) which demand high quality products, provided by large scale enterprises. This huge gap in the production and the heterogeneity of the segments served is a jam for economic development. In particular, this type of market segmentation causes an unbalanced increase in employment of low wages respect to high wages, which, in turn, disproportionately pushes up the demand for low price, low quality goods relatively to

[16] Employment and Inequality Outcomes in India, Dipak Mazundar, Munk Center for International Studies, University of Toronto and Visiting Professor, Institute of Human Development, New Delhi, India, p.26

high price, high quality goods. In conclusion, the process reinforces itself, intensifying segmentation and, therefore, inequality. If the industrial growth, instead, generates employment in middle size firms, in which the higher cost of labour is compensated by higher productivity, it's plausible to expect an upsurge in both the demand and in the income of the classes in the middle share of the distribution, which is fundamental in order to enter the mass market era.

To sum up, the employment structure of the manufacturing sector in India has been negatively affecting income inequality in the country for various reasons. First of all, its own very dualistic composition is itself enough to widen the gap in the income distribution, because of the significant difference in earnings. Moreover, dualism makes it hard to absorb the labour surplus coming from agriculture, given the slower growth that it causes to the manufacturing sector. This makes the Indian case peculiar, because for this reason the reduction of unemployed workers coming from agriculture and related activities has been slower than expected. That's what caused the bimodal distribution of the labour market in the whole economy, which sees the contraposition of the primary and tertiary sectors, with a secondary sector that is quite marginalised in its contribution to the Indian economic growth. Even if it is true that the preponderance of small scale producers in manufacturing was able to improve the living conditions of many, allowing them to step out of poverty, it is also true that the lack of a middle income sector has widen income disparities. Lastly, the fact that the manufacturing sector hasn't managed to sustain the growth of the economy and the shift in the labour market composition, meant that this role was undertaken in India by the service sector. Once again, unfortunately this sector has seen an increased polarization of employment in recent years, given the major importance of some of its branches, such as financial services, which generated incredibly high incomes. The result has been an upsurge in inequality within the tertiary sector itself, with a spike in the Indian overall inequality, given the higher share of services in the creation of its GDP.

Some causes lay behind the dualism in the Indian manufacturing sector. Since Independence and in line with the protectionist policy of the socialist regime, the labour legislation of the country has been oriented towards discouraging large enterprises by introducing incentives for the establishment of small firms and by placing a threshold on the production and, therefore, on the number of workers required. The consequence has been an increase in the presence of small scale companies, because of the tendency of entrepreneurs to expand horizontally instead of vertically. Such legislation has been gradually dismantled since the beginning of the reforms in the 1980s and especially after 1991, but the missing middle phenomenon has persisted for other reasons.

India lacks adequate provision of electric power which impacts disproportionately on small firms. The consequence is that these companies are forced to make huge capital investments in order to have their own provision of power, which induces them to expand to large scale enterprises to benefit from economies of scale. This, together with the impossibility for many small firms to access even the more basic new communication and information technologies, has significantly contributed to slow down their production capacity.

Furthermore, India is still in deficit of suitable infrastructures, particularly roads and transport systems, despite the recent advancements in the construction sector. The fact that the provision of infrastructures among the territory is unable to sustain a widespread industrialization has contributed to the agglomeration of industries in just a few regions, cities or towns and this is a problem especially for small firms, which find themselves competing with big companies in a resource shortened environment.

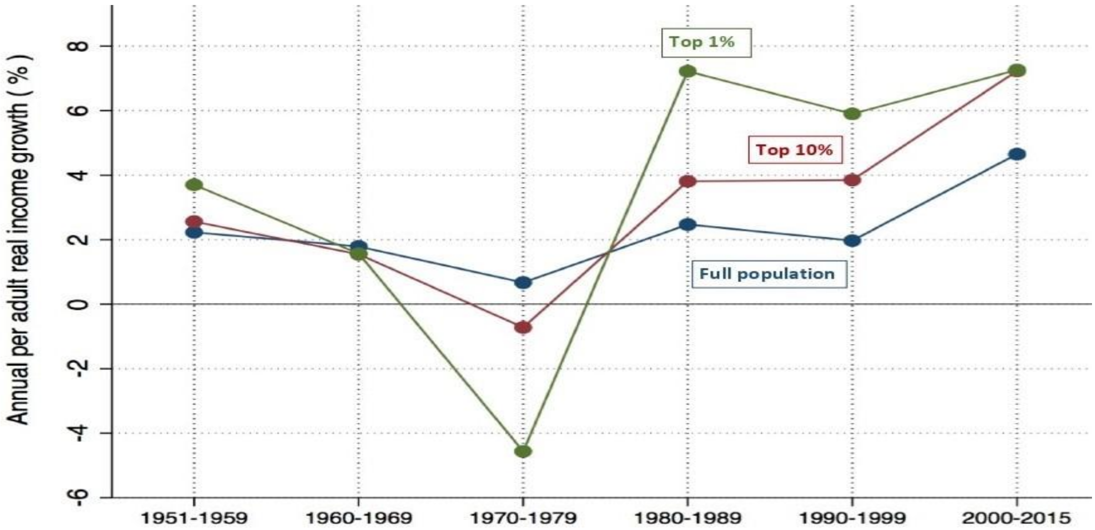
Another problem in the Indian labour market is the provision of skilled versus unskilled workers. The educational system in India is heterogeneous: in spite of the trend toward the provision of free and compulsory primary instruction for everybody, only a minor part of the population experienced an increase in secondary and tertiary education. The fact is that a modern and dynamic manufacturing sector today requires some basic skills, but in India the gap in education has translated in the contrast between small firms which employ unskilled or low skilled workers and big firms which, instead, adopt new technologies and, therefore, are able to hire high skilled workers and to enlarge their production and dimension.

Lastly, the persistence of certain dynamics in the structure of the Indian labour market might be due to the phenomenon of hysteresis, according to which the causes of some well established processes can be eliminated, but these still tend to survive over time. An example could be the entrepreneurial way of thinking in terms of horizontal expansion instead of vertical, which biases infrastructures and institutions into assisting small firms with a limited pool of consumers and markets instead of large scale companies.

5. THE RISE IN TOP INCOMES

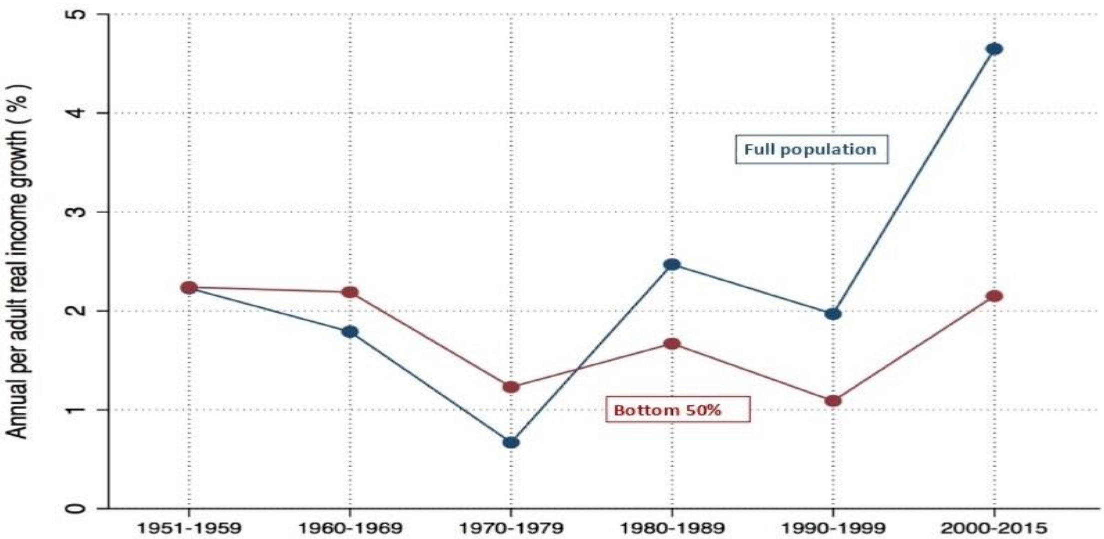
Consistent with the dualistic structure of the Indian labour market, with its missing middle, since the beginning of trade liberalization in the 1980s, the top 1 and 10 per cent of the population have seen their income growing largely faster than the average, while the bottom 50 per cent has actually seen it increase largely slower than the average, as can be seen in Figure 34 and Figure 35.

Figure 34: National Income Growth in India: full population vs. top 1% and top 10% income groups, 1951-2015



Source: Indian Income Inequality, 1922-2015: from British Raj to Billionaire Raj?, Thomas Piketty and Lucas Chancel, 2017

Figure 35: National Income Growth in India: full population vs. bottom 50% income group, 1951-2015

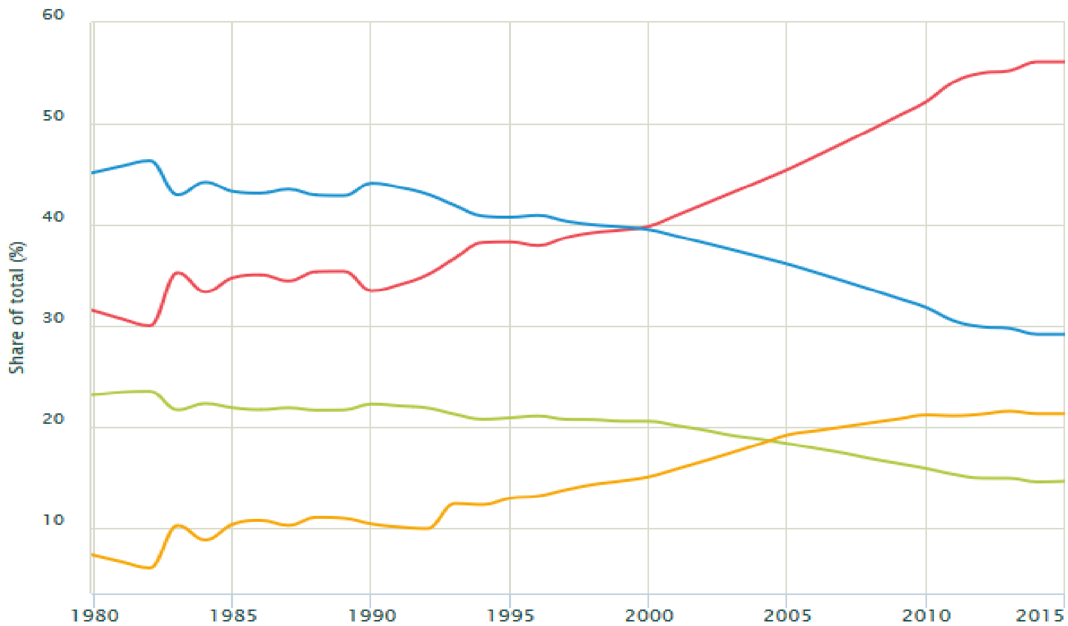


Source: Indian Income Inequality, 1922-2015: from British Raj to Billionaire Raj?, Thomas Piketty and Lucas Chancel, 2017

Worth mentioning is the fact that the Indian growth gap between the top 10 per cent and the rest of the population is one of the widest in the world. Plus, while the income of the bottom 50 per cent rose by 97 per cent between 1980 and 2014, the top 10 per cent experienced an increase of 376 per cent during the same period. As a consequence, the top classes have been able to rip a significant share of the national income. Figure 36 clearly shows the two opposite trends: a shrinking in the percentage of income of the bottom and middle floors of the distribution and an enlargement at the top of the ladder. In 2014, 21.3 per cent and 8.2 per cent of national income were in the hands, respectively, of the top 10 and 0.1 per cent of the population; the bottom 50 per cent and the middle 40 held, respectively, only 29.2 per cent and 14.6 per cent. Something to be really concerned about, if we also add that India is the Asian country that experienced the sharpest increase in the income share of the top 10 per cent: from 31.5 per cent in 1980 to 56.1 per cent in 2015.

Figure 36: Income inequality, 1980-2015

Note: Pre-Tax national income; top 1% (red line), top 10% (yellow line), middle 40% (green line), bottom 50% (blue line)



Source: www.wid.world

An important aspect to keep in mind is that the Indian peculiar phenomenon of the missing middle, in both manufacturing and services, disproportionately affected the condition of the middle groups, which benefitted the least from economic growth and experienced the worst decrease (16 per cent between 1980 and 2015) in their share of national income.

6. ORGANISED AND UNORGANISED SECTORS

Even if the percentage of people living below the poverty line in India has fallen significantly, especially because of the upsurge in low paid employment caused by the market segmentation for manufacturing products, the dualism in both the manufacturing and service sectors caused a process for which only a small fraction of the population benefited from economic growth, while the majority has been left out and still occupies the low end of the income distribution. Established that development itself is not alone sufficient to equally redistribute income and wealth within a country, the Indian attention has been concerned primarily with the distinction between formal and informal sector, for which the difference (according to the Indian definition) simply lays on having regulated employment (formal or organised sector) or not (informal or unorganised sector).

In the unorganised sector, workers suffer from the joint presence of low wages and poor working conditions. The majority of casual workers in the sector rely on wage earnings, but are employed in low wages activities, mostly agriculture, with only 22 per cent performing tasks in non agricultural sectors, mainly construction, services and manufacturing. This implies that just 10 per cent are found in the high end of the income distribution. The situation is a little bit better for the regular workers, which count one third of the workforce up in the high tail. Plus, many of those involved in the informal sector find themselves earning less than the amount stated by minimum wage laws. Even more, there is a wide gap between wages in the formal sector and wages in the informal sector: if we translate the distinction into regular versus casual male workers, a survey from 1999-2000 shows that the earnings of the former were more than three times higher than those of the latter. Something worth underlying is that inequality is higher for regular than casual workers labourers, given that some variables, such as age, education and industry, have a significant weight in the determination of regular earnings.

In recent years, policies have tried to intervene both on minimum wage and on productivity, in order to improve the life conditions of people employed in the unorganised sector. The aim is to improve and enforce the minimum wage while, at the same time, mitigate those obstacles that put a threshold on the productivity of both agricultural and non agricultural activities, such as increase the presence of skilled workers, facilitate access to technology and credit and others. Unfortunately, something that is slowing down the process is that states have some space of manoeuvre to set minimum wages, which has created an heterogeneous picture not only within the country, but also within occupation categories and employment groups.

Another field of inequality is social insurance, which is canalised mainly in the organised sector and is particularly insufficient in the unorganised one. For example, it has been found that almost one quarter of Indian who get injured or sick for a medium-long period of time fall into poverty as a consequence of being unable to work. Even more, the insufficiency of credit insurance may result in the transmission of poverty to the next generation. In this sense, the Indian government has been particularly concerned with the problem of social insurance, which led to the introduction of a national insurance scheme in 2006, that includes provisions in terms of pensions, health insurance, maternity benefits and life and disability insurance for the informal sector. Sadly, it seems that the social security expenses have been more directed towards easing poverty rather than improving social insurance. Plus, the increase in social security expenditure has played a major role in worsening the budget deficit. As a result, the Indian government budget today is unable to bear the costs of more pronounced social spending, which is a matter of concern given the investments in infrastructures, education and agricultural advancements that the country needs in order to improve the standard of life and the income of a significant share of the population, especially in rural areas.

7. SKILL BIASED TECHNOLOGY

The liberalization process allowed the introduction of modern technologies into the Indian systems of production. Given that during the 1990s there has been an increase in the skilled workforce in many industries, it can be said that economic growth in India has definitely been skilled biased. In general, when the supply of skilled workers increases, their wages should go down, while the earnings of the unskilled workers should go up. This movement can be counteracted with the introduction of technology that is usually biased towards skilled labour. In India, in some sectors, such as electricity, gas and water or construction, the skill premium (the ratio between the wages of skilled and unskilled workers) declined, but other sectors, such as manufacturing and services, experienced a growth in both the share of skilled labour and in the skill premium, which implies that there wasn't any possibility of substitution between skilled and unskilled workforce and suggests the introduction of new technologies, which is exactly what happened in the country in the last decade of the XX century. This is especially true for urban areas and it shouldn't surprise to much, given that it was the service sector that was severely affected by technological change, which pushed up the demand for skilled labour.

When it comes to gender, women have been negatively affected by technological change, given that they didn't experience neither an increase in technology nor in the demand for skilled workers. For males, instead, the situation is completely the opposite, with, once again, changes especially in the manufacturing and service sectors.

In the service sector, the higher degree of technology boosted the demand for both regular and casual workers, though it was more pronounced for the regulars. In the manufacturing sector, while regular workforce demand increased, the one for casual labour decreased, which is consisted with the structure of the sector, where the more manual tasks tend to be performed by less skilled workers, which is usually the case of casuals, while in the regular workers pool the degree of skills is often high enough to benefit from technological innovations. Anyway, considering the labour market as a whole, technological progress improved the working conditions for both categories of workforce.

Furthermore, the Indian ICT industry is driving the economic development of the country by boosting employment and exports, therefore increasing the country's GDP, and is becoming one of the most prestigious sectors in the world economy.

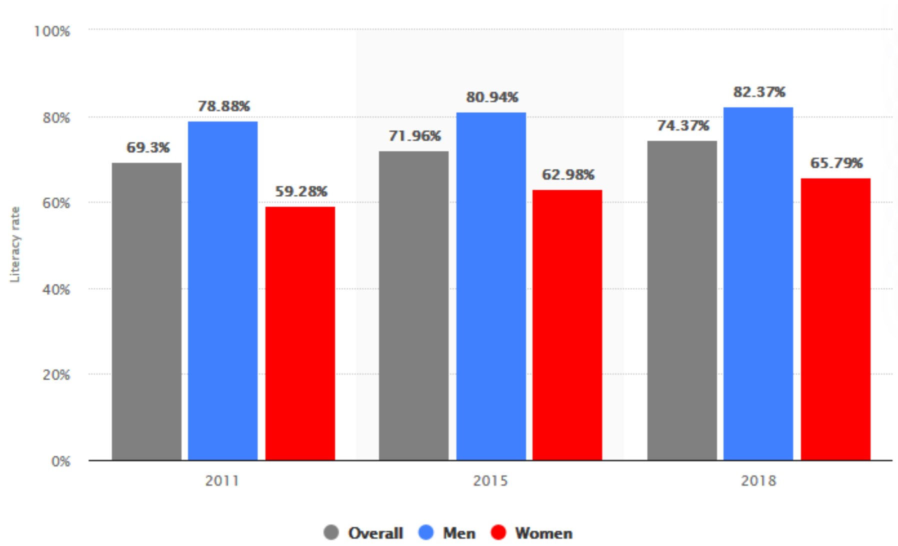
8. EDUCATION, HEALTH AND THE RURAL-URBAN DIVIDE

India presents a wide rural-urban gap in both economic and non economic dimensions. Two thirds of the population (more or less 67 per cent) live in rural areas and is employed in agriculture or related activities. Moreover, if we take households as the unit of analysis, almost 74 per cent resides in rural India. The income divide has been widening and this is mostly related to policies that have been disproportionately favouring urban over rural areas. Thus, given the lower level of development of rural India, the majority of its inhabitants has no access to basic services, such as education, health care, land and housing. Disparities are evident if we use the Human Development Index, which takes into account economic, educational and health dimensions: it was

0.340 for rural communities and 0.511 for urban ones in 2012. Some other indicators can be used to enlighten the differences.

We have long discussed the role that education plays in the development of a country. Investing in education means investing in human capital, so that more educated people translate into a larger pool of skilled workers and into higher productivity in various sectors of the labour market. In India, education is seen as an essential right for the advancements of both individuals and the society as a whole. That's why the country has committed itself to provide the widespread of free and compulsory primary education. In spite of this, India is globally one of the nations with the highest percentage of illiterate population (26 per cent in 2011), with a difference of 16 percentage points between urban (15 per cent) and rural (31 per cent) areas, according to the Census of India. In reality, these data appear to be underestimated, and many other sources report higher numbers, as can be seen in Figure 37. The literacy rate was more or less 40 per cent in 1981 and more or less 48 per cent in 1991. Compared to the 74.37 per cent of 2018, the growing trend appears significant, but worries should arise from the little advancements made between 2011 and 2018, with a growth of just 5 per cent.

Figure 37: Literacy rate in India, 2011, 2015, 2018



Source: www.statista.com

These are strong concerning statistics if we take account of the fact that India is the second most populous country in the world.

Disparities are even more marked if we disaggregate the data according to gender. The gap between male and female literacy rates, which still stands at almost 17 per cent, has narrowed very little during the years, which leads to think that the evolution in the field has been disproportionately benefitting men over women. In 2011, 80 per cent of female urban population could read, against not even 59 per cent of rural. The fact that the percentage of male literate population was higher than female in both urban (90 per cent) and rural (79 per cent) areas, is significant in terms of gender inequality, keeping in mind that the data from the Census of India could be, once again, misleading. The information is even more concerning if we consider that there is a higher concentration of women in rural areas, which causes problems for their empowerment and integration in the Indian society.

Differences are evident according to the state, too. In 2001, the lowest literacy rate by state was below 50 per cent, with the highest being over 90 per cent. Even if the government is trying to reduce these inequalities, a lot still remains to be done.

Rural population is also disadvantaged in terms of both primary and secondary education and presents lower attendance rates on both levels of schooling: in 2011, only 81,5 per cent of rural children attended primary school, against 88,5 per cent in urban areas. The percentage gets even worse for secondary education, with 62 per cent of urban children who attended it, against not even 50 per cent of rural ones. In this direction, efforts have been made for instruction in line with the government will to achieve compulsory universal primary education. Still, completion rates suffer from high dropouts and from the share of children who actually enrol but don't really attend. Unfortunately, there is a lack of data on gender school attendance, but we know that usually girls abandon school earlier than boys in rural areas, due to family duties, migration and poverty. Plus, the high incidence of slums, which deprivation actually impede children from going to school, is one of the elements that is putting a stop on the reach of universal basic education even in urban settlements. Furthermore, the country is experiencing un upsurge in private schools, a branch that presents three main features: investments have been taking place especially in secondary and tertiary education; they are way more costly then public schools; and they are mostly found in urban areas. From this, it's clear that despite the Indian promise of extending at least primary education to everybody everywhere, the country is still behind, in particular regarding quality and learning outcomes, which have been found to be below average in many Indian states.

The picture arising is that of a polarised educational system, where a remarkable illiterate share of the population is opposed to almost widespread basic education. Higher education is becoming increasingly privatised, something that clearly goes at the advantage of high income households, who can afford high educational fees. This, in turns, exacerbates the geographical concentration of higher education and leaves significant parts of the population behind. Overall, in 2013, more than 30 per cent of Indian inhabitants lacked secondary education. Moreover, inequalities in the field get worse off if we add disparities by place of residence and gender. In this sense, in 2010, the Gini coefficient for education was 0.44, which indicates a strong unequal access to this basic right. Something noteworthy is that the progresses made in the educational area in the last years are reducing disparities among young people, which gives hope for the future of the country. But the Indian government must keep working hard to implement policies which aim is to reduce inequality of opportunities, improve learning outcomes and increase the percentage of graduated people, which in 2013 was just a little above 3 per cent of the population.

Health is a fundamental human right. Good health and nutrition are indicators of a healthy population and workforce. When the labour force can rely on good health, it unleashes its full potential and the productivity of the whole economy benefit from it. That’s why poor health is seen as an obstacle to both social and economic growth. In the last three decades, many Indian states have experienced significant steps forward in both nutrition and health, but there is still a concerning share of the population, children and women especially, who suffers from food deprivation. India has improved in some indicators, such as life expectancy at birth, child and maternal mortality, with a significant reduction of women who give birth outside of health facilities and hospitals. But nutritional outcomes are still disappointing. In 2019, the Global Hunger Index, which is used to calculate hunger at the global, national and regional level, ranked the Indian situation as “serious”, with a score of 30.3, a magnitude that stands in the middle of the scale. The index is a composition of three dimensions: inadequate food supply, child mortality and child undernutrition, which includes stunting and wasting (weight in relation to height). Furthermore, progresses have been heterogeneous throughout the territory, once again in terms of location. Urban areas perform way better than rural areas in health services and inequalities persist among states in health related indicators, with the southern region achieving better results than the rest of the country. Interesting to notice is the fact that the states with worse health indices are not always those with the higher poverty. For example, Uttar Pradesh has relatively low poverty levels, but child mortality is considerably higher here than in other states.

Rural and urban areas present opposite problems: in rural India, many children belonging to low income households suffer from underweight and hunger, while urban India has been experiencing a rise in obesity due to wider consumption of processed food and lower physical activity of its inhabitants. As a consequence, the rural-urban gap in health is increasing. Furthermore, Indian government has obliged itself to provide safe drinking water to the whole population, independently from where they live, but the results have been scarce and more than worrying. In 1998, for example, not even 19 per cent of rural population had access to safe water, against more than 70 per cent of urban citizens. This huge divide has urged India to invest in a comprehensive programme, the National Rural Health Mission, which aims at providing better nutrition, hygiene and sanitation and safe drinking water especially for rural inhabitants, with a particular focus on women, children and poor. Another basic amenity in which the country lags behind is electricity, with 20 per cent of the population that still has no access to it, even if some states made consistent progresses in this field.

In brief, the path towards universal health coverage is still far away and the geographical gap could get worse without adequate policies to address it, both at the national and regional level. Tackling health disparities is one of the many challenges that India has to face, in order to boost inclusive economic growth.

The structure of the labour market mainly lays on the agricultural sector. In 2012, 60 per cent of the population was employed in agriculture or related activities and the contribution share of the sector on India's GPD was almost 19 per cent in 2005-2006. What seems countersense is that the majority of the resources are directed toward non agricultural activities, with the result that the primary sector has been growing less than half the secondary and the tertiary sector (2-3 per cent and 8-12 per cent respectively, in 2012). Given the fact that the majority of the agricultural workforce is to be found in rural areas, the slow growth of the sector impacts significantly on the gap between rural and urban settlements: the income of a rural resident is just 40 per cent that of a urban resident.

In the face of recent improvements, India is still one of the countries with the highest poverty rate. The reduction of rural poverty has been very disappointing (only 3 percentage points between 1993 and 2000), also given the decrease in the growth rate of non farm activities in rural areas (from 4 per cent in 1997-1998 to 2 per cent in 1999-

2000). In spite of this, non farm workers still earn more than farm workers. Table 4 shows the distribution of income in urban and rural areas in 2001. We can see that the concentration of low income households is higher in rural areas, while as we climb the latter the percentage decreases in favour of urban areas. As a direct consequence, both consumption and expenditure levels are higher in urban than rural areas. A slightly positive side is that while the government expenditure to alleviate poverty in urban settlements decreased, it increased for rural communities. The trend, however, must be monitored given the wider diffusion of slums in cities.

Table 4: Rural-Urban Households Income (in percentage), 2001

Income Groups	Rural	Urban
Low Income	65.4	36.7
Lower Middle	23.2	33.1
Middle	7.5	17.1
Upper Middle	2.5	7.8
High Income	1.4	5.3

Source: The Growing Rural-Urban Disparity in India: Some Issues, 2012

Labour participation is another field where gender disparities are evident, given that the percentage of active men is double that of women, but it is also a field in which rural areas perform better, at least if we consider male and female together. Overall, India has a very low level of work participation and the situation is dreadful for women, whose participation rate in the labour market is a little more than 30 per cent in rural areas, but not even 12 per cent in urban areas. All of this is evident from Table 5.

Table 5: Work Participation Rate (in percentage), 2011

India	Total	Male	Female
Total	39.3	51.9	25.7
Rural	41.9	52.4	30.9
Urban	32.2	50.9	11.6

Source: The Growing Rural-Urban Disparity in India: Some Issues, 2012

In conclusion, the resources devoted to the development of rural areas have been insufficient for both economic and non economic dimensions. Infrastructures and services are still far behind those of urban areas, even if the increased incidence of slums in the latter could represent a turning point if national and local policies miss to address the problem quickly. In order to undertake a path of sustainable development, India must commit itself to improve policies which are inclusive for both the rural and the urban settlements, because this is the only way to dampen the effects of globalization and to reduce the existing geographical gap.

9. SLUMS

"Slums are urban areas characterized by substandard housing, overcrowding, unsanitary conditions and lack of services. People living in slums suffer from one or more of the following five deprivations: lack of access to improved water sources, lack of access to improved sanitation facilities, lack of sufficient living area, lack of housing durability and lack of tenure security."[17] Slums are the result of urbanization when the government is unable to properly plan the expansion of cities: lack of affordable housing pushes poor households and rural migrants into this type of settlements.

In the first decade of the XXI century, population living in urban areas in India increased above 30 per cent, for three main reasons. First, the rural-urban growth gap. Second, migration from rural areas, given the higher levels of poverty and unemployment. Better jobs in the industry and service sectors attracted agricultural workers to the big cities, with the promise of a better tenure of life. Lastly, the agglomeration of some towns and villages into the urban suburbs, because of the need for more space, given the upsurge in residents. As a consequence, the presence of slums has been increasing in the country since Independence. A data that might look positive at first sight is that the share of slum inhabitants on the total urban population has been decreasing between 2001 and 2011, from 18.3 per cent to 17.4 per cent. Unfortunately, given the increase in the Indian population, these numbers are misleading. In fact, in real terms, slum population increased from 52.37 million to 65.49 million during the same period. The lower percentage is just the result of the upsurge in the urban population (from 286.12 million in 2001 to 377.11 million in 2011).

[17] World Social Report 2020: Inequality in a rapidly changing world, United Nations Department of Social and Economic Affairs, World Social Report 2020, 2020, p.119

As a consequence of lack of affordable housing and the impossibility to purchase good land, slums dwellers are those at the very bottom of the income distribution, particularly those below the poverty line. The proportions of slums in terms of location and surroundings differ across Indian states and according to slums being notified or non-notified. In general, though, these establishments are located in parks or along drains and railway lines, while they are usually surrounded by other slums or by residential, industrial or commercial areas. Plus, Indian slums are usually built on either public or private land, but it's not plausible that their inhabitants can actually afford to purchase it, exposing them to a really volatile tenure.

It has been said above that one of the deprivations that characterizes slums is the lack of safe drinking water. In India, for example, 72 per cent of slums have access to tapped water, but if this water is not filtered properly than the population is at concrete risk of chronic diseases. Find ways of ensuring potable water to slum dwellers is therefore crucial, given that water sources are one of the major causes of illnesses in these areas. Plus, a safe drainage system is needed, considering that 31 per cent of slums has no way of getting rid of waste water and liquid wastes in general. From this picture, it appears that sanitation is a very concerning problem for Indian slums. Another worrying aspect is that 31 per cent of slum dwellers has no latrines and 33 per cent uses public ones. The situation for electricity is a little better, with only 7 per cent of Indian slums without access to it and 68 per cent having electricity for both houses and streets. A positive feature of Indian slums is that the majority (86 per cent) of them is within a one kilometre range from primary schools, and this reminds us of the Government commitment for universal primary education, even if progresses are still far behind desirable. On the other hand, the country is not performing so well in terms of health protection. In fact, not even half (44 per cent) of slums are within two kilometres from hospitals and health care centres.

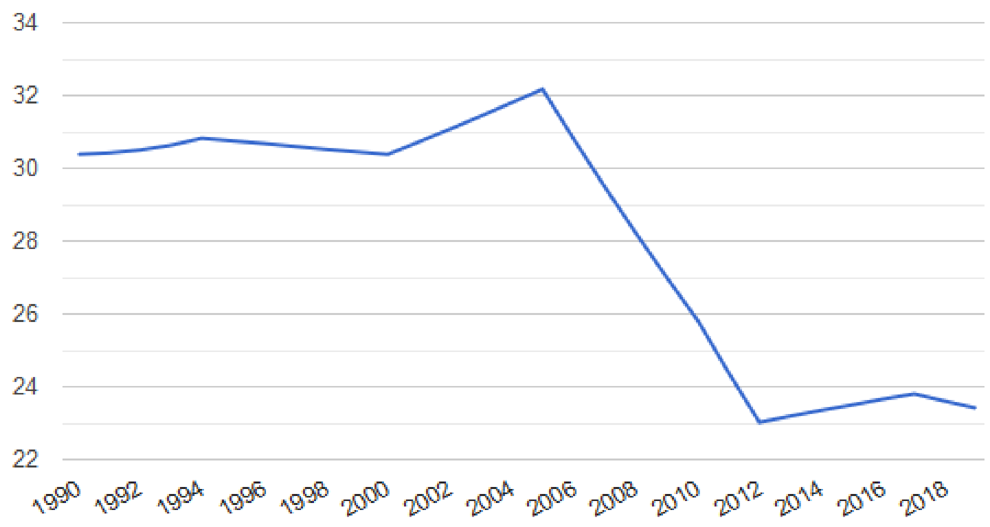
Taking all these elements together, it is truthful to state that the living conditions and standards of life in many rural areas of the country are better than those of many Indian slums. A consistent share of urban slums population lacks access to basic amenities, such as food, water, clothes, adequate shelter, health and education. Insufficient sanitation combined with too many people living in a too narrowed space creates the preconditions for an unhealthy environment, where infections and diseases can spread rapidly. The situation calls for investments at both local and national levels. Providing more low cost housing solutions, improving the health care system and the sanitation system, managing and planning the expansion of cities in a sustainable way is the only path for a feasible and inclusive development.

10. GENDER

In the previous paragraphs we came across some information about gender inequality in India. We know, for example, that women's lower levels of literacy and education have negatively affected their possibility to adopt skill biased technology and that work participation rates are significantly lower for women than men.

The gender gap becomes wider between rural and urban areas, with the majority of female living in rural villages and being employed in agriculture. Thus, income inequality has widen since India began its development path, because men have seen their share of employment in agricultural activities actually decreasing. For women, instead, this change occurred only in urban settlements and in a very low proportion, with only 37.8 per cent of urban female workers employed in the tertiary sector in the first decade of the century. Rural areas have not experienced the benefits of the service sector growth, in particular with respect to the gender gap. The fact that less than 5 per cent of the rural female workforce was engaged in this category at the end of the last decade is a direct consequence of various social and economic norms, including education, which favour men over women in developing countries and impede the latter to climb the social ladder.

Figure 38: female labour force participation rate, 1990-2019



Source: www.theglobaleconomy.com

In general, India is globally one of the worst countries in terms of female's education, economic participation and health, which means that in terms of gender inequality India has remained behind in both opportunities and outcomes. The gap has increased in recent years, because the Indian female labour force has shown a steady decline in the participation rate. Figure 38 exhibits a slight increase between 1990 and 2005, when the rate went from 30.28 to its highest value of 31.79; a decline has followed and has continued ever since, with a participation rate of 20.52 in 2019. A loss of 10 percentage points in less than twenty years. Plus, rural areas experienced this trend stronger than urban areas, with a downturn of 8 per cent between 2004 and 2012.

For the active female population, the situation is far from desirable. In order to have a picture of income inequality based on gender in India, it's useful to look at the composition of the labour market, according to sector and status of employment, which is highlighted in Table 6.

Table 6: percentage distribution of workers by industry of work and by employment status, 1999/00-2011-12

Years		Sectors of economy (%)			Status in employment (%)		
		Primary	Secondary	Tertiary	Self-employed	Regular salaried	Casual labour
2011–12	Total	48.9	24.3	26.8	52.2	17.9	29.9
	Male	43.6	25.9	30.5	50.7	19.8	29.4
	Female	62.8	20.0	17.2	56.1	12.7	31.2
2009–10	Total	53.2	21.5	25.3	51.0	15.6	33.5
	Male	47.1	23.6	29.3	50.0	17.7	32.2
	Female	68.7	16.3	15.0	53.3	10.1	36.6
2004–05	Total	58.5	18.1	23.4	56.9	14.3	28.9
	Male	50.8	20.5	28.6	54.7	17.2	28.1
	Female	73.9	13.3	12.8	61.4	8.3	30.3
1999–00	Total	61.7	15.8	22.5	52.8	14.0	33.2
	Male	54.9	17.7	27.3	51.5	17.2	31.3
	Female	76.3	11.7	12.0	55.8	7.1	37.1

Source: Female Labour Force Participation in India and Beyond, Ruchika Chaudhary and Sher Verick, ILO Asia-Pacific Working Paper Series, International Labour Organization

The first thing to notice is the predominance of women in the primary sector for all four rounds of observations; the percentage decreased during the years, but agriculture still employs the overwhelming majority of female workforce. The other feature that is worth underlying is the basically insignificant presence of women in the tertiary sector, both in absolute terms and compared to men. Female employment here has improved of just 5.2 per cent between 1999-00 and 2011-2012. The prevalence of low income activities and the stunted incidence of high income jobs for women is significant in terms of economic inequality. Indeed, also men show an higher presence in the primary sector respect to the others, but for female labour the proportions are way more uneven. Furthermore, women account for the bulk of casual workers, which is once again explicative of their lower incomes. Lastly, self employment reckon more than half of female workforce. This is a problem to some extent, because of the higher volatility of earnings and the lower security of jobs. Additionally, according to the World Bank, a very high share of female workers is employed in the informal sector, where they usually engage in heavy tasks and longer working hours and where they earn very low wages.

In spite of the policies put in place by the national and regional governments to improve this general context, the gender gap continues to be of concern. In 2014 the World Economic Forum reported that even when men and women perform the same jobs, because of gender discrimination female's work is remarkably less remunerated than men's. Most of female workers perceive gender bias in employment alternatives: the Indian labour market is strongly gender-specific and this prevent women to access good job opportunities. A system that ends up relegating them to domestic work or pushing them into poverty. In fact, a seriously concerning statistics states that of the total poor population in India, 70 per cent is composed of women. Furthermore, the lack of options negatively impacts on female empowerment, limiting their political, economic and social voice.

But discrimination is not the only cause of gender inequality in India. Women usually lack access to education, because the structure of the Indian society is rooted on norms which relegate them to marginal roles within the households already at a young age. While boys education benefits from some privileges, such as lower fees, investing in girls instruction is not seen as advantageous, especially because of the early marriage tradition (India owns the tremendous record of 40 per cent of the world's child bribes) and, as a matter of fact, households are encouraged to send boys to school instead of girls, especially when they are located at the bottom of the income distribution and they face financial constraints. As a consequence, it has been documented that 15 per cent of girls never attended school, against 11 per cent of boys. Moreover, the unawareness on the importance of learning leads uneducated mothers to prevent their children from going to school, transmitting under education to the next generation. But the educational deficit doesn't only impact on the economic sphere: it also has negative repercussions on women's health and food choices. "In this way gender-based discrimination in education is both a cause and a consequence of broader forms of gender inequality in society."[18] The deficiency of skills, including literacy in many cases, arising as a consequence of missing or insufficient instruction impedes women to be hired in high income jobs once they enter the labour market, increasing income inequality.

The patriarchal system on which the Indian society is built has exploited new technologies to the benefit of male children. The ability to know the child sex early in pregnancy led to a growing number of female fetuses abortions, increasing the male to female ratio. The United Nations stated that the gap in population that will be generated in the future will produce even more gender disparities, worsening women's condition in both economic and societal aspects. This is just the tip of the iceberg for a society that favours men in many ways, for example through intergenerational customs. In fact, while families' heritage is passed on from fathers to sons, the marriage tradition provides a dowry, which act as a deterrent in raising daughters.

To sum up, the gender gap in the Indian society is a consequence of many concatenated factors, the most important being its deep rooted patriarchal structure, which ends up impacting on both social and economic aspects. Such widespread inequality urges for the implementation of inclusive policies, in order to give women more active roles in the community. In particular, reducing the obstacles preventing women to access better paid and more secure jobs, starting with more investments in female's education, is crucial to sustain growth and productivity. In 2015, an IMF report stated that closing the gender divide could boost the Indian GDP by 27 per cent, given the enormous amount of currently wasted labour force. Plus, it has been discovered that increasing women empowerment and awareness has positive spillovers on the health status of their household. But these advancements require radical changes in social customs and beliefs, which may be difficult to implement. As a matter of fact, the Indian Government recently came up with a set of policies aiming at improving women's social, economic and political conditions, but, despite some positive results (in

[18] The State of Gender Inequality in India, Singh Sumanjeet, Ramjas College, University of Delhi, University Enclave, New Delhi, Delhi 110007, India, 2017, p.145

education, for example), the general framework is still too feeble and gender parity is still far from reach.

11. THE CASTE SYSTEM

While inequality in general has its own features, such as access to land, housing, education, employment, income and others, the Indian context, once again, is extremely peculiar, because of the background of its individuals. The roots of the society, in fact, are to be found in the caste, religious and ethnic hierarchies, which have profoundly shaped institutions, political participation, social behaviours and practices and market exchanges of goods and services, with a higher incident in rural areas. Since the establishment of this system, all economic and social aspects have been linked to the caste of birth, in a sort of ladder: rights were widen at the top and were gradually eliminated while going down to the bottom, so that the lowest castes were basically left with nothing. As a consequence, employment and labour mobility were restricted, while land ownership and access to education were a privilege of the upper castes. It is common believe that the caste system is one of the main causes of poverty in India. The same fate has fallen off ethnic minorities and discrimination on the basis of religion occurs inside the country, as well.

Today, in spite of some efforts to build a more equal society, discrimination and segregation based on the three mentioned above features still persist. The effect is a concatenation of characteristics that pushes individuals and groups even deeper into poverty. For example, if a person belongs to Scheduled Castes, which are the poorest castes in India, and at the same time this person is also a Muslim, it will find itself even poorer. “Therefore, while examining individual poverty, the influence of social belongings on the level of the nature of access to economic endowments and the individual’s ability to utilise them freely would be of considerable significance.”[19]

Using data from 2004-05, among religious groups in rural areas, the highest incidence of poverty is found for the Buddhists (40 per cent), followed by Muslims (28 per cent) and Hindus (29 per cent); the lowest levels are for Christians (16 per cent), Sikhs (5 per cent) and Jains (2 per cent). Among social groups, the hierarchy of poverty is the following: Scheduled Tribes (47 per cent), Scheduled Castes (36 per cent), Other Backward Classes (26 per cent) and the Others (15 per cent). Worth underlying is the

[19] Ethnicity, Caste and Religion: Implications for Poverty Outcomes, Amit Thorat, Economic and Political Weekly, Vol XLV NO 51, December 18, 2010, p.48

fact that both Scheduled Castes and Scheduled Tribes have the highest illiteracy rate across all religious groups, a significant indicator of the deep and persistent deprivation of these communities, which contributes to make them the poorest classes in the country. In particular, tribes have been relegated to agricultural activities, while Scheduled Castes are still unable to possess either land or capital and are excluded from middle or high income jobs, given their scars rates of instruction. On the opposite side, high levels of education are found within the Other Backward Classes and, especially, for the Others and, in fact, poverty declines for these castes as school years increase.

One of the major problems India has been facing since Independence is the impact of castes on labour mobility. The fact that the social status is inherited by birth and that specific castes perform specific jobs and activities, makes it basically impossible to climb the economic ladder. Therefore occupational mobility has always been very low in India, in spite of the fact that the government tried to protect the most disadvantaged groups by reserving them spots in the most important public institutions. In particular, improving employment status for children in comparison to their parents has always been difficult. In substance, low intergenerational mobility in the labour market persist, even if there have been some slightly positive trends for both Scheduled Tribes and Castes in recent years. Today, young people are more luckily to face the possibility to earn higher wages than their parents, but this progress in the transmission of income from one generation to the next one is just the first step towards a more equitable income distribution.

To sum up, the Indian social division based on individual and inherited characteristics, such as caste, ethnicity and religion appears to have somewhat ameliorate lately, but a lot still remains to be done. The persistence of such a strict system, which is at the basis of enduring, long term poverty and of huge disparities of opportunities among the population, is not only impacting on the economic sphere by preventing some people to access better jobs and earn higher wages, therefore contributing to a growing income inequality, but it’s also slowing down the Indian development by maintaining a status quo which is becoming more and more incompatible with the new organizational structure of the country.

Chapter VI. A POLICY FRAMEWORK TO TACKLE INEQUALITY

Inequalities in the developing world are not inevitable; as a matter of fact, they can be slowed down and even reversed. Of course, every country has its own specific issues and characteristics that contribute to internal disparities, as we have seen with India in the previous chapter. Nonetheless, there is a general blueprint which involves a set of policies that can be implemented by all countries and can be summarised in three main categories: opportunities, income and labour, and social beliefs.

1. EQUALIZING OPPORTUNITIES

To achieve economic equality it is fundamental that everybody has the same chances to unleash their full potential and to improve their life conditions and well-being. In order to close gaps in education, health and nutrition, public expenditure must not only increase in monetary terms, but also in qualitative ones. Countries should devote resources primarily to address disparities that affect the most disadvantaged sectors, areas and groups, because most of the time what happens is that people from isolated locations or from marginalised communities benefit from lower access and quality of public services, even if they depend more than others from these amenities. For example, if we are talking about the necessity to build health infrastructures and to provide basic health services, resources should be primarily mobilized in rural areas and slums. In particular, to reduce inequalities and improve standards of life, countries must supply their population with continuous and of good quality health services. To adequately deliver these basic amenities to everyone, countries must work on two fronts: improve their institutional capacity to be responsive and effective and decentralise duties to local and regional governments.

Having a sufficient stock of workers becomes crucial in this framework; that’s why it is so important to provide equal access to education: higher school enrolment and educational attainment are the tools through which increase the pool of human capital and skills. Because of this, a wider educated population should, initially, negatively affect wage inequality, but in the medium and long term the wage premium should decrease, reducing income disparities. Investments need to focus first on secondary and then on tertiary education, now that universal basic instruction is on its way to be achieved in many countries. Moreover, fundings must be devoted to the quality of instruction: well trained teachers, distributed more equally across countries territories, and who earn adequate salaries have been proved to positively impact on learning outcomes.

2. MODERATING INCOME INEQUALITY

"Moderating income inequality will require that countries transition towards inclusive growth."[20] This means adopting policies which enable poor and low income households to benefit more from economic development than the rest of the population. Such strategy is not only necessary to push down income inequality, but it's also profitable for the economy as a whole, because it stimulates domestic aggregate demand. As a matter of fact, given that those at the bottom of the income distribution tend to spend higher portions of their earnings on consumer products, it's realistic to imagine that they will use their additional income to buy locally produced goods.

In general, in order to promote inclusive growth, countries need to meet three requirements in employment: quantity, quality and equal access, which means that the economy must create enough jobs for the majority of the population; these jobs must generate sufficient income and provide a safe workplace; and everyone must have access to these new occupations. India is one of the countries that has committed itself to this type of policies with the 2012-2017 Five-Year-Plan, which priority was a "faster, sustainable and more inclusive growth"[21], with improvements in livelihood opportunities and in work conditions, and faster jobs growth especially in manufacturing. Unfortunately, results are still far from desirable and a stronger emphasis must be put on equalising access to employment, given the wide horizontal inequalities in the country. Furthermore, it is important to invest in small and medium enterprises, given that they usually are labour intensive and, therefore, tend to employ workers with less skills, located at the low end of the income distribution. With this in mind, governments should facilitate these companies access to both capital and new technologies.

Strong labour market institutions, able to implement active policies, are needed to sustain inclusive growth. Minimum wage laws and job search assistance are useful tools to ensure a basic income to everyone and to help matching skills and labour

[20] Humanity Divided: confronting inequality in developing countries, United Nations Development Programme, United Nations report, United Nations, November 2013, p.229

[21] Humanity Divided: confronting inequality in developing countries, United Nations Development Programme, United Nations report, United Nations, November 2013, p.230

market needs. Unfortunately, in countries with an high incidence of the informal sector, as the case of India, these policies have been difficult to implement. Plus, informal occupations, together with an increase in non standard forms of employment, is one of the reasons behind the decay of unions and collective bargaining power that has been seen in the last decades and which caused a slower implementation of sufficient and effective minimum wages in many countries and in different sectors. Collective bargaining has been proved to positively affect income inequality, because it reduces both gaps in earnings across sectors and differences between different groups in the society, including gender disparities. That's why it would be important to find ways to make sure that unions regain some of their power and that they keep pace with the evolution of the labour market. Many developing countries have actually experienced an upsurge in inequality because of the worsening of labour conditions and minimum wages; mechanisms that have been seen as a way to attract foreign direct investment and to increase exports after the opening up of their economies to globalization and for which governments now need to enact solutions, such as the restriction of foreign capital flows only to certain areas.

Lastly, macroeconomic policies have always been concerned primarily with economic stability, leaving equality at the margins of their objectives. Nevertheless, in an optic of inclusive growth it becomes crucial to design and implement programmes which promote economic development, create safe and decent employment and generate sufficient income for everyone, while, at the same time, strengthen the country's ability to protect its economy from external shocks.

3. DEVELOPING EFFICIENT SOCIAL PROTECTION AND REDISTRIBUTION SYSTEMS

Social protection programmes provide a basic income security, which allows access to essential goods and services such as health, nutrition and education. In this way, they set some minimum standards of life for poor and disadvantaged individuals and households and, therefore, are important in the reduction of both inequalities of outcomes and of opportunities. These programmes are split into two different categories: on one side, social insurance programmes provide a sort of shock dampener for some future events that happen in life (maternity, unemployment, illness and accidents) and include health insurance, unemployment benefits and pensions, just to give a few examples. They are usually contributory. Given that these programmes provide some protection in times of uncertainty, in order to reduce income inequality they should be extended also to the informal sector; on the other side, social assistance programmes provide some minimum reliability in terms of income and are especially known as transfers and subsidies but, in developing countries, they have also been increasingly used to directly improve the nutritional status of the population and have taken the form of school feeding programmes and food stamps. Social assistance has been proved to have the most positive impact on dampening income inequality. Another mechanism that has contributed to decrease inequality in developing countries are consumer subsidies, thanks to which low income households experience a decrease in the cost of those basic goods and services for which they use an higher amount of their money. Given that they are mainly applied for food, these subsidies also significantly improve health and nutritional status of low income households members, which directly impact on their productivity, both in school and in the labour market. Consumer subsidies can be applied in three ways: the price of basic goods is set by the government below the market price; the government purchases locally produced goods and then distributes them at subsided prices or for free; the government transfers money to households that satisfy certain criteria in order to allow them to buy basic goods at market price.

Being financed through taxes, the implementation of efficient social assistance programmes needs to be supported by a well designed tax system. In particular, to reduce income inequality, the tax system must be progressive, meaning that taxes are progressively raised while climbing the income ladder, so that those at the top contribute more than those at the bottom. Unfortunately, in the last decades many areas of the world have seen their tax systems become less and less progressive, leaving an higher burden on the low tail of the income distribution. Income and property taxes must be redesigned, especially in developing countries, in order to obtain more resources to invest in infrastructures and basic services and to shape the redistributive system in a more inclusive and sustainable way. Moreover, developing countries mostly rely on indirect taxes (such as VAT), which are usually regressive, because they tend to disproportionately affect low income consumers, who spend higher portions of their resources on goods and services. Monitoring consumption in order to lower taxes on goods and services purchased by the poorest would be a good starting point for these countries to shift to a progressive system for indirect taxes. Plus, the high incidence of the informal sector on the economy of the developing world calls for finding and enacting proper methods to tax firms operating in this category, in order to expand the tax base.

Lastly, tax systems must be improved in order to significantly reduce tax evasion, which is a major problem in many developing countries.

4. FIGHTING DISCRIMINATION

Discrimination is one of the main factors contributing to inequality. Like India, for which, among others, the caste system is the most clear example of social exclusion, many other developing countries continue to limit people's opportunities in life on the basis of predetermined social, economic, cultural or political characteristics, such as gender and race, for example. With the passing of time many nations implemented laws and norms to fight discrimination in the most important areas of the economy, such as employment, education, health, housing and land, and political participation. Unfortunately, in spite of this formal protection, informal discrimination remains pervasive. Prejudice and discrimination tend to reproduce themselves across generations, perpetuating inter-group inequalities, because they are often embedded in people's mind and in societal customs and practices. Policies to eradicate this problem include enacting efficient anti-discrimination legislations, pro active policies for the poor and marginalized groups, which are often discriminated because of their economic condition, and shaping new ideologies in the mass opinion.

In terms of anti-discriminatory laws, it's important not only to ensure that the most disadvantaged shares of the population have equal opportunities in terms of employment and access to resources, such as land and housing or credit, but it is also crucial to make sure that once they have open access to these opportunities, they are actually able to achieve the same results as the others, especially in the labour market. Many countries turned to affirmative actions to help marginalized groups enter some main areas of society. For example, in order to improve their representation, India reserved some parliamentary seats to women and to Scheduled Castes and Tribes; other similar policies include quotas for education and higher and preferential accessibility to certain jobs.

Beyond these special treatments for the poor and most disadvantaged segments of the population, in general, strengthening participation in political and public life is fundamental in order for institutions and governments to be able to address the needs of specific groups and communities. Countries must recognize freedom of association and expression as ways to make everybody's voice heard, because equality can be achieved only through inclusive policies and pro equalization majorities. Moreover, increased awareness on the importance of voting should be put in place, and this can be accomplished by making sure that the whole population has access to basic information and communication technologies.

In conclusion, eradicating discrimination and prejudice requires structural changes in the society and its institutions. An elite dominance who recognises the importance of inclusive policies which give to everybody the same opportunities to advance in life is fundamental in order to direct people toward a more equal mentality.

Conclusions

The picture arising from this analysis is that of an heterogeneous world in terms of inequality. Not only there are consistent differences between North and South, but also within the developing world itself. All over the world, non economic inequalities have attracted attention because of the impact they have on income inequality. Countries understood the importance of extending education (and of quality education), of closing the gender gap and of planning a sustainable urbanization, but still a lot remains to be done, especially in developing countries. In particular, strengthening the educational system becomes fundamental in an optic of skill biased technology, which, today, is causing some major changes in the labour market. Moreover, while income inequality between countries is decreasing because of the “catching up” process undertaken by the South, income inequality within countries is increasing rapidly and this is happening not only in developed countries, as we would expect given the Heckscher-Ohlin and Stolper-Samuelson models, but also in developing nations, which is not coherent with what the theory states. In fact, in all of the three regions of the South of the world, namely Africa, Asia and South America, there are countries who managed to reduce income inequality, while others are still struggling with its continues rise. The model is, in conclusion, too simple to appropriately describe the current evolution of countries. The example of India is indicative in this sense, because it doesn’t only present some peculiar features which makes it a perfect special case, but it also touches the main points that can be used to confute the theory.

The first thing to underline is the role of national policies, that the model completely ignores. In India, the policies undertaken during the socialist period first and during the transition to a market economy after, are fundamental to understand the current situation of the Asian country. More specifically, the so called “missing middle” in manufacturing, which is probably the main characteristic of the Indian development, can be traced back to those years. In fact, when India still was a planned economy, the birth of small firms was encouraged at the disadvantaged of bigger companies. As a consequence, entrepreneurs started to think in horizontal terms instead of vertical ones. When the country started to open its economy to international trade, the will to expand the production to benefit from economies of scale incentivized many firms to enlarge into big enterprises. As a consequence, India today lacks middle size companies. This strong dualism is at the basis of the high income inequality in the country, for two reasons. First, the difference in productivity, and so in wages, between small and big size companies. Second, the duality in manufacturing has slowed down the growth of the sector, which has become quite marginal in both employment creation and in the contribution to the Indian GDP. Thus, the manufacturing sector has been unable to absorb the surplus of unskilled workers coming from agriculture, who ended up in the low paid branches of the service sector, exacerbating inequality both within the sector itself and in the whole economy.

And here comes the second fundamental element that the international trade theory doesn't take into account: technological change. In the last decades, the advancements in technology, ICTs and automation especially, have spread throughout the globe thanks to globalization. In India, access to these innovations meant a rapid growth of the service sector, and in particular of its high productivity areas, such as telecommunications and finance, which employ skilled workers, who started to earn incredibly high salaries. As a matter of fact, India is one of the countries that experienced the highest spike in top incomes respect to the rest of the population.

If we take together the fact that the low growth of the manufacturing sector has pushed unskilled workers into the traditional branches of the tertiary sector and that new technologies have boosted the development of the high paid branches of the tertiary sector, we should have a clear idea of the reasons behind the upsurge in inequality in India.

Another critic that can be used against the Heckscher-Ohlin and Stolper-Samuelson models regards industry development. In particular, it's too much of a generalization to think that the industrial sector will grow unconditionally all over countries territories. It's more plausible that wages will increase only in certain areas, as a consequence of industrial concentration in specific parts of the country. Which is exactly what happened in India. During the years of socialism, especially, resources and investments have been directed mainly to the already better off regions. Additionally, the lack of infrastructures, and especially of transport infrastructures, put a stop to the widespread of the industrial sector. Thus, the western part of the Asian country has seen progressed in manufacturing and has been driving the sector ever since, while the western states remained excluded.

Moreover, the Indian case brings to light that gaps in wages aren't, per se, the only cause of inequality. There are other factors which significantly contribute to widen economic disparity. Specifically, India has pervasive horizontal inequalities, which are for the majority summarized in the caste system. Today, this structure of the society still prevents significant segments of the population to advance in life, because it doesn't only affect jobs, but also the level of education. India has globally one of the highest rate of illiterate people, in spite of the will to provide widespread and compulsory primary education. At the opposite side, recently, urban areas have been experiencing an increase in private secondary and tertiary education. Something that goes to the advantage of the richest households, widening both income inequality and the rural-urban divide. Plus, being hereditary, castes contribute to perpetuate intergenerational poverty, because labour mobility is significantly low. The gap between rural and urban areas is concerning also in terms of income, given that rural population mainly relays on agriculture or related activities, while the service sector has developed especially within cities. As a matter of fact, the majority of low income households is found in rural areas, while as we climb the income latter the percentages decrease in favour of high income households in urban areas. To monitor, though, how the evolution of slums will unfold.

In India, traditions and social beliefs still segregate women, whose presence in the labour market is basically inexistent. In fact, the Indian patriarchal society incentivizes households to send boys to school instead of girls, which means that, usually, women have lower skills and, if they are not relegated to domestic work, when they do enter the labour market, they are unable to compete for more prestigious positions. Even more, in the Indian labour market there is an high incidence of the informal sector, in which workers suffer especially from low wages and insufficient social insurance. In conclusion, reducing disparities in India requires some structural changes in the society, which may be very difficult to implement in an efficient way.

Many other countries in the developing world experienced an upsurge in inequality after the opening up to international trade and this, once more, sustains the thesis that the Heckscher-Ohlin and Stolper-Samuelson models are not exhaustive in explaining the modern transformation in the South of the world. It appears that economic development and the globalization process are at the basis of the phenomenon. In particular, technology can be seen both as an exogenous force that globalization contributed to diffuse, and as an outcome, given that globalization accelerated technological advancements because of the higher degree of competition that it imposed on firms all over the world. Once again, the fact that some developing nations were actually able to reverse the trend in income inequality brings the attention on the role of national policies and institutions. In this sense, we have seen that there is a set of policies that every country can implement in order to reduce inequalities. Some general approaches to inequality helped to realize that inequality of outcomes and of opportunity are two sides of the same coin. Therefore, in order to be effective in reducing disparities, policies must address both. To make sure that everybody has the same opportunities to advance in life, public expenditure must be devoted primarily to address the needs of the most disadvantaged areas, sectors and groups. Plus, to increase the supply of human capital, devoting more resources to education must be a priority. Moreover, to lift up the most disadvantaged individuals and households in the society, countries need to make sure that the benefits of development disproportionately go to their advantage. This policy is called inclusive growth and it focuses on three main points: sufficient number of jobs, income security and safe work conditions, equal opportunities for all. Plus, it calls for the creation of strong labour institutions, able to enact efficient minimum wage laws and job search assistance programmes. Moreover, to counteract the effects of the structural changes that development and globalization impose on countries, to design efficient social protection systems and redistribution systems becomes fundamental. In particular, transfers and subsidies, including consumer subsidies, have been proved to have the most positive impact in reducing income inequality. Plus, countries must find ways to implement progressive tax systems. Lastly, legislations must be redesigned in order to eradicate discrimination from the society, which today still marginalises some individuals and groups. Pro active policies, anti-discriminatory laws, affirmative actions are good starting points, but this is not enough. There must be an increase awareness on the importance to take part in political and public life in order to shape new ideologies in the population and in order for governments to be able to address everybody’s needs.

Inclusive societies need to be built, so that no one is left behind anymore.

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