



The Etiology of Economic Exclusion: Its Global Distribution and Differences

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1. Introduction: Globalization again in the dock

Even before fully recovering from the aftermath of the Great Recession, new discontents with the global economy have emerged. As before, their epicenters are in the U.S. and Europe. They come from society and politics, but express discontent with national economies and globalization, particularly with immigrants and imports that threaten local production. Their noteworthy expression has been the presidential election of Donald Trump, with its nationalistic – even xenophobic – and populist rhetoric but they were also manifested in the United Kingdom with Brexit and now threatens other European countries too. Nothing like this can be seen in Asia Pacific, but it appears in many countries of the Middle East – important sources of emigration to Europe – defrauded by the Arab Springs and hit by the fall of oil prices, fragile economies and Islamic fundamentalism. Criticism to globalization has been almost permanent in Latin America, but it is a matter of intense political debate nowadays.

Globalization is on the dock and, with more passion than reason, its results are being scrutinised. The debate has three characteristics of the risky, Orwellian world of “post-truth” in which we live. Passion and emotion predominate over reason, and data and information are left aside, or fabricated; the public and the media prefer to see the snapshots of the moment and not the processes that unite them.

This paper[1] shows and analyzes (sections 2 and 3) both faces of *economic exclusion and inclusion*, the static and the dynamic, defining them as the differences in access to *economic, i.e., scarce goods*, sometimes impossible to distinguish from *broadly defined social goods*. In section 4 an attempt is made to identify at least some of the causes of the economic exclusion, its etiology. The paper ends with some conclusions.

2. Economic exclusion: the snapshots

Economic power and wealth. Snapshots show us a world with a clear predominance of the great powers and an overwhelming incidence of poverty and other forms of exclusion. Home to only 17% of the world's population, developed countries generate 41% of total GDP (Tables 1 to 4)[2] and an even larger share of global inclusive wealth.[3] For example, per capita wealth in Australia is more than a hundred times greater than that of Afghanistan, while per capita GDP is “only” 25 times greater (Table 5).

Standards of living (GDP PPP per capita). The standard of living of developed countries – measured by per capita GDP in Purchasing Power Parity (PPP) US dollars – is more than four times higher than that of developing countries.

Jobs, gender differences, unemployment, underemployment and forced labor. High quality jobs are concentrated mostly in developed countries. In contrast, developing countries account for the bulk of precarious jobs that amount 1400 million people, 42% of global employment. Youth are the most affected, with an unemployment rate of 14% in the world. It has higher incidence in developed countries (16.4%), especially in Europe (27.6% in the Euro area), compared to 13.5% in low and middle-income countries (with peaks of 30.4% in the Middle East and North Africa). Long-term unemployment is also very high and huge gender disparities in the workplace persist, with women being more affected than men by precarious employment, low wages and unemployment. Finally, a real shame for humanity, according to the International Labour Organisation (ILO), there are 21 million people who are trafficked and/or in forced labor in the world, of which 19.5 million are in the developing countries, and 60% of them in Asia Pacific.

Poverty. Nearly 700 million people, around 10% of the world population, still live in *extreme poverty*, on less than \$ 1.90 a day. There are no world averages regarding the poverty headcount population ratio at \$3.10 a day but some figures are useful to show this harsh reality. In 2014 it was 76.5% in Nigeria, 58% in India, 11.1% in China and 7.6% in Brazil.[4]

Hunger. Hunger affects 790 million people, 10.5% of the world population.[5] Mainly because of wars, there are 20 million people at serious risk of starvation in Ethiopia –where 79% of the children suffer from acute

malnutrition – Nigeria, Somalia, South Sudan and Yemen, the highest figure since World War II. According to IFPRI's Index of Global Hunger, two of the most populated subcontinents, Sub-Saharan Africa and South Asia are in a "serious" hunger situation.[6]

Health (life expectancy and infant mortality). Life expectancy in Sub-Saharan Africa is below 60 years old.[7] In the poorest countries infant mortality is still higher than 50 per thousand, and in Latin America it is 15 per thousand.[8] With regards to infant mortality under 5, the world average is 43 per thousand but in the least developed countries it still reaches 73 per thousand.[9]

Housing. In the poorest countries, two-thirds of the population live in precarious housing in slums that are also poor, and in Latin America still a fifth of the population is in such conditions.

Education. In the poorest countries, only two out of three students finish primary school[10], only 43% are enrolled in middle school[11] and a meager 42% manage to complete the basic cycle of secondary education.

Income distribution. Income distribution is also worrying. In some developed countries, especially the Anglo-Saxon ones, 1% of the richest people account for 15% of total income (Figure 1). There are many developing countries where the poorest 10% earn only between 1.5% and 2% of total income, while the richest 10% accounts for more than 40%, a situation that is almost twice as worse than in developed countries.[12]

It would be possible to show and comment many more instances of this, but what has been shown is enough to find in developing countries, especially in the poorest, flagrant situations of poverty and exclusion. On the other hand, in the most developed countries, inequality stands out and there is a widespread sensation that, because of globalization, the future will be worse than the present.

3. A deep global change, with relevant inclusion but much exclusion remaining: the film

In addition to showing the dynamics of some of the different forms of exclusion and poverty – it is impossible to show all of them – this paper follows by emphasizing the framework in which these forms of exclusion take place, i.e., global processes that in the last quarter of a century have led to changes that increasingly resemble a change of civilizations (see section 4.8). As such, they demolish walls of exclusion and generate new ones, with a favorable as well as insufficient balance for the poor.[13]

Narrower gaps. Although it is frequently repeated that the gap between rich and poor countries is expanding, the fact is that the distance between their levels of living (per capita income) has fallen by almost half, from about 8 times in 1990 to slightly more than 4 times today (Table 6). More than that, the standard of living of emerging countries has ceased to diverge and has begun to converge with that of developed countries, for the first time in at least five hundred years (Table 7).[14] [15]

The former "developing" countries already generate almost 60% of the annual world product (Table 8). This is mainly due to Asia, as China is leading this trend. But in this century Sub-Saharan Africa and, somewhat less, Latin America have also been growing at a faster rate than developed countries. These show big differences among them. Since 2007, before the Great Recession, Korea's GDP grew 31.1%, Italy's fell almost 8% and Greece's 26.1%. Similar differences can be seen within countries, for instance, by comparing the now famous "Rust Belt" to California or the East Coast, where decaying versus rampant demography is one of the most striking.

Another relevant dimension of the same process is the evolution of the already mentioned "inclusive wealth", which includes produced or physical capital but also human and natural capital. In its per capita dynamics during the recent global phase it is observed that this wealth in a good part of the developing countries increased more than in the developed ones (Table 5).

Poverty. Different are the perceptions of many people in Africa and Asia. Although these continents are home to 95% of the 705 million people living in extreme poverty, a quarter of a century ago, most of the 1850 million people affected by this scourge, representing 35% of the world population against 10% today, lived in those very same continents (Figures 2, 3 and 4). Another positive development is that the *poverty gap* has significantly decreased following the last wave of globalization, from 442 billion dollars in 1990 to 164 billion in 2013.[16] "By 2015 the world had achieved some of what seemed to be daunting challenges 25 years ago. Even though the global population increased by 2 billion – from 5.3 billion in 1990 to 7.3 billion in 2015 – more than 1 billion people escaped extreme poverty, 2.1 billion gained access to improved sanitation and more than 2.6 billion gained access to improved sources of drinking water".[17] Finally, although there are no world averages regarding the poverty headcount population ratio at US\$3.10 a day, from 1990 to 2014 it decreased from 89.2% to 11.1% in China, from 78.9% to 58.0% in India, from 34.3% to 0.9% in Thailand and from 35.8% to 7.6% in Brazil. Africa was not as successful as Asia and, to a lesser extent, as Latin America. For instance, Nigeria still has 76.5% of its population below US\$ 3.1 a day, more than in 1990 (70.6%).[18]

Notwithstanding the recent positive developments in fighting poverty, the future could be more complicated. First, because 80% of those living in extreme poverty live in rural areas, where it could be more difficult to leave poverty behind. Second, because 50.7% of those living in extreme poverty live in Sub-Saharan Africa. Although, the proportion of people in that condition decreased from 54% in 1990 to 41% in 2013, it actually increased in absolute terms – by about 200 million extra people. This is due to very rapid population growth (Figure 6). There are reasons to think that reducing extreme poverty in rural areas and in Sub-Saharan Africa could be more difficult than it was in China and even in India in the last thirty years.[19]

Hunger. Although hunger is not an exception and has also shown improvements during the last quarter century, some results are disappointing. The number of people who suffer from malnutrition decreased from 1010 million in 1990 (18.6% of world population) to 795 million in 2014 (10.9%). In Africa, in spite of a fall in the percentage from 27.5% to 20%, it increased in absolute terms, from 182 to 232 million people.[20] According to the IFPRI (International Food Policy Research Institute) Index (Figure 7), the Global Hunger Index (GHI) for developing countries fell by 40% between 1992 and 2016 but still remains – by a narrow margin – in the *serious* zone, the third category of hunger intensity according IFPRI. The GHI fell in all six regions of the emerging world, two of them went from alarming to serious (Sub-Saharan Africa and South Asia), one went from serious to moderate (East and South East Asia), two went from moderate to low GHI (Eastern Europe plus Commonwealth of Independent States and Latin America and the Caribbean), and the Near East and North Africa remained in the moderate zone. However, one person in nine in the world still goes hungry, and one in three is malnourished. [21]

Health. “The global under-five mortality rate was more than halved between 1990 and 2015 – from 91 per 1,000 live births to 43. The incidence of HIV, malaria and tuberculosis declined between 2000 and 2015”. [22] The progress made in life expectancy, both in the long run and in the last quarter of century is also remarkable (Figure 9).

Environment. “The global net loss of forested areas fell from 7.3 million hectares a year in the 1990s to 3.3 million during 2010-2015”. [23] “Worldwide, 18,000 people a day die because of air pollution”. [24]

Housing. The proportion of people living in slums decreased in the averages of low and middle-income countries. However, 1784 million people still live in precarious conditions, and grew in absolute terms in the average of low-income countries.

Education. Worldwide illiteracy rates fell from 32% in 1990 to 15%, which is still very high. Mean years of education of the population aged 25 years and more increased by roughly the same amount in all socioeconomic regions. This implies that huge inequalities remain: from 9.5 to 11.7 years in very high human development countries (HDC), from 5.5 to 8.1 in high HDC, from 3.4 to 5.5 in medium HDC and from 2.3 to 4.2 in low HDC. Secondary gross enrolment rates also increased everywhere but big differences remain between high-income countries (more than 100%), middle-income countries (76%) and low-income countries (just 41%).

Income distribution. It might be hard to believe, but the rapid growth of many poor countries since 1990 – especially China, because of its large weight in the averages – has lowered inequality in the world distribution of income, and the middle class worldwide has doubled from 1500 to 3000 million people in this century who are projected to grow to 5250 million by 2030 (Figures 10 and 11). At the same time, inequality has increased in many countries – and in almost all the developed world – with the aggravation of a huge concentration of income in the richest 1% – who own 15% or more of the national income – and even the richest 0.1% (Figures 12 and 13).

Jobs. Employment performances since 1990 have been positive, both in developed and developing countries, as the employment rate increased from 36.3% to 38.4% in the former and from 43.3% to 45.0% in the latter. Since the Great Recession, instead, that rate fell in developed countries from 39.2% in 2007 to 38.4%, while in the emerging countries it remained fairly stable, falling by a mere 0.1%, from 45.1% to 45.0%. [25]

4. Economic exclusion and inclusion: the etiology

We have seen, in short, that it is so true that the world today has unacceptable poverty and vast inequality of income and wealth. On the other hand, it is also true that never before have global poverty and inequality been reduced as much as in the last twenty-five years. The objective analysis invites much more to the nuances than to black-and-white judgments, but the last are the ones that prevail. In this section the paper accepts that invitation, presenting some hypotheses about the causes of successes and failures in the economic and social inclusion in recent globalization, and then some very preliminary suggestions to pave the way to a more participatory global society.

4.1 Demography

What are the reasons behind the rapid progress of so many emerging countries in the last quarter of a century? One is, undoubtedly, demography. World population has increased by 2250 million people, reaching 9200 between the years 2010 and 2040 (Table 9). Only 50 million of this total would live in developed countries, increasing the trend observed in the last decades. More than that, “other” emerging countries – not including China nor India – would get 77% of the increase, and Africa would double its population, from 1031 to 2063 million people: another world. In contrast, Europe pursues the impossible trinity of very few children and immigrants, and excellent social security systems (Figure 14). If President Trump fulfills some of his threats, the U.S. could come close to an analogous utopia.

4.2. Economic development with “unlimited” supply of labor

Demographic vitality in Africa and Asia – with the relevant exception of China[26] – will help them to continue with the growth model first installed in Asia and now gradually in Africa. The model is based in a very abundant – almost “unlimited” – supply of labor in the cities, not only because of demography but also because of rural-urban migration due to falling agricultural productivity. New urban populations are mostly hardworking workers that earn very low wages at the beginning, which later improve rapidly, not only because of fast economic growth but also due to huge investments in education. Social security is very limited compared to Western standards, which leads to high saving rates and, very importantly, a gradual openness to trade, and a fast one to investment and technology. In addition, most of these countries perform sound macroeconomics through low inflation, attractive investment conditions and reasonably balanced external and fiscal accounts. All of this naturally results in the famous Asian export-led-growth. All of this described was predicted in the *Lewisian*[27] recipe for growth and poverty reduction. A recipe whose success could only prevent armed conflicts, even more serious ones than today’s or, in the longer term, the continuity of the deterioration of the environment.

4.3. International trade

In a relatively open world economy, the Lewisian model will have three significant consequences for many other countries in the world. The first is that it will increase the trade balances surplus of the “Lewisian” countries and will reduce non-Lewisian ones. This is usually associated to a reduction in the level of employment in industries that compete with imports from countries with lower wages. The second consequence is that in the “importing” countries the price of labor relative to capital will fall, since the imports that will increase the most will be those of labor-intensive goods with not very high labor quality requirements. Ultimately, wages and employment in manufactured goods in the importing countries will probably fall.[28] Such seems to be the social landscape seen in the “Rust Belt” (or manufacturing belt) of the American Mid East but also, for example, in so many Italian cities which once hosted thriving medium-sized and internationally competitive manufacturers.[29] However, as in almost all human activities, there are relevant exceptions to “general laws”. In this case the exceptions are Germany and, to a lesser extent, several Central European countries. Thanks to innovation, investment and specialization in quality and differentiated products, they have a GDP share of manufacturing of 23% or more, against an average of 15% both globally and in developed countries.[30]

Another very relevant effect of the rapid growth of Asia Pacific countries, most of them with low endowments of natural resources per capita, has been giving strong impetus to the economics of Africa, the Middle East, Russia, Central Asia and Latin America. Contrary to Asia, all of them have a high endowment of natural resources per capita. In conclusion, the adoption of the Lewisian growth model, which emerged in one after another Asian country, opening up to private investment and (to a lesser extent) to international trade, ended up driving rapid growth in almost all the entire developing world. At the same time, it seems to have generated relevant problems in the traditional manufacturing regions of several of the developed countries.

4.4. The Great Recession and other failures of recent globalization

What has been said so far must not lead to the mistake of ignoring evidence about many failures of globalization. The dramatic Great Recession of 2008 was fueled by predatory financial excesses, which have not yet been fully fixed yet, and by insufficient global coordination, that remain in place in matters like balance of payments imbalances or exchange rates misalignments.[31] Evidence of the deterioration of the environment, the increase in arms trade and drug trafficking are also growing and posing new and serious challenges.

It is not only utopian to think that today’s national-populist reactions will correct these shortcomings. If they live up to their promises, the global economy and society, and especially the world’s poorest, will ultimately be worse than if the current path is improved. These truths should invite us to reflect and to amend the approaches to those who accompanied the global stage that now seems to end with skewed diagnoses on the world economy and society, contributing to the breeding ground of the neo national-populism.

4.5. Technology

The accelerated technological changes applied to information, communications and, more recently, to artificial intelligence, carry two threats in terms of their effects on employment. On the one hand, a permanent drop due to the displacement of workers with low ICT skills. This argument is not fully convincing since the U.S., one of the most technology-intensive economies, has created 2.3 million jobs per year since 2011. Moreover, it receives hundreds of thousands of immigrants and has an unemployment rate of 4.7%. On the other hand, there is the fear of robotics-based automation, still incipient but in rapid growth, regarding its effects on employment. [32] These profound technological changes are already creating new sources of inclusion and exclusion. Quantitative evidence is not yet available. But it is clear that the main beneficiaries – or at least, the least disadvantaged – will be youth with higher educational or training levels and in the most dynamic regions and countries, either developed or developing. Those facing exclusion will be the older and less qualified generation of workers, living in less dynamic regions and countries, not necessarily the poorest ones. It is also clear that there is an urgent need for labor training policies, which, unfortunately, tend to be in short supply in the regions that are most in need.

4.6. *Economic populism*

Following their own idiosyncratic paths, Latin America has been the slowest growing subcontinent in the 21st century, with big differences among countries. It is a mistake to attribute these differences either to “neoliberalism” or to “progressivism”, because the main line dividing countries of good and bad performances is the one that distinguishes a rational and foresight economy from the economic populism that raffles the future by maximizing consumption and punishing investment, sometimes at all costs. Only the first approach succeeded in achieving sustainable forms of inclusion. In the first group stands out Peru, the Latin-American star of the 21st century, whose standard of living increased by 26% between the 2007 pre-crisis level and 2016. With very different models, but without populism, the other two are Bolivia, which increased by 16%, and Chile, by 9%. In contrast, the standard of living of those with economic populism decreased in the same period: Ecuador by 5%, Argentina by 7%, and Venezuela, the tragic masterpiece of this form of populism, by a 30% drop.

Faced with such truths, it is surprising that critics of globalization have been, at the same time, indulgent with the damage inflicted by populism in Latin America, that are worse than those of globalization *per se*. It is also surprising because this is the region which most clearly shows that national-populism is not the way to eradicate poverty and achieve greater inclusion and equality, a relevant experience for some developed countries nowadays. Criticizing without nuances recent globalization, and ignoring populism at the same time, contributed to fattening the breeding ground of the revival of neo-national populism in developed countries.

4.7. *Social and political cultures*

Without intending to make this profane text sacred, it is enlightening to remind ourselves that only truth can give us freedom, even the freedom needed to find the best, difficult ways to build a more just, inclusive and equitable society, one without the apparently insurmountable cracks that proliferate nowadays in many countries. In other words, to help us to build the participatory society that gathered us here, looking forward to the “New Roads to Social and Cultural Integration”.

These “difficult best ways” require the constructive and also cooperative role of three actors: the civil society, the State and the market. Notwithstanding, political discussions and sometimes even academic ones, often simplistically focus on either “more state” or “more market”. This dichotomy has limitations, but it is relevant anyway. Even in the developed world we find very striking differences regarding the intervention of the State. Considering the ratio of public spending to GDP in developed countries, there are extremes of 57% in Finland and 21% in Korea, while the U.S. is in an intermediate position with 35.5%. Finland is a very unequal country which, before public policies, had a Gini coefficient of 0.47, i.e., too much inequality, which was reduced to 0.26 after State action, transforming it in one of the most egalitarian countries in the world. Korea, by contrast, is a “naturally” more egalitarian country: before State action it had a Gini of 0.34, which was reduced just to 0.30 after State policies. So it was more “naturally” equal than Finland before public policies, but less after them. The U.S., instead, is more unequal than Finland and Korea, both before (Gini 0.49) and after public policy (0.38).

Anyway, it is misleading to limit the discussion to just more or less market or State. Even the aforementioned sharp differences in inequality before and after public policies show us that economically relevant social relations are very different in Korea, Finland or the United States. Korean social ties lead to less “natural” inequality than in Finland and the U.S.; Finland’s society, instead, decided to have a very efficient State at the time of reducing inequality. The U.S., as it is (or used to be?) well known is more tolerant with economic inequalities, considering them largely normal.[33]

It seems to be the case that, even to get the same or similar goals regarding economic and social inclusion, different countries would need different recipes. Some societies might need more State and more market at the

same time, as it is very evident in failed or almost failed States nowadays. Other ones, as is frequently the case in most emerging countries, might need better States and better markets at the same time, abating corruption, monopolies and lacking accountability in both of them. Also, public-private cooperation or Moncloa-type social agreements might be needed in some cases, either to get investment partnerships, to improve macroeconomic policies or to have at least some non-partisan State policies.

In short, it seems evident that Scandinavia does not need the same proposals as Sub-Saharan Africa, nor Latin America the same as the Eurozone or the Commonwealth of Independent States.

4.8. A change of civilizations?

Ten years ago, in a seminar at the Pontifical Academy of Social Sciences, Henry Kissinger said that the center of world economic power was inexorably shifting from the Atlantic to the Pacific. This is what has begun to happen in the last quarter of a century, and it will be very difficult to interrupt it (Table 8).

It is also relevant to recall the deep and widespread nature of the aforementioned demographic changes we are experiencing (Table 9 and Figure 14). Let us add that 88.4% of the increase in world population from 2010 to 2040, i.e., a total of almost 2 billion people, will be in non-Western countries, while just 11.6% of them (260 million) will be in the West. The share of world population living in developed countries is projected to fall from 32.2% of the world's total in 1950 to just 14% in 2040. It is very unlikely that these demographic shifts will not also cause, sooner or later, significant changes in the overall pre-eminence of different continents or sub-continents.

In a broader perspective, one might even think that the ongoing historical process shows signs of a change of civilization that can be seen as the reversal of the European conquests in Africa, part of America and Asia, that began more than five hundred years ago. But whether it is "just" a shift in the gravity of the global economy or a deeper change concerning actual civilizations, there is one point in which history does not offer much scope for optimism. With the very special exception of the United States replacing the United Kingdom as the center of the world economy, all such changes in the past have occurred through major wars. This is not a prediction, it is just a reminder of human history and it suggests that we should be alert and vigilant. Other signs suggest that a world in which political, economic, social and cultural ties between countries and continents with historical-cultural differences are preserved, will lead to less wars. On the contrary, a world permeated with the values and disvalues of neo national-populism, in addition to other features, makes countries more prone to wars and armed violence, clearly increasing the possibility of history repeating itself.

5. Concluding remarks

We have seen that this last stage of globalization has led to breakthroughs, as palpable as they are insufficient, in different forms of economic inclusion. This advises an objective and nuanced balance, retaining its positive aspects and leaving aside the many negative facets it has.

Several criticisms to current realities in many developed countries contain truths. But this is not the case with the policies that these critics propose. Building fortresses simply by closing the doors to immigration, trade and international investment, and increasing military spending is not the way. Not only because it looks too much like the policies that finally led to the great wars of the twentieth century, but also because they will be ineffective, in the long or short run. They may bring temporary relief to the problems that are at the origin of the relative rise of the new national-populism, such as lower unemployment or the reactivation of some economically and socially deteriorated regions. They may also hurt most of the emerging countries, where the poorest people in the world live. But all these effects are most likely to be transient. Developing countries will continue to grow more than developed ones. This will benefit everyone in the long run, because of economic opportunities but also because it will mitigate increasing emigration and could even contribute to reducing the occurrence of armed conflicts.

Developed countries, especially in Europe, face profound dilemmas, not only socio-economic but also cultural. The outstanding problems seem to be the very low population growth and the tendency to limit immigration, which result in a dubious viability of health and social security systems. The root of this conflict seems to lie in a clear preference of present well-being over future well-being. Since the economy cannot satisfy these preferences (technically, the intertemporal discount rate or, simply, the price of time), the result is lower economic growth, or even stagnation or decay. It is curious that neo national-populism proposes ways that can accentuate this conflict between the present and the future. This is clear in the limits to immigration, but also in economic nationalism which, paradoxically, could only work if economic agents changed their intertemporal preferences by accepting a lower standard of living to increase productivity through greater investments in physical and human capital and technology.

As I have said in previous meetings, as members of a Pontifical Academy we have the responsibility of devoting our best efforts to contributing to find ways that help to build a more integrated and inclusive world with greater peace and justice. This is what we are doing in this seminar. But perhaps it is important to emphasize that we are required not only accurate diagnoses, but also ideas that can generate effective proposals. To achieve these new ideas, we must start from the truth, whether we like it or not, and stop throwing figures to win discussions, and we must invest much more time, a cold brain and a hot heart in finding the way to full social inclusion and a fairer society.

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End notes

[1] This paper has continuities with previous works presented to PASS and PAS. See J.J. Llach (2008, 2013, 2014, 2015 and 2016).

[2] See Section 6, Tables and Figures.

[3] At difference with conventional approaches, inclusive wealth includes three dimensions of capital. Produced (its most traditional definition, i.e., “physical”), human and natural. The last one aims to register its depletion coming from environmental damages. Conceptually, inclusive wealth aims to measure countries’ wealth in terms of progress, well-being and long-term sustainability. See <http://inclusivewealthindex.org/inclusive-wealth/#why> and *Inclusive Wealth Report* 2012 (devoted to natural capital) and 2014 (human capital).

[4] All poverty that are from the World Bank Databank, <http://data.worldbank.org/topic/poverty>.

[5] World Hunger: <http://www.worldhunger.org/2015-world-hunger-and-poverty-facts-and-statistics/#hunger-number>

[6] IFPRI Global Hunger Index 2016: <http://ghi.ifpri.org/results/>

[7] World Bank: <http://data.worldbank.org/indicator/SP.DYN.LE00.IN>

[8] Idem: World Bank: <http://data.worldbank.org/indicator/SP.DYN.IMRT.IN>

[9] Idem: <http://data.worldbank.org/indicator/SH.DYN.MORT>

[10] Idem: <http://data.worldbank.org/indicator/SE.PRM.CMPT.ZS>

[11] Idem: <http://data.worldbank.org/indicator/SE.SEC.ENRR>

[12] Idem: <http://wdi.worldbank.org/table/2.9>

[13] The website *Our world in data* (<https://ourworldindata.org/>) has plenty of information on economic and social exclusion and inclusion processes that accompanied the last and previous stages of globalization. For a longer historical view see also Johan Norberg (2016).

[14] The Maddison-Project, <http://www.ggdgc.net/maddison/maddison-project/home.htm>, 2013 and previous versions.

[15] Limitations of the indicators of standard of living, particularly income per capita, are well known. However, alternatives proposed up to now – like happiness, social progress or genuine progress indicators – are very correlated with them.

[16] The poverty gap is the amount of money that would be theoretically needed to lift the incomes of all people in extreme poverty up from the international poverty line of US\$ 1.90 a day, measured in international PPP dollars at the 2011 conversion rate (<https://ourworldindata.org/extreme-poverty/>).

[17] *Human Development Report* 2016, p. 3.

[18] Most conventional measures of poverty are based on household surveys that ask people for their income. There are growing evidences of serious income underreporting, that leads to overestimates of people living in poverty, at any monetary line. Using sophisticated devices, like cities’ photographs taken at night, is possible to measure the magnitudes involved (see Figure 5, taken from M. Pinkovskiy and X. Sala I. Martin (2015).

[19] See hypothesis on increasing difficulties to eradicating extreme poverty in *The Economist*, March 30th, 2017.

[20] See <http://www.worldhunger.org/2015-world-hunger-and-poverty-facts-and-statistics/#hunger-number>

[21] A longer historical perspective shows an amazing progress as regards the occurrence of famines (Figure 8).

[22] Idem note 15.

[23] Idem note 15.

[24] Idem note 15.

[25] Source, ILO: http://www.ilo.org/global/research/global-reports/global-employment-trends/2014/WCMS_234879/lang--en/index.htm

[26] China introduced a birth control policy in 1979 and began dismantling it in 2015. It is now under intense debate what was the real effectiveness of that policy as well as what would be the effects of its suspension, beyond an apparent initial increase in births.

[27] Incredibly foreseen in 1954 by W.W. Arthur Lewis, Nobel Prize in Economics in 1969.

[28] These are some of the conclusions of the very well-known Stolper-Samuelson theorem (1941).

[29] For an alternative approach, focused on lacking productivity and labor conflicts in the “rust belt” see S. Alder *et al.* (2017).

[30] In line with Stolper-Samuelson, D. Autor *et al.*, have written several papers (for instance, 2013 and 2016) on the damages that trade with China has inferred to the U.S economy, particularly to jobs in manufacturing. This was contested by K. Handley *et al.* (2017) and J. Rothwell (2017).

[31] J.J. Llach (2008 and 2013).

[32] A synthesis of these challenges can be found in McKinsey (2017).

[33] Some people think, perhaps rightly, that the problem is not – or not as much – inequality, but unfairness (C. Starmans *et al.*, 2017).