Analyses & Trends

Demography: a global trend

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Content

Demography: a global trend

People are living longer, the world population is growing. In the newly industrialising countries in particular, rapid population growth is going hand-in-hand with a powerful economic momentum. Seen in the right light, demography as a global trend becomes an investment opportunity.

Demography is a trend of worldwide dimensions. According to the medium variant of the population forecast by the United Nations (UN) from a bird's eye view, two main developments are becoming apparent:

- Up to the year 2050, the world population will probably increase further by almost 50% to more than 9 billion people. Only for Europe is a decline to be reckoned with (cf. Chart 1, p. 3).

- There will be a "double ageing" (cf. Chart 1, p. 3): While human life expectancy will go on rising on the whole, the share of older people in terms of the world population will increase at the same time because fertility rates are expected to decline over time, i.e. the number of new-born children per woman will decrease.

Within these main trends, however, developments will vary considerably from one country to the next:

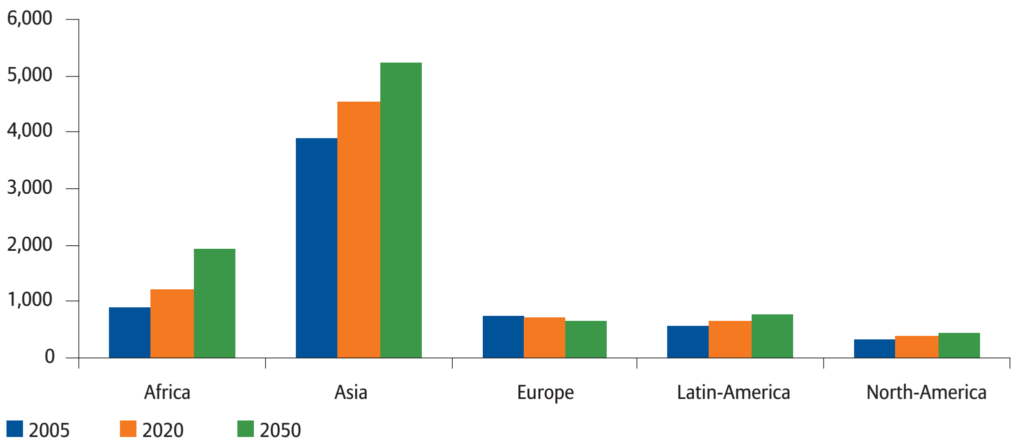
- The industrial nations will experience a considerably less dynamic growth than the developing and emerging market countries.

- The industrial countries' share of the world population will decline from close to 19% in 2005 to 14% in 2050; that of the less developed countries will stagnate at approx. 68%, whereas the least developed countries will see their share climb from almost 12% to 19% (cf. Chart 2, p. 4).

- At the same time, the industrial states will age by far the fastest rate. The average age in the industrial states is likely to be around 46 years in the year 2050. In 2005, it was 39 and in 1950 it was only 29 years. In the industrialising countries, by contrast, it is expected to rise from 27 (in 2005) to 39 over the same period, and from 19 to 27 in the developing countries.

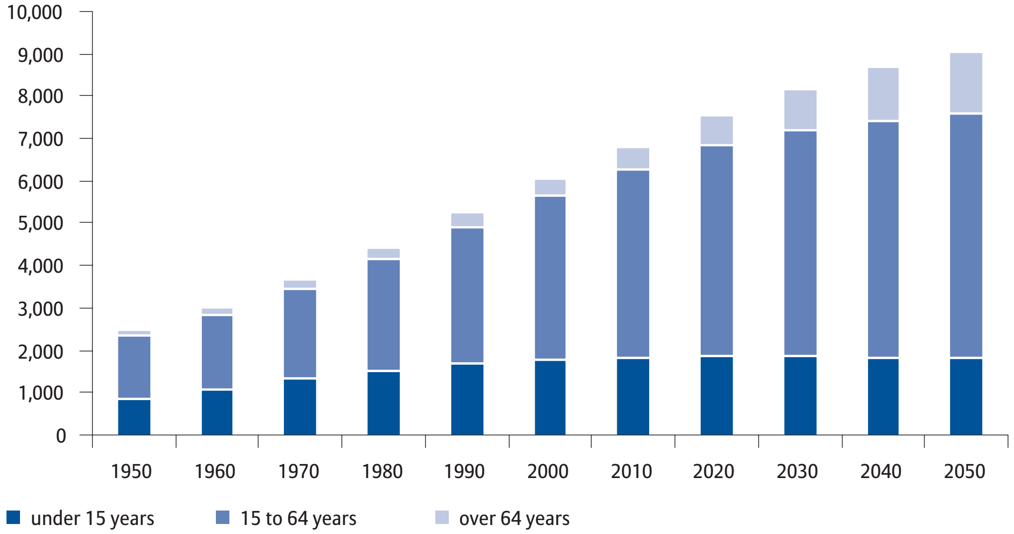
- Whereas pensioners will dominate the world (cf. Chart 4, p. 5), the developing and

Chart 1: Demography: A global trend (Population in million people)



Source: UN, Population Division

Chart 2: Population growth by age categories (in millions)



Source: UN World Population Prospects, 2004 Revision

industrialising countries will increasingly become the "workbench" of the world (cf. Chart 5, p. 5). These countries already account for the lion's share of the population between 15 and 64 years, the age category which – at least statistically speaking – is equated with the working-age share of the population; and this age group will gain further in importance until 2050 (cf. Chart 5, p. 5) – at least in absolute figures.

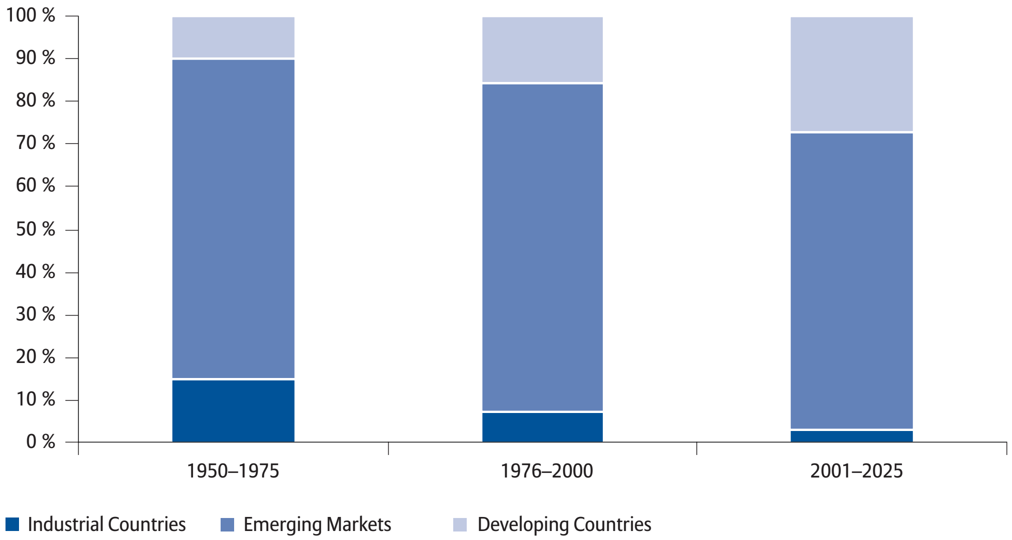
- The so-called old-age dependency ratio – the ratio of the population aged 65 years or over to the population aged 15-64 – will continue to widen worldwide. However, the development will be significantly more dramatic in the industrial countries, as the share of pensioners in terms of the overall population will rise more quickly (cf. Chart 6, p. 6).

- The old-age dependency ratio in the USA will rise over the next 45 years from 19% to 34%, in the EU from 26% to 48% and in Japan from 30% to 65%.

- The prospects for Africa and Asia are different. In Africa, the old-age dependency ratio will rise from only 6% to 10%; in Asia from 10% to 27%.

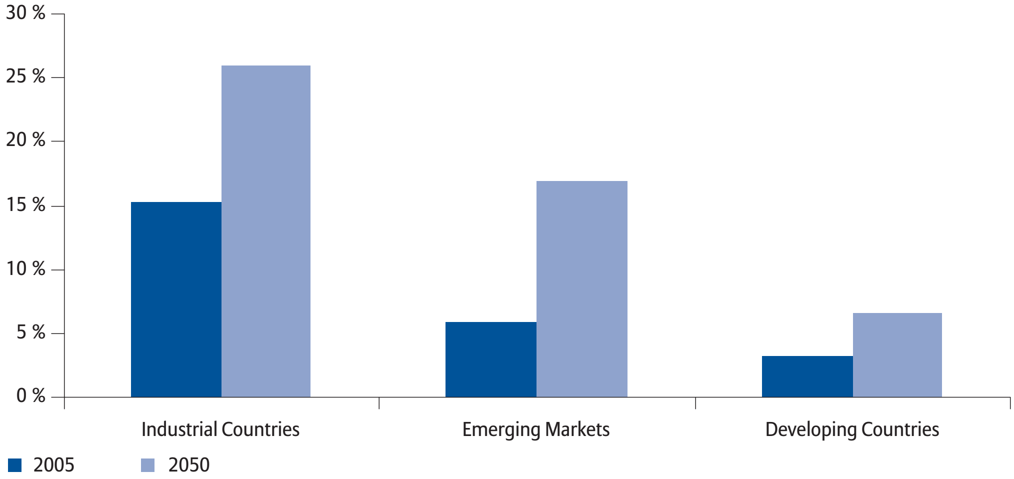
Industrialising countries will increasingly become the „workbench" of the world.

Chart 3: The industrial nations' contribution to population growth on the decline – Share in population growth 1950 to 2025



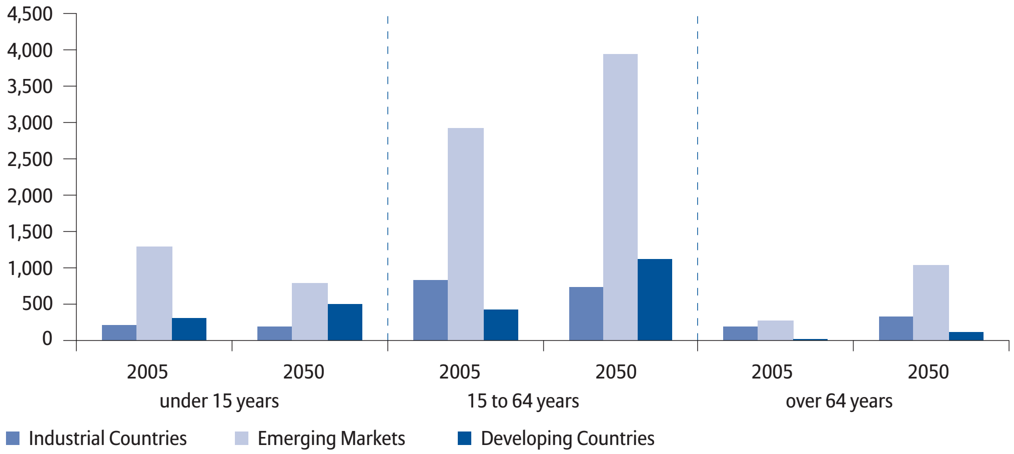
Source: UN World Population Prospects, 2004 Revision

Chart 4: Pensioners dominate the world
Share of population over 64 years by level of economic development (in %)



Source: UN World Population Prospects, 2004 Revision

Chart 5: Emerging markets as the global workbench
Age categories by level of economic development (Population in million people)



Source: UN World Population Prospects, 2004 Revision

The world will split into ageing and rising societies

Whereas one part of the globe will for the most part grow older, the other will stay comparatively young and the population will increase further. Viewed from this perspective, the world will split into ageing and rising societies.

The motto: Invest more globally:

· Parts of the money should be invested where growth occurs and is going to occur.

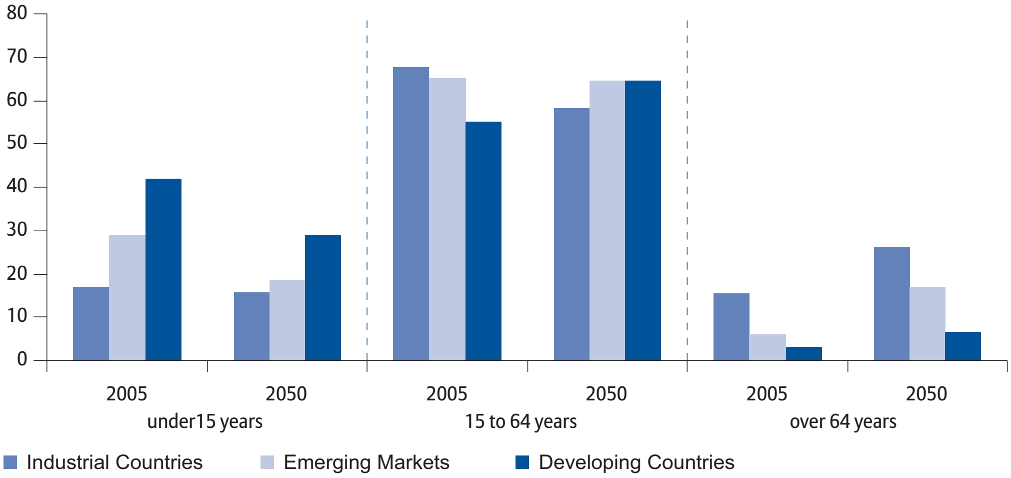
· In the simplest case, this can be done with a globally investing portfolio (e.g. a globally investing fund) and/or

· through investments in regions with above-average growth potential, where the demographic trend is likely to have the most advantageous effect, and/or

· in companies which are still domiciled in the ageing countries, but whose sales markets are to a large extent in the less developed countries or which stand to profit from the trend of an ageing society.

But not only that. Under the aspect of the global demographic trend, investments that warrant closer consideration include

Chart 6: World population in need of rejuvenation treatment
Age categories by level of economic development (in %)



Source: UN World Population Prospects, 2004 Revision

· stocks of energy and other commodities that are becoming increasingly scarce as demand rises, and

· biotechnology and pharmaceutical stocks which stand to profit, above all, from an ageing population, but also from an increase of wealth in the developing world.

· Since the newly industrialising nations are typically characterised by urbanisation and strong economic growth, investments in infrastructure and transport may present a further investment opportunity.

Thus, there will not only be shifts in demand within certain sectors – e.g. because in the pharmaceutical sector there is a demand for more drugs for an ageing population – but also an additional demand that will concentrate on a number of sectors and will be driven by the rising societies.

This means that anyone investing in the global demographic trend will always ask himself: How can I profit from it? Is an investment especially attractive because it profits from the rising societies or because it profits from the ageing societies?

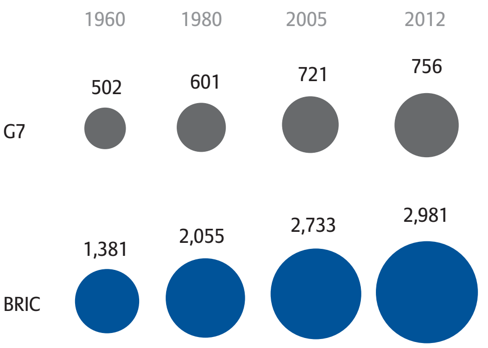
In the following we will take a closer look at some potential investment opportunities that may number among the demographic profiteers.

Demographic profiteers

Example: BRIC. Brazil, Russia, India and China are behind this investment philosophy. The philosophy of these four letters can be summed up in a few words: Brazil stands for commodities, Russia for gas and oil, India for software and China for a voracious appetite for growth and a vast army of consumers.

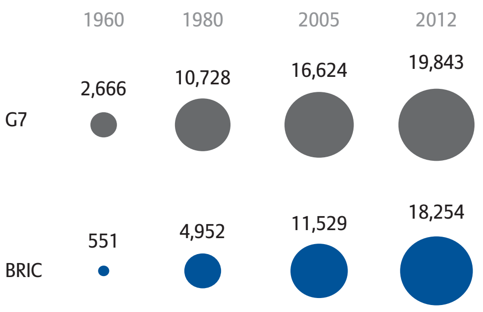
But that is far from all. The sheer population figures of these four countries are in themselves impressive. In 2012, the total population is likely to be close to three billion people. To compare: The seven leading industrial nations will, together, account for a population of close to 750 million in the years ahead – only a quarter as many people. Whereas the G7 population will, from 1960 until then, have risen by 50%, that of the BRIC states will have doubled. Not only that. The relationship in terms of economic strength will also go on changing (cf. Chart 7, p. 7).
Whereas the G7 in 1960 generated, at USD 2.6 trillion, five times what the BRIC states produced, by 2012 they will probably be barely 10% ahead of the "Fantastic Four" in terms of economic performance. By then, the gross domestic product generated by the BRIC states together should be more than USD 18 trillion (cf. Chart 8, p. 7). These figures take the impact of inflation into

Chart 7: B R I C – The Fantastic Four.
Population trend (in millions)



Source: World Bank, own calculations based on forecasts of Allianz Economic Research

Chart 8: B R I C – The Fantastic Four.
US$ GDP (US$ bn) in real terms (price basis 1990), purchasing power adjusted



Source: GGDC, own calculations based on forecasts of Allianz Economic Research

account and presuppose a lasting growth trend for both groups of countries. Please note: This economic performance calculation is based on the actual purchasing power in the respective countries, because what ultimately counts is what the people can actually afford. Only that has any relevance for demand.

Energy & commodities

At the end of the demand chain driven by population and economic growth are commodities.
Yet demand for commodities is not rising purely on account of world population growth (quantitative). There is also a "qualitative" growth: as affluence rises, consumption will also become more commodity-intensive.
The World Bank is predicting that the low-income countries will grow twice as quickly in the coming decades as the countries with high incomes (in real terms). The pent-up demand is vast. The following concrete figures demonstrate this vividly (base year: 2004). On average, a German consumes sixteen kilos of processed aluminium per year, a Chinese only two kilos. The ratio is similar for copper. An American consumes twenty-six barrels (over 4,000 litres) of oil per year compared with a Mexican at somewhat more than six barrels and a Chinese just short of two.
The surge in per capita consumption of industrial metals in China illustrates where the trend is headed (cf. Chart 9, p. 8). The International Monetary Fund's predictions for the "Middle Kingdom" apply in like manner to the emerging market states as a whole.

Environment: a resource in short supply

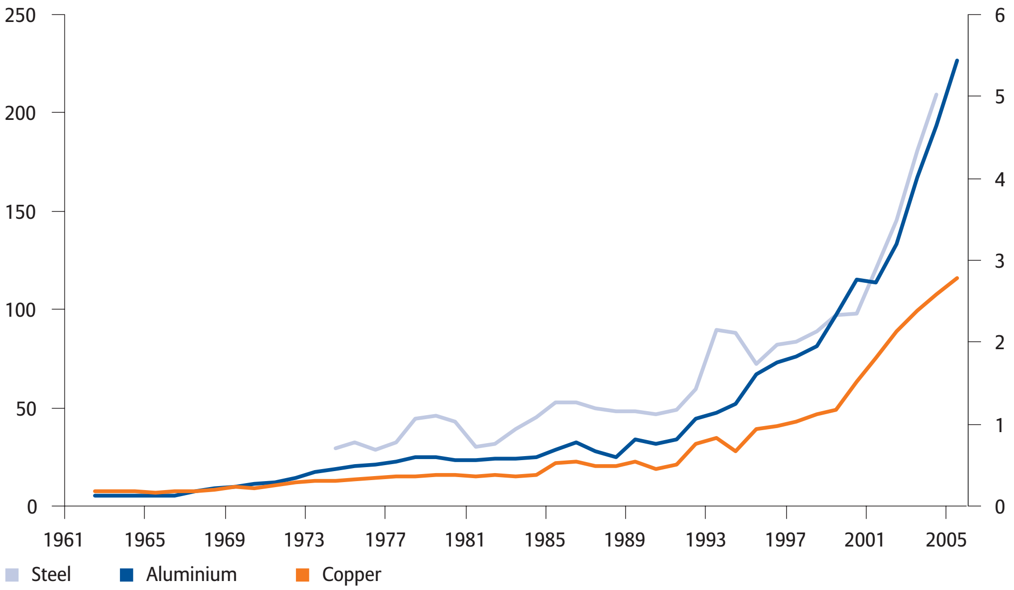
The "classical" commodities such as oil, gas, industrial metals and so forth are becoming increasingly scarce. Based on the present-day (!) global consumption of fossil fuels (coal, mineral oil, natural gas), the world reserves of crude oil will probably last another 60 years, of gas roughly 70 years and of coal over 200 years. Climatic change, too, is increasingly making itself felt. For example, it is evident that the number of extreme weather events (storms, flooding etc.), causing corresponding large-scale damage, has jumped continuously over the past decades. During the 1950s, 13 such weather events were counted, compared with as many as 72 in the 1990s. One might say the world is not enough; there is not enough environment to go around. It, too, is becoming a short-supply resource – making it, directly or indirectly, an investment opportunity.

„The World is not enough."

Energy and environmental shortages are making it more and more imperative that we use renewable energy technologies. These offer the advantage that they not only replace costly oil but are also, ideally, CO_2 neutral: while burning, they emit only as much CO_2 as

Investment opportunity: alternative energies, recycling & "water"

Chart 9: Per capita consumption of various industrial metals in China (kg/inhabitant)



IWF World Economic Outlook 2006
Steel: left-hand axis

they took out of the environment on the way, say, to becoming bio-diesel.
A gigantic, growing market. The World Energy Council estimates that the market for renewable energies will be worth USD 635 billion in 2010. By 2020, it is forecast to grow to USD 1.9 trillion. According to a scenario analysis, the "Scientific Advisory Council on Global Environmental Changes" is expecting the share of the global energy mix accounted for by renewable energies to expand to 50% by the year 2050.

And: The scarcer resources become, the more valuable will become what in the past has been referred to as waste. Recycling is gaining ground. The amount of waste generated per capita brings home the dimensions of the waste mountains that surround us. The USA tops the table. For the average American, the local waste disposal service takes away 730 kg per year compared with 590 kg for a German, 410 kg for a Japanese and 270 kg for a Pole. Yet household refuse is only one cause of the global waste mountain.
The total waste produced by the OECD countries weighed approx. 4 trillion tons at the turn of the year 2006/2007. Yet the greater part was not accounted for by household garbage (16%) but by industrial waste, which made up 77% of all waste generated. Agriculture accounted for 7%.

The mountain of waste is likely to continue rising with population and economic growth. According to estimates by the OECD, the gross domestic product of the nations it represents is set to rise by a factor of 2.4 between 1980 and 2020, whereas the waste to be handled by the local waste disposal service is likely to swell by a factor of 2. During the same period, the population of the OECD is expected to grow by 20%. "Waste" as a growth industry. Recycling as an investment topic.

Recycling as an investment topic.

Water: a resource in short supply

Let's not forget water. At first glance, there is no shortage of water. Two-thirds of Earth is covered by water. 1,400 million km³ water are spread across our proverbial blue planet. But somewhat more than 97% of it is undrinkable sea-water and only approx. 3% is drinking water. And of that, in turn, roughly two-thirds are bound up in ice and snow at the Antarctic and in Greenland – and are therefore not accessible. Of the remaining one percent, the greater part is polluted. The World Bank estimates that only 0.01% of all the water on Earth is drinking water. As the song goes: "Water, water everywhere, but not a drop to drink."
Today, 80 countries in the world with 40% of

the world's population suffer from a serious shortage of water. And the world population will keep on rising. By the year 2020, water needs are expected to rise by 40%. To compare: Between 1900 and 2000, water needs rose tenfold. The shortage of water will become increasingly severe; at the same time, the supply of clean water will gain in importance. The supply and disposal of water is becoming more and more of an investment topic. According to World Bank estimates, the need for investment in the developing countries alone amounts to USD 30 billion per year in order to achieve the millennium target of halving the share of people without adequate access to fresh water by 2015.

Summa Oeconomica

- The world population is growing and ageing.

- Developments differ: The industrial states are ageing faster than the emerging markets. At the same time, the population there will continue to grow significantly more quickly and longer than in the "old" or ageing societies.

- Whereas the ageing societies are likely to become less significant as production locations, the rising societies will gain in importance. Thus, the growing population with a large share of younger workers will coincide with strong economic growth.

- Resources are becoming increasingly scarce. Not only driven by the world population growth, but also by a „qualitative" growth, as consumption will also become more commodity-intensive.

- Demography is a global trend that presents a wealth of investment opportunities.

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