Title: The World Bank's Development Taxonomy and the global middle class in question"

Rogelio Madrueño Aguilar
Ibero-America Institute for Economic Research,
Georg-August-Universität Göttingen
rmadrueno@gmail.com

Resumen.

El articulo sostiene que mientras que la tendencia del ingreso mundial indica una movilidad hacia mayores niveles de ingreso, este hecho debe ser tratado con cautela debido a la composición de la taxonomía de desarrollo internacional, que se asienta sobre la base de los umbrales de renta. Esto no es un asunto menor, ya que dicho patrón tiene fuertes implicaciones en la forma en que se concibe el surgimiento de una clase media global. El articulo analiza las principales características de la denominada "clase media" en el mundo y a nivel regional, dando énfasis a la región latinoamericana. Finalmente, se plantea una serie de consecuencias que pueden enriquecer los debates sobre la taxonomía del desarrollo y la consolidación de la clase media.

Palabras clave. movilidad de ingresos, países de renta media, América Latina, clase media

Abstract.

This paper argues that while the world income mobility trend shows a shift toward higher levels of income, this development should be treated cautiously because of the composition of the world development taxonomy, based on income thresholds. This pattern has implications in the way the emergence of the global middle class is conceived. The paper discusses the main characteristics of the 'middle income class' at the world and regional level, giving emphasis to the Latin American region. It raises a series of implications that could enrich the debates about the world development taxonomy and the consolidation of the middle class.

Key Words. income mobility, middle income countries, Latin America, middle class

1. Introduction

At the centre of the debate about the emergence of the global middle class, it is possible to detect three categories of thinking. First, it is said that a large middle class has become a world reality, which is the result of both a better international income distribution and solid economic growth in emergent markets in recent decades (Ferreira *et al.*, 2013; NIC, 2012; Friedman, 2005). Second, it is widely argued that this global middle class 'is at best only emerging' (Milanovic, 2011: 171). In reality, this argument seems to be based on the idea that legitimise the so-called middle-income trap concept, in which societies encounter increased difficulties to overcome the vicious cycle of poverty and inequality; and third, it is alleged that the middle class is an ambiguous concept, which does not conform a social class, and it is the consequence of a statistical aggregate rather than a social construction (Stavenhagen, 1965).

This article aims to shed light on this debate. In particular, the challenge will be to determine empirically what variations in middle-income segments (at the world and regional level) existed in the last decades and how these changes are the result of a better income distribution. The research questions that guide the paper are as follows: how does the changing economic context have affected the performance of the middle-income countries (MICs)? To what extent it is possible to assert that the world income distribution is moving from lower to higher levels? How does the World Bank's Country Income Classification affect the perception of the development process?

One way to address these questions is by posing the following hypothesis: if development involves a process of social change that allows global society to move toward a phase of the expansion of the middle-income class, it is important to know the position of this population group in the current global framework and its performance in recent decades. To test this assumption, this paper analyses the development of MICs, as the source of the new global middle class, using the World Bank's Development Taxonomy, which provides explicit development thresholds by using the categories: MICs, low-income countries (LICs), and high-income countries (HICs).

It is argued in this regard that the distribution of global income has changed, displaying since the 1980s a shift toward higher levels of income. However, this pattern should be treated cautiously because of the composition of the world development taxonomy, particularly its statistical bias, and the financial tax bias. The effect of this shift applies primarily to the HICs segment in the World Bank's income classification.

The present paper discusses the trends and main characteristics of MICs through the analysis of world income distribution, emphasizing Latin American countries (LACs) and the performance of their middle classes. Section 2 raises the subject of the debate on the World Bank's income group classification and the implications of a renewed income taxonomy. To this effect, the country classifications published in the World Development Reports (WDRs) and the recent review of the analytical income classification are compared. The paper also analyses global income distribution trends by studying the changes in the Lorenz Curve and income mobility between income strata by country group (aggregates) and world region. This leads us inevitably to consider in detail the composition of per capita income thresholds and lack of reliable disaggregated data to describe the issue before us precisely. Section 3 discusses the changes in income distribution within LACs. To this aim the middle-income stress (MIS) concept will be used and assessed for the period 1990-2011. Section 4 sets out some broad lines for the world development taxonomy and middle class debate. In Section 5, conclusions are presented.

2. World Income Distribution and the Middle-Income Class

An increasing number of studies have recently emphasised and given added relevance to the role of income mobility, thus enriching the debate on the emergence of a global middle class (Birdsall et al., 2000; Milanovic & Shlomo, 2001; Easterly, 2001; Banerjee & Duflo, 2008; Birdsall, 2010; Kharas, 2010; Milanovic, 2011; Ferreira, et al., 2012). In this respect, it is considered that the middle class is the ideal collective for providing not only robust economic growth because of its importance for entrepreneurship, innovation, education, hard work, commitment, and consumption capacity, but also because it has positive effects on the promotion of democracy and even geopolitical stability (Kharas, 2010: 7–10; Friedman, 2005).

Accordingly, the idea of an emerging global middle class is closely related to economic expansion in emergent markets, especially China and India.

It is worth recalling that the middle-class argument is tightly linked to the conventional notion of development led by countries as if they were part of a competitive race, in which participants to some extent remain in independent lanes without significantly influencing each other. This long-standing line of thought from the late 18th century provides the basis for measuring prosperity by linking the change in economic and social returns with the importance of national income estimates.[i] This approach reached its zenith in the first half of the 20th century after many years of intensive debate, with the contributions made by Keynes, Hicks, Kuznets, Clark, Perroux, and Gini, among others, as some of the leading international scholars in the field of macroeconomic measurement (Kuznets, 1933; Clark, 1940; Studenski, 1958; Meier & Seers, 1984; Maddison, 2004). However, Clark's book *The Conditions of Economic Progress* (1940) had a 'decisive impact on development economics and on providing momentum for comparable economic surveys within the United Nations'. As a consequence, national income accounting, particularly GDP, became the most important instrument not only for measuring economic activity but also for making cross-national comparisons (Speich, 2008: 17). Once such a scheme was in place, the distinction between developed and developing countries become firmly established in the international arena, to such a degree that seems to be deep-rooted in people's minds and views, despite the fact that this vision of development does not appear at this stage compatible with the differences observed between countries in terms of level of development (Payne, 2010). Notwithstanding, an open review of this approach within the World Bank (WB) had not started until recently.

In this context, if we look at the evolution of GDP per capita in so-called BRICs economies (including Mexico), we see that economic performance varies within these MICs. However, China and India are the most dynamic economies, especially since the beginning of the 1990s, and the rest of this group is far from achieving these economic levels, showing less than stellar performance (see Figure 1).

How does this affect global income distribution and the expansion of the notion of the middle class? How has this helped or hindered LICs and MICs? Understanding the nature of these issues necessarily involves both the evolution of MICs over time and the performance of the middle-income layers within these societies. This has a direct

bearing on the explanation of global inequality and other crucial factors in relation to inclusive economic growth: to eradicate poverty, to strengthen so-called anchor countries and their influence on improving global governance, and to lay the foundation for longer-term global sustainable development, among others.

Figure 1. GDP per capita evolution in selected MICs
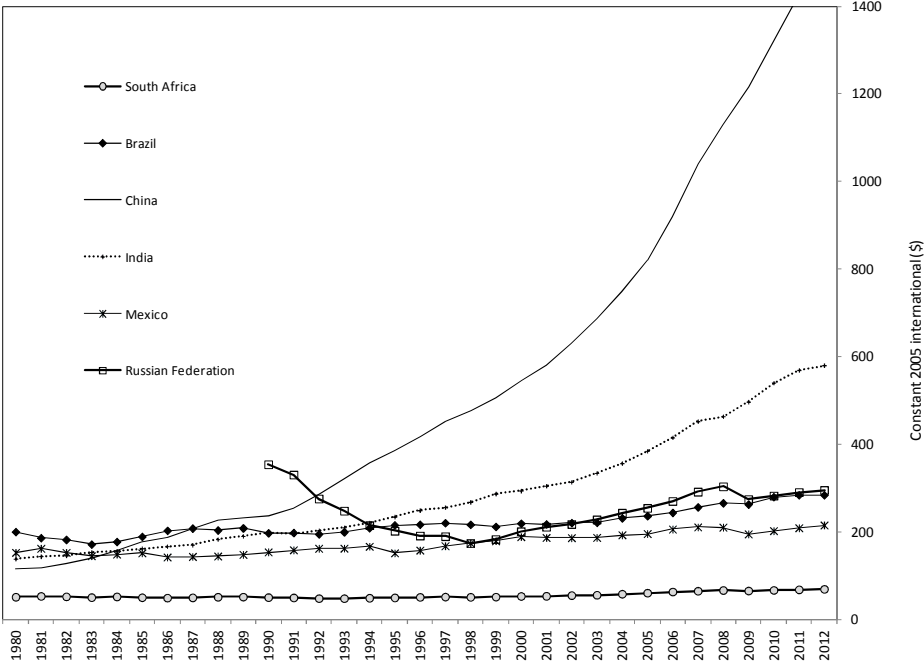
Source: own calculations based on World Bank (WDI, 2013)

Note: Gross national income (GNI) per capita in PPP terms ($ 2005) weighted by population

However, there are limitations to this analysis because of a technical aspect regarding the development taxonomy used by the main international organisations and the quality and availability of data behind this issue. In addition, there has long been great concern, although not unanimous, about the middle class being an ambiguous concept, which to some extent is still present in the imagery of development scholars and practitioners.

Previous analysis has shown that middle-income performance, in terms of either class level or country level, is related more to desire than to reality. On the one hand, Milanovic (2005), following Birdsall et al. (2000), who established the middle class as incomes falling within 75 and 125 percent of the median income, found that just 17.5 percent of the world population could be called 'middle class'. In this case, it was

estimated that this world middle segment received only 6.5 percent of world income in 1998 (Milanovic, 2005: 130).

Milanovic's world image is closely associated with the declining trend of the global economy since the 1960s, where 'there was an uninterrupted national downward mobility', mainly in Africa. This showed a reduction in the number of rich nations and countries with the potential to become rich between 1960 and 1998, 'swelling the ranks of those belonging to the third and fourth world' (Milanovic, 2005: 78).

Another complementary view of this trend was provided by Alonso (2007). In this analysis, the global economy was shown to have undergone significant changes at the bottom and top of the income distribution that had widened the income share to the detriment of middle-income segments. Indeed, there were more cases of MICs moving down the World's Bank income thresholds than the other way around between 1978 and 2003 (Alonso, 2007: 36). This trend suggests that mobility in MICs is significantly greater than that at any other income level. This analysis, however, contrasts with more recent evidence presented by the WB as a result of the review of its analytical income classification based on its operational lending categories.[ii]

(a) The challenge of a renewed income taxonomy

According to the short history of the World Bank's Income Taxonomy,[iii] GNI can provide a useful measure that summarises economic capacity and progress with such powerful force that it is still used as a reference indicator in the field of economic performance. This belongs to a long tradition that considers GNP per capita to be 'the principal performance test of development' despite serious problems and assumptions associated with its capacity to provide a suitable measure of social welfare (Hicks & Streeten, 1981: 53). Nevertheless, GNI per capita is still widely accepted and it became the Bank's main criterion of classifying countries by using the so-called World Bank Atlas Method.

Since 1978, the World Bank's Analytical Country Classification (WBACC) has been continuously updated to incorporate the effect of international inflation. This process took its current shape in 1983 when the lower middle-income (LMC) and upper middle-income (UMC) categories were introduced in the WDRs. In 1989, the World Bank's Executive Board introduced an explicit income threshold of $6,000—updated

annually based on the inflation rate—in order to establish a common understanding about what constitutes the high-income segment.

Nevertheless, the weaknesses and ambiguities in relation to the WBACC have led to an intense (formal and informal) debate about the real benefits of this classification whose validity is being lost. Not only have previous categories been dropped or merged (i.e. industrial countries and capital-surplus oil exporters into HICs) but also, according to Nielsen (2012), it is by no means clear to what extent the construction of the subsequent income thresholds is acceptable. In addition, the main problem behind this issue is that the delimitation of the per capita income thresholds poses a fundamental problem because whereas the evidence suggests that income thresholds are expressed in absolute terms, real incomes have increased. This implies a distortion of the income distribution, which has led to a substantial decrease in the number of countries located in lower-income segments, namely LICs and LMCs. As a result, it seems that the prevailing world economic structure is moving toward higher levels of income (i.e. middle-income and high-income layers), while absolute poverty is far from being eradicated.[iv] This has put into question the complete WBACC, opening a debate that revolves around three main themes: (i) the relevance of relative versus absolute country groupings, (ii) the range of indicators to measure economic and social progress, and (iii) the current methodology.[v]

In this context, the WB has suggested that its development taxonomy is intended for statistical and analytical convenience, with no effects on the financial allocation of resources in developing countries. Moreover, it adds that the term:

'developing economies ... does not imply either that all the economies belonging to the group are actually in the process of developing, nor that those not in the group have necessarily reached some preferred or final stage of development'.[vi]

Nevertheless, it is inevitable that some aspects of this review have no real impact on other areas of development, such as the perception of financial markets or the process of direct investment led by different national and international organisations toward developing countries, among others. In fact, it is no secret that the WDRs have openly associated the use of 'these income groupings for distinguishing economies at different stages of economic development' (WDR, 1989: 159; WDR, 1997: 206).

Yet, it is unclear whether all this may have far-reaching implications for the future. However, it must be kept in mind that the current taxonomy may have had important repercussions on how development is perceived. The question that arises here is to what extent the classification of the world's economies based on estimates of GNI raises important misunderstandings concerning the notion of development, especially in relation to the evolution of MICs. Let us look at this briefly.

(b) What do we know from the empirical evidence? Two visions in the WB

Two global visions—but not necessary consensual—as regards income mobility are offered by the WB. The first (sample 1) can be found in the WDRs, the annual publication of the WB that has been published every year since 1978. The second source of information (sample 2) is the recent historical WBACC that can be obtained from the World's Bank website.[vii] The latter belongs to a reassessment by the Bank based on a revisit of the data collected in its Statistical Office.

With regard to the former, the availability of data enables us to harmonise the statistics before 1989—when the current group of economies was adopted—in order to have comparative information in accordance with recent WDRs.[viii] This provides a broader picture of the WBACC between 1983 and 2012. This information has been collated from developed and developing countries and territories for four points in time: 1983, 1990, 2007 and 2012 (according to the World Bank's fiscal year (FY) (see Table 1)).

The second view (sample 2) seems to have become the most up-to-date and accurate version of the WBACC. However, while WDRs have longer-term information with regard to the LMC and UMC strata, the more recent historical classification only provides information from 1989 onwards. To compare the two samples, Table 2 provides an overview of FY1990, FY2007, and FY2014. The following information can be obtained from the analysis of the two WBACCs (see Annex 1):

Table 1. Historical WBACC: the WDRs for 1983, 1990, 2007, and 2012 (sample 1)

Income Level	WDR 1983 ($ 1981)		WDR 1990 ($ 1988)		WDR 2007 ($ 2005)		WDR 2012 ($ 2010)	
	countries (a)	%	countries (b)	%	countries (c)	%	countries (d)	%
LICs	42	27,5	49	27,8	54	25,8	35	16,2
MICs	83	54,2	80	45,5	98	46,9	110	50,9
LMCs	36	23,5	33	18,8	59	28,2	56	25,9
UMCs	47	30,7	47	26,7	39	18,7	54	25,0
HICs	28	18,3	47	26,7	57	27,3	71	32,9
World	153	100	176	100	209	100	216	100

Notes: (a) includes on the one hand 125 countries with a population of more than 1 million (LICs: < $410, LMCs > $410–$1699), UMCs > $1700–$5670, HICs: $ > $5230), following the classification established by the WDR (1983); on the other hand, it includes countries with a population of less than 1 million that have been classified according to the same income criteria. HICs include both industrial market economies and high-income oil exporters.

Six countries in 1983 were non-market economies (Eastern Europe) without GNP per capita values: Albania, Bulgaria, Poland, the USSR, Czechoslovakia, and East Germany. These are excluded because they cannot be classified according to the income criteria.

(b) includes 121 countries of more than 1 million classified under the following criteria (LICs: $545 or less, LMCs: >$546–$2289, UMCs: >$2290–5999, HICs: >$6000) and countries with a population of less than 1 million that have been classified following the same income criteria.

(c) includes all World Bank members and countries with a population of more than 30,000. The income groups have the following criteria: (LICs: $875 or less, LMCs: $876–$3465, UMCs: $3466–$10725, HICs: $10726 or more).

(d) includes the classification of economies by region and income, FY2012. Income groups are LICs: $1,005 or less, LMCs: $1,006–$3975, UMCs: $3,976–$12,275, HICs: $12,276 or more.

Source: own calculations based on the 1983, 1990, 2007, and 2012 WDRs

Table 2. Recent Historical WBACC: 1990, 2007, and 2014 (sample 2)

Income Level	WDR 1990 ($ 1988)		WDR 2007 ($ 2005)		WDR 2014 ($ 2012)	
	Countries (a)	%	Countries (b)	%	Countries (c)	%
LICs	48	29,3	54	26,2	36	16,7
MICs	75	45,7	96	46,6	103	47,9
LMCs	50	30,5	57	27,7	48	22,3
UMCs	25	15,2	39	18,9	55	25,6
HICs	41	25,0	56	27,2	76	35,3
World	164	100	206	100	215	100

Notes: The groups are (a) LICs: <= 545, LMCs: 546–2,200, UMCs: 2,201–6,000, HICs: > 6,000

(b) LICs: <= 935, LMCs: 936–3,705, UMCs, 706–11,455, HICs: > 11,455

(c) LICs<= 1,035, LMCs: 1,036–4,085, UMCs: 4,086–12,615, HICs: > 12,615

Source: own calculations based on WDI (2013)

1. There is a trend toward a reduction in the number of LICs. It can be seen that after a slight improvement in 1990 in the first sample, the percentage reduction in the low-income segment was clearer. The second sample is useful to confirm the same trend.

2. Likewise, there is evidence that the high-income segment has expanded. In both samples, the share of HICs within the overall number of nations has risen. This seems to be particularly evident in the second sample.

3. However, there is disagreement in relation to the performance of MICs. According to the former sample, the LMC segment has widened after having shown some fluctuations and reaching a particular high level in 2007. In the second sample, the trend is negative, while the share of LMCs in total distribution has also declined since 1990.

4. As in the previous case, it is difficult to establish a reliable trend for UMCs; their development is different in each sample. The second sample gives a highly positive view in relation to the development of this income stratum. On the contrary, the first sample shows a negative trend since the 1980s, despite a relative increase in the share of the UMC quota between 2007 and 2012.

Another way of looking at this is through the analysis of world income distribution by income group. Figures 2 and 3 show the effects of income inequality by analysing the changes in the Lorenz Curve for the years under study. In effect, in spite of their differences, there has been some narrowing in the LIC segment and an expansion of HICs in both samples. Nevertheless, this has not been fully reflected in a better distribution of income as shown by the fact that the Lorenz Curve has remained below the line of perfect equality (45 degree line in both graphs) in recent years. On the contrary, it seems that the world tendency is toward more unequal distribution.

At this point, however, the question arises as to whether these trends have actually led to an improvement of the MIC and HIC groups. To answer that, it is important to analyse income mobility between income strata. Tables 3 and 4 display the income mobility matrix and rotation coefficients of our two samples. The aim is to detect any changes within each income group and the transition (mobility) of the countries to a lower or upper income status.

Figure 2. World Income Distribution by Income Group, 1983–2012: Lorenz Curve and Equidistribution Line (sample 1)
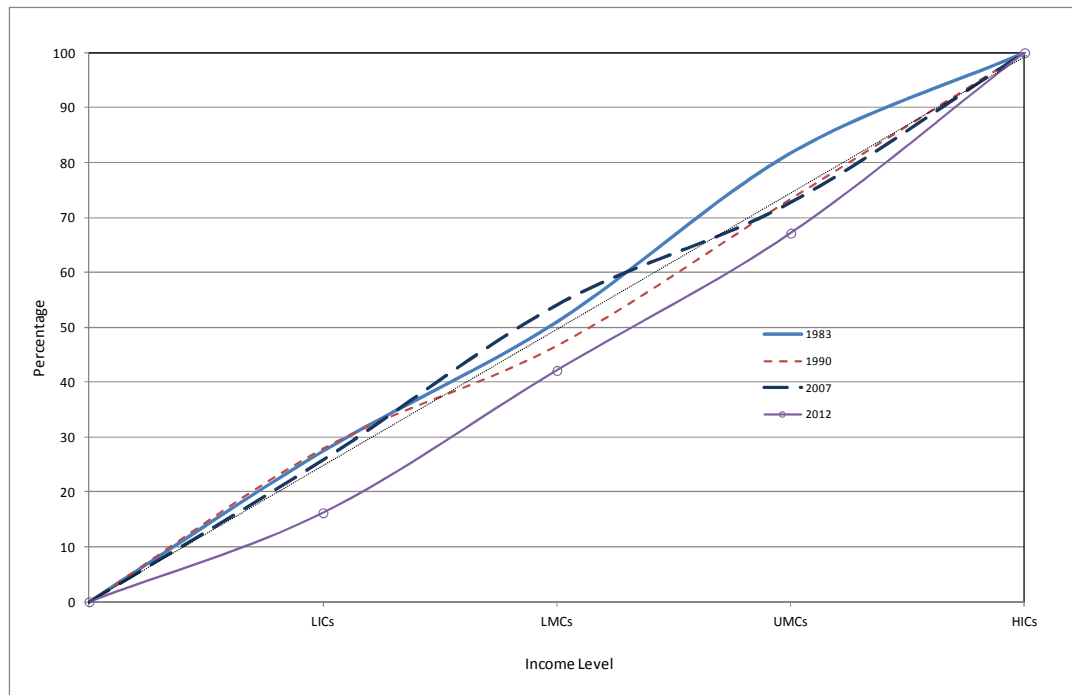
Source: own calculations based on the 1983, 1990, 2007, and 2012 WDRs

Figure 3. World Income Distribution by Income Group, 1990–2014: Lorenz Curve and Equidistribution Line (sample 2)

Source: own calculations based on WDI (2013)

11
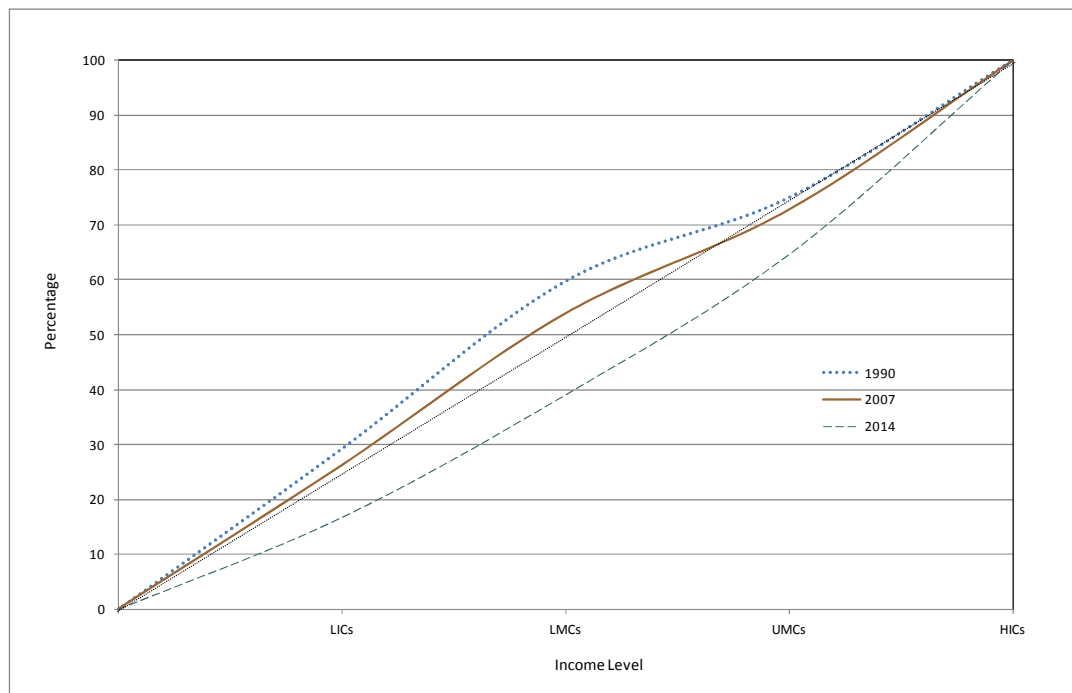
Table 3. Mobility Matrix and Rotation Coefficients: 1983–2012 (sample 1)

1983–2012					1983–2012				
Income level (from/to)	LICs	LMCs	UMCs	HICs	Income level (from/to)	LICs	LMCs	UMCs	HICs
LICs		12	2	2	LICs		0,33	0,04	0,07
LMCs	3		25		LMCs	0,07		0,53	0,00
UMCs		2		16	UMCs		0,06		0,57
HICs		1	2		HICs		0,03	0,04	
total	**3**	**15**	**29**	**18**	**total**	**0,02**	**0,10**	**0,19**	**0,12**
total groups				**65**	**coefficients in total groups**				**0,42**

Table 4. Mobility Matrix and Rotation Coefficients: 1990–2014 (sample 2)

1990–2014					1990-2014				
Income level (from/to)	LICs	LMCs	UMCs	HICs	Income level (from/to)	LICs	LMCs	UMCs	HICs
LICs		15	2	1	LICs		0,30	0,08	0,02
LMCs	2		31	2	LMCs	0,04		1,24	0,05
UMCs				16	UMCs		0,00		0,39
HICs					HICs		0,00	0,00	
total	**2**	**15**	**33**	**19**	**total**	**0,01**	**0,09**	**0,20**	**0,12**
total groups				**69**	**coefficients in total groups**				**0,42**

Source: own calculations based on WDI (2013)

The sweeping overview provided by each income mobility matrix shows that there is considerable income mobility in MICs, both LMCs and UMCs. If we look at the first period from 1983 to 2012, the values of the mobility coefficients are higher than those for the period 1990–2014. The reduction in the relative weight of LICs is more evident due to its transition to LMC status. However, the most successful performance can be found in LMCs, which have succeeded in their transition to obtain UMC status. In the opposite case, only a small number of countries (two or three, depending on the sample) that belonged to LMCs have moved in the opposite direction to become LICs.[ix]

Looking at income mobility in higher-income groups, it can be seen that a large number of UMCs (16) have achieved the higher level of income, while none of the countries belonging to this group has dropped out of this major income level.

(c) What we do not always know about the empirical evidence

It is worth noting at this point, however, that unless the composition of the country income thresholds are fully considered, it is impossible to accurately quantify the real performance of the income distribution. This review has found an important financial tax bias against the economies that have managed to make the leap into the top income group. To do this, we adopted the approach provided by the Economist Intelligence Unit with regard to tax havens.[x]

It is estimated that about 39 and 50 percent, respectively (depending on sample 1 or 2) of these countries are tax havens. This aspect could have introduced unnecessary distortions into the real income performances of these economies. In fact, if one considers only the countries that belonged to the HIC category in the last year of each sample as well as their percentage share of total HICs, 23 and 27 economies are tax havens, which represents 37 and 35 percent of HICs, respectively.[xi] However, this does not only affect HICs. There are other cases of MICs where income mobility was successful. However, in these cases the potential financial tax bias remains. This is particularly the case for Grenada and St. Kitts and Nevis.[xii]

In addition, improvements in the level of development can also be achieved through a statistical effect rather than a real growth in per capita income, which is another clear distortion of the stages of development. One good example of this is the evolution in the classification of countries such as Argentina and Mexico, which are usually viewed as UMCs. Despite that, these countries were classified as LMCs at the end of the 1980s when an 'explicit benchmark between MICs and HICs was established'[xiii], recovering their former position at the beginning of the 1990s.

These two biases can help answer the above-mentioned question of how to provide a bridge between specialists in the study of income mobility. This fact is important to mention because the expansion of HICs started in the first decade of the 21st century, in particular from the mid-2000s onwards, while previous studies have shown a downward trend in global income distribution between 1960 and 2003 using the same WB data source. This information is relevant because that period seems to be critical for the income mobility of many LICs and MICs. Milanovic (2005: 71) showed that 'while in 1960 there were twenty-five countries belonging to the Fourth World, in 2000 that number has nearly tripled'. On the other hand, Alonso (2007) showed that 25 MICs moved to the LIC stratum between 1978 and 2003.

(d) The effect on income distribution at the country and world levels

In any case, if we stick to the information available from the World Development Indicators (WDI, 2013), it is estimated that the improvement in the distribution of income among the WBACC is particularly visible in UMCs and HICs. In fact, proportional improvements in incomes are closely associated with the effect of global mobility, which is in line with the previous analysis. In this respect, some interesting aspects in income distribution (measured as percentage shares by quintile) are worth mentioning (see Table 5). First, all income groups recorded improvements in the income share held by lowest 20% and the second 20% during the first decades of the 21st century (compared with the 1990s). These changes were especially marked in LICs and UMCs. At the same time, we can

observe a gradual process of reduction in the income share held by highest 20%, with the exception of HICs, which remained unchanged.

The data for middle-income strata (income share held by the third 20% and fourth 20%) in LICs, MICs, and HICs show that there has been relative improvement in LICs and UMCs, with greater emphasis on the latter. This change in the pattern of income distribution has coincided with the better distribution of income, according to the evolution of the Gini index, which has dropped significantly in the same income groups, especially in LICs.[xiv]

Another way of looking at this is to compare the evolution of income distribution by geographical region (Table 6). At this level, the data show two regions where inequality has worsened: East Asia & Pacific and Latin America. The effects of such unequal distribution in these regions have been more severe in the income share held by the third 20% and fourth 20%, which have reduced their share within total income, keeping them trapped in percentages under 10 percent. On the contrary, there has been an increase in high-income segments in both regions, while the lowest quintile behaves differently. On the one hand, the lowest quintile of income distribution is slightly better than that in the past decade in East Asia & Pacific, while in LACs it is slightly worse.

Table 5. Estimates of Income Distribution by Country Level (Percentage Shares by Quintile) and Gini index

	1990–1999				2000–2011			
	LICs	LMCs	UMCs	HICs	LICs	LMCs	UMCs	HICs
Income share held by lowest 20%	5,8	5,8	5,2	7,2	6,4	5,9	5,6	7,3
Income share held by second 20%	9,7	9,8	9,3	12,0	10,3	9,9	9,8	12,1
Income share held by third 20%	14,0	14,3	13,7	16,3	14,5	14,3	14,3	16,3
Income share held by fourth 20%	20,5	20,9	20,5	22,2	20,6	20,9	21,0	22,2
Income share held by highest 20%	49,9	49,2	51,4	42,3	48,2	49,0	49,4	42,3
Gini index	43,3	42,8	44,8	34,5	41,4	42,5	43,1	34,4

Source: own calculations based on WDI (2013)

Table 6. Estimates of Income Distribution by World Region (Percentage Shares by Quintile)

	1990–1999							2000–2011						
	East Asia & Pacific	Europe & Central Asia	LACs	Middle East & North Africa	North America	South Asia	Sub-Saharan Africa	East Asia & Pacific	Europe & Central Asia	LACs	Middle East & North Africa	North America	South Asia	Sub-Saharan Africa
Income share held by lowest 20%	21,0	22,3	20,2	21,7	:	20,9	19,8	21,2	22,3	19,9	21,6	22,7	21,3	20,3
Income share held by second 20%	14,8	16,6	12,8	15,5	:	15,0	12,8	14,4	16,6	12,3	15,6	16,4	15,6	13,7
Income share held by third 20%	10,6	12,4	8,1	11,0	:	11,1	8,5	10,0	12,4	7,5	11,2	11,7	11,6	9,4
Income share held by fourth 20%	6,6	7,6	3,8	6,8	:	7,5	4,8	6,1	7,8	3,4	6,8	6,3	7,9	5,6
Income share held by highest 20%	47,0	41,1	55,1	44,9	:	45,5	54,1	48,3	40,9	56,9	45,1	42,9	43,7	51,0
Gini index	37,8	33,1	50,4	37,7	:	37,5	48,3	41,6	32,7	52,5	37,4	36,7	35,4	44,7

Source: own calculations based on WDI (2013)

All regions in the world—with the exception of the Middle East & North Africa—display above-average levels of income performance within middle-income segments.

Yet, all these regions have seen an increase of their 'middle classes' compared with the strong decline of the middle class in East Asia & Pacific and LACs. It is, however, necessary to recognise that there are limitations as regards the lack of disaggregated data at the country and regional levels, which may distort the overall income distribution trends. This problem occurs in practically all income levels (country or region) but is especially acute in HICs. In 14 out of 18 (77 percent) cases of countries in which high levels had been reached between 1983 and 2012, there is a major lack of statistics on differences between income quintiles. Moreover, there are also relevant individual cases such as the US and the UK, where information is not sufficiently available. Nevertheless, it is well known that these countries have experienced continued income inequalities (Stiglitz, 2013; Wilkinson & Picket, 2009).

3. Middle-Income Class in LACs

In order to complement the analysis, there is a need to elaborate further on the issue of income distribution and the role of the middle class. We look at LACs not only because this is the most unequal region in the world but also because it is considered that this region has experienced a rapid expansion of the middle class (about 50 percent in the past decade), making it a candidate to become a middle-class region (World Bank, 2013). This could provide essential steps in establishing better linkages between the assessment at the global and regional levels.

To do this, the MIS measure developed by Birdsall et al. (2000) was used. MIS is 'designed to capture the income difference between the top of the [income] distribution and the middle' (Graham & Pettinato, 2002: 65). This offers additional information that is not captured by the Gini coefficient and it provides 'the change in the middle [income distribution] relative to the bottom as well as the top' income strata (Birdsall et al., 2000: 12). Table 7 shows two measures that reflect the so-called MIS in the past two decades. In this respect, we use both a broad and a strict definition of MIS. The first considers the ratio of the median income of the top 50% income households relative to the total mean. The second one includes the median

Table 7. MIS in LACs: 1990s versus 2000s

#	Country	Year	Average Income	bottom	top	MIS (a)	Deciles	MIS (b)	Year	Average Income	bottom	top	MIS (a)	Deciles	MIS (b)	GDP growth 1990-2011	% Change GINI index 1991-2010	% change MIS (a)	% change MIS (b)
1	Argentina	1993	320	240	401	1,60	6, 7, 8	3,33	2011	1.773	1.330	2.217	1,58	6, 7	3,09	3,8	-4,5	-1,3	-7,2
2	Bolivia	1993	287	216	359	1,67	7, 8	5,14	2011	1.124	843	1.405	1,58	6, 7, 8	3,29	3,9	33,9	-5,4	-36,0
3	Brazil	1993	15.533	11.650	19.416	1,76	7, 8	6,30	2011	824	618	1.030	1,68	7, 8	4,81	2,7	-10,4	-4,5	-23,7
4	Chile	1992	64.588	48.441	80.735	1,68	7, 8	5,63	2011	252.196	189.147	315.245	1,64	7, 8	5,03	5,1	-5,8	-2,4	-10,7
5	Colombia	1992	56.032	42.024	70.040	1,66	7, 8	4,65	2011	489.788	367.341	612.235	1,68	7, 8	4,92	3,7	8,9	1,2	5,8
6	Costa Rica	1993	15.780	11.835	19.725	1,61	6, 7, 8	3,38	2010	203.194	152.396	253.993	1,62	7, 8	4,06	4,8	8,7	0,6	20,1
7	Dominican R.	1997	1.997	1.498	2.497	1,63	7, 8	4,07	2011	7.997	5.998	9.997	1,61	7, 8	4,04	5,2	-8,1	-1,2	-0,7
8	Ecuador	1994	317.134	237.850	396.417	1,82	8, 9	12,49	2011	182	136	227	1,61	6, 7, 8	3,60	3,3	-3,8	-11,5	-71,2
9	El Salvador	1991	366	275	458	1,69	7, 8	4,61	2010	132	99	165	1,60	6, 7, 8	3,45	3,3	-10,5	-5,3	-25,2
10	Guatemala	2000	591	443	739	1,68	7, 8	5,34	2011	1.043	782	1.304	1,67	7, 8	5,30	3,7	0,2	-0,6	-0,7
11	Honduras	1993	247	185	308	1,68	7, 8	4,97	2011	2.715	2.036	3.394	1,72	7, 8	5,53	3,5	9,8	2,4	11,3
12	Mexico	1992	457.309	342.982	571.637	1,68	7, 8	5,16	2010	2.721	2.041	3.401	1,62	7, 8	4,03	2,8	-7,6	-3,6	-21,9
13	Nicaragua	1993	281	211	351	1,73	7, 8	5,09	2009	1.835	1.376	2.294	1,60	6, 7, 8	3,67	3,2	-19,7	-7,5	-27,9
14	Paraguay	1997	329.683	247.262	412.103	1,74	6, 7	4,71	2011	1.044.801	783.600	1.306.001	1,70	7, 8	4,84	3,1	28,4	-2,3	2,8
15	Peru	1997	271	203	339	1,69	7, 8	4,56	2011	605	454	757	1,60	6, 7, 8	3,45	4,5	7,3	-5,3	-24,3
16	Uruguay	1992	712	534	890	1,56	6, 7, 8	3,13	2011	10.986	8.240	13.733	1,58	6, 7, 8	3,25	3,3	13,1	1,3	3,8
17	Venezuela	1997	55.143	41.357	68.929	1,63	7, 8	3,90	2011	1.213	910	1.516	1,53	6, 7	2,72	3,0	6,3	-6,1	-30,3

Notes: The middle class is conceived as the incomes falling between 75 and 125 percent of the median income

(a) MIS is the ratio of the median income of the top 50% income households and the total mean (broad definition)

(b) MIS is the ratio of the median income of the middle-income deciles (sixth, seventh, and eighth) and the total mean (strict definition)

Source: own calculations based on SEDLAC (CEDLAS and The World Bank) based on microdata from household surveys

income of the population belonging to the sixth, seventh, and eighth deciles in relation to the median income for the total population.

While the former definition has wide currency, we consider that the latter may be a more accurate definition because the sixth, seventh, and eighth deciles are directly associated with the concept of middle class provided in this paper. That is, they are usually located within the upper and lower boundary values that define the middle class (between 75 and 125 percent of the median income).

In contrast to previous studies, we do not consider the third and fourth deciles to measure MIS. The main reason is that it has also been argued (at the country level and especially in LACs) that these deciles still belong to the low-income group and that they are strongly associated with household poverty levels (Sumner, 2013; Vélez et al., 2013).

Accordingly, it is more common to see that MIS has declined in the past 20 years, based on both the strict and the broad definitions. This is evident when looking at strict MIS. Only 29.4% of LACs (five out of 17 countries) showed an increase in MIS (Colombia, Costa Rica, Honduras, Paraguay, and Uruguay). On the other hand, half of the countries considered had a strong decline in MIS over the past decade. The major positive changes have been (in decreasing order of importance) in Ecuador, Bolivia, Venezuela, Nicaragua, El Salvador, Peru, Brazil, and Mexico (see Table 7).

It is important to note that while the magnitude of these changes seems to differ, it is possible to say that there is a positive correlation between MIS and inequality. The evidence confirms that the region had reinforced the trend of the 1990s, which marked the beginning of an expansion of the middle stratum (Birdsall et al., 2000: 15).

Figure 4 shows that most countries experienced a significant reduction in MIS and in the Gini index between 1990 and 2010. The most notorious cases are Ecuador and Nicaragua, which both underwent comprehensive state-led developmental programmes within the ALBA (the Bolivarian Alliance for the Peoples of our America) integration process. It is also interesting that Venezuela and Bolivia—belonging to the ALBA—as well as Peru followed a different path because the reduction in inequality has been intense since 1998. Nevertheless, from a longer-term perspective (since the beginning of the 1990s), there is still a need for further improvement. In the case of Uruguay, Costa Rica, and Colombia, the findings were

actually the opposite: broadly speaking, one might say in these cases that the more inequality during periods of economic expansion, the greater the stress on middle-income strata.

These results, however, convey a partial truth. Given the acknowledged random nature of household or income surveys, it is unlikely that the richest households are selected to be in the sample (within the top decile). In Latin American societies, this is not a minor matter, considering the large income gap not only between the rich and poor but also, and especially, between the median income of the top 50 percent of households and the top decile: the latter is consistently higher that the former in this region. At the very least, this represents a distortion of the income improvements for a newly emerging middle class.

Figure 4. MIS and Inequality in LACs, 1990–2010
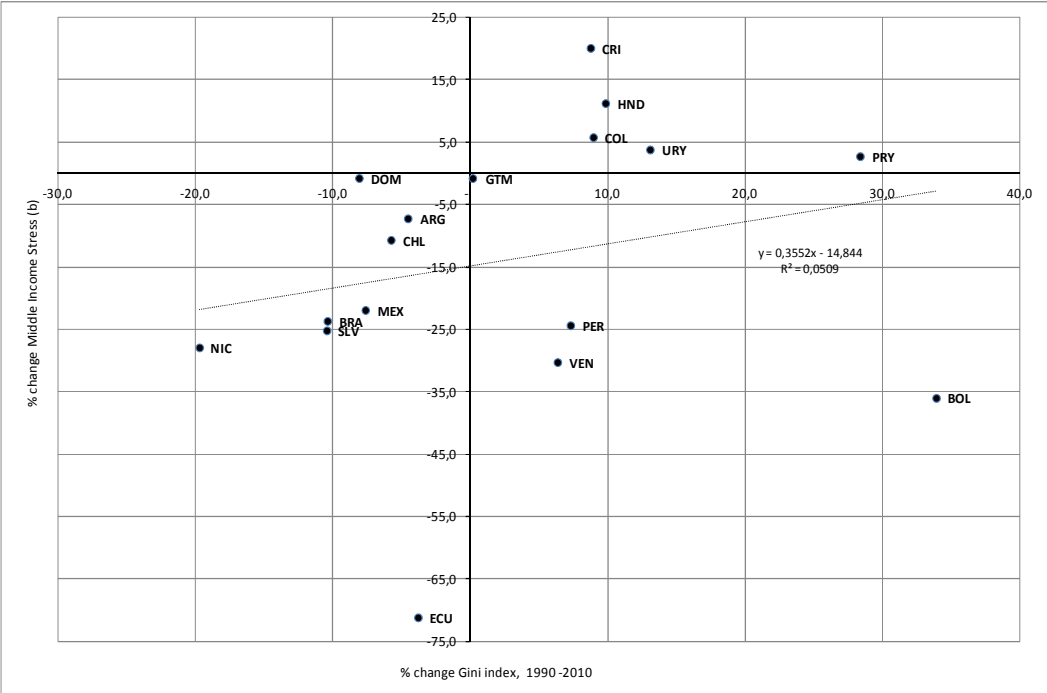
Source: own calculations based on SEDLAC (CEDLAS and The World Bank) based on microdata from household surveys

4. Implications for the World Development Taxonomy Debate

One could argue that the gradual shift in global income mobility toward higher levels of income is mainly determined by a cyclical and structural change in the global economy. This seems to break the trend of previous years, which put the world economy in a situation of vulnerability (prone to downward mobility). However, when

we look carefully at matters, the fact is that these two approaches are not necessarily mutually exclusive. In truth, it seems to be that these two visions are two sides of the same coin. This has important implications not only for the explanation of global income distribution but also for understanding the emergence of the global middle class. Any serious attempt to adopt a unified vision with respect to these issues needs to consider the following aspects (with specific implications for the development taxonomy debate):

(a) *It is necessary to overcome the country classification bias.* For this aim to be achieved, many different elements are needed. This includes a profound review of the current bias in the statistical methodology and country classifications as well as the information and statistics provided by the relevant official statistics. In particular, there is a need to somehow become less dependent on the view (one-dimensional approach) of development, in which GNI is seen as 'the best single indicator of capacity and progress' (Nielsen, 2011: 11). In this paper, it has been shown that there are significant distortions from the use of income thresholds in terms of statistical bias through inflation, a lack of disaggregated data, or the main source of the wealth of nations. In this respect, while there may have been an expansion of global wealth in the past decade, this is far from having a better global income distribution. That leads me to the second point.

(b) *The adoption of an efficient approach to wealth creation.* There is a real need to bridge the gap between income and wealth distribution. Any assessment of income distribution and the role of an emerging middle class need to take into consideration the distribution of wealth within and between countries. This could be very useful to reduce income fluctuations and distortions for HICs, the consequence of which would be a better analysis within so-called income groups.

(c) *A multidimensional perception of development should be fully adopted.* This could be at the global, regional, national, or local level. The idea behind this is to offer a more nuanced view of the level of development between different income groups and social classes. In this regard, there is still a lack of solid evidence on the improvements of the middle class at the global and regional levels. Therefore, it seems to be hard to attribute the distinctive character of the global middle class (or the middle-class region in the case of LACs) to an only partially consolidated group.

5. Conclusion

Until now, major international organisations have classified countries with different views and goals. By doing so, they inevitably shape a shared understanding of the development process. That is particularly the case in the country income groups defined by the WB. However, despite such efforts, Kuznets' (1955: 3) concern about the quality of the data that 'can be used directly for the purpose of measuring the secular income structure' is still a pending issue. According to the most recent information provided by the WDI, there is a shift in global income distribution toward higher levels of income, which has favoured the idea of an emergent global middle class, both at the global level —with the better performance of the MICs— and within the strengthening of the middle segments in these nations. Nevertheless, these figures have to be treated with caution, because it is difficult to disentangle the effects of different factors, particularly those relating to the quality of statistical information and, more importantly, to the composition of the income thresholds. Any identification of MICs as the source of the new global middle class should avoid the inherent bias in the current World Bank's Income Taxonomy.

In this respect, our hypothesis cannot be fully proven, given the lack of adequate information used to carry out studies and analyses on income distribution between and within countries. Nevertheless, the information provided in this paper suggested that we are far from being in a position to state that MICs have reached a smooth and effective development process.

In the case of Latin America, its relevance as the leading region in terms of economic inequality shows that its middle classes have not reached a stage of consolidation. Within this context, it can be inferred that both institutional and economic structures have not yet found—with the exception of a few cases—better synchronisation for the treatment of social inequality. This is partly due to the set of incentives sent out to a highly polarised society by its political class structure. This finding suggests that the explanation of the development trap in which these societies are embedded necessarily requires a multidimensional approach.

In summary, the income mobility trend moving toward HICs hides an important imbalance of global income distribution. It requires, therefore, a nuanced development approach that helps improve our understanding of social and income mobility at different levels and over time.

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[i] This corresponds to the revival of interest in Political Arithmetic—in the context of the Industrial Revolution—'after the concept of national income was first formulated in the 17th century' (Studenski, 1958: 11).

[ii] See http://data.worldbank.org/about/country-classifications (5/09/2013).

[iii] See http://data.worldbank.org/about/country-classifications/a-short-history (5/09/2013).

[iv] See, for instance, Sumner (2013) and Tezanos and Sumner (2013).

[v] See http://blogs.worldbank.org/opendata/reviewing-world-bank-s-analytical-country-classification-update (5/09/2013).

[vi] Ibid.

[vii] See http://data.worldbank.org/about/country-classifications/a-short-history (5/09/2013).

[viii] This is done by merging industrial market economies and high-income oil exporters into the high-income threshold, using 1983 data.

[ix] In the first period, the countries are Zimbabwe, Korea Dem. Rep., and Kenya. As for the second, the countries are Kenya and South Sudan.

[x] See Tax Research Limited and The Tax Justice Network 2005 available in http://www.richard.murphy.dial.pipex.com/Fiscalparadise.pdf.

[xi] In most cases, it is possible to find countries and territories such as Andorra, Antigua and Barbuda, Aruba, the Bahamas, Bahrain, Barbados, Belgium, Bermuda, Cayman Islands, Channel Islands, Cyprus, Hong Kong SAR, China, Iceland, Ireland, Isle of Man, Liechtenstein, Luxembourg, Macao SAR, China, Malta, Monaco, the Netherlands, Northern Mariana Islands, Singapore, St. Kitts and Nevis, Switzerland, Turks and Caicos Islands, and Virgin Islands (US).

[xii] To some extent, the scope of this analysis is presented under a strictly defined approach and other broad definitions of tax havens may increase the incidence of this financial tax bias.

[xiii] See http://data.worldbank.org/about/country-classifications/a-short-history.

[xiv] There is a relatively slight worsening of the Gini index when China is excluded from the sample of UMC: the Gini index (1990–1999) is 45.0 while in 2000–2011, it is only 43.1.