

Global Economics October 2012

Consumer in 2050

The rise of the EM middle class

A global consumer revolution is underway... ...driven by an unprecedented expansion of the middle class in emerging markets... ...transforming demand in sectors from clothing to travel, and IT to financial services



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Disclosures and Disclaimer This report must be read with the disclosures and analyst certifications in the Disclosure appendix, and with the Disclaimer, which forms part of it



Summary

A global consumer revolution is in the offing – and it will be driven by an unprecedented expansion of the world's middle class. Almost 3bn people – more than 40% of today's population – will join the middle classes by 2050 and these entrants are to be found almost exclusively in today's emerging markets. Hence we project that emerging market consumption could make up almost two-thirds of global consumption in 2050, compared to around one-third today.

In our previous reports, <u>World in 2050</u> (4 January 2011) and <u>World in 2050 - From the Top 30 to the Top 100</u> (11 January 2012), we looked at the countries we think are going to dominate the global economy in 40 years' time. In this report, we seek to identify just how that is going to impact global spending patterns, which sectors are likely to benefit most, and the products that will be in most demand. We focus particularly on 17 of the emerging markets that we believe will belong to the world's top 30 economies in 2050.

In many parts of the emerging world, workers are becoming increasingly well equipped with new technology, machinery and skills. As a result, productivity and real incomes are rising, and will continue to do so. As income grows, food and other basics stop consuming most of the monthly salary and there is more money for the 'fun' things in life. We show how preferences change with income and how discretionary spend rises from roughly one third of total consumption, when salaries are as low as USD1,000 a year, to 60% when salaries reach around USD15,000 a year.

Geographies and sectors

Our methodology combines our projections for income per capita, demographics and changing spending patterns. Using this we forecast a phenomenal shift in the geography of global consumption. On our projections the developed world will offer less than 2% annual consumption growth in the coming four decades. But countries such as China, India, the Philippines, Peru, Malaysia and Russia all look set to experience annual growth in real incomes of more than 4% over that period (Chart 1). The figures are even higher in areas of discretionary spending such as clothing, hi-tech, furniture and recreation: here China, India, the Philippines and Peru offer compound annual growth rates of between 5% and 8%.

The finance industry will also see a surge in demand. At present, the emerging markets consume around 18% of global consumer-facing financial services. This is likely to rise to more than 50% by 2050. Indeed, as access to banking and insurance improves and state welfare expands, we may see savings rates fall, turbo-charging consumption above the rates projected here.



Demographics and distribution

We take a closer look at two further factors:

- Demographics Across the world populations are ageing, but many of the emerging economies have a better demographic outlook than the developed world and their median age is considerably lower. Individuals tend to consume most in their lifetime between the age of 16 and 40 – the period when income levels rise, homes and families are being built, and before consumers really begin saving for retirement. Countries such as the Philippines, India, Pakistan, Egypt and Saudi Arabia all have populations today with a median age of 25 or under. These young people, with growing incomes, are getting ready to shop, in stark contrast to ageing populations in countries such as Italy, Germany and Japan.
- Income distribution Not only will the middle class blossom in these emerging economies, so too will the upper income group. An additional 1.3bn people are projected to attain at least middle-income levels by 2030, and 2.6bn by 2050. Over the next four decades, Egypt, Indonesia and the Philippines combined will add more middle-class earners than either Brazil or Russia.

Macroeconomic consequences

Three macro implications will affect broader asset markets. First, emerging economies will shift increasingly towards service sector growth, making them less vulnerable to the gyrations of global trade. Second, at least initially, many of these consumers will seek cheap, low-value added manufacturing goods. These will often be provided by other emerging markets, facilitating a huge rise in South-south trade. Third, the West should also be able to tap in to this growth of demand, boosting exports and alleviating global imbalances. This may sound optimistic – and we acknowledge that a range of energy, environmental and political factors could derail our projections – but the rise of the emerging market consumer will be one of the very best ways to resolve our current global cyclical and structural challenges.

Our report should comfort those who fear that Western deleveraging and structural problems will lead to decades of global stagnation. The world became far too dependent on the US consumer in the 1990s and early 2000s and ended up paying a heavy price because of the imbalances that dependence brought with it. Luckily, major new sources of demand are emerging in the East and South.

We acknowledge the substantial analytical contributions of Tushar Arora, Associate, Bangalore, and James Pomeroy, HSBC Bank plc, to this report.



Rapidly rising incomes

- Better technology and skills will see strong gains in real incomes
- Many emerging economies are moving from low to higher income

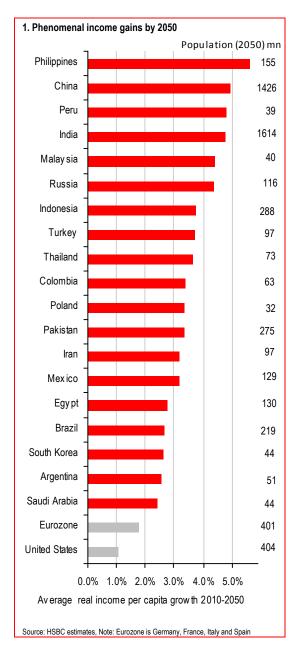
More skills, more money

In <u>*The World in 2050*</u> we considered why emerging economies were managing to perform so much more strongly than the developed world and whether there was scope for this outperformance to continue.

The answer was a resounding yes. Many of the economies in what we (perhaps lazily) term 'the emerging world' are at a very early stage of development. As their workers are increasingly better equipped with more machinery and technology and their level of skills rises, their productivity will increase, GDP will continue to expand and alongside it the workers' real incomes (Chart 1 – see Appendix for full details).

In this report we focus on our list of the Top 30 economies by size in 2050 and focus particularly on 17 of the emerging markets that featured in that Top 30. We project:

Between now and 2050 the average Chinese worker's income will increase seven-fold with individual income per capita rising from close to USD2.5k to almost USD18k. With a population of 1.4bn people today, that's a lot of people becoming a lot richer. The risks to these estimates are to the upside. We don't assume China 'catches up'. In fact we forecast income per capita in 2050 will still be only a third of that of the US. It is more than probable that growth in income will be even greater than this.

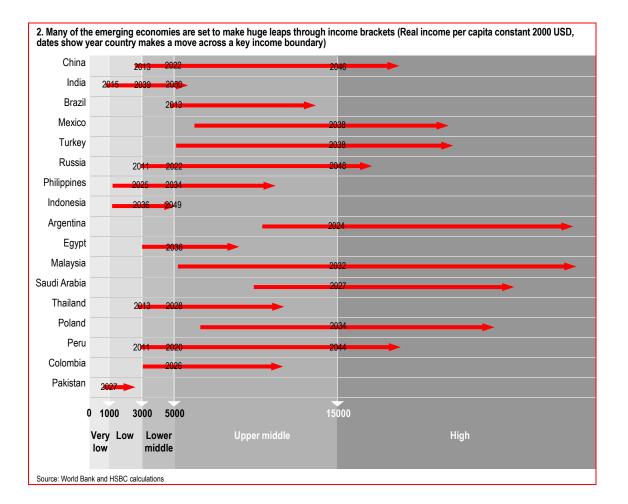


HSBC (X)

- India's population of 1.6bn in 2050 will have an income more than six times today's salary.
- The Philippines, with a population in 2050 twice the size of either Germany or the UK, will see the real income of its population increase nine-fold.
- Peru with a population of just under 30m today – may be a lot smaller, but is the star performer in LatAm on our projections.
- Add in some of the other emerging economies and we have more than 3bn people whose salary over the coming four decades will have grown more than five-fold. This is well above the real per capita income growth we expect in the developed world, which amounts to 1.0% for the US and 1.8% for the big four in the eurozone. Moreover, cyclical factors

mean the risks on our estimates for these developed economies are more skewed to the downside.

These emerging economies will move swiftly from being low to middle or even high-income countries (Chart 2) and as they do their spending patterns will change. Less of the family budget will be taken up with mundane necessities and more income will go towards the more 'fun' discretionary purchases. It is this change in spending behaviour to which we now turn.





Changing tastes

- Rising incomes lead to big changes in spending habits
- Discretionary spending explodes
- Healthcare, recreation and financial services all the main beneficiaries

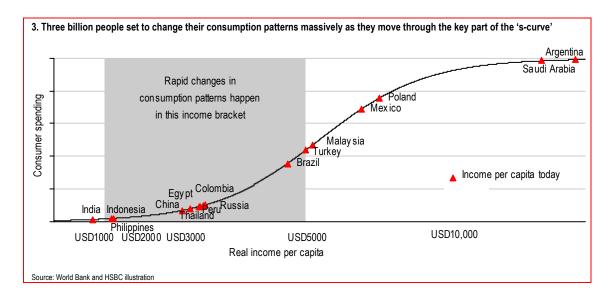
The finer things in life

As income levels rise, consumer spending patterns change as more cash is left at the end of the month to pay for the finer things in life.

We are able to track how spending habits change as consumers' income grows using the information from the consumer surveys that are used to construct CPI baskets around the world (details in the appendix). Table 4 plots the striking change in consumer behaviour as income levels increase. Two things stand out – the 'threshold effect' and the massive rise in discretionary spending as incomes rise.

The threshold effect

Big changes in spending patterns occur when individuals move from a very low income (annual wages of less than USD1000 per annum) to a lower-middle income (between USD3,000 and USD5,000). This is consistent with the 'S-curve' econometric findings, which illustrate a 'threshold effect' whereby demand changes very rapidly when a certain level of income is reached and changes beyond then are more incremental. China, India, Indonesia, the Philippines, Egypt, Colombia, Peru and Russia are all set to go through this threshold between now and 2050. On today's numbers that amounts to more than 3bn people (Chart 3).





4a. As income levels rise, consumer spending patterns change dramatically

| | Income level | | | | | | | |
|---|--|----------------------------|-------------------------------------|--------------------------------------|---------------------|--|--|--|
| | Very low x <usd1,000< th=""><th>Low USD1,000< x < 3,000</th><th>Lower middle USD3,000< x < 5,000</th><th>Upper middle USD5,000< x < 15,000</th><th>High x>USD15,000</th></usd1,000<> | Low USD1,000< x < 3,000 | Lower middle USD3,000< x < 5,000 | Upper middle USD5,000< x < 15,000 | High x>USD15,000 | | | |
| Food, of which: | 43.0% | 35.0% | 21.5% | 17.3% | 10.6% | | | |
| Bread and cereals | 14.4% | 7.7% | 3.9% | 3.4% | 2.0% | | | |
| Meat | 3.8% | 8.5% | 6.0% | 4.0% | 2.6% | | | |
| Fish and seafood | 0.3% | 3.1% | 1.1% | 1.3% | 0.7% | | | |
| Milk, cheese and eggs | 8.9% | 4.3% | 3.5% | 2.9% | 1.7% | | | |
| Oils and fats | 4.4% | 1.3% | 1.3% | 0.9% | 0.3% | | | |
| Fruit | 2.3% | 2.5% | 1.4% | 1.3% | 0.9% | | | |
| Vegetables | 5.5% | 3.4% | 2.4% | 1.9% | 1.1% | | | |
| Sugar and confectionery | 2.0% | 2.2% | 1.2% | 1.2% | 0.9% | | | |
| Food products n.e.c. | 1.4% | 2.0% | 0.7% | 0.5% | 0.5% | | | |
| Non-alcoholic beverages, of which: | 2.3% | 3.3% | 1.6% | 1.6% | 1.2% | | | |
| Coffee, tea and cocoa | 1.4% | 1.1% | 0.8% | 0.6% | 0.3% | | | |
| Soft drinks | 1.0% | 2.3% | 0.8% | 1.0% | 0.8% | | | |
| Alcohol and Tobacco, of which: | 2.6% | 6.3% | 3.5% | 5.7% | 3.8% | | | |
| Alcoholic beverages | 1.2% | 2.8% | 1.8% | 2.1% | 1.6% | | | |
| Tobacco | 1.5% | 3.5% | 1.7% | 3.5% | 2.1% | | | |
| Clothing and footwear, of which: | 6.5% | 6.5% | 5.4% | 4.8% | 4.8% | | | |
| Clothing | 5.4% | 4.5% | 3.9% | 3.6% | 3.9% | | | |
| Footwear | 1.2% | 2.0% | 1.5% | 1.2% | 0.9% | | | |
| Housing, water and fuels, of which: | 13.4% | 11.3% | 18.9% | 20.0% | 22.9% | | | |
| Actual rentals for housing | 8.6% | 4.5% | 10.9% | 5.1% | 9.3% | | | |
| Imputed rentals for housing | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| Maintenance and repair of the dwelling | 0.3% | 1.0% | 1.6% | 1.9% | 2.0% | | | |
| Water supply and other services | 0.2% | 1.3% | 2.6% | 2.7% | 3.1% | | | |
| Electricity, gas and other fuels | 4.3% | 4.4% | 3.8% | 10.2% | 8.5% | | | |
| Furnishings and household maintenance, of which: | 5.9% | 4.8% | 5.2% | 5.5% | 5.7% | | | |
| Furniture and furnishings | 0.5% 1.1% | 1.2% 0.2% | 1.8% 0.3% | 1.6% 0.5% | 2.0% | | | |
| Household textiles | 0.8% | 1.2% | 0.3% | 1.0% | 0.5% 0.9% | | | |
| Household appliances Glassware, tableware and utensils | 0.8% | 0.3% | 0.2% | 0.4% | 0.5% | | | |
| Tools and equipment for home | 0.8% | 0.3% | 0.2% | 0.4% | 0.5% | | | |
| Household maintenance | 1.8% | 1.6% | 2.0% | 1.7% | 1.4% | | | |
| Health, of which: | 3.7% | 3.7% | 5.1% | 4.4% | 5.5% | | | |
| Medical products and equipment | 2.2% | 1.9% | 3.1% | 2.0% | 2.0% | | | |
| Outpatient services | 1.6% | 0.9% | 1.2% | 1.9% | 2.3% | | | |
| Hospital services | 0.0% | 0.9% | 0.8% | 0.4% | 1.2% | | | |
| Transport, of which: | 9.0% | 12.0% | 13.2% | 12.5% | 12.3% | | | |
| Purchase of vehicles | 0.8% | 2.6% | 4.8% | 3.5% | 3.7% | | | |
| Operation of transport equipment | 4.8% | 5.1% | 4.7% | 6.9% | 6.8% | | | |
| Transport services | 3.4% | 4.4% | 3.7% | 2.1% | 1.8% | | | |
| Communication, of which: | 1.9% | 3.9% | 4.2% | 3.7% | 2.7% | | | |
| Postal services | 0.0% | 0.2% | 0.3% | 0.1% | 0.1% | | | |
| Telephone and telefax equipment | 1.9% | 2.7% | 1.4% | 3.6% | 2.6% | | | |
| Telephone and telefax services | 0.0% | 1.0% | 2.5% | 0.0% | 0.0% | | | |
| Recreation and culture, of which: | 1.9% | 3.8% | 4.7% | 7.4% | 9.3% | | | |
| AV, photographic and computing equip. | 0.9% | 1.1% | 0.8% | 1.2% | 1.6% | | | |
| Other major durables | 0.0% | 0.0% | 0.0% | 0.1% | 0.3% | | | |
| Other recreational items | 0.1% | 0.3% | | 1.3% | 2.0% | | | |
| Recreational and cultural services | 0.0% | 1.0% | 1.2% | 2.1% | 2.6% | | | |
| Newspapers, books and stationery | 0.9% | 0.7% | 0.2% | 1.4% | 1.5% | | | |
| Package holidays | 0.0% | 0.7% | 0.8% | 1.1% | 1.4% | | | |
| Education | 2.2% | 1.3% | 2.8% | 2.0% | 1.6% | | | |
| Restaurants and hotels, of which: | 2.9% | 3.9% | 5.9% | 6.2% | 8.3% | | | |
| Catering services | 2.0% | 2.7% | 5.2% | 5.3% | 7.0% | | | |
| Accommodation services | 0.9% | 1.1% | 0.7% | 0.9% | 1.3% | | | |
| Miscellaneous, of which: | 4.7% | 4.2% | 8.1% | 9.1% | 11.4% | | | |
| Personal care | 2.2% | 2.0% | 3.6% | 3.7% | 3.7% | | | |
| Personal effects n.e.c. | 0.6% | 0.5% | 0.4% | 1.1% | 1.1% | | | |
| Social protection | 0.1% | 0.1% | 0.4% | 0.5% | 2.2% | | | |
| Insurance and financial services | 0.7% | 0.6% | | 2.8% | 3.3% | | | |
| Other services n.e.c. | 1.1% | 1.0% | 0.8% | 1.1% | 1.1% | | | |

Source: HSBC and national statistics offices. Note: This data collates CPI basket information for 50 countries and groups them according to income level in order to establish a 'standard' consumer spend for each income level.



| | Income level | | | | | | | |
|---|-----------------|------------------|-----------------------|------------------------|---------------------|--|--|--|
| | Very low 500 | Low 2,000 | Lower middle 4,000 | Upper middle 10,000 | High 25,000 | | | |
| Food, of which: | 215 | 701 | 861 | 1,733 | 2,644 | | | |
| Bread and cereals | 72 | 154 | 157 | 340 | 496 | | | |
| Meat | 19 | 170 | 240 | 397 | 640 | | | |
| Fish and seafood | 2 | 61 | 45 | 126 | 169 | | | |
| Milk, cheese and eggs | 44 | 86 | 141 | 288 | 417 | | | |
| Oils and fats | 22 | 27 | 51 | 93 | 78 | | | |
| Fruit | 11 | 49 | 55 | 133 | 215 | | | |
| Vegetables | 28 | 68 | 96 | 193 | 278 | | | |
| Sugar and confectionery | 10 | 44 | 49 | 116 | 229 | | | |
| Food products n.e.c. | 7 | 40 | 27 | 48 | 121 | | | |
| Non-alcoholic beverages, of which: | 12 | 67 | 63 | 161 | 291 | | | |
| Coffee, tea and cocoa | 7 | 22 | 30 | 58 | 86 | | | |
| Soft drinks | 5 | 45 | 32 | 103 | 206 | | | |
| Alcohol and Tobacco, of which: | 13 | 125 | 140 | 568 | 943 | | | |
| Alcoholic beverages | 6 7 | 56 70 | 72 68 | 215 353 | 408 535 | | | |
| Tobacco | | | | | | | | |
| Clothing and footwear, of which: | 33 | 129 | 215 | 477 | 1,190 | | | |
| Clothing | 27 | 90 | 156 | 360 | 966 | | | |
| Footwear | 6 | 39 | 59 | 116 | 224 | | | |
| Housing, water and fuels, of which: | 67 | 226 | 754 | 2,000 | 5,726 | | | |
| Actual rentals for housing | 43 | 91 | 434 | 515 | 2,331 | | | |
| Imputed rentals for housing | 0 | 0 | 0 | 0 | 0 | | | |
| Maintenance and repair of the dwelling | 2 | 20 | 63 | 191 | 507 | | | |
| Water supply and other services | 1 | 26 | 104 | 271 | 769 | | | |
| Electricity, gas and other fuels | 21 | 89 | 153 | 1,022 | 2,118 | | | |
| Furnishings and household maintenance, of which: | 29 | 97 | 209 | 549 | 1,433 | | | |
| Furniture and furnishings | 2 | 23 | 70 | 158 | 510 | | | |
| Household textiles | 5 | 4 | 12 | 49 | 119 | | | |
| Household appliances | 4 | 25 | 27 | 102 | 221 | | | |
| Glassware, tableware and utensils | 4 | 7 | 9 | 44 | 115 | | | |
| Tools and equipment for home | 4 | 7 | 10 | 25 | 111 | | | |
| Household maintenance | 9 | 32 | 80 | 172 | 357 | | | |
| Health, of which: | 19 | 73 37 | 205 | 436 203 | 1,372 | | | |
| Medical products and equipment | 11 | | 124 | | 491 | | | |
| Outpatient services | 8 0 | 18 18 | 49 32 | 192 42 | 573 | | | |
| Hospital services | | | | | 308 | | | |
| Transport, of which: | 45 | 241 52 | 526 192 | 1,246 | 3,067 | | | |
| Purchase of vehicles | 4 | | | 346 | 923 | | | |
| Operation of transport equipment | 24 17 | 102 87 | 187 147 | 695 | 1,688 | | | |
| Transport services Communication, of which: | | | | 205 | 456 | | | |
| | 10 0 | 78 3 | 168 10 | 367 6 | 687 27 | | | |
| Postal services | 10 | 54 | | | 660 | | | |
| Telephone and telefax equipment | | | 57 | 361 | | | | |
| Telephone and telefax services | 0 | 21 | 101 | 0 | 0 | | | |
| Recreation and culture, of which: | 9 4 | 76 22 | 187 33 | 738 123 | 2,334 394 | | | |
| AV, photographic and computing equip. | 4 | 1 | 0 | 123 | | | | |
| Other major durables | 0 | 6 | 67 | 134 | 85 494 | | | |
| Other recreational items | 0 | 20 | 48 | 214 | | | | |
| Recreational and cultural services | 4 | 13 | 40 7 | 144 | 645 | | | |
| Newspapers, books and stationery | | | 33 | | 371 | | | |
| Package holidays Education | 0 11 | 13 26 | 33 111 | 113 196 | 345 407 | | | |
| Restaurants and hotels, of which: | 14 | 20 77 | 238 | 617 | 2,065 | | | |
| · · | 14 | 55 | 238 210 | 530 | 2,063 | | | |
| Catering services Accommodation services | 10 | 55 23 | 210 | 530 87 | 327 | | | |
| Accommodation services Miscellaneous, of which: | | 23 83 | 28 324 | 87 911 | | | | |
| Personal care | 23 11 | 83 39 | 324 145 | 371 | 2,841 929 | | | |
| Personal care Personal effects n.e.c. | 3 | 39 10 | | 107 | 929 280 | | | |
| | 3 0 | 10 | 14 16 | 51 | 280 549 | | | |
| Social protection | | | | | | | | |
| Insurance and financial services Other services n.e.c. | 3 6 | 12 20 | 116 33 | 276 105 | 819 265 | | | |

4b. As income levels rise, consumer spending patterns change dramatically – as shown by real dollar expenditures (USD)

Source: HSBC and national statistics offices. Note: This data collates CPI basket information for 50 countries and groups them according to income level in order to establish a 'standard' consumer spend for each income level.





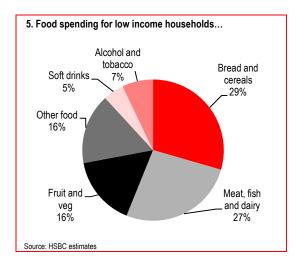
A big rise in discretionary spend

Changing diets and bad habits – Of overall spending, we project the proportion an individual spends on food will fall from more than 40% of total income at low income to around 10% at high income levels. Moreover, the type of food consumed changes materially (Charts 5 and 6). The amount spent on meat, fish and other dairy increases, whilst non-protein staples such as cereals and vegetables play a smaller role in meeting calorific needs.

Bad habits also develop, with a much larger proportion of income heading towards consumption of alcohol and tobacco as consumers transition to upper-middle income (although it is possible that the larger proportion of spending represents higher taxes than volume consumed).

Spending on housing increases notably – Between very low and lower-middle income, individuals spend more on furnishings and appliances. That is then followed by a large increase in spending on fuel to power new appliances and provide heating and air conditioners.

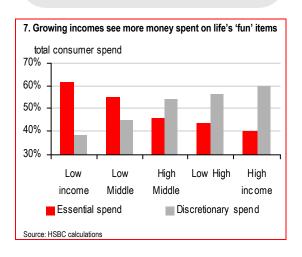
Planning ahead – Rising incomes tend to accompany longer life expectancy. Therefore as salaries rise, consumers start devoting more income to health, social protection, insurance and



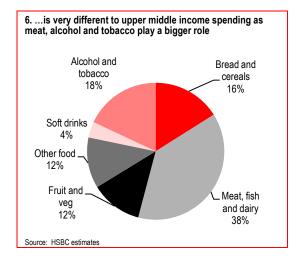
financial services as they plan ahead for major purchases, retirement and bequests. The proportion of income spent on these services rises from less than 5% of total income to nearly 12%.

Between 2000 and 2012, almost 17m Brazilians started using a private healthcare system. That's equivalent to adding the population of the Netherlands to the global private healthcare market.

Source: National Agency of Supplemental Healthcare



All this amounts to a much bigger share of income going to the purchase of discretionary items – life's more 'fun' items (Chart 7).





A consumer revolution

- > Emerging consumers will revolutionise global demand
- The rising consumer will provide an internal engine of growth...
- ...and massive opportunities for global corporations

Three changes are likely to take place in the coming decades:

- A huge diversion in growth of real incomes between the developed world and parts of the emerging world.
- Population growth differs significantly around the world. We discussed this extensively in <u>The World in 2050</u> but the growth rates are shown again in Table 8.
- As income rises, preferences and spending patterns will change.

Taking these three factors together we are able to forecast how total consumption in a country will change (see Table 9).

The developed world's consumer habits are expected to remain stable and so spending on each good rises in line with the rate of GDP growth.

Compare this to the striking growth rates seen across Asia. China thunders through the allimportant middle-income bracket, leading to a significant shift in consumer behaviour.

| 8. There is a huge dispersion in global workforce growth across |
|---|
| the world |

| Average annual growth in working population | 2010-2020 | 2020-2030 | 2030-2040 | 2040-2050 |
|---|-----------|-----------|-----------|-----------|
| population | 2010-2020 | 2020-2030 | 2030-2040 | 2040-2030 |
| China | 0.2% | -0.1% | -0.7% | -0.5% |
| US | 0.5% | 0.3% | 0.4% | 0.3% |
| India | 1.6% | 1.1% | 0.6% | 0.1% |
| Japan | -1.0% | -0.8% | -1.5% | -1.3% |
| Germany | -0.4% | -1.2% | -1.0% | -0.7% |
| UK | 0.2% | 0.1% | 0.2% | 0.3% |
| Brazil | 1.1% | 0.2% | -0.2% | -0.7% |
| Mexico | 1.2% | 0.5% | -0.3% | -0.5% |
| France | -0.1% | -0.1% | -0.2% | 0.0% |
| Canada | 0.4% | 0.0% | 0.4% | 0.3% |
| Italy | -0.2% | -0.6% | -1.1% | -0.6% |
| Turkey | 1.3% | 0.7% | 0.2% | -0.2% |
| S. Korea | 0.0% | -1.1% | -1.4% | -1.3% |
| Spain | 0.4% | -0.1% | -0.7% | -0.7% |
| Russia | -1.0% | -0.9% | -0.6% | -1.2% |
| Philippines | 2.1% | 1.6% | 1.3% | 1.0% |
| Indonesia | 1.2% | 0.6% | 0.0% | -0.2% |
| Australia | 0.5% | 0.4% | 0.4% | 0.4% |
| Argentina | 0.9% | 0.7% | 0.4% | -0.1% |
| Egypt | 1.8% | 1.5% | 1.0% | 0.4% |
| Malaysia | 1.6% | 1.0% | 0.6% | 0.2% |
| Saudi Arabia | 2.3% | 1.6% | 1.0% | 0.6% |
| Thailand | 0.3% | -0.2% | -0.3% | -0.3% |
| Netherlands | -0.2% | -0.5% | -0.4% | 0.1% |
| Poland | -0.8% | -0.8% | -0.7% | -1.6% |
| Peru | 1.5% | 1.0% | 0.5% | 0.1% |
| Iran | 1.0% | 0.9% | 0.3% | -0.7% |
| Colombia | 1.4% | 0.8% | 0.5% | 0.2% |
| Switzerland | 0.0% | -0.4% | -0.2% | 0.2% |
| Pakistan | 2.3% | 1.8% | 1.3% | 0.6% |

Source: UN

| Compound annual growth rate between now and 2050 | Food | Clothing & Footwear | Housing & Energy | Furnishings | Health | Transport | Communi- cation | Recreation & Culture | Education | Restau- rants & Hotels |
|--|------|------------------------|---------------------|-------------|--------|-----------|--------------------|-------------------------|-----------|------------------------------|
| China | 2.2% | 4.6% | 7.3% | 5.8% | 6.4% | 5.3% | 3.8% | 7.8% | 5.9% | 7.4% |
| India | 3.5% | 4.8% | 6.3% | 5.0% | 6.2% | 7.3% | 5.8% | 7.8% | 5.9% | 7.3% |
| Brazil | 2.7% | 2.7% | 3.1% | 3.1% | 2.6% | 2.8% | 3.2% | 4.2% | 2.1% | 3.1% |
| Mexico | 2.4% | 3.6% | 4.0% | 3.8% | 4.2% | 3.8% | 2.9% | 4.3% | 3.2% | 4.4% |
| Turkey | 3.2% | 4.5% | 4.8% | 4.6% | 5.1% | 4.7% | 3.8% | 5.1% | 4.0% | 5.2% |
| Russian Federation | 0.9% | 3.3% | 5.9% | 4.5% | 5.1% | 4.0% | 2.5% | 6.4% | 4.6% | 6.0% |
| Philippines | 4.7% | 5.8% | 8.2% | 7.0% | 7.1% | 6.4% | 5.7% | 8.4% | 7.7% | 7.9% |
| Indonesia | 2.5% | 3.6% | 5.9% | 4.7% | 4.8% | 4.1% | 3.5% | 6.1% | 5.4% | 5.6% |
| Argentina | 1.9% | 3.1% | 3.5% | 3.2% | 3.7% | 3.3% | 2.4% | 3.7% | 2.6% | 3.9% |
| Egypt, Arab Rep. | 4.4% | 4.5% | 4.9% | 4.9% | 4.3% | 4.6% | 5.0% | 6.0% | 3.9% | 4.9% |
| Malaysia | 4.0% | 5.3% | 5.6% | 5.4% | 5.9% | 5.5% | 4.6% | 5.9% | 4.8% | 6.0% |
| Saudi Arabia | 2.2% | 3.5% | 3.9% | 3.6% | 4.1% | 3.7% | 2.8% | 4.1% | 3.0% | 4.3% |
| Thailand | 2.2% | 3.3% | 5.6% | 4.4% | 4.5% | 3.8% | 3.2% | 5.8% | 5.1% | 5.3% |
| Poland | 2.1% | 3.3% | 3.7% | 3.4% | 3.9% | 3.5% | 2.6% | 3.9% | 2.8% | 4.1% |
| Peru | 2.1% | 4.5% | 7.2% | 5.7% | 6.4% | 5.2% | 3.7% | 7.7% | 5.8% | 7.3% |
| Colombia | 3.7% | 3.8% | 4.2% | 4.2% | 3.7% | 3.9% | 4.3% | 5.3% | 3.2% | 4.2% |
| Pakistan | 3.9% | 4.1% | 3.7% | 3.6% | 4.1% | 6.1% | 5.7% | 6.0% | 2.8% | 4.9% |
| US | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% |
| Eurozone big 4 | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% |

9. Projected consumption by sector: the emerging economies offer rates of growth that far exceed those in the developed world

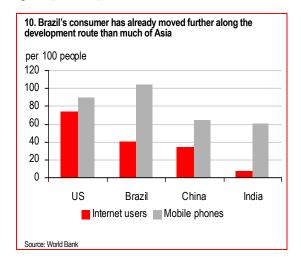
Source: HSBC calculations

The multiples for India are even more striking. India is moving from the low to upper middleincome bracket and so, as shown in Table 4, sees the biggest change in consumption patterns of all the countries we consider. Couple these 'threshold effects' with stunning demographics and Indian consumption looks set to rocket across all the spending groups. Like China, it is discretionary spending that picks up markedly.

The other phenomenal story in Asia is the Philippines. Massive income per capita growth and a rapidly growing population, reaching 155m in 2050, help support a huge rise in consumer spending. Here we're looking at growth in spending on restaurants, recreation, and personal care growing by multiples of at least 25 times the level seen today.

Behind Asia are the countries we cover here in Central and Eastern Europe. Turkey offers a good opportunity across the sector spectrum and Russia in recreation and restaurants.

Latin America on the whole doesn't perform quite as well. Countries such as Brazil have already seen some of these trends and their starting point is a higher level of income per capita and consumer spend (Chart 10).



But we're still looking at rates of growth which far exceed those of the developed world. Mexico's performance is a little better than that of Brazil but Peru, with strong income per capita growth and multiple threshold effects, is the standout growth area in the region, with many areas of discretionary spending 20 times higher in 2050 than the levels seen today.



Clothing and footwear

| CAGR between now and 2050 | Clothing & Footwear |
|---------------------------|---------------------|
| Philippines | 5.8% |
| Malaysia | 5.3% |
| India | 4.8% |
| China | 4.6% |
| Peru | 4.5% |
| Turkey | 4.5% |
| Egypt, Arab Rep. | 4.5% |
| Pakistan | 4.1% |
| Colombia | 3.8% |
| Mexico | 3.6% |
| Indonesia | 3.6% |
| Saudi Arabia | 3.5% |
| Poland | 3.3% |
| Thailand | 3.3% |
| Russian Federation | 3.3% |
| Argentina | 3.1% |
| Brazil | 2.7% |
| Europe | 1.7% |
| US | 1.7% |

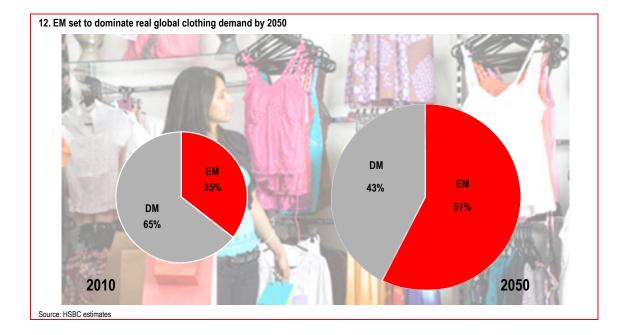
Source: HSBC calculations

One of the items of discretionary spend that will see a huge rise in demand is clothing and footwear (Table 11). China, India, the Philippines and Malaysia are all likely to see near 5% annual compound growth between now and 2050. So by 2050, the Philippines' annual spend on clothing will have risen more than ten-fold. Given sluggish demand growth in the West, total global clothing demand will be transformed with the emerging world accounting for 57% of total sales versus 35% today (Chart 12).

The Asia Pacific market is now the largest market for Prada.

Gucci expects China to become their number one market within five years.

Source: WSJ & Bloomberg





Housing and furniture

13. Furnishing the new pad

| CAGR between now and 2050 | Housing & Energy | Furnishings |
|---------------------------|------------------|-------------|
| Philippines | 8.2% | 7.0% |
| China | 7.3% | 5.8% |
| Peru | 7.2% | 5.7% |
| India | 6.3% | 5.0% |
| Russian Federation | 5.9% | 4.5% |
| Indonesia | 5.9% | 4.7% |
| Malaysia | 5.6% | 5.4% |
| Thailand | 5.6% | 4.4% |
| Egypt, Arab Rep. | 4.9% | 4.9% |
| Turkey | 4.8% | 4.6% |
| Colombia | 4.2% | 4.2% |
| Mexico | 4.0% | 3.8% |
| Saudi Arabia | 3.9% | 3.6% |
| Pakistan | 3.7% | 3.6% |
| Poland | 3.7% | 3.4% |
| Argentina | 3.5% | 3.2% |
| Brazil | 3.1% | 3.1% |
| Europe | 1.7% | 1.7% |
| US | 1.7% | 1.7% |

Source: HSBC calculations

Economic development and rising incomes tend to coincide with increased urbanisation. One doesn't cause the other but instead all are driven by the underlying forces of opportunity stemming from better technology, education, etc. In fitting with our GDP forecasts, the most rapid rates of urbanisation are expected to occur in China, India, Pakistan, Egypt and Thailand (Chart 14). It is clear that as people move to the cities, accommodation tends to become more sophisticated and more income is spent in furnishing and powering appliances.

In China, refrigerator ownership per 100 rural households jumped from 0.1 to 17.8 between 1980 and 2004; similarly, ownership of air conditioners went from 0 to 69 per 100 urban households in the same time period.

Source: United States International Development

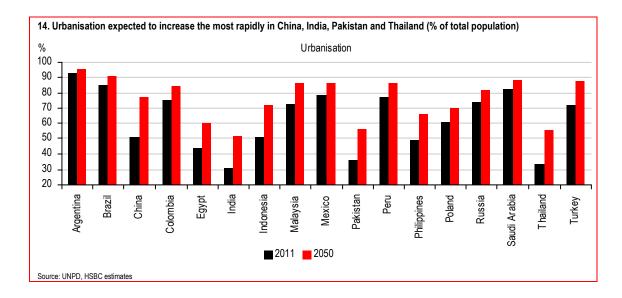
Again, our model suggests China, the Philippines, and Peru all offer annual compound demand growth of more than 5% for the next 40 years.

In 2008 the penetration rate of dishwashers was 36% in the UK, 60% in North America and less than 1% in China and India

Source: Euromonitor

Ikea will open its first outlet in Cairo in 2013, and has plans for 25 stores in India

Source: Reuters





Restaurants and hotels

| CAGR between now and 2050 | Restaurants & Hotels |
|---------------------------|----------------------|
| Philippines | 7.9% |
| China | 7.4% |
| Peru | 7.3% |
| India | 7.3% |
| Russian Federation | 6.0% |
| Malaysia | 6.0% |
| Indonesia | 5.6% |
| Thailand | 5.3% |
| Turkey | 5.2% |
| Pakistan | 4.9% |
| Egypt, Arab Rep. | 4.9% |
| Mexico | 4.4% |
| Saudi Arabia | 4.3% |
| Colombia | 4.2% |
| Poland | 4.1% |
| Argentina | 3.9% |
| Brazil | 3.1% |
| Europe | 1.7% |
| US | 1.7% |

Source: HSBC calculations

Eating out and other leisure activities will become much more common amongst emerging market consumers. Here countries like Peru, China, India and the Philippines offer growth of at least 7.0% per annum for the next four decades.

McDonald's will open its first vegetarian only restaurant in India in 2013.

Source: India Times and Bloomberg

Recreation, culture & gadgets

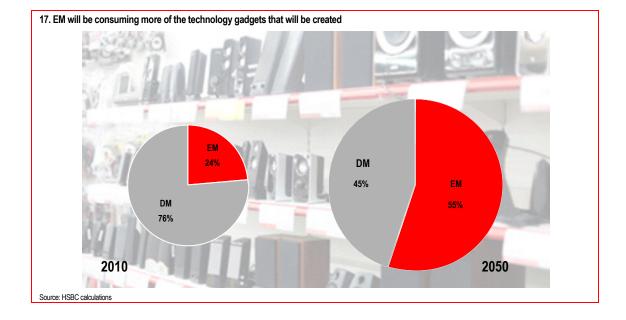
| CAGR between now and 2050 | Recreation & Culture |
|---------------------------|----------------------|
| Philippines | 8.4% |
| India | 7.8% |
| China | 7.8% |
| Peru | 7.7% |
| Russian Federation | 6.4% |
| Indonesia | 6.1% |
| Pakistan | 6.0% |
| Egypt, Arab Rep. | 6.0% |
| Malaysia | 5.9% |
| Thailand | 5.8% |
| Colombia | 5.3% |
| Turkey | 5.1% |
| Mexico | 4.3% |
| Brazil | 4.2% |
| Saudi Arabia | 4.1% |
| Poland | 3.9% |
| Argentina | 3.7% |
| Europe | 1.7% |
| US | 1.7% |

Source: HSBC calculations

Nevada – the US's main gaming region – has 184 casinos serving 318m people. Macau has 34 serving 1.3bn in mainland China.

Source: World Casino directory

There are huge opportunities across the recreation and culture sector. China, India, Russia, the Philippines, Indonesia, Egypt, Peru and Pakistan should all see demand growth of 6% a year or more between now and 2050.





Again this will result in a massive transition The EM consumer will buy up 55% of all audiovisual, photographic and computing equipment in 2050 from 24% today (Chart 17).

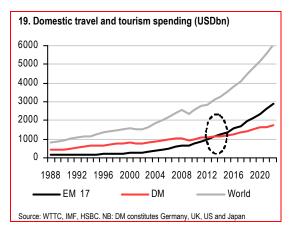
The Asia Pacific market accounted for 7% of Apple's net sales in 2009, 13% in 2010 and 21% in 2011.

Source: Apple Inc. 2011 Annual Report

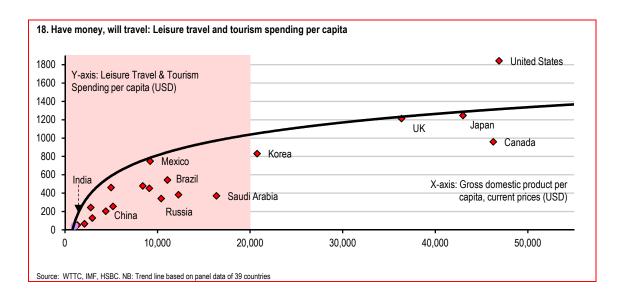
Tourism and Travel

'Fun' discretionary items include holiday trips, taken both domestically and internationally. Leisure travel tends to accelerate most sharply when per capita income rises up to USD20,000, with growth slowing thereafter. Emerging markets are thus entering the critical "take-off" period for tourism (Chart 18). Take China. In 2011, some 60m travellers left the Mainland to explore the world. Yet a Chinese person still only spends about a quarter of the amount that a Korean person spends on leisure travel. On HSBC's forecasts, outbound travel from China will reach 130m by 2015, and possibly top 200m in 2020, which is three times the current number of departures from the United States, the world's number one travel nation until now.

Annual tourist departures make up about 20% of the US population, around 34% in France and 13% in Japan (note that some travel multiple times per year). In China, departures only make up 4.3% of the population, and are lower still for places such as India (1.2%) and Brazil (2.7%).



But it is not just about international travel. Plenty of sights are also worth seeing at home. Domestic travel will similarly grow at a rapid clip. Next year, for example, domestic travel and tourism spending in the 17 emerging markets covered in this report is expected to exceed the combined expenditure of Germany, the UK, the US and Japan on domestic travel (Chart 19).





Financial services

As income levels rise, demand for financial services will naturally increase. Workers begin to look for more sophisticated products to conserve their savings as funds for retirement and bequests become more of a priority.

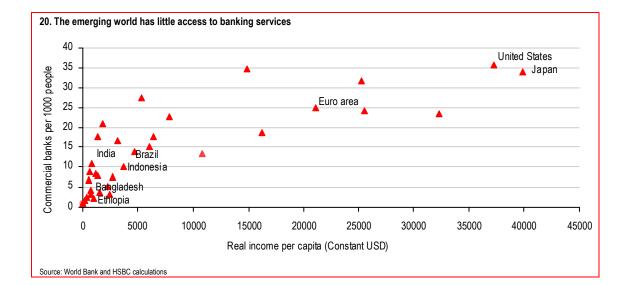
At present, many of the consumers in the emerging world have very little access to banking (Chart 20). A recent report for the World Economic Forum (Driving Growth through financial services innovation, 2012) found that 40% of India's population has no formal channel for savings, and is holding their money in cash 'under the mattress'. Those that do have access are the wealthiest in the population; 81% of those earning more than 200k rupees a year have a bank account which compares to 24% of households earning less than 90k rupees.

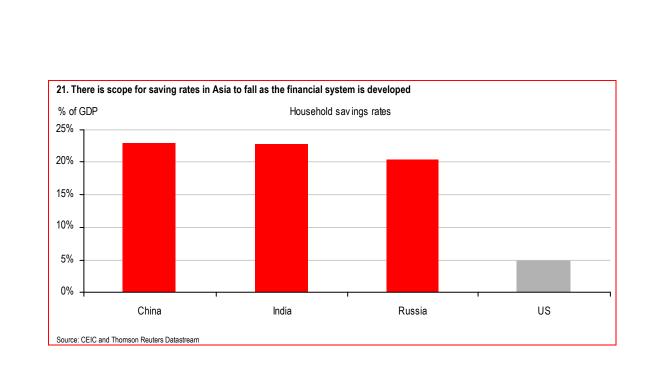
As banking services develop, this in turn will oil the wheels of economic growth as these savings get used to fund the investment and entrepreneurial endeavours of the small business sector. A virtuous cycle ensues whereby employment rises providing more income, demand and savings to encourage even more business start-ups. Clearly financial sector intermediation plays a key role in development. Moreover, access to credit and insurance has the potential to turbocharge our spending projections through two channels. First, it should lower the savings rate. When consumers don't have access to basic credit and insurance they need to hold a buffer to protect against any fluctuations in income – what us economists tend to call precautionary saving.

The development of the financial sector will likely see savings rates fall from the very high levels seen today in many of these emerging economies (Chart 21). However, just as important is the role of insurance provided by the welfare state. A more comprehensive social safety net would also boost consumption and the numbers so far presented would prove to be an underestimation.

In the last *30yrs* 8m homes were financed with a mortgage in India. The housing finance regulator predicts that there are currently 26m prospective homeowners should mortgage finance improve.

Source: Indian National Housing Bank





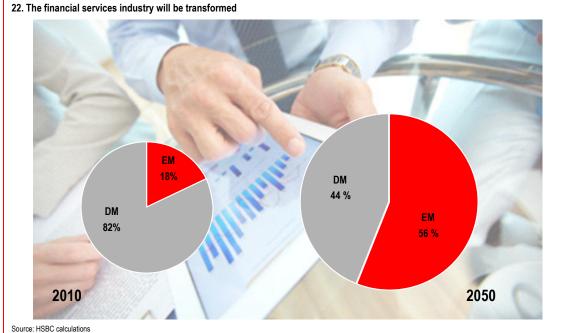
Second, access to loans allows consumers to bring forward consumption to today. They don't have to wait and save to buy durable goods; they can make their purchases now. This would then alter the profile of spending through time, if not the overall result.

Overall the growing demand for financial services in EM will lead to a huge shift in global banking. The emerging markets consume just 18% of total world financial services today but this will grow to a stunning 56% by 2050 (Chart 20).

In 1913 Henry Ford introduced the mass produced Model T Ford and in the following decade, sales grew on average by 27%. But when they introduced consumer credit in 1923, US car sales rose 60% that year.

HSBC (X)

Source: Ford Motor Co. and The Economist, One hundred years of economic statistics



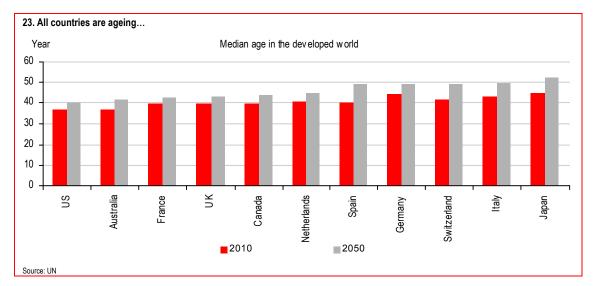


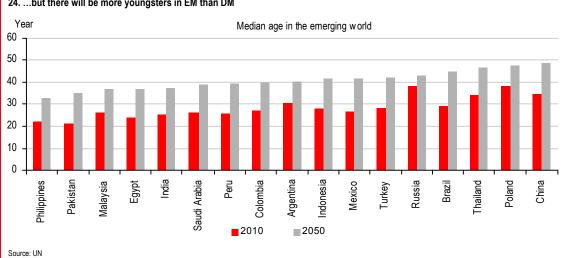
Young and old

- Japan, Korea, and Italy have the most worrying demographics
- The Philippines, India, Egypt & Pakistan remain 'young' into 2050

So far we have just considered country averages: average income, average age, average population growth. But to get a really good idea of what products consumers will demand, it is also worth spending a bit of time looking at the distribution around these averages.

Let's start with the demographics before we turn to the income distribution. Charts 23 and 24 show that populations are ageing everywhere.





24. ...but there will be more youngsters in EM than DM



In Appendix 3 we show the demographic breakdown for all the countries in our Top 30 but Charts 25 to 30 are most striking.

Within our Top 30 it will come as no surprise to know that Japan has the worst demographic profile, both today and in the future. Indeed in 2050 almost a quarter of the population will be older than 75.

In 2012 in Japan adult diapers are expected to outsell baby diapers.

Source: 'Informed decisions'

Fujitsu announced in July 2012 it is launching the RakuRaku smartphone aimed specifically at the senior market.

Source: Fujitsu

The best performer amongst our Top 30 is the Philippines. The median age in the Philippines in 2010 was 22 and in 2050 is still only 32.

It wouldn't be fair to say the developed world has demographic issues and the emerging world doesn't. Within the developed world, Europe is ageing rapidly with Italy in the worst position, followed by Germany and Spain. The US by contrast has a much better demographic outlook helped by large-scale migration, which in turn has helped keep fertility rates elevated relative to elsewhere in the developed world.

The emerging world is also a mixed bag. This is where the shine comes off the China story. China's now modified one child policy will prove some headwind to growth, particularly beyond 2020. The median age today is 35 and in 2050 it will have risen to 49. However, we don't believe getting old will stop them getting rich because the potential productivity gains of the young are so great. But spreading these gains across the whole population will provide a challenge to Beijing given the current limitations to the Chinese welfare state.

Similarly, Russia and Poland in Eastern Europe have bad demographic profiles today and these are set to get worse. But the *deterioration* is greatest in Brazil whose median age rises from 29 today to 45 in 2050.

On the other end of the scale there is the Philippines, which we've already discussed. India's demographics are also in good shape. Their median age is currently 25 and in 2050 will still only be 37. Countries in the Middle East, with fertility rates that are still high, also have demographics profiles with plenty of young shoppers.

Filipino teens, which represent 16% of the population, or 15m people, increased their spending by 18% in the last year.

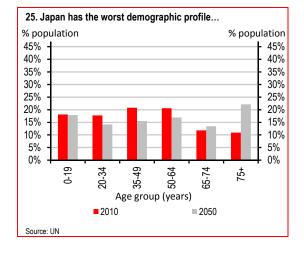
Source: Teens Research Unlimited, TNS

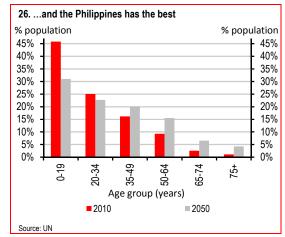
Now of course serious health warnings are required with these demographic projections. They are based on current fertility rates, migration policy, etc. But as things stand, the age profile of the consumer has important considerations for both what consumers will demand and how products should be bought to market.

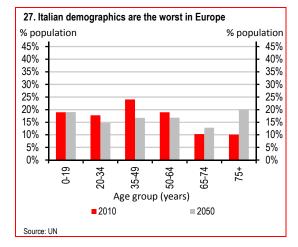
Despite the stagnation of its economy, Japan's online sales are forecast to grow 75% in the next five years relative to 60% in the US. This may be attributable to the decreased mobility of the ageing population.

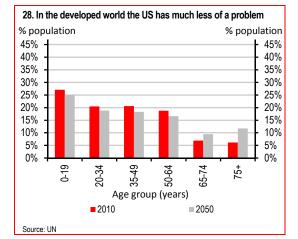
Source: Forrester Research Inc.

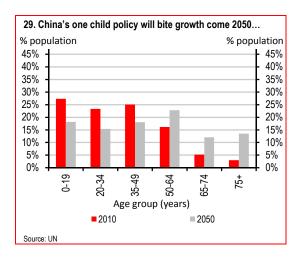


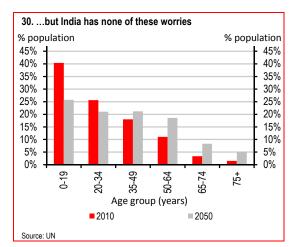














Income distribution and rise of the middle class

- Within the 17 emerging markets in our Top 30, an additional 1.3bn people are projected to attain at least middle-income levels by 2030 and 2.6bn by 2050 – that's more than one-third of today's world population
- The split is roughly three ways: China, India and the other top 15 EM together will add roughly the same number of middle-class earners
- Beyond Asia's giants, Brazil and Russia will add the largest number of middle-class earners by 2030, but Egypt, the Philippines and Indonesia will pull ahead by 2050

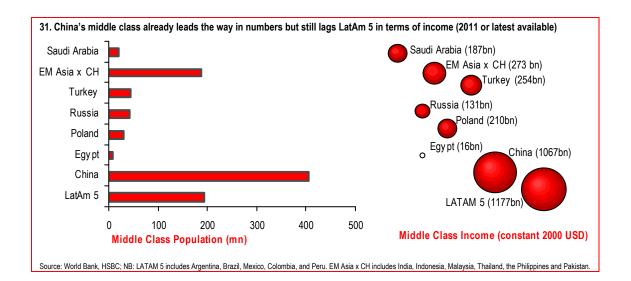
The top end

So far, we've dealt with country averages. But within societies profound changes are occurring as well and income distribution is an important factor in consumer spending.

Suzuki's tag line in India is 'kitna deti hai', translating into 'how much (mileage) does it give' showing the preference for fuel efficiency in India. Advertising strategy in China by contrast reflects luxury and prestige. Premium car sales in 2012 are likely to be 31 times as high in China as India reflecting the wider income distribution in China.

Source: HSBC auto analysts

With growing prosperity, millions of individuals will rise out of poverty to join the middle class. Measures of the middle class vary but there are two basic approaches (see Appendix 4). The first classification is based on *relative* incomes, with the middle class being defined as a specific income bracket within a society. The second approach, and the one adopted here, is based on absolute incomes, with individuals deemed "middle class" if their earnings exceed a certain level, which can vary over time or remain static. Thus, middle-class households are assumed to have earnings between USD3,000 and USD15,000, with USD5,000 being the dividing line between lower and upper middle class. Note that this definition is based on constant 2000 dollars, not on purchasing power parity. As income levels rise one expects currencies to move towards PPP rates providing consumers with more global spending power. But, on the other hand, PPP distorts the purchasing power of households for goods that are traded internationally (such as cars and electronics). Moreover, PPP and constant international price projections essentially yield the same conclusions in terms of relative market size over time.



Where we are today...

Chart 31 provides a useful snapshot of the current state of affairs. In terms of numbers, China already boasts the largest middle class: roughly 400m people. This is double the number of middle-class members in the main five Latin American markets. However, in terms of total income, and thus total spending power, China's middle class still falls short of the LatAm 5, indicating that the average income among middle-class individuals is still higher in LatAm than China. Similarly, the total income of the middle class in Turkey, Egypt and Saudi Arabia, in all some 72m people, exceeds the combined earnings of the middle class in Indonesia, Malaysia, Pakistan, Thailand, the Philippines and India (EM Asia ex China), even though the latter comprise 188m citizens.

Table 32 provides further details. In China, 30% of the population is estimated to belong to the middle class, with some 940m people still on incomes below USD3,000. In India, by our definition, even more people belong to the lower income group, with Indonesia, Pakistan, Russia, and Brazil also having a large number of relatively poor citizens that could, with sustained income growth, move to the middle income bracket over the coming decades.

| | Lower income (less tha | n USD3,000) | Middle class (USD3,0 | 00-15,000) | Upper income (above USD15,000) | | |
|-------------------|------------------------|-------------|----------------------|------------|--------------------------------|----------|--|
| | % share of pop. | millions | % share of pop. | millions | % share of pop. | millions | |
| Argentina (AG) | 10 | 4 | 70 | 26 | 20 | 7 | |
| Brazil (BR) | 50 | 97 | 40 | 78 | 10 | 19 | |
| China (CH) | 70 | 944 | 30 | 404 | 0 | 0 | |
| Colombia (CO) | 70 | 32 | 20 | 9 | 10 | 5 | |
| Egypt (EG) | 90 | 71 | 10 | 8 | 0 | 0 | |
| India (IN) | 90 | 1,086 | 10 | 121 | 0 | 0 | |
| Indonesia (ID) | 90 | 217 | 10 | 24 | 0 | 0 | |
| Malaysia (MY) | 40 | 11 | 50 | 14 | 10 | 3 | |
| Mexico (MX) | 30 | 34 | 60 | 68 | 10 | 11 | |
| Pakistan (PK) | 100 | 175 | 0 | 0 | 0 | 0 | |
| Peru (PE) | 60 | 18 | 40 | 12 | 0 | 0 | |
| Philippines (PH) | 90 | 86 | 10 | 10 | 0 | 0 | |
| Poland (PO) | 10 | 4 | 80 | 30 | 10 | 4 | |
| Russia (RU) | 70 | 100 | 30 | 43 | 0 | 0 | |
| Saudi Arabia (SB) | 10 | 3 | 70 | 20 | 20 | 6 | |
| Thailand (TH) | 70 | 45 | 30 | 19 | 0 | 0 | |
| Turkey (TY) | 30 | 22 | 60 | 44 | 10 | 7 | |

Source: HSBC

HSBC (X)



...in 2030...

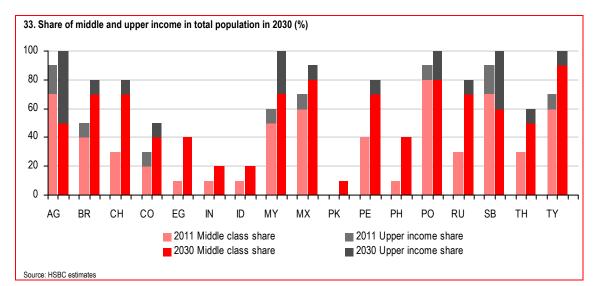
As discussed, average income per capita is likely to grow considerably for many of these emerging economies in the coming decades. But the distribution of income is also likely to change. Historical evidence suggests that income distribution narrows as economies move from the lower to the middle income bracket and then widens again as economies become richer.

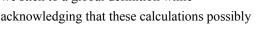
We can use this information to forecast not only how average income will change over time but also to consider the distribution around that average to see the range of consumers, which will all have different needs.

It is worth noting that our forecasts are highly sensitive to the distribution of income in individual economies. Not only is this difficult to measure (usually undertaken by infrequent surveys), but it also varies over time. In a number of economies, the latest surveys are already a few years old. Anecdotally, some countries, such as Egypt, Pakistan, Indonesia, the Philippines and India already have an emerging middle, and even upper, class, although their size is still limited. To allow for consistent, cross-country comparisons, we stick to a global definition while acknowledging that these calculations possibly underestimate the number of middle and upper income households in a number of countries.

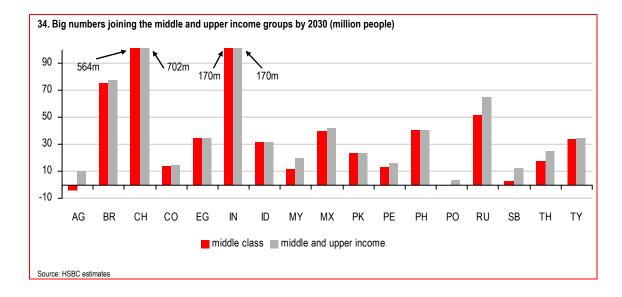
Chart 33 shows that the proportion of the middle class rises almost everywhere, with the largest percentage point jump by 2030 occurring in China and Russia. In Peru, Turkey, the Philippines, Egypt and Brazil a relatively large share of the population will move into the middle-income bracket as well. By contrast, based on the present definition, the share of the middle class will remain small in Pakistan, and increase only marginally in India and Indonesia.

In Poland the share of middle income earners will stay constant as well, even if it remains quite large by global standards. However, these numbers mask other developments as well: for example, 10% of Poles will climb to the top income bracket, with an equal share of low-income earners moving up to middle-income status. Meanwhile, in Argentina, the share of the middle class will actually decline by 20 percentage points, largely because a significant number of citizens will migrate to upper-category incomes.









When we consider both the middle and upper income categories, China and Russia lead the way with an increase of 50 percentage points in the share of population with incomes exceeding USD3,000, followed by Peru and Malaysia (40ppt). Again, in Pakistan, by our definition there will be only a small share of population reaching the middle or upperincome bracket, with relatively small gains seen in case of India and Indonesia.

Changes in population shares, of course, only tell us so much. For businesses and investors the actual number of people that will move from one income bracket to another also matters hugely, conditioning the size of emerging opportunities (Chart 34). Here, China and India lead the way. In the former, over half a billion people are projected to join the middle class by 2030, with the number rising to 700m if the upper class is included (well more than three times Brazil's current population). In India, even by our admittedly conservative estimates, the total number of middle and upper-income earners will grow over the next two decades by almost 170m (twice the current population of the Philippines). Apart from these two giants, other countries will see a big jump in the number of people enjoying middle or even upper-income status. In Brazil and Russia, the rise will be roughly equal to the current population of Germany and France, respectively. Meanwhile, the size of the middle and upper income groups will also grow briskly, in terms of absolute numbers, in Indonesia, Egypt and Turkey.

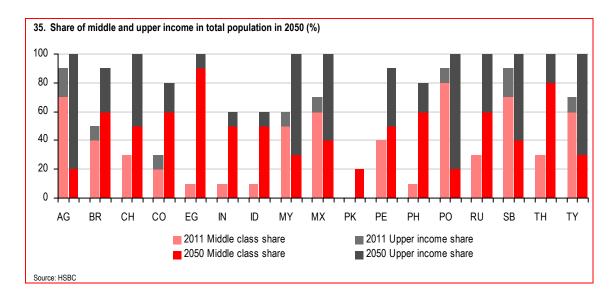


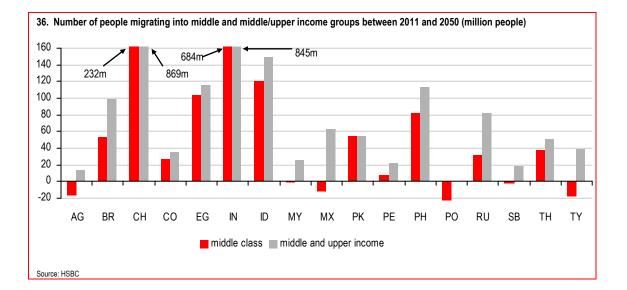
...and 2050

An even bigger leap will occur across emerging markets by 2050. Not too surprisingly, extending our calculations shows an even bigger increase in the size of the middle class over the coming four decades. However, the relative gains between the period until 2030 and the subsequent 20 years differ across countries. For example, in Egypt, India, Indonesia and Thailand, more people will move into the middle class over the latter period than before. In Colombia, more individuals will join the middle and upper class between 2030 and 2050 than over the coming two decades.

In most countries the share of the middle class in the population will rise further by 2050. However, in Argentina, Malaysia, Mexico, Poland, Saudi Arabia and Turkey it will actually decline as a growing number of citizens will see their incomes swell above USD15,000, thus joining the ranks of the upper group. Chart 35 shows the combined change in the share of the middle and upper classes in the total population over the coming four decades. In Argentina, China, Egypt, Malaysia, Mexico, Poland, Russia, Saudi Arabia, Thailand and Turkey, virtually the entire population will enjoy middle or upper income status, with incomes above USD3,000.

Again, in terms of absolute numbers, China and India dominate (Chart 36). But, catching up after a relatively sluggish start over the coming 20 years, India will see an almost equally seismic shift in the structure of its society as China by 2050. Over the next four decades, some 680m Indians are expected to join the middle class. If we include the upper income category as well, the count is 845m. These numbers are similar to China's (232m and 869m, respectively). However, it is important to keep in mind that China's average per capita income will still be higher than India's and thus the overall purchasing power of its middle and upper classes. Moreover, note that by 2050, India is projected to have a considerably larger population than China (1.6bn vs. 1.4bn, according to the UN).





Elsewhere, Indonesia, Egypt and the Philippines will also see a huge rise in the number of people with middle or upper-income status, ultimately eclipsing the changes in Brazil and Russia. Pakistan, too, after a slow take-off, will add over 50m people to its middle class over the next four decades.

In short, the rise of the middle class in emerging markets will entail momentous changes in global spending power, with the top 17 economies in this study alone adding almost 2.6bn individuals with middle or upper-income levels (883m excluding China and India). Companies should be aware that not only are middle-income groups expanding, but also the numbers moving into the higher income brackets offer further considerable opportunities.

| | Lower income | | | | Middle class | | | | Upper income | | | |
|--------------|--------------|------|---|---------------------------|--|------|-------------------------------------|---|--------------|-----------------------|------|------|
| | Very low Low | | | Lower middle Upper middle | | | le | Lower high USD15,000 <x< 25,000<="" th=""><th colspan="2" rowspan="2"> High _x> USD25,000</th></x<> | | High _x> USD25,000 | | |
| | | | USD1,000 <x< 3,000<="" th=""><th colspan="2">USD3,000 <x< 5,000<="" th=""><th colspan="2">USD5,000 <x< 15,000<="" th=""></x<></th></x<></th></x<> | | USD3,000 <x< 5,000<="" th=""><th colspan="2">USD5,000 <x< 15,000<="" th=""></x<></th></x<> | | USD5,000 <x< 15,000<="" th=""></x<> | | | | | |
| | 2011 | 2050 | 2011 | 2050 | 2011 | 2050 | 2011 | 2050 | 2011 | 2050 | 2011 | 2050 |
| Argentina | - | - | 4 | - | 7 | - | 19 | 10 | 4 | 10 | 4 | 29 |
| Brazil | 19 | - | 78 | 22 | 39 | 22 | 39 | 109 | 19 | 44 | - | 22 |
| China | 270 | - | 674 | - | 270 | 127 | 135 | 509 | - | 382 | - | 255 |
| Colombia | 14 | - | 18 | 12 | 5 | 12 | 5 | 24 | 5 | 6 | - | 6 |
| Egypt | 8 | - | 63 | - | - | 25 | 8 | 86 | - | 12 | - | - |
| India | 966 | - | 121 | 644 | 121 | 483 | - | 322 | - | 161 | - | - |
| Indonesia | 145 | - | 72 | 116 | 24 | 87 | - | 58 | - | 29 | - | - |
| Malaysia | - | - | 11 | - | 6 | - | 9 | 13 | 3 | 13 | - | 17 |
| Mexico | 11 | - | 23 | - | 34 | - | 34 | 57 | 11 | 43 | - | 43 |
| Pakistan | 158 | 27 | 18 | 192 | - | 27 | - | 27 | - | 0 | - | - |
| Peru | 6 | - | 12 | 4 | 6 | - | 6 | 19 | - | 8 | - | 8 |
| Philippines | 48 | - | 38 | 31 | 10 | 15 | - | 77 | - | 15 | - | 15 |
| Poland | - | - | 4 | - | 11 | - | 19 | 7 | 4 | 14 | - | 14 |
| Russia | 14 | - | 85 | - | 28 | 12 | 14 | 62 | - | 37 | - | 12 |
| Saudi Arabia | - | - | 3 | - | 6 | - | 14 | 17 | 3 | 13 | 3 | 13 |
| Thailand | 6 | - | 38 | - | 13 | 14 | 6 | 42 | - | 7 | - | 7 |
| Turkey | - | - | 22 | - | 15 | - | 30 | 27 | 7 | 36 | - | 27 |
| Total | 1,665 | 27 | 1,285 | 1,020 | 594 | 825 | 337 | 1,468 | 56 | 830 | 7 | 468 |

Source: UN, World Bank, HSBC

HSBC (X)

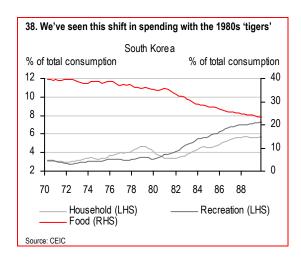


Conclusion

The global economic landscape is changing dramatically. It's as much a structural story as a cyclical one. As workers in the emerging markets are provided with more machinery and technology and their skills rise, productivity and incomes will continue growing at rates that far outstrip those of the developed world.

It's important for businesses now to capture this rising tide of middle-class spenders. Tastes and habits are not yet as firmly established as in other societies, offering opportunities to reposition brands and build entirely new markets. And the "threshold effect", triggered by the sudden migration of large segments of the population from one income bracket to the next, implies explosive growth in the demand for newly desired products. Their sales can thus expand at an even faster pace than the already impressive growth of emerging market economies.

The sectors that benefit most include clothing, audio and high tech, recreation and restaurants and financial services.



We have seen this phenomenon play out before with the Asian tigers in the 1970s and 1980s. Chart 38 shows the shift in spending patterns in South Korea that occurred during the period of rapid development back then.

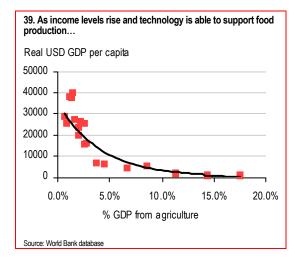
Our projections suggests that the contribution of the emerging world to total global consumption will rise from less than a third today to nearer two-thirds by 2050. Economics Global 15 October 2012

HSBC (X)

There are also important macroeconomic implications. First, as income and consumer demand grows, these economies will naturally transition away from export orientated/manufacturing heavy growth towards consumer driven/service sector growth. It isn't that their ability to produce agricultural or manufacturing goods decreases. Instead, the increased level of technology means that machinery will play a larger role in production, freeing up resources to meet the growing demand for domestic services. So as an economy develops, incremental employment is increasingly in the service industries to meet the demand for waiters, bank clerks and so on.

This is a natural evolution, seen by numerous economies in the past as they transition from low income to high income economies (Charts 39 and 40). Yet investors are often concerned where China's growth will come from if not driven by the mercantilist, export-orientated policies of the past. In the very near term this may be a delicate transition, but over time the emerging markets will be able to sustainably decouple from the debt-burdened, ageing consumers in the West.

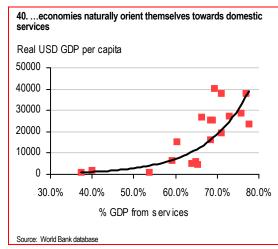
Second, this also has huge implications for Southsouth trade, as discussed in *The Southern Silk Road* (Stephen King, June 2011). Countries will increasingly look to their low-cost neighbours as a source of production for these consumer goods.



Third, if Western producers can tap into this demand this could prove an amicable way of resolving global imbalances. The best way out of our current economic difficulties is for the former consumers (the West) and the former producers (the East) to swap roles. Rising Western exports would enable them to repay their debts more easily. The less amicable resolution includes default, protectionism and deglobalisation.

As ever, there are many things that might send these projections off track. Natural resource constraints and environmental damage are a key concern. These projections assume that resource constraints don't restrict production so that whatever is demanded can be supplied. This may not be the case. Food and energy constraints may mean that increasing demand will merely be met by higher prices, forcing households to spend more of their income on necessities and less on discretionary goods. As discussed in *Energy in 2050*, efficiency improvements and alternative sources of energy will help prevent such a scenario.

In addition, our projections are based on governments 'doing the right thing', and continuing to make progress in providing a fertile ground for investment, growing levels of education and skills.

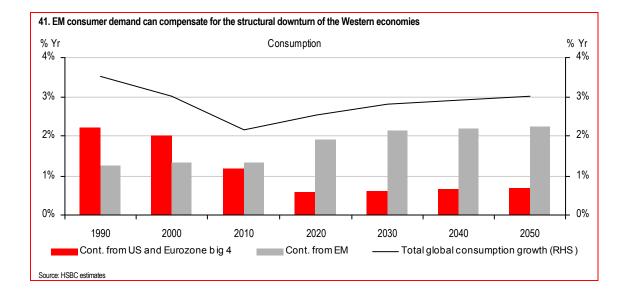


Economics Global 15 October 2012



Although there are numerous downside risks, there are similarly upside risks. Our forecasts for income growth are reasonably cautious. If anything, it seems likely that actual income growth, the rising middle and upper class, and demand will far outstrip the already striking numbers presented here.

This report should provide some comfort to those who fear that Western deleveraging and structural problems will lead to decades of global stagnation. This may yet prove true for the West. But look East and South and there is a major source of demand emerging on the horizon perfectly able to compensate (Chart 41).



Appendix 1

In The World in 2050 we used a conditional convergence model where an economy's potential income per capita is determined by whether it fulfils structural criteria such as a good rule of law, decent education and government policy, etc. Coupling these results with demographic forecasts we are able to predict the size of an economy's GDP in 2050. The results of the Top 100 are listed below.

| | | Size of economy in | | | Income per capita in | | | | Population | |
|----|----------------------|-----------------------------|-----------------------------|-----------|------------------------|---------|------------------------|----------|------------|----------|
| | | 2010 | 2050 | Change in | 2010 | Rank | 2050** | Rank | 2010 | 2050 |
| | | Constant 2000 (USDbn) | Constant 2000 (USDbn) | rank | Constant 2000 (USD) | | Constant 2000 (USD) | | (m) | (m) |
| 1 | China* | 3,511 | 25,334 | 2 | 2,579 | 63 | 17,759 | 54 | 1,362 | 1,426 |
| 2 | United States | 11,548 | 22,270 | -1 | 36,354 | 6 | 55,134 | 8 | 318 | 404 |
| 3 | India | 960 | 8,165 | 5 | 790 | 88 | 5,060 | 86 | 1,214 | 1,614 |
| 4 | Japan | 5,008 | 6,429 | -2 | 39,435 | 3 | 63,244 | 4 | 127 | 102 |
| 5 | Germany | 2,058 | 3,714 | -1 | 25,083 | 18 | 52,683 | 10 | 82 | 71 |
| 6 | United Kingdom | 1,711 | 3,576 | -1 | 27,646 | 11 | 49,412 | 14 | 62 | 72 |
| 7 | Brazil | 921 | 2,960 | 2 | 4,711 | 52 | 13,547 | 61 | 195 | 219 |
| 8 | Mexico | 688 | 2,810 | 5 | 6,217 | 42 | 21,793 | 47 | 111 | 129 |
| 9 | France | 1,496 | 2,750 | -3 | 23,881 | 20 | 40,643 | 21 | 63 | 68 |
| 10 | Canada | 892 | 2,287 | 0 | 26,335 | 15 | 51,485 | 12 | 34 | 44 |
| 11 | Italy | 1,124 | 2,194 | -4 | 18,703 | 23 | 38,445 | 23 | 60 | 57 |
| 12 | Turkey | 385 | 2,149 | 6 | 5,088 | 49 | 22,063 | 46 | 76 | 97 |
| 13 | South Korea | 798 | 2,056 | -2 | 16,463 | 25 | 46,657 | 17 | 49 | 44 |
| 14 | Spain | 711 | 1,954 | -2 | 15,699 | 26 | 38,111 | 24 | 45 | 51 |
| 15 | Russia | 412 | 1,878 | 2 | 2,934 | 58 | 16,174 | 56 | 140 | 116 |
| 16 | Philippines | 112 | 1,688 | 27 | 1,215 | 83 | 10,893 | 72 | 93 | 155 |
| 17 | Indonesia | 274 | 1,502 | 4 | 1,178 | 85 | 5,215 | 85 | 233 | 288 |
| 18 | Australia | 565 | 1,480 | -4 | 26,244 | 16 | 51,523 | 11 | 22 | 29 |
| 19 | Argentina | 428 | 1,477 | -2 | 10,517 | 33 | 29.001 | 38 | 41 | 51 |
| 20 | Egypt | 160 | 1,165 | 15 | 3,002 | 57 | 8,996 | 76 | 84 | 130 |
| 21 | Malaysia | 146 | 1,160 | 17 | 5,224 | 47 | 29,247 | 37 | 28 | 40 |
| 22 | Saudi Arabia | 258 | 1,128 | 1 | 9,833 | 34 | 25,845 | 43 | 26 | 44 |
| 23 | Thailand | 187 | 856 | 6 | 2,744 | 61 | 11,674 | 68 | 68 | 73 |
| 24 | Netherlands | 439 | 798 | -9 | 26,376 | 14 | 45,839 | 18 | 17 | 10 |
| 25 | Poland | 250 | 786 | -1 | 6,563 | 39 | 24,547 | 45 | 38 | 32 |
| 26 | Peru | 85 | 735 | 20 | 2,913 | 59 | 18,940 | 43 53 | 29 | 39 |
| 20 | Iran | 161 | 732 | 20 | 2,913 | 72 | 7,547 | 81 | 29 75 | 39 97 |
| 28 | Colombia | 142 | 732 | 12 | 3,052 | 56 | 11,530 | 69 | 46 | 63 |
| | Switzerland | | 725 | -9 | | 50 4 | | 3 | 40 | 9 |
| 29 | | 294 | | | 38,739 | | 83,559 | | | |
| 30 | Pakistan | 111 | 675 | 14 | 657 | 92 | 2,455 | 91 | 174 | 275 |
| 31 | Bangladesh | 78 | 673 | 17 | 482 | 95 | 3,461 | 89 | 149 | 194 |
| 32 | Chile | 103 | 592 | 12 | 6,083 | 43 | 29,513 | 36 | 17 | 20 |
| 33 | Venezuela | 158 | 558 | 2 | 5,438 | 46 | 13,268 | 63 | 29 | 42 |
| 34 | Algeria | 76 | 538 | 14 | 2,190 | 70 | 11,566 | 70 | 35 | 47 |
| 35 | South Africa | 187 | 529 | -8 | 3,710 | 54 | 9,308 | 75 | 50 | 57 |
| 36 | Austria | 222 | 520 | -11 | 26,455 | 13 | 61,124 | 6 | 8 | 9 |
| 37 | Nigeria | 78 | 515 | 9 | 506 | 94 | 1,323 | 98 | 158 | 390 |
| 38 | Sweden | 295 | 507 | -20 | 31,778 | 8 | 47,941 | 15 | 9 | 11 |
| 39 | Belgium | 265 | 481 | -18 | 24,758 | 19 | 41,842 | 20 | 11 | 11 |
| 40 | Ukraine | 45 | 462 | 19 | 987 | 86 | 12,818 | 65 | 45 | 36 |
| 41 | Vietnam | 59 | 451 | 11 | 674 | 91 | 4,335 | 88 | 88 | 104 |
| 42 | Singapore | 165 | 441 | -11 | 34,110 | 7 | 84,405 | 2 | 5 | 5 |
| 43 | Greece | 161 | 424 | -11 | 14,382 | 29 | 38,756 | 22 | 11 | 11 |
| 44 | Israel | 168 | 402 | -14 | 21,806 | 22 | 37,731 | 25 | 7 | 11 |
| 45 | Ireland | 147 | 386 | -9 | 27,965 | 10 | 61,363 | 5 | 5 | 6 |
| 46 | Romania | 56 | 377 | 9 | 2,596 | 62 | 20,357 | 51 | 21 | 19 |
| 47 | United Arab Emirates | 118 | 360 | -6 | 25,607 | 17 | 29,651 | 35 | 8 | 12 |
| 48 | Norway | 199 | 352 | -22 | 40,933 | 2 | 59,234 | 7 | 5 | 6 |
| 49 | Czech Republic | 76 | 342 | 0 | 7,225 | 38 | 32,153 | 32 | 10 | 11 |
| 50 | Portugal | 123 | 336 | -10 | 11,588 | 31 | 35,863 | 28 | 11 | 9 |

Source: World Bank, UN population projections and HSBC estimates

Note: "China includes Hong Kong and Macao given full unification is planned for 2047 and 2049. **Income per capita forecasts are not the cumulative sum of the forecasts for income per capita presented later in the document. This is because the GDP created by the working population must be shared among the population as a whole, not just the working population.



A1b. The economic league table in 2050 (continued)

| | | Size of economy in Income per capita in | | | | | | | Population | |
|----------|----------------------|---|----------|----------------|--------------------------------|----------|----------------------------------|----------|-------------|-------------|
| | | 2010 Constant 2000 (USDbn) | | Change in rank | 2010 Constant 2000 (USD) | Rank | 2050** Constant 2000 (USD) | Rank | 2010 (m) | 2050 (m) |
| 51 | Uzbekistan | 25 | 314 | 22 | 893 | 87 | 8,859 | 77 | 27 | 35 |
| 52 | Hungary | 58 | 295 | 1 | 5,833 | 44 | 31,966 | 33 | 10 | 9 |
| 53 | Tanzania | 16 | 288 | 34 | 382 | 97 | 2,085 | 92 | 45 | 138 |
| 54 | Kazakhstan | 38 | 287 | 7 | 2,376 | 68 | 13,520 | 62 | 16 | 21 |
| 55 | Kuwait | 61 | 280 | -4 | 23,072 | 21 | 54,183 | 9 | 3 | 5 |
| 56 | Morocco | 58 | 279 | -2 | 1,781 | 75 | 7,110 | 82 | 32 | 39 |
| 57 | Finland | 145 | 270 | -19 | 27,151 | 12 | 49,643 | 13 | 5 | 5 |
| 58 | Denmark | 172 | 265 | -29 | 31,418 | 9 | 47,743 | 16 | 5 | 6 |
| 59 | Libya | 49 | 230 | -2 | 7,692 | 37 | 26,182 | 42 | 6 | 9 |
| 60 | New Zealand | 64 | 214 | -10 | 14,939 | 28 | 37,705 | 26 | 4 | 6 |
| 61 | Dominican Republic | 37 | 212 | 1 | 3,697 | 55 | 16,406 | 55 | 10 | 13 |
| 62 | Ecuador | 24 | 206 | 14 | 1,771 | 76 | 10,546 | 73 | 14 | 20 |
| 63 | Ethiopia | 17 | 196 | 23 | 201 | 100 | 1,352 | 97 | 83 | 145 |
| 64 | Syria | 28 | 181 | 2 | 1,397 | 78 | 5,470 | 84 | 20 | 33 |
| 65 | Sri Lanka | 25 | 175 | 7 | 1,233 | 81 | 7,558 | 80 | 21 | 23 |
| 66 | Azerbaijan | 20 | 168 | 14 | 2,303 | 69 | 14,482 | 59 | 9 | 12 |
| 67 | Kenya | 18 | 163 | 16 | 452 | 96 | 1,683 | 95 | 41 | 97 |
| 68 | Tunisia | 29 | 160 | -3 | 2,805 | 60 | 12,686 | 66 | 10 | 13 |
| 69 | Guatemala | 26 | 152 | -3 | 1,858 | 73 | 4,826 | 87 | 14 | 32 |
| 70 | Lebanon | 20 | 148 | -2 | 6,342 | 41 | 31,659 | 34 | 4 | 5 |
| 71 | Bolivia | 12 | 140 | -2 | 1,192 | 84 | 8,652 | 78 | 10 | 17 |
| | | | 145 | -12 | | | | 39 | 5 | |
| 72 | Slovak Republic | 44 30 | 145 | | 8,042 | 36 | 27,639 | | 5 3 | 5 4 |
| 73 | Oman | | | -10 | 10,779 | 32 | 36,832 | 27 | | |
| 74 | Angola | 24 | 134 | 1 | 1,313 | 80 | 3,170 | 90 | 19 | 42 |
| 75 | Costa Rica | 23 | 124 | 3 | 5,043 | 50 | 20,588 | 50 | 5 | 6 |
| 76 | Belarus | 25 | 122 | -2 | 2,556 | 65 | 15,207 | 57 | 10 | 8 |
| 77 | Cuba | 49 | 121 | -19 | 4,370 | 53 | 12,202 | 67 | 11 | 10 |
| 78 | Iraq | 23 | 117 | -1 | 743 | 89 | 1,410 | 96 | 32 | 83 |
| 79 | Qatar | 54 | 112 | -23 | 38,466 | 5 | 43,027 | 19 | 2 | 3 |
| 80 | Jordan | 15 | 112 | 9 | 2,497 | 67 | 11,317 | 71 | 6 | 10 |
| 81 | Uganda | 12 | 111 | 14 | 366 | 98 | 1,179 | 99 | 33 | 94 |
| 82 | Panama | 20 | 110 | -1 | 5,732 | 45 | 21,423 | 48 | 4 | 5 |
| 83 | Croatia | 28 | 105 | -16 | 6,396 | 40 | 27,091 | 41 | 4 | 4 |
| 84 | El Salvador | 16 | 104 | 4 | 2,566 | 64 | 13,729 | 60 | 6 | 8 |
| 85 | Ghana | 8 | 100 | 22 | 343 | 99 | 2,035 | 94 | 24 | 49 |
| 86 | Paraguay | 9 | 99 | 17 | 1,432 | 77 | 9,587 | 74 | 6 | 10 |
| 87 | Turkmenistan | 9 | 97 | 15 | 1,827 | 74 | 14,659 | 58 | 5 | 7 |
| 88 | Uruguay | 30 | 93 | -24 | 8,942 | 35 | 25,482 | 44 | 3 | 4 |
| 89 | Honduras | 10 | 82 | 11 | 1,380 | 79 | 6,337 | 83 | 8 | 13 |
| 90 | Cameroon | 14 | 79 | 1 | 694 | 90 | 2,048 | 93 | 20 | 38 |
| 91 | Serbia | 9 | 75 | 13 | 1,229 | 82 | 8,565 | 79 | 10 | 9 |
| 92 | Bulgaria | 19 | 72 | -10 | 2,542 | 66 | 13,154 | 64 | 7 | 5 |
| 93 | Luxembourg | 26 | 68 | -24 | 52,388 | 1 | 96,592 | 1 | 1 | 1 |
| 94 | Slovenia | 26 | 66 | -23 | 12,577 | 30 | 32,971 | 31 | 2 | 2 |
| 95 | Bahrain | 13 | 61 | -3 | 16,968 | 24 | 33,910 | 29 | 1 | 2 |
| 96 | Lithuania | 17 | 59 | -12 | 5,154 | 48 | 20,955 | 49 | 3 | 3 |
| 97 | Bosnia & Herzegovina | 8 | 56 | 10 | 2,162 | 40 71 | 18,961 | 43 52 | 4 | 3 |
| 97 98 | Latvia | 0 11 | 50 | 0 | 4,973 | 51 | 27,143 | 40 | 4 | 2 |
| 90 99 | Yemen | 13 | 45 | | 4,973 | 93 | 731 | 100 | 24 | 62 |
| 33 | Cyprus | 13 | 45 45 | -8 | 15,510 | 30 | 33,337 | 100 | 24 | 02 |

Source: World Bank, UN population projections and HSBC estimates **Income per capita forecasts are not the cumulative sum of the forecasts for income per capita presented later in the document. This is because the GDP created by the working population must be shared among the population as a whole, not just the working population.



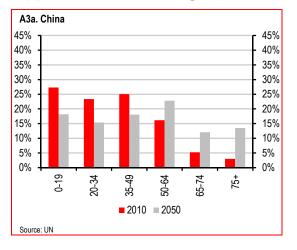
Appendix 2

Methodology for forecasting consumption

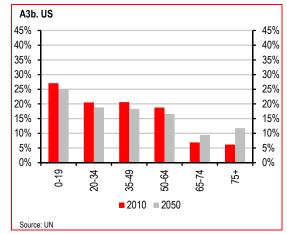
Using data from 50 countries we are able to construct a 'standard' CPI basket for countries in different income brackets. We then use this information with that of current income per capita to establish how much is spent on each category in each country today, and how that will change as we move into the future.

By standardising across countries we are abstracting from cultural and religious factors that may influence consumption so this is worth bearing in mind when considering the results.

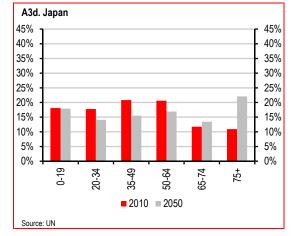




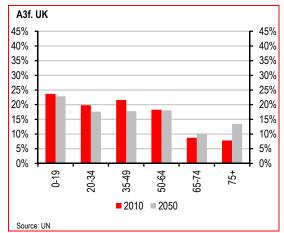
Appendix 3 – Demographic distribution of the Top 30



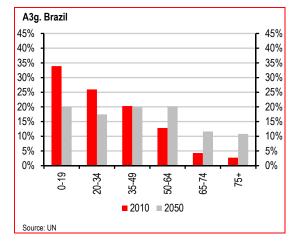


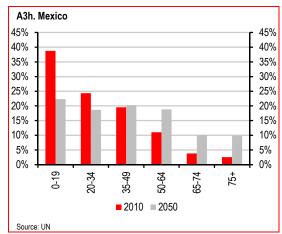


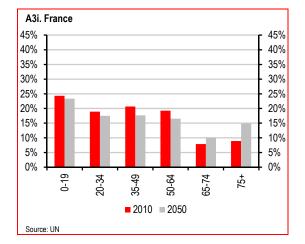


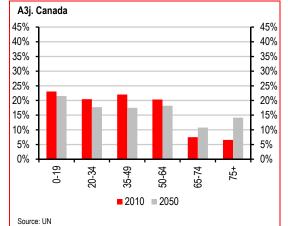


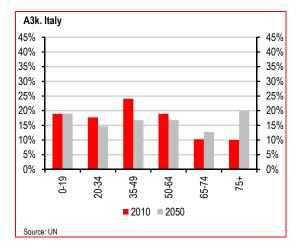


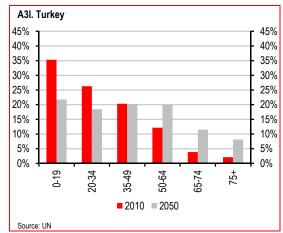




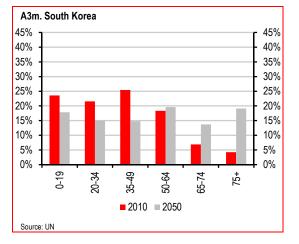


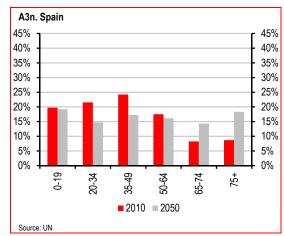


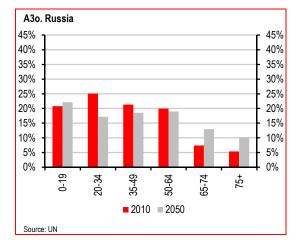




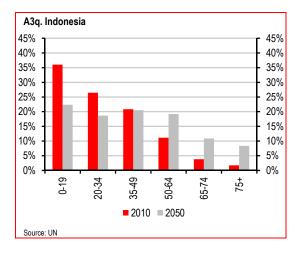


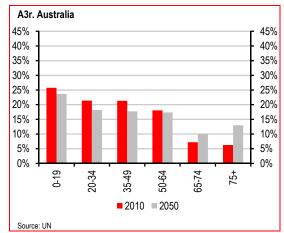




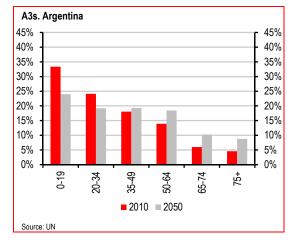


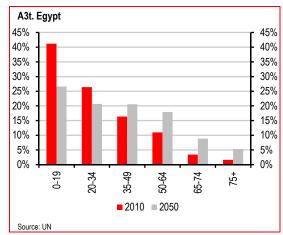


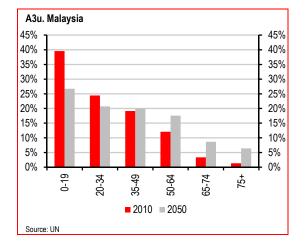


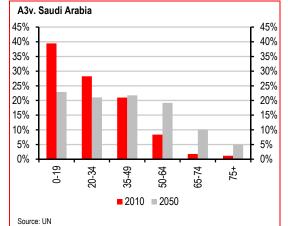




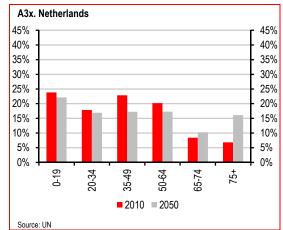




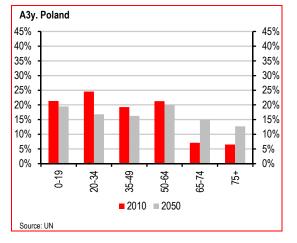


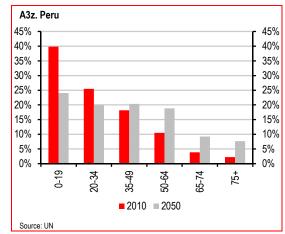


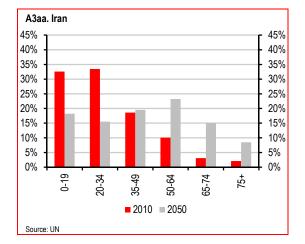


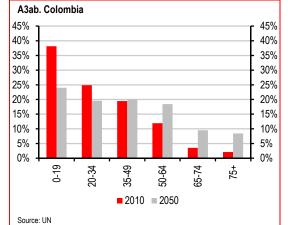


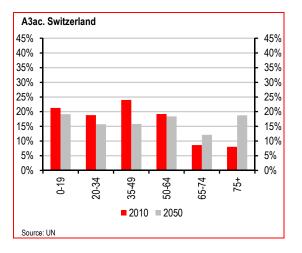


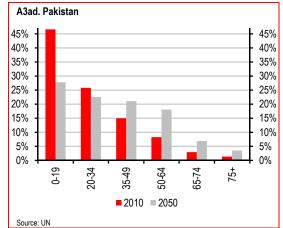














Appendix 4

Notes

For India and Pakistan, given that current per capita income is below USD1,000 in constant 2000 USD dollars, a slightly different definition for Middle Class was used than for other countries until the point when these economies are projected to exceed this level (India: 2015, Pakistan 2031), when the study switches to the universal definition. The reason for this is that at very low levels of income constant USD may not adequately capture comparative purchasing power. The following thresholds were used in these cases: poor or vulnerable: less than 1,000; lower class: 1,000-2,000; lower middle: 2,000-5,000; upper middle: 5,000-13,000; upper class: above 13,000 USD (constant 2000).

For Colombia, for more plausible results, the study keeps income distribution constant over time, unlike other countries where income distribution is assumed to evolve according the general economic development patters.

Alternative definitions of Middle Class

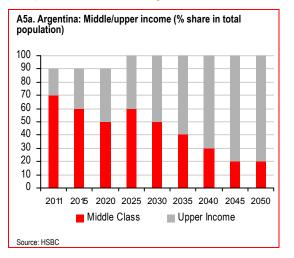
There are various approaches to measuring the size of the middle class.

The Asian Development Bank (2010) uses an absolute approach defining the middle class as those with consumption expenditures of USD2–20 per person per day in 2005 PPP USD (lower-middle class: USD2-4; "middle middle" class: USD4-10; upper-middle class: USD10-20 per day.

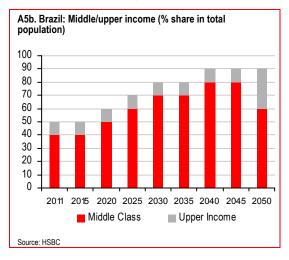
The OECD (2010) defines middle class households as having daily expenditure between USD10 and USD100 per person in purchasing power parity terms. The lower bound is chosen with reference to the average poverty line in Portugal and Italy, the two advanced European countries with the strictest definition of poverty. The upper bound is chosen as twice the median income of Luxemburg, the richest advanced country. Defined in this way, the global middle class excludes those who are considered poor in the poorest advanced countries and those who are considered rich in the richest advanced country.

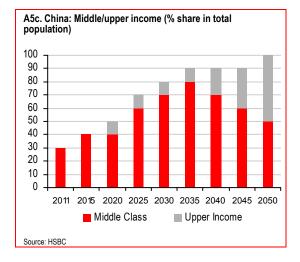
Using a relative approach, Easterly (2001), and others have defined the middle class as those in the second, third, and fourth quintile of the distribution of per capita consumption expenditure. Birdsall, Graham and Pettinato (2000) have defined it to include individuals earning between 75% and 125% of a society's median per capita income. Ravallion (2009) uses the median value of poverty lines for 70 national poverty lines as the lower bound (USD2 per person per day) and the US poverty line (USD13) as the upper bound.

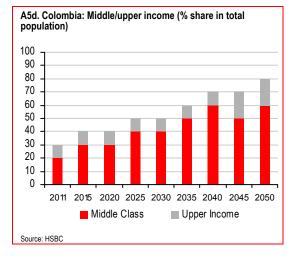


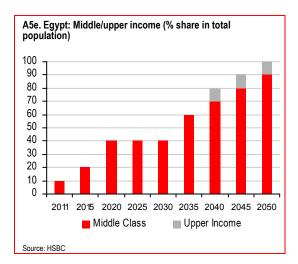


Appendix 5 - Projected shares of middle and upper income



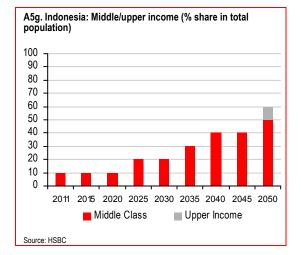


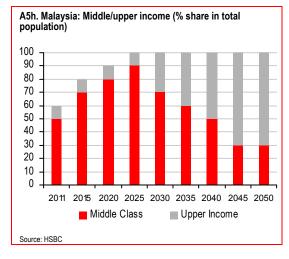


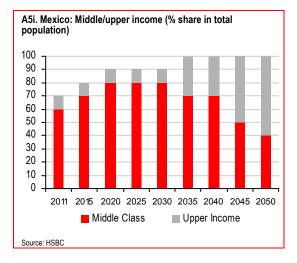


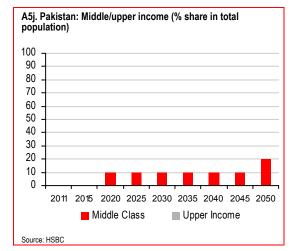


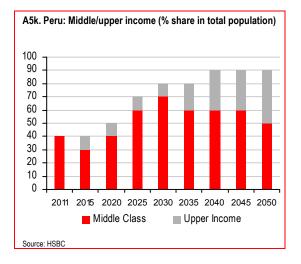


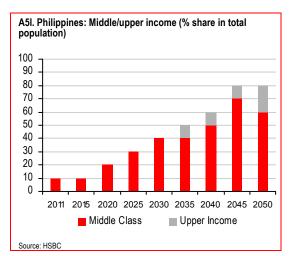




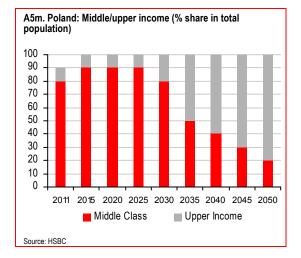






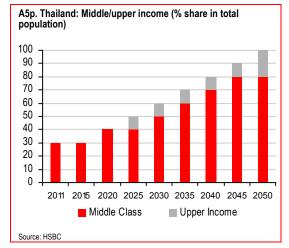


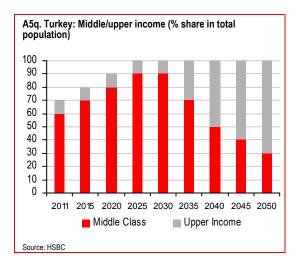


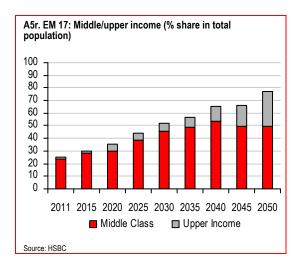














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Notes



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