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# Flourishing middle classes in the emerging world to keep driving reductions in global inequality

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# BBVA projections for world population by GDP per capita

Middle classes to comprise two-thirds of world population by 2025, doubling the share in 2000 We forecast that the number of people in the poor and low-income segment will continue falling in the next ten years in both absolute and relative terms, decreasing by more than 900 million people to 24% of world population. Accordingly, the middle classes will expand by a further 1.3 billion to a 65% share (or 5.2 billion) from 33% in 2000 (2 billion), maintaining a strong pace in income transition and helping to reduce global inequality. On the other hand, the global number of affluent people will almost double and reach 900 million by 2025.

### A low middle class citizen is today's worldwide median

According to our estimates, around 60% of the world's population belonged to the poor and low-income segment during the 80s and 90s, whereas after a period of strong growth in developing countries, the share of the low middle class is nowadays at that same level, and will surpass it by 2025. Africa is the exception among emerging regions as strong demographic pressure impedes the fighting of poverty, while a high middle class citizen remains the median in developed countries.

### Emerging economies become predominant in wealthier segments

We expect emerging countries to increase their share of the global medium-high middle classes and affluent segments from 24% in 2000 to 67% by 2025 (or 2 billion people). Steady and rapid gains in purchasing power in Asia, which represents more than a half of the total population, are behind this complete reshaping of global income distribution. Further progress is also expected for Latin America and Emerging Europe, where these segments are already significant.

### A dramatic reshaping of global consumer business away from basic products

Growth and demographic forces are already having a significant impact on the centre of gravity for business activity worldwide. On the one hand, the emerging world shows supporting demographics and significant income gains, which are boosting consumption and shifting spending patterns towards discretionary expenditure and away from basic products (i.e. increasing the share of leisure and personal services, transport, electronics and housing equipment to the detriment of food and clothing). On the other hand, and in sharp contrast with these dynamics, aging and a low-growth profile in the developed world weigh on limited expansion of consumption and changes in the expenditure basket.

Figure 1

population) (1980-2025f)

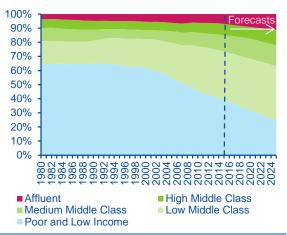
## A dramatic reshaping of global income distribution

The start of the new century definitively marked a turning point for income convergence of emerging economies to developed countries. Macroeconomic stability and reform momentum were the foundation for a period of steady and rapid growth in the emerging world, which accelerated income transition.

According to our estimations (Figures 1 and 2, Box for methodological issues), the global income distribution remained relatively stable during the 80s and 90s, with a significant share comprised of the poor and low-income segment, slightly above 60% of world population. However, there has been a dramatic reshaping since 2000 led by an unprecedented reduction in poverty rates as well as by the rapidly growing middle classes in the emerging economies, which in addition have concentrated population growth during this period. As a result, a low middle class citizen represents today's worldwide median.

We expect these trends to continue in the following ten years:

- 1. Population in the poor and low-income segment will decrease globally by 905 million people, while the low middle class will expand by 637 million, the medium middle class by 332 million, the high middle class by 290 million and the affluent segment by 403 million.
- 2. The low middle class will become predominant in the world by 2025 with a population share of 39% (or 3.1 billion people), closely followed by the sum of the three wealthier segments (37%, 3 billion) and well above the lowest one (24%, 1.9 billion).
- 3. Global inequality will reduce further even assuming no changes in domestic income distributions; however, levels will remain high on cross-country standards, with a GINI index similar to those recorded today in Africa and Latin America.

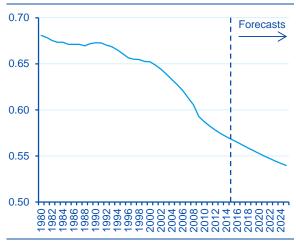


World population by GDP per capita (% of total

NB: Based on PPP-adjusted 2010 USD; Poor and Low Income (<USD5,000), Low Middle Class (USD5,000-15,000), Medium Middle Class (USD15,000-25,000), High Middle Class (USD25,000-40,000), Affluent (<USD40,000).

Source: BBVA Research, UN, WB, IMF

Figure 2 Global: GINI index (1980-2025f)

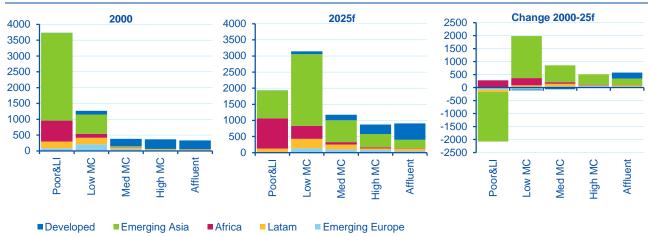


NB: The GINI index is calculated with percentile GDP per capita including data for 90 countries covering over 90% of the world population. Source: BBVA Research, UN, WB, IMF

### Asia leads income transition to wealthier segments in the emerging world

We expect emerging countries to increase their share of the global medium-high middle classes and affluent segments from 24% in 2000 to 67% by 2025 (or 2 billion people). On a regional basis, Asia, which represents more than a half of the total population, has been by far the largest contributor to this reshaping of the world's income distribution since 2000 (Figures 3 and 4):

- 1. We estimate that the number of people in the poor and low-income segment reached a maximum level at the end of the previous century, with close to 3.8 billion, of which 2.8 billion lived in Emerging Asia and around 650 million in Africa. According to our projections, the population in the lowest income segment will have halved by 2025 compared to the records for 2000, with the bulk of those people being located in Africa in ten years' time (940 million vs. 870 million in Emerging Asia).
- 2. Where are the Asian population transitioning to? We expect that **1.6 billion people in Emerging Asia will have moved to the low middle class segment between 2000 and 2025**, reaching 2.2 billion with a global share of more than 70%, while **2.0 billion people will belong to the three wealthier segments** in ten years' time compared with an initial 260 million just 25 years previously.
- 3. Latin America and Emerging Europe, where the middle classes have traditionally been present in the socioeconomic structure, are also undergoing significant changes during the first quarter of this century after severe crises in the 80s and 90s. The share of the wealthier segments is on the rise in both regions, reaching almost 40% in Latin America (270 million people) and over 60% in Emerging Europe (240 million).
- 4. Income transition has been much more limited in the regional tails of the global distribution, i.e. the developed world and Africa. In the latter, despite growth momentum and higher socio-political stability, strong demographic pressure remains as a huge impediment to the fighting of poverty. On the other hand, the global crisis in developed countries reversed the process and the minimum share for the lowest income segments, which had been reached in 2007, will not be regained until the end of this decade.



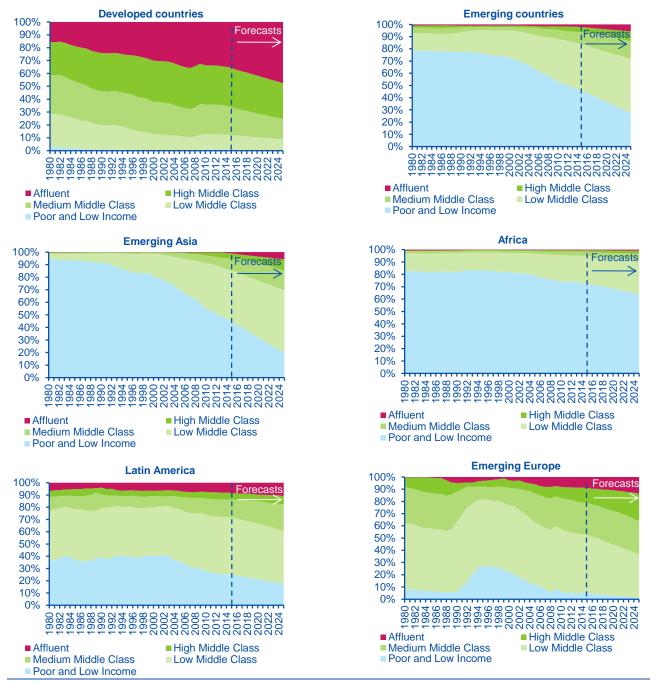
### World population (mn) by GDP per capita and region (2000-25f)

Source: BBVA Research, UN, WB, IMF

Figure 3

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#### Figure 4 Population by GDP per capita and region (% of total population) (1980-2025f)



Source: BBVA Research, UN, WB, IMF

### Income transition drives significant changes in consumption expenditure

The increase in purchasing power in emerging economies is not only supporting robust growth in consumption but significant shifts in the composition of the expenditure basket,

According to our analysis (Figure 5), as countries develop from low income to middle and high income levels the relative demand of basic products (i.e. food and clothing) declines substantially, while the opposite happens with discretionary products (transport, communications, recreation, culture, education, restaurants, hotels, personal care and insurance) and only small changes are recorded for the semi-necessities group (housing, equipment and health).

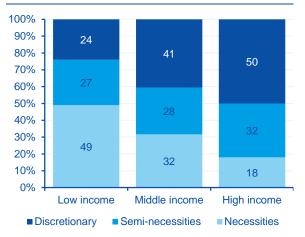
For example, this is **the path that Korea has followed throughout the last decades in which the country has developed extraordinarily rapidly**, increasing its GDP per capita five-fold between 1980 and 2010 and transitioning from low to high income levels (Figure 6).

These dynamics take place in emerging economies in sharp contrast with the developed world, in which aging and low growth profile weigh on limited expansion of consumption and changes in the expenditure basket.

Figure 5

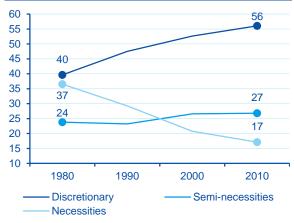
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Consumption basket according to GDP per capita (average CPI weights by broad group) (c.2012)



Source: BBVA Research, Haver, IMF

Figure 6 Consumption basket in Korea (% CPI weight by broad group) (1980-2010)



Source: BBVA Research, Haver

# Box: Methodological issues

### A reminder of our approach

We use PPP-adjusted real GDP per capita measured in 2010 dollars. GDP values and projections correspond to the October 2014 edition of the IMF/WEO database, while population estimates and forecasts are from the 2012 revision of the UN World Population Prospects. Regarding income distributions, our starting point is the information available in the WDI/World Bank, which includes the two top and bottom deciles and all quintiles. As data are not we interpolate continuous missing data. Projections until 2025 keep distributions constant from the latest observation.

Regarding the estimation procedure, we first distribute GDP into available deciles and quintiles, calculating a reference per capita figure in each case. We then match this reference to the percentile accumulating 60% of the income in the corresponding quantile, except for the top two deciles, for which the accumulation share is 70%. We then linearly interpolate these references to obtain a GDP per capita reference for each percentile.

Finally, we group population according to the following five income ranges: 1/ poor and low-income (up to USD5,000), 2/ low middle class (USD5,000-15,000), 3/ medium middle class (USD15,000-25,000), 4/ high middle class (USD25,000-40,000), and 5/ affluent (over USD40,000).

The number of countries included in this update has been extended to 90 and the current coverage accounts for over 90% of the world population:

- Developed economies: United States, Japan, Germany, France, United Kingdom, Italy, Korea, Spain, Canada, Australia, Netherlands, Belgium, Greece, Czech Republic, Portugal, Sweden, Austria, Denmark, Finland, Slovak Republic, Ireland, Slovenia, Estonia and Luxembourg.
- 2. Emerging economies: China. India. Pakistan, Indonesia, Brazil, Nigeria, Bangladesh. Russia. Mexico. Philippines, Ethiopia, Vietnam, Egypt, Iran, Turkey, DR Congo, Thailand, South Africa, Tanzania, Colombia, Kenya, Ukraine, Argentina, Algeria, Uganda. Sudan, Poland, Iraq, Morocco. Afghanistan, Venezuela, Peru, Malaysia, Uzbekistan, Nepal, Mozambique, Ghana, Yemen, Madagascar, Cameroon, Angola, Syria, Sri Lanka, Romania, Côte d'Ivoire, Niger, Chile, Burkina Faso, Malawi, Kazakhstan. Mali. Guatemala. Ecuador. Cambodia, Zambia, Zimbabwe, Senegal, Hungary, Bulgaria, Paraguay, Croatia, Panama, Uruguay, Lithuania, Qatar and Latvia.

In order to fit in with total world population, we assume that the income distribution in missing countries is equal to the regional one computed with the available sample.

### **New PPP valuations**

The IMF updated its WEO database at the end of 2014 including a new set of Purchasing Power Parities (PPPs) computed in the 2011 round by the International Comparison Program (ICP), which imply significant revisions to those computed in 2005<sup>1</sup>. In particular, among emerging economies the PPP-adjusted GDP levels have increased substantially for African and Asian countries and to a lesser extent in Latin America and Europe, while the figures have remained almost unchanged in developed economies (Figure 7).

#### Figure 7

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Valuation of 2013 GDP in PPP-adjusted terms (% change between previous and new estimates)



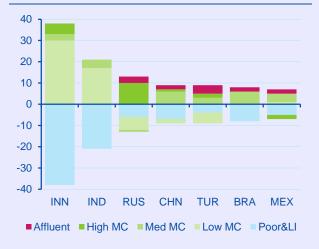
Source: BBVA Research, IMF

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The use of the new figures in our update of population projections by income segment has also brought considerable revisions, particularly benefiting India and Indonesia among the largest emerging economies (Figure 8).

#### Figure 8

Population by GDP per capita in selected emerging economies (pp change between previous and new PPP valuations) (2015)



Source: BBVA Research, UN, WB, IMF

1: A thorough analysis on methodology changes between the 2005 and 2011 rounds is available at Deaton, A., and Aten, B., 2014, "Trying to understand the PPPs in ICP 2011: why are the results so different?"

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