# The rich and the poor: A note on countries' classification

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#### 1. Development taxonomies

Most people would agree with the view that economic development, environmental sustainability and social inclusion are the three main pillars of development and of people's wellbeing. The UN Agenda for 2030 established in September 2015, with the Sustainable Development Goals (SDGs), strongly supports this idea (see United Nations, 2015; Vaggi, 2016). Development is a multidimensional process and cannot be squeezed into a onedimensional economic indicator; a variety of different indicators are now available to try to capture the improvement of people's wellbeing (see Stiglitz et al., 2008). Therefore "when it comes to classifying countries according to their level of development, there is no criterion (either grounded in theory or based on an objective benchmark) that is generally accepted" (Nielsen, 2013, p. 1088, emphasis in the original). Country classification is a very complicated exercise, because it is a matter of grouping together countries which can be very heterogeneous when we consider different aspects of a development process, such as the composition of output and exports, demographics, health and educational indicators and so on. Moreover the economic and social structures of countries are constantly changing (Tezanos Vàzquez and Sumner, 2013). There are several indexes that try to capture the multidimensional aspects of development and also of poverty; two very well-known indexes are the Human Development Index (HDI) developed by the United Nations Development

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Programme (UNDP, 2015), and the multidimensional poverty index (see Alkire et al., 2013).

The use of a variety of indexes that take many dimensions into account is most welcome, but the classification of countries based on a single indicator is still widely used both for operational and analytical reasons. From an analytical point of view, development taxonomies try to simplify a complicated picture by grouping countries into relatively homogeneous categories, which should facilitate cross-country and inter-temporal comparisons. From an operational point of view, taxonomies play a relevant role in directing aid and in international agreements, such as in the case of the Least Developed Countries (LDC) in trade agreements or the indication that at least "0.15 to 0.20 per cent ODA/GNI [... should go] to Least Developed Countries" which is in Target 17.2 of SDG 17 for the 2030 Agenda (United Nations, 2015, p. 26, ODA stands for Official Development Assistance). Income per capita is one of the criteria considered when calculating which countries are part of the LDCs group.

The Gross National Income (GNI) per capita calculated by the World Bank is the most widespread system of classification; along with other indexes it is widely used by international organizations, aid agencies, academic researchers and the media. This taxonomy classifies countries into four groups: Low Income Countries (LICs), Lower Middle Income Countries (LMICs), Upper Middle Income Countries (UMICs), and High Income Countries (HICs). These four groups are separated by three thresholds defined in terms of per capita GNI at current prices, with the so-called Atlas method. If we compare the composition of the four groups in 2015 and in 1987 (see section 2 for the choice of reference years) we see that the number of LICs has sensibly decreased from 42 to 31, while that of HICs has increased from 25 to 79 (see table 3 below). This would be very good news, but this outcome is largely due to the fact that the thresholds have been updated in a way that does not reflect the increase in the world income per capita during those 28 years. If we adjust the thresholds according to the changes in the world income per capita, a number of countries will not look much better in 2015

than they did in 1987 in terms of income per capita groups. Many new HICs will go back to the UMICs group, and some LMICs will find themselves still belonging to the LICs group.

The World Bank thresholds have been raised in a 'sticky' way vis à vis the world GDP per capita; with this methodology, it gradually becomes easier to reach a certain threshold, which may be a good stimulus for developing countries. This way the thresholds have become sort of 'absolute thresholds', but they are much less useful to describe the relative position of countries as to their income per capita. Both absolute and relative thresholds have their own merits, they provide different and complementary information. However if all countries will end up in the same High Income group, thresholds will become useless. We will not be able to know whether a country has progressed to a higher group because of its own economic growth or because the threshold has been moved up too slowly. In order to have this information the thresholds must be readjusted in a way that is coherent with world economic growth.

Beside this adjustment, the paper will also discuss the implications of these new thresholds for the so-called extreme poverty line, which in 2015 has been updated to \$1.90 a day at 2011 Purchasing Power Parities (PPP) prices. According to the current World Bank's classification, middle-income countries host the vast majority of the poor. According to the thresholds set with the methodology proposed in this paper this is still true, but only because India still marginally belongs to the LMICs group.

One final point to keep in mind is that income per capita does not account for income distribution, and it is well known that inequality has also increased in many developing countries; this is not the topic of this paper even if it could be a further critique to the use of the average GNI per capita. For this last argument, it would be relevant to consider the inequality-adjusted version of the Human Development Index that has been proposed few years ago by the UNDP (2015).

## 2. World Bank taxonomy: countries classification based on GNI per capita

The World Bank provides a classification of countries according to per-capita Gross National Income, GNI. The rationale behind the original thresholds was: "[f]inding a stable relationship between a summary measure of well-being such as poverty incidence and infant mortality on the one hand and economic variables including per capita GNI estimated based on the Bank's Atlas method on the other. Based on such a relationship and the annual availability of the Bank's resources, the original per capita income thresholds were established" (World Bank, 2016a). Although the World Bank recognizes that development is not only a matter of income, it believes that per capita GNI is "the best single indicator of economic capacity and progress" (*ibid*.). The income categories derived this way are based on the World Bank's operational lending categories (civil works preferences, International Development Association, eligibility, etc.).<sup>1</sup> The operational categories are used to make a comparative estimate of the economic capacity of different countries and they were based on the idea that poorer countries deserve better borrowing conditions from the Bank, like those provided by the International Development Association, IDA, the World Bank's arm lending to poorer countries.

The first analytical country classification system of this type was published in 1978 together with the launch of the *World Development Report* (World Bank, 1978). In the original elaboration countries were grouped under different labels: "developing economies" were divided into low-income and middle-income economies; OECD membership was used to define "industrial countries" and other economies were listed as "capital surplus oil exporters" and "centrally planned economies" (World Bank, 2015).<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> On "civil works preferences" and IDA eligibility see Fantom and Serajuddin (2016, pp. 9, 22).

<sup>&</sup>lt;sup>2</sup> See also the World Bank's website at https://datahelpdesk.worldbank. org/knowledgebase/articles/378833-how-are-the-income-group-thresholdsdetermined.

A reform of this grouping system was introduced in the 1989 *World Development Report*, using data for 1987, in which countries were re-grouped according to a new criterion. The new High-Income Countries category was clustered with "industrial countries" and "capital-surplus oil-exporters". The category of developing countries was split into "low-income" and "middle-income" countries (Nielsen, 2013) and since 1989 the division into "lower-middle income" and "upper-middle income" countries became a standard separation, even though it had already been used in the *World Development Reports* of 1987 and 1988, although we prefer to take 1987 as the reference year.

Income is measured using per capita Gross National Income, GNI, with the World Bank Atlas method (see World Bank, 2016a). The Atlas method takes the national GNI in the country's currency and converts it in US dollars using a 3-year average of the exchange rate. The conversion factor takes the average of a country's exchange rate for that year and of its exchange rates for the two preceding years, adjusted for the difference between national inflation and that of "international inflation". The latter is measured by the change in the IMF's Special Drawing Rights deflator, which is the weighted average of inflation in the euro zone, Japan, the United States of America and the United Kingdom (Sumner, 2012a, p. 870). The SDR deflator is also used to adjust the three thresholds that separate the four income-percapita groups. The classification is published on the World Bank website and it is revised every year on July 1, at the beginning of World Bank fiscal year (Fantom and Serajuddin, 2016, p. 2). Since 2001, with figures for 1999, the World Development Indicators report provides GNI per capita also in terms of Purchasing Power Parity, which for developing countries is normally higher than GNI per capita with the Atlas method.

In the 1989 *World Development Report*, which used data from 1987, the following income thresholds were defined: low-income countries were the countries with a yearly GNP per capita equal or below \$480, middle-income countries were the countries with a GNP per capita between \$481 and \$6,000, with a lower and upper middle

income threshold at \$1,940 and high-income countries had a per capita GNP higher than \$6,000.<sup>3</sup> For the fiscal year 2017, based on data from 2015, low-income economies are defined as those with a GNI per capita of \$1,025 or less; middle-income economies are those with a GNI per capita of more than \$1,025 but less than \$12,475, lower and upper middle income are separated at a GNI per capita threshold of \$4,035; and high-income economies are those with a GNI per capita of \$12,476 or more (see World Bank, 2016b).<sup>4</sup>

In August 2016, the World Bank listed 31 low-income economies, 52 lower-middle income countries, 55 upper-middle income countries and 79 high-income economies (see World Bank, 2016a; and table 3 below).<sup>5</sup> These numbers convey a rather rosy picture of the evolution of the world economy during the previous 28 years. Since 1987 there have been important improvements in many developing countries, particularly in East Asia, and since 2000 in other parts of the developing world as well, including Sub-Saharan Africa. However for many countries the good news largely depends on the way in which the three thresholds have been adjusted over the years.

The original thresholds were meant to provide a comparative classification of countries and were supposedly considered as being *relative* thresholds and not *absolute* ones. "The observation that the income range of middle-income countries comfortably spanned the average world income level of about USD \$3,200 in 1987 suggested that the new country classification system would use relative thresholds" (Nielsen, 2013, p. 1091). The fact that the thresholds change every year seems to indicate that they focus on a comparative classification of countries. However, the annual adjustment of the

<sup>&</sup>lt;sup>3</sup> Before the 2001 issue of the World Development Indicators, income figures were given in terms of either GDP or GNP; the 1987 figures refer to GNP.

<sup>&</sup>lt;sup>4</sup> Notice that these are the same thresholds that had been used in 2013 with data from 2011 (World Bank, 2013); we will further examine this point in the next section.

<sup>&</sup>lt;sup>5</sup> This provides an overall figure of 216 countries; in the following analysis we include Argentina even if is the only country "Not Classified" in the World Bank dataset as of August 14<sup>th</sup> 2016.

thresholds is based only on "international inflation", which leads to the fact that the thresholds are rather 'sticky'; they become similar to absolute thresholds and provide a partial view of the changes in the global economic scenario. Absolute thresholds may be useful for tracking countries progresses, but many commentators (Ravallion, 2012; Sumner, 2012a) highlight the need to periodically update the income benchmarks in order to better reflect the changing economic landscape.

#### 3. The revised thresholds

The problem with the World Bank thresholds is that they are revised upwards based on "international inflation", which implies a much smaller nominal growth than that of the world GDP. Some authors have noticed that "international inflation" is not a reliable parameter because it does not include China and other relevant emerging economies (Sumner, 2012a).<sup>6</sup> Moreover, the prices of some basic goods usually increase much faster in developing countries than in high-income ones. This fact contributes to distort the significance of the official thresholds and indeed the world income per capita has increased much more than the World Bank income thresholds.

Before dealing with the new methodology of revision of the thresholds, let us comment on a rather curious point: the 2015 World Bank thresholds are the same as those of 2012. This looks unusual but it is due to the re-evaluation of the US dollar between 2014 and 2015 and its dominant role in the calculation of international inflation.<sup>7</sup> In

<sup>&</sup>lt;sup>6</sup> In October 2016 the basket of the four currencies has been expanded to include the Chinese renminbi (RMB) as the fifth currency, (http://www.imf.org/external/np/exr/facts/sdr.htm/). Moreover it is easy to see that usually the prices of some basic goods increase much faster in developing countries than in the high-income ones. This fact contributes to distort the significance of the official thresholds.

<sup>&</sup>lt;sup>7</sup> The table below gives the exchange rates of the US dollar with the other three currencies in the SDR deflator; figures are yearly averages. Notice there is clear increase in the value of the dollar between 2014 and 2015.

US dollars the world GDP was smaller in 2015 than in 2014: \$73,434 billion and \$78,106 billion respectively: \$4,672 billion less, or a 6.36 per cent decrease.<sup>8</sup> In 2015 the world GNI was \$76,679 billion, therefore it was smaller than the world GDP and also \$1,732 billion lower than the 2014 world GNI, which was \$78,399.9 billion; or a 2.25 per cent decrease. In 2015 the world GNI per capita was smaller than that of 2014, \$10,437 and \$10,799 respectively, \$362 less, a 3.47 per cent decrease. These considerations show that there are serious problems in the composition of the basket of currencies to be used to evaluate the income per capita of the different countries.

Let us go back to the values of the three thresholds; table 1 compares the increases in world GNI, in world GNI per capita and in the three WB thresholds between 1987 and 2015.

Between 1987 and 2015 the average world income per capita as increased by 3.17 times, but all three WB thresholds have little more than doubled. Let us see what happens if we multiply the figures of the 1987 thresholds by the increase in the average world GNI per capita.

As illustrated in table 2, the 2015 revised thresholds are higher than the World Bank ones, and the intervals between them are wider. The income interval between low and high income countries is around \$17,500 according to the revised thresholds, against a range of \$11,690 with the World Bank ones; the interval between low and lower middle income countries is around \$4,500 against \$3,080, and the interval between upper middle and high income countries is almost \$13,000 against \$8,610.

USD per unit of currency				
	2013	2014	2015	2016
Euro	1.3282456	1.3286246	1.1099589	1.11623
British Pound	1.5642878	1.6473938	1.518162	1.4328765
Japanese Yen	0.0102573	0.0094713	0.0082643	0.0089717

<sup>8</sup> See http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?view=chart

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	1987 (current US\$)	2015 (current US\$)	2015/1987 ratio
World GNI (billion US\$)	16,488 <sup>9</sup>	76,679	4.65
World GNI per capita (US\$)	3,28710	10,437	3.17
Low-Income countries threshold (US\$)	480	1,025	2.14
LMI/UMI countries threshold (US\$)	1,940	4,035	2.08
High-Income countries threshold (US\$)	6,000	12,475	2.08

Table 1 – World GNI and World Bank thresholds and their changes between 1987 and 2015

*Source*: elaboration on World Bank Data archive, *World Development Report* and *World Development Indicators*, various issues.

Table 2 – The World Bank thresh	olds and the revised thresholds			
(current US dollars)				

	World Bank thresholds (2015)	Revised thresholds (2015)
Low income	≤ 1,025	≤ 1,521
Lower Middle Income	1,025-4,035	1,522-6,150
Upper Middle Income	4,035-12,475	6,151-19,020
High income	≥ 12,476	≥ 19,021

Source: elaboration on World Bank Data archive.

<sup>&</sup>lt;sup>9</sup> The 1987 figures originally appeared in terms of GNP, not GNI (World Bank, 1989, pp. 161-165). In 1987 the overall GNP did not include the GNP of many countries belonging to the former Soviet Union block, for a total of 371 million people, because they were still classified as "non-reporting non members".

<sup>&</sup>lt;sup>10</sup> The 1989 *World Development Report* gives a slightly smaller figure of US\$ 3,010 for the 1987 GNP per capita of the "Total reporting economies" (World Bank, 1989, p. 165).

The revised income per capita thresholds affect the allocation of countries to specific income groups. Applying the revised thresholds, many countries would go back to the LICs, LMICs and UMICs categories. In 1987, out of 120 countries there were 25 HICs, 18 UMICs, 35 LMICs and 42 LICs. In 2015, out of 217 countries, the current World Bank classification counts 79 high-income countries, 55 upper-middle-income countries, 52 lower-middle income countries and 31 low-income countries.<sup>11</sup> As shown in table 3, with the revised thresholds we have only 59 high-income countries, and 50 and 62 countries would compose the upper-middle-income and lower-middle-income countries group respectively; the new low-income group would now have 15 more members than in the World Bank classification, reaching a total of 46 countries.<sup>12</sup>

The following countries would move among the different groups (figures for countries marked with star \* refer to year 2014):

• 15 countries that are now considered LMICs would rejoin the low-income group: Bangladesh, Cambodia, Cameroon, Cote d'Ivoire, Ghana, Kenya, Kyrgyz Republic, Lesotho\*, Mauritania\*, Myanmar\*, Pakistan, Sao Tome and Principe\*, Tajikistan, Yemen\*, Zambia.

• 24 Upper-Middle Income countries would move back to the Lower-Middle Income group. They are: Albania, Algeria, Angola, Belize, Bosnia and Herzegovina, Dominican Republic, Ecuador, Fiji, Guiana, Georgia, Iran\*, Iraq, Jamaica, Jordan, Libya,

<sup>&</sup>lt;sup>11</sup> Classification available on the World Bank website, at the URL http://data.worldbank.org/about/country-and-lending-groups#Low\_income. This World Bank classification has only 216 countries because it does not include Argentina, see footnote 5 above. Argentina would be in the HICs group according to the World Bank thresholds and in the UMICs group with the revised thresholds. Sumner (2016, p. 5) shows the changes in the number of countries in the four groups between 1985 and 2015.

<sup>&</sup>lt;sup>12</sup> Because of the decrease of the dollar value of the world GNI between 2014 and 2015, the 2014/1987 ratio would have been higher than that for 2015/1987, which has been used to calculate the revised thresholds. Taking the 2014 world GNI per capita would have led to higher revised thresholds, with more countries moving back to the LICs group, including India.

Macedonia, Marshall Islands\*, Namibia, Paraguay, Serbia, South Africa, Thailand, Tonga\*, Tuvalu\*.

• 19 countries now classified as High Income would be still part of the Upper-Middle Income group: Antigua and Barbuda, Argentina\*, Barbados, Chile, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta\*, Oman, Poland, Puerto Rico\*, Trinidad and Tobago, Seychelles, Slovak Republic, S. Kitts and Nevis, Uruguay.

	WB thresholds (1987)		WB thresholds (2015)		Revised thresholds (2015)	
	Number of	0%	Number of	0/6	Number of	0/2
	countries	70	countries	70	countries	70
LIC	42	35	31	14	46	21
LMIC	35	29	52	24	62	29
UMIC	18	15	55	25	50	23
All developing countries	95	79	138	63	158	73
HIC	25	21	79	37	59	27
Total	120	100	217	100	217	100

Table 3 – Countries in different income groups

Source: World Bank Data archive.

Table 3 provokes some considerations that could influence the narratives that are now part of development debates. First, confronting the number of countries and the share of countries in the various groups it is clear that over the period considered here the situation has improved. Second, applying the 2015 World Bank thresholds the improvement looks very impressive, with more than one third of the countries being now classified as High Income and only 14% of countries in the LICs group. The total number of LICs is only two thirds of the 48 officially described Least Developed Countries. Third, if instead we compare the 1987 shares and the

revised 2015 shares we still see that there is a significant improvement both for the LICs and for the HICs groups. However, the revised thresholds now provide a more moderate view of these achievements, and the overall number of LICs is now quite close to that of LDCs. Fourth, the countries that would move from the UMIC to the LMIC category belong to all the areas of the world, from Latin America to the Middle East and North Africa, to Asia, to Europe. Notice that in Sub-Saharan Africa there is only one country, South Africa, that goes back to the LMICs group. Fifth, among the countries going back to the UMICs group there are many Eastern European countries, together with Russia, some countries in Latin America and some other countries that are part of the EU, such as Malta and Portugal. Greece is slightly above the revised High Income threshold.

Income per capita is not the best indicator of economic capacity and of well-being. If we consider a country's economic strength, the Gross Domestic Product provides a more appropriate view of its ability to produce different valuable goods and services. The GDP growth rate over a number of years is a better indicator than the GNI to indentify the vitality of the economy. As for the country's wellbeing and actual standard of living, the Gross National Disposable Income, GNDI, which includes remittances and international aid, provides a better measure of the average income actually available to the people of a country and hence of their ability to buy goods and services, the economic component of well-being (on the comparison of the three indicators see Capelli and Vaggi, 2016). Different figures tell different stories, depict different realities and hint at different priorities and policies. The 2015 World Bank thresholds give a description of a situation in which *practically all developing countries* have improved very fast and seem to be already on a path that could take them out of income poverty. The number of countries in the LICs group is shrinking fast; during these 28 years LICs have decreased from 35 to 14 percent of the world's countries, a remarkable achievement. All the more so if we recall that for many developing countries the eighties and nineties have been years of severe economic crisis. In contrast, the revised thresholds provide a more

prudent classification; the share of LICs still decreases, but only from 35 to 21 percent.<sup>13</sup>

#### 4. The poor in the middle?

The re-classification of countries according to the revised thresholds has several implications, both from an analytical and from a policy perspective; let us see what happens with the issue of extreme poverty, the 1 US dollar a day narrative, the reduction of which was the first of the Millennium Development Goals and is the first of the new Sustainable Development Goals. With the extreme poverty line, sometimes called international poverty line, we are talking of poor people, not poor countries. The absolute poverty line is the minimum level of income deemed adequate to sustain basic consumption needs of an individual, in absolute terms.<sup>14</sup> The poverty line is expressed in US dollars and is converted from the local currencies into dollars through Purchasing Power Parity exchange rates (PPP). In order to determine the PPP factors, the International Comparison Program (ICP) periodically updates the prices and monitors how the price levels differ across countries. When the ICP releases new PPP data the international poverty line is updated.

Table 4 displays the different international poverty lines that have been used since the 1990 *World Development Report*, when the poverty line was set at 1 US dollar a day using 1985 PPPs (Ravallion et

<sup>&</sup>lt;sup>13</sup> Notice that among the 15 countries regressing back to the LICs group there are some countries where remittances are very high. For these countries, the GNDI is larger than the GNI and in some cases the difference can be a remarkable one: it is around 9 percentage points (p.p.) for Bangladesh and Pakistan, 32 p.p. for Nepal, 12 p.p. for Senegal and 30 p.p. for the Kyrgyz Republic (Capelli and Vaggi, 2016, pp. 229–230). <sup>14</sup> For a definition of the extreme poverty line, see the World Bank website at the URL:

http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/

EXTPA/0,,contentMDK:20242879~menuPK:435055~pagePK:148956~piPK:216618 ~theSitePK:430367,00.html. The poverty line refers to the cost of a bundle of goods that an individual should afford to consume, and not to her income.

al., 2009).<sup>15</sup> The first adjustment was made in 2001, when the poverty line was moved up to US\$1.08 using 1993 PPP prices (Chen and Ravallion, 2001). From 2009 to 2015 the World Bank has used a US\$1.25 a day poverty line, based on 2005 PPP prices. In 2014 the ICP released new data on 2011 PPP factors that implied substantial revisions in relative price levels and thus a significant adjustment of the international poverty line (Ferreira et al., 2012), and in October 2015 the World Bank set the new international poverty line at US\$1.9 a day at 2011 PPP.<sup>16</sup>

Sumner pointed out that there is a "poverty paradox", because three quarters of the world's people who are below the extreme poverty line, roughly one billion people in the world, live in Middle-Income countries (half of them in China and India) and only a quarter in LICs (Sumner, 2010). However, let us consider the thresholds that separate the Low Income Countries from the Lower Middle Income ones. In the last fifteen years almost half of the low-income countries have been 'promoted' to the middle-income category. The 'promotion' of Pakistan, Indonesia, Nigeria, and above all of India to the LMICs group accounts for much of the 'extremely' poor people that live in middle-income countries (Sumner, 2010).<sup>17</sup> Of course this shift depends on the rising incomes in many LICs (Sumner, 2012a), but it is also the result of the slow increase of the income thresholds. The World Bank GNI per capita classification does not indicate where the *poor people* are but which *countries are poor* on average.

<sup>&</sup>lt;sup>15</sup> A first attempt to define extreme poverty was made in 1979 by Ahluwalia, Carter and Chenery, who used India's national poverty line to estimate the world's incidence of poverty (see Ahluwalia et al., 1979).

<sup>&</sup>lt;sup>16</sup> The purpose of this adjustment was that of maintaining the real value of the \$1.25 figure in order "to preserve the integrity of the goalposts for international targets such as SDGs and the World Bank's own goals" (Ferreira et al., 2012, p. 39). Of course the \$1.9 line is very sensitive to the type of inflation figures that are used; a minor increase in the value of the line could add hundreds of thousands to the count of new poor people.

 $<sup>^{17}</sup>$  Poverty is very concentrated, 80% of the extremely poor people live in just 10 countries (Sumner, 2012b).

With the revised thresholds, most of the people who are classified as extremely poor, that is below the 1.9 US dollar a day level in 2011 PPP prices, would still be in Lower Middle Income Countries, but only because India is marainally above the revised threshold, with an income *per capita of 1,590 US dollars*. Other very populated countries in South Asia such as Bangladesh and Pakistan would move back from the LMICs to the LICs group, together with many African countries. Almost 600 million people live in countries that would go back to the category of LICs, and out of this total number, there are more than 100 million people who live below the 1.9 US dollar a day threshold. Therefore it continues to be true that most of the extremely poor people are to be found in Middle Income Countries, but this is entirely due to the fact that India, with its 400 million people in extreme poverty, is in the LMICs group. In section 3 we have seen that had we used 2014 data to calculate the ratio of increase of GNI per capita with respect to the 1987 figure. the ratio itself would have been higher than that measured with the 2015 figure. If we had revised the thresholds with this higher ratio. India would have been back into the LICs category and most of the extremely poor people would have been in the lowest income group.

Table 4 shows that the extreme poverty thresholds have been moved up quite slowly. Between 1990 and 2001 the extreme poverty line almost did not change; during these eleven years it increased from 1.01 to 1.08, which is a total change by a factor of 1.069 only. Between 2001 and 2008 it was increased by a factor of 1.157 times and from 2008 to 2015 by 1.52. Since 1990 every percentage change increase in the poverty line has been higher than the previous one, but even so jointly they have not even reached a factor of 2, nor have they been proportional to the 3.17 increase of the world average GNI per capita.

Such very slow motion change could be justified in the case of the extreme poverty line, because this is meant to indicate an *absolute threshold* below which people cannot afford basic subsistence. In principle the poverty line should be constant in real terms, and its

changes should reflect only the prices changes of basic goods in developing countries *vis à vis* the dollar prices for the same goods.<sup>18</sup>

Whatever the original intention of the World Bank, income per capita thresholds have become a kind of *absolute* threshold. They give a description of the process of *status upgrading* of a country and of how long it takes to move from one group to a higher one. However the four income groups are not very informative when it comes to providing a description of the *relative conditions* of the different countries.

Table A1 in the Appendix shows three different lists of 'poor' countries: 31 LICs according to the World Bank threshold (WBT-LICs); 46 RT-LICs, that is the low-income countries according to the revised thresholds; and the 48 Least Developed Countries. Most of the 15 RT-LICs added with respect to the WBT-LICs have very similar economic conditions to the 31 official WBT-LICs. With few exceptions (see the next section) the 46 RT-LICs and the 48 LDCs could be regarded as the countries deserving all the types of policies which should be tailored to the poorest among the developing countries.

Indeed, the classification of countries according to the Human Development Index confirms that the number of countries that should be ranked as 'poor' is probably closer to 45 than to 30. The 2015 *Human Development Report* classifies 45 countries as exhibiting Low Human Development; in the first *Report* of 1990 there were 44 (see UNDP, 1990; 2015). 37 of the 45 Low Human Development countries are also Low Income Countries with the revised thresholds, and 5 more countries in the RT-LICs list are classified as exhibiting Medium

<sup>&</sup>lt;sup>18</sup> Ferreira et al. (2012) and Ferreira (2015) expand on this topic and provide a detailed analysis of the last update of the extreme poverty line, from \$1.25 to \$1.9. Ferreira concludes: "\$1.90 in 2011 buys approximately the same things as \$1.25 did in 2005 in poor countries, which is why poverty has changed very little. That the value is higher in US dollar terms is merely a reflection of a 'weaker' dollar in PPP terms" (see Ferreira et al., 2015). The global headcount of people in extreme poverty did not change much between applying the \$1.25 poverty line with 2005 PPP prices and the \$1.9 poverty line with 2011 PPP prices (Ferreira et al., 2012).

Human Development, though they are among the bottom six countries in the latter group.<sup>19</sup>

	1979 "India line"	1990 "Dollar-a- day"	2001 1.08/day	2008 1.25/day	2015 1.90/day
Source	Ahluwalia et al. (1979)	1990 WDR; Ravallion et al. (1991)	Chen and Ravallion (2001)	Ravallion, Chen and Sangraula (2009)	Ferreira et al. (2012)
ICP data	1975 PPP, Kravis et al. (1978)	1985 PPP	1993 PPP	2005 PPP	2011 PPP
Poverty lines used	1 (India)	8 countries	10 countries	15 countries	15 countries (same lines as 2008)
Method	India's poverty line (46 <sup>th</sup> percentile)	"Inspection" (rounded)	Median	Mean	Mean (rounded)
Poverty line (ICP base year USD)	\$0.56	\$1.01 (\$1)	\$1.08	\$1.25	\$1.88 (\$1.9)
Poverty line (constant 1985 USD)	\$1.12	\$1.01	\$0.8	\$0.69	\$0.91
Countries used in 'reference group'	India	Kenya, Nepal, Tanzania, Bangladesh, Indonesia, Morocco, Philippines, Pakistan	China, Tanzania, Zambia, India, Indonesia, Thailand, Nepal, Bangladesh, Tunisia, Pakistan	Malawi, Mali, Ethiopia, Sierra Leone, Niger, Uganda, Gambia, Rwanda, Guinea- Bissau, Tanzania, Tajikistan, Mozambique, Chad, Nepal, Ghana	Same as 2008

Table 4 – The evolution of the World Bank's International Poverty Line

Source: Ferreira et al. (2012, p. 46).

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<sup>&</sup>lt;sup>19</sup> Notice that the lists of countries by the World Bank and by the UNDP do not coincide; some countries which appear in the latter list are not in the former one.

#### 5. Conclusions

Moving up the ladder may be a matter of national pride and of prestige for developing countries and this is understandable: with rather 'sticky' thresholds, upgrading a country's status becomes easier. Why should the official World Bank classification be changed if this implies some downgrading? Moreover, we know that GDP and GNI calculated in different ways bv different countries. are Notwithstanding the indications of the UN System of National Accounts (see European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, and World Bank, 2009) in each country GDP might include different items and is subject to constant revisions. For example, in 2015 Ireland saw its GDP increase by more than 26% due to the decision to include foreign direct investments into the Irish capital stock. Similarly, between 2012 and 2013 Nigeria's GNI almost doubled due to a revision of the classification criteria. China and India have also revised their classification standards. However, we believe there is some use for the exercise carried out here, because a synthetic and even rough classification should give at least sketchy and provisional information about a country's economic development.

Let us make four final comments. First, a synthetic variable such as the GNI per capita has intrinsic limitations. Independently of any type of classification and thresholds, individual countries will maintain their economic characteristics; Nigeria will remain a big country with a lot of problems, dependent on oil exports, along with Angola and other commodity exporters. The income taxonomy cannot supplant the analysis of the structural features of each country: whether or not it is import dependent, what is the composition of its exports, its educational achievements, its capital stock and so on. It is important to look for a more complex classification, which could incorporate information on the structural characteristics of countries and on their level of human development, such as the cluster analysis proposed by Tezanos Vàzquez and Sumner (2013).

Second, the fight against extreme poverty was at the forefront in the Millennium Development Goals and is still number one in the 2015 Sustainable Development Goals. To reduce the number of Low Income Countries could improve aid and development effectiveness. Aid could be focused on the countries that have very limited domestic resources to tackle extreme poverty. International cooperation might focus on the 31 WBT-LICs; this is also a rather coherent group in terms of structural characteristics (see Sumner 2016, p. 11). Of course a smaller group includes less 'outliers', but what about the 15 countries that are now classified as Lower Middle Income ones but would be in the LICs group according to the revised thresholds? Are Bangladesh, Cambodia, Cameroon, Cote d'Ivoire, Ghana, Kenva, Kyrgyz Republic, Lesotho, Mauritania, Myanmar, Pakistan, Sao Tome and Principe, Tajikistan, Yemen, and Zambia realistically close to abandoning the low-income status? Are they no longer in need of international aid? Most of these countries are still on the favorable IDA terms for borrowing from the World Bank, and some of them are in the so-called "blend" borrowing status.

This exercise does not imply that we wish to minimize the importance of national redistributive policies in the fight against extreme poverty, particularly in countries that experience significant growth rates for a sustained period of time. Some of the fifteen new LICs, namely Bangladesh, Pakistan and Myanmar, could have the resources to enter a process of structural change and of long-term economic growth. However, the improvement in the economic conditions of most of the 'new' LICs still looks very fragile.

Third, some emerging powers, like India or Indonesia, might not need much Official Development Assistance; other large countries such as Bangladesh, Nigeria and Pakistan have relevant domestic resources. These countries are home to a large number of people in extreme poverty, whose conditions should be addressed with national policies. With respect to these countries, international donors are likely to shift their attention from extreme poverty towards issues such as equity and good governance (see Sumner, 2012a, p. 875). However it is important to remember that Nigeria's GDP varies with the price of oil and that Bangladesh is still trapped in cheap-labor lowtechnology type of manufacturing and does not seem to be moving up the ladder in the value production chain.

Fourth, in 2015 the High Income group includes 79 countries and spans from Norway, with an income per capita close to US \$100,000, to Croatia with less than \$13,000, Norway's income per capita being almost eight times larger than that of Croatia. To join the High Income club is a matter of national pride, even if the club is getting very crowded; by now it includes more than one third of the countries of the world (see table 3 above). It would be nice if all countries eventually ended up in the High Income group, a fact that would support Solow's 1956 model, which predicts higher growth rates for lower income per capita countries.<sup>20</sup> However, if most of the countries of the world are in the same group what would the informative value of a classification be? Thresholds would simply become some kind of fixed obstacles for countries to overcome, the only difference being in the timing with which they reach the different thresholds. This would correspond to the interpretation of *thresholds* as *absolute* levels and not as *relative* ones.

In conclusion, narratives are important; by providing different pictures they tell different stories and influence the perception of a phenomenon in very different ways. Classifications strike the imagination and become powerful tools to convey different messages. The current World Bank classification is a bit too rosy and this is due to an increase of the thresholds that is too slow. This makes international aid seem less important than in the past, even though this effect would not be caused by there actually being few Low Income Countries left. The revised thresholds adopted in this paper give a more balanced perception of thirty years of economic improvements, which however show that there is still a lot of work left to do in a significant number of countries.

<sup>&</sup>lt;sup>20</sup> See Solow (1956). To be part of the same group is not a sufficient condition for absolute convergence, which requires the attainment of the same income per capita, at least in a hypothetical steady state.

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## Appendix

### Table A1 – Low Income Countries and Least Developed Countries

Low Income Countries	Low Income Countries	Least Developed
World Bank	Revised thresholds	Countries
		(as of May 2016)
Central African Republic	Afghanistan	Afghanistan
Chad	Bangladesh+	Angola <sup>1</sup>
Comoros	Benin	Bangladesh
Congo Dem. Rep.	Burkina Faso	Benin
Eritrea	Burundi	Bhutan
Ethiopia	Cambodia+	Burkina Faso
Gambia	Cameroon+∆	Burundi
Guinea	Central African Republic	Cambodia
Guinea-Bissau	Chad	Central African Republic
Haiti	Comoros	Chad
Korea Dem, P. Rep. $\Delta$	Congo Dem. Rep.	Comoros
Liberia	Cote d'Ivoire+ $\Delta$	Congo Dem, Rep.
Madagascar	Eritrea	Diibouti
Malawi	Ethiopia	Equatorial Guinea <sup>2</sup>
Mali	Gambia	Eritrea
Mozambique	Ghana+∆	Ethiopia
Nepal	Guinea	Gambia
Niger	Guinea-Bissau	Guinea
Rwanda	Haiti	Guinea-Bissau
Senegal	Kenva+∆	Haiti
Sierra Leone	Korea Dem. P. Rep.	Kiribati°
Somalia	Kyrgyz Republic+Δ	Lao People's Dem. Republic
South Sudan	Lesotho+*	Lesotho
Tanzania	Liberia	Liberia
Togo	Madagascar	Madagascar
Uganda	Malawi	Malawi
Zimbabwe∆	Mali	Mali
	Mauritania+*	Mauritania
	Mozambique	Mozambique
	Myanmar+*	Myanmar
	Nepal	Nepal
	Niger	Niger
	Pakistan+Δ	Rwanda
	Rwanda	Sao Tome And Principe
	Sao Tome And Principe+*	Senegal
	Senegal	Sierra Leone
	Sierra Leone	Solomon Islands°
	Somalia	Somalia*

(continues)

(continued)

Low Income Countries	Low Income Countries	Least Developed
World Bank	Revised thresholds	Countries
		(as of May 2016)
	South Sudan	South Sudan
	Tanzania	Sudan
	Tajikistan+	Tanzania
	Togo	Timor-Leste
	Uganda	Togo
	Yemen+*	Tuvalu°
	Zambia+	Uganda
	Zimbabwe	Vanuatu <sup>o,3</sup>
		Yemen
		Zambia
$\Delta$ Not part of LDCs	+ 15 'new' LICs	° 4 small islands
	$\Delta$ Not part of LDCs	1.To graduate in 2021
	* Data refer to year 2014	2.To graduate in 2017
		3.To graduate in 2020
		* Data refer to year 2014

Sources: for LDC countries, United Nations database, available at the URL www.un.org/en/development/desa/policy/cdp/ldc/ldc\_list.pdf.