

Mikkel Barslund and Daniel Gros

Europe's Place in the Global Economy – What Does the Last Half Century Suggest for the Future?

When *Intereconomics* was founded 50 years ago, the world was very different. A large part of Europe did not participate in the global economy. China was closed, India seemed a basket case and most of Africa had just recently become independent. Global trade in manufacturing was dominated by the US and a handful of European economies. Almost all of these elements have now changed. Europe's weight in the global economy has diminished as other nations have grown quickly.

In this contribution, we describe some of the major developments in the global economy and provide an outlook for the medium-term future until 2030. We assess broad demographic trends for major regions of the world, then look at GDP growth and trade, before we turn to human capital and innovation.

Europe versus European Union

In terms of economic mass, the European Union today essentially represents Europe. This was not the case 50 years ago. At the time, the European Economic Community had six members with a population of around 200 million. The EEC represented an ambitious approach to European integration with its goal of “ever closer union” already enshrined in the founding treaty. In 1966 the EEC was still on its way to becoming a customs union, and there was another group of European countries offering a different vision, namely that of limiting integration to free trade in the European Free Trade Association (EFTA). The United Kingdom and the Scandinavian countries were the most important members of this group.

Today is of course very different: EFTA plays only a marginal role, and the EEC has evolved into the EU, which now has a population of over 500 million in 28 countries. Today, in terms of population and economic output, the EU is Europe.

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We also note that one factor which seems to persistently accompany European integration is the feeling of crisis. One of the contributions to the very first issue of *Intereconomics* 50 years ago was entitled “Economic Aspects of the Current EEC Crisis”.¹ In it, Erhard Kantzenbach decried a lack of economic policy coordination, even as integration had continued within what was then the Common Market. This same message, with only slightly differently formulations, would resonate with many today. In fact, as shown in Box 1, all articles from the first issue of *Intereconomics* remain relevant today.

Demography: the EU is old and ageing

Demography is one of the key driving forces behind long-term economic growth. Fifty years ago, Europe was still in its post-war baby boom. Ageing was not a concern. On the contrary, the main concern of demographers was continuing, rapid population growth, which led the Club of Rome to its warning about the “limits to growth”.

Today's perspective is quite different. The pace of population growth has slowed down everywhere. Most of Europe and developed Asia have already reached zero or negative growth, and a stable world population might be reached towards the end of this century. In the medium term, most projections agree that the global population will continue to expand, albeit at a much slower pace, through 2030, with 40 per cent of total population growth occurring in Africa and another 20 per cent in India.

China's population is predicted to remain roughly flat, as is the population of EU. Of these five major economies, only India's share of the world population will increase, and that of the US will remain roughly constant thanks to continuing modest growth.

As a share of the world population, the EU reached its peak after the 2007 enlargement added Bulgaria and Romania to the union, but it will decline steadily for the foreseeable future (see Figure 1). Around six per cent of the world's population will reside in the EU in 2030, exactly the same percentage as before the Eastern enlargement in 2004. In fact, it is only through enlargements that the

¹ E. Kantzenbach: Economic Aspects of the Current EEC Crisis, in: *Intereconomics*, Vol. 1, No. 1, 1966, pp. 12-17.

Box 1

The first issue of *Intereconomics*, 1966

All of the contributions from the very first issue of *Intereconomics* 50 years ago dealt with issues which remain relevant today.

“The Nonsense of Antidumping” by Ernst Niemeier, p. 3

Even today anti-dumping remains an important, and controversial, trade policy instrument (perhaps even more so today, since tariffs have subsided to a secondary consideration). The current discussion on whether to accord China the status of “market economy” is essentially about this issue, since market economy status makes anti-dumping more difficult to use.

“A Practical View of the German Export Situation”, Interview with Rolf Audouard, pp. 4-9

The interview dealt with the question of how Germany could continue to maintain its exports of machinery despite high wages. The only competitors mentioned are the US and European countries.

“Development through Export Diversification: Some Suggestions” by Christian Wilhelms, pp. 9-12

This is a key problem in many emerging economies (like Brazil and Indonesia, but also Russia) whose growth had been driven for decades by higher commodity prices.

“Economic Aspects of the Current EEC Crisis” by Erhard Kantzenbach, pp. 12-17

Crisis has accompanied European integration from its beginning. The author, a long-time president of the institute responsible for *Intereconomics*, notes the diverging strengths of the French and the German economies. He also argues that an integrated market needs an integrated economic policy.

“World Business Trends”, pp. 17-18

An evergreen and a precursor of today’s Purchasing Managers’ Index, but the geographical focus has shifted today.

EU has so far been able to compensate its slower population growth.

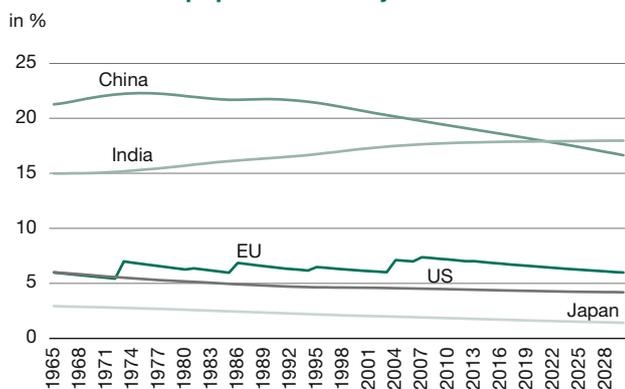
The working age population might be a more useful gauge for potential economic growth than overall population. Figure 2 presents a projection of the labour force of major economic and/or population centres until 2030. India and Sub-Saharan Africa are the only regions expected to experience meaningful labour force increases. Most other regions, including the EU, have rather flat profiles, with a small decrease in China. The figure also shows how different population dynamics are leading to quite different weights over time: India’s labour force used to be half that of China, but it will soon be of a similar order of magnitude. An even more radical change is visible in Africa: the labour force in all of Sub-Saharan Africa was about as large as that of the EU in 2000. By 2030 it will be more than twice as large (and still growing).

It is well known that Europe is ageing, driven by continuous expansions in life expectancy at older ages and a long-term trend of falling fertility rates. However, what is less often observed is that this process is also taking place in most other world regions. While the median age will increase in Europe from 42 to 45 in the next 15 years, it will increase even more rapidly in Japan and China (to 51 and 43 years, respectively) and somewhat more slowly in the US (to 40). In terms of the demographic transition, Europe is following Japan with a lag of 15-20 years, and China is roughly another 15 years behind. Even India is expected to see a rapid increase in the median age – though from a lower starting point (see Figure 3).

The labour force and support ratios

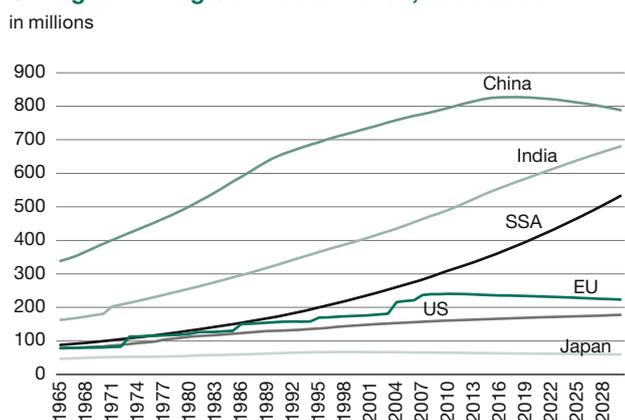
Changes in population size and structure are important for economic growth due to their impact on the labour force and the support ratio. An important consequence

Figure 1
Share of world population in major economies



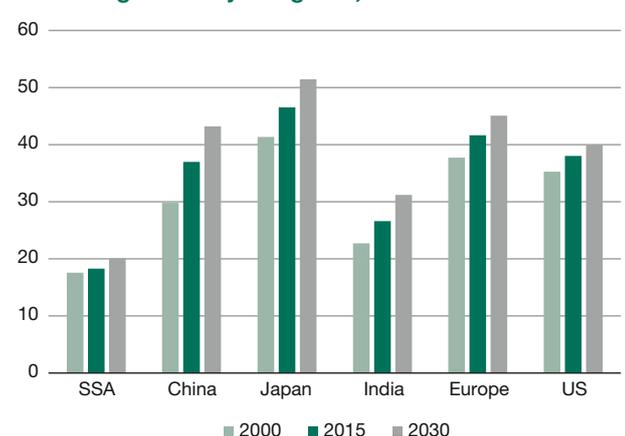
Source: UN population projection (medium fertility variant).

Figure 2
Changes in the global labour force, 1965-2030



Source: MaGE estimations and projections.

Figure 3
Median ages in major regions, 2000-2030



Source: UN Population Projection (medium fertility variant).

of ageing is the decline in the working age population or potential labour force (traditionally measured as 15-64 year-olds) as a share of the population. This has important consequences for the support ratio. Japan was the first major economic region to experience a decline in the support ratio in the early 1990s. The US and the EU have faced the same phenomenon since the start of the current decade, and China will soon follow (see Figure 4). When a country or region reaches the turning point, i.e. it goes from an increasing to a decreasing support ratio, not only does this have clear implications for the management of public finances, but it has also resulted in deep and prolonged crises in Japan, the US and the EU.²

The question is whether this will be the case for China as well; could the slowdown of 2015 be a harbinger of much lower growth rates for China in the future? One obvious difference between China and the other countries facing declining support ratios is that China is still a middle income country and there is still much space for growth in the quality of the labour force.

Both the support ratio and labour force in Europe will evolve in a more favourable manner if pension reforms and the political push for extending working lives bear fruit. By way of illustration, the number of dependents per 20-69 year-old in the EU in 2035 will be the same as the number of dependents per 20-64 year-old in 2015. An extension of working lives by five years would thus be sufficient to manage ageing in Europe for the next 20 years.³

Economic growth, trade and innovation

The drivers of economic growth will be largely productivity growth in the richest economies, i.e. the EU, Japan and the US. For China and other emerging regions such as Latin America, both the quality of human capital and the catching-up process will be important, whereas for India and Sub-Saharan Africa the three forces of demography, human capital and catching-up will drive economic growth.

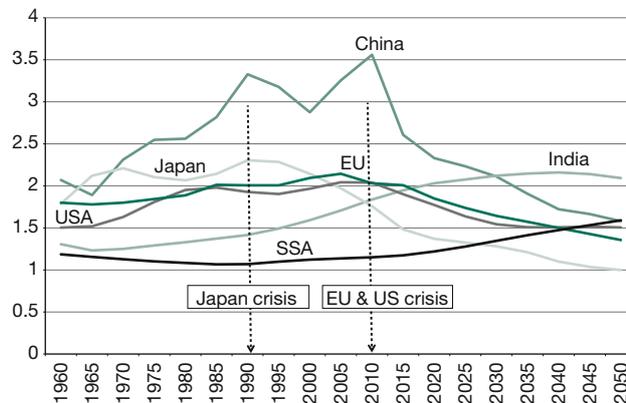
GDP growth

Since 1965 the world economy has grown by a little more than three per cent annually in real terms, with a limited

2 K.G. Nishimura: This time may truly be different: Balance sheet adjustment under population ageing, speech prepared for the panel “The Future of Monetary Policy” at the 2011 American Economic Association Annual Meeting, 2011; G. Magnus: Demographics: From dividend to drag, American women, and Abenomics, UBS Investment Research, Economic Insights – By George, 19 June 2013.
3 See also M. Barslund, M. von Werder: Measuring ageing and the need for longer working lives in the EU, CEPS Working document, 2016.

Figure 4
Total support ratio: boom to bust

Number of workers per dependant



Note: Support ratio is defined as the ratio of the working age population (15-64) to dependents.

Source: Own elaboration on UN data.

slowdown since 1990. The EU has managed approximately the same growth rate over the period, but only if one counts enlargements as growth. US growth has been similar, though the slowdown in growth since 1990 is much smaller (and the increase in the population came through immigration and higher fertility rates). China's GDP has on average expanded by eight per cent annually over the past 50 years, and at an even faster rate since 1990. Growth in India has also accelerated over this period, although this was from a very low base and has not been with the same speed as China. Japan had significant economic growth until 1990, but has since then slowed considerably to less than one per cent growth per year.

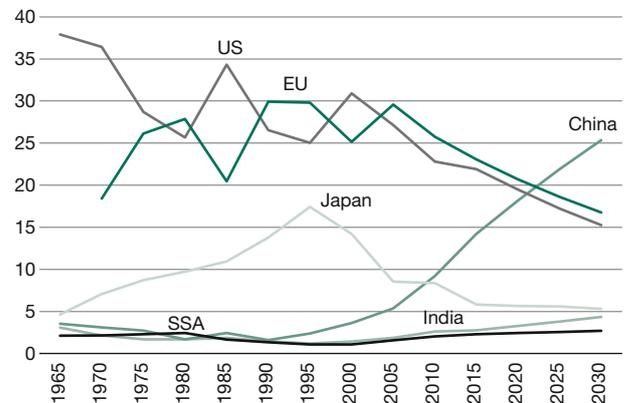
What emerges is that even though countries in Europe have on average grown more slowly, in particular in the last 25 years, the EU has until recently roughly maintained its share of world GDP (at market prices) through enlargements (see Figure 5). This process has now largely run its course.

Looking forward, the population projections described above can form the backbone of projections of economic growth in major regions through 2030.⁴ Global growth is

4 Results presented here are based on D. Gros, C. Alcidi: *The Global Economy in 2030: Trends and Strategies for Europe*, Centre for European Policy Studies, European Strategy and Policy Analysis System, 2013. See also L. Fontagné, J. Fouré, M.P. Ramos: *MIRAGE-e: A General Equilibrium Long-term Path of the World Economy*, No. 2013-39, December 2013; and J. Fouré, A. Bénassy-Quéré, L. Fontagné: *Modelling the world economy at the 2050 horizon*, in: *Economics of Transition*, Vol. 21, No. 4, 2013, pp. 617-654.

Figure 5
Regional GDP shares in US\$, 1965-2030

in %



Note: EU refers to EU members in a given year. Thus, the country composition is not static.

Source: World Development Indicators and model estimations.

expected to remain roughly constant at just below four per cent (measured in PPP terms). This implies a doubling of world output in the period 2010 to 2030. As one would expect from the population and productivity projections, growth will be unequal across major regions (see Figure 5). China and India will grow the fastest – more than tripling their output over this time horizon, while Sub-Saharan Africa will see a doubling of GDP. In fact, in the ten years preceding 2030, one half of projected global GDP growth can be attributed to India and China alone.

It is also clear – given that further EU enlargements will be marginal – that the relative decline of the EU will accelerate compared to the pace of the past 20 years.

These differences in overall growth rates will translate into large changes in GDP per capita. China will more than triple its GDP in per capita terms, while the increase for India will be somewhat smaller due to its much greater population growth. Sub-Saharan Africa will double its output per capita. Meanwhile, per capita income in the US and the EU will only increase by around 25 per cent and 33 per cent, respectively.⁵ Income will still be unequally distributed in 2030, but the cross-country difference in income per capita will be much smaller than today. The richest regions, North America and Japan, will have per capita annual incomes of around \$50,000, while for Europe it will be 25 per cent smaller and China will be at approximately half the US level.

5 See D. Gros, C. Alcidi, op. cit. for details of changes for other regions.

As a result, the economic clout of the EU as a whole will diminish in the coming 20 years at a much faster rate than in the proceeding 20. For individual member states, on the other hand, the relative decline will continue at much the same pace. In 1995 EU member states made up almost 30 per cent of global GDP (based on dollar exchange rates), while in 2030 this number will be almost halved to just 17 per cent.

These economic developments raise the question of what role the EU will have in the global economy. The three big economies (G3) – the EU, the US and China – will still account for about 55 per cent of global GDP in 2030, almost exactly the same proportion as today. Thus, in this strict economic sense, the world will not become any more multipolar than it already is today (if one considers the EU as one unified actor).

The main difference is that China will go from being the smallest to the biggest member of the G3. As a consequence, the trade channels among these three pillars of the global economy, which today are all of roughly equal magnitude, will also centre on China. Transatlantic trade will become less important than trade with China, for both the EU and the US.

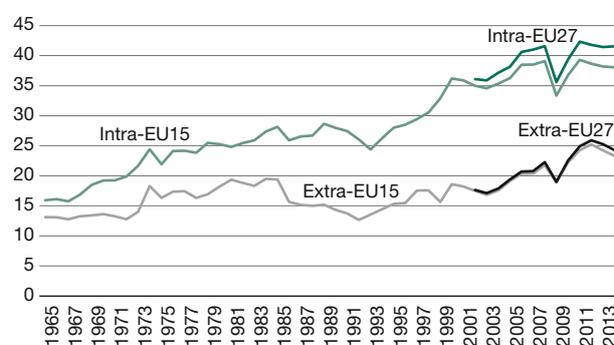
The EU economy will thus remain an important element of the world economy, but the same cannot be said of its individual member countries. By 2030, there will probably be only one European country left among the largest seven economies in the world. The G7, which today comprises four EU member states, will either have become irrelevant or will have seen its membership radically revamped. In purely economic terms, a G3 would, however, remain relevant, and Europe would still have an important role within such a grouping.

The policy challenge is well known: today it is mainly the member countries and not the EU institutions that represent Europe in terms of global economic governance. If Europe is to remain an important international player and effectively defend its interests in international bodies, EU members will have to pool resources and let the European Commission become the main advocate of member states interests. The argument goes beyond global governance of the economic system, since the shift in economic clout will also affect the ability to project military power.

Trade and globalisation

Trade has always played a key role in the European project, with the establishment of a customs union a key priority from the outset. This significance applies both

Figure 6
Trade in goods (imports plus exports), 1965-2014
in % of GDP



Source: Ameco database.

to trade within Europe (or rather within the EU) and trade with the rest of the world. Figure 6 shows that the ratio of trade to GDP has increased on both accounts: intra-EU trade (for the EU15, for which long time series are available) has increased as a share of GDP from 16 per cent in 1965 to close to 40 per cent today. For the EU27, the number is slightly larger. It is interesting that the “Common Market” of the 1960s already attracted so much attention, even though the ratio of intra-market trade to GDP was much lower than today.

EU trade with the rest of the world has also increased in importance, in particular since the mid-1990s. This is the other side of the lower weight of the EU in the global economy as simple gravity models would predict.

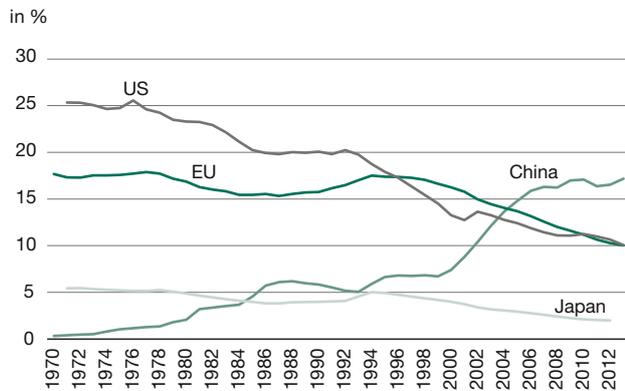
Data on trade flows also points to a shift towards China and the rest of Asia. In the period 2002-2014, the share of EU exports going to the NAFTA area declined from almost one-third to just above one-fifth. The share going to Asia, mainly driven by China, went from 30 per cent to 35 per cent. Given the projected distribution of economic growth through 2030, this shift in trade composition will continue.

The key question for the future is whether globalisation – at least as measured by the integration of trade – will continue. The pattern from the past suggests that the importance of trade can only grow. But this is not a foregone conclusion, as argued by Gros and Alcidi.⁶

One reason is the increasing importance of services, which are less involved in trade than goods. More than two-thirds of global trade is in manufactured goods. For

⁶ Ibid.

Figure 7
Share of students in tertiary education
in %



Source: World Development Indicators.

most countries, including the major developed trading blocs, only five per cent of services output is traded. The corresponding figure for manufacturing is around 80 per cent, and manufacturing's share of the economy is declining. This will be especially true in China when domestic rebalancing towards consumption is expected to increase the share of services in economic output.

However, given that the rest of the world is likely to grow faster than the EU, it is also likely that the relative importance of external trade to internal trade will increase over time. This point is further magnified by the fact that extra-EU trade consists of a higher proportion of value-added trade – the important measure when it comes to job creation – than intra-EU trade.⁷

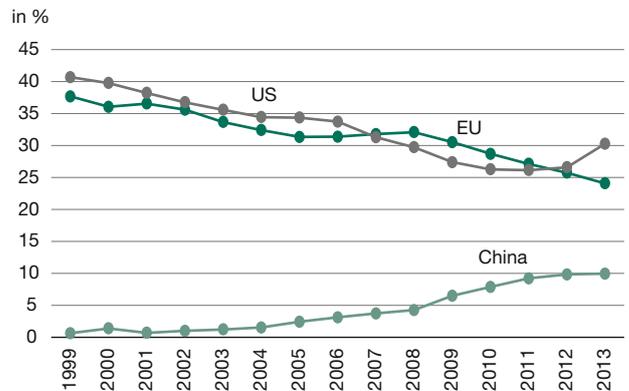
Human capital and innovation – moving east

In parallel, and interacting with the economic gravity shift, there is an ongoing move from West to East with regard to where innovation and knowledge production takes place. While the impact of trends in e.g. the number of researchers or tertiary enrolment on innovation and frontier research output is harder to gauge (due to issues of quality), it is unlikely that the upgrading of research capacity, especially in China, will not have a profound impact.

In terms of enrolment in tertiary education, China overtook the EU and US a decade ago (Figure 7) and may already have total tertiary enrolment equalling the combined number of enrolled students in the US and EU. The same trend is present if one looks at enrolment in US tertiary institutions over the last ten years. China has overtaken India as the largest foreign nationality in US higher

⁷ See also Pascal Lamy's contribution in this issue.

Figure 8
Share of world triadic patent applications
in %



Source: OECD.

education, and the number of Chinese students in the US has quintupled to more than 250,000.

The total number of active researchers – people involved in R&D activities – in China might soon overtake the number in the EU. Based on present trends, China may have as many researchers as the combined total of the EU and the US by 2030. At that time, India will also start to become an international force, albeit much smaller.

The raw numbers of university students and personnel engaged in R&D only show inputs in research-related activities. The economically valuable output should be measured more in terms of indicators like patents, which represent ideas whose value has been recognised and which can be exploited.

The best indicator of globally competitive ideas are so-called “triadic” patents, i.e. patents which have been registered with the offices of the major markets like the EU, the US and China (previously Japan). Unfortunately, there are no long time series available for this indicator, but Figure 8 shows that as recently as 1999 the EU and the US together accounted for 80 per cent of these patent applications. Since then, the shares of the US and the EU have been declining rapidly, whereas that of China is exploding. In 1999 China accounted for less than one per cent of triadic patents. By 2013 the share had risen to ten per cent, and it continues to rise.

One can quibble with every one of the indicators reviewed here. But the overall conclusion is clear. Where Europe and the US used to be the only large centres for human capital accumulation and innovation, research and innovation capacity is geographically spreading at an increasing pace.

Conclusion

In this article we have elucidated how the economic gravity centre of the world has changed and will continue to do so through 2030. In terms of its share of the world population, the EU has always been small. This fact is increasingly visible in economic indicators as well, as evidenced in the fact that the emerging market economies have outpaced the EU and will continue to do so for some time. This is most vividly symbolised by the growth in China. The EU's decline has been postponed by enlargements, but future enlargements will be marginal, and it is therefore likely that the EU's relative decline will accelerate in comparison with the last two decades.

These economic shifts away from the EU (and the US) as major centres of gravity are mirrored in other indicators as well. Europe's share of global "knowledge output" – research personnel, tertiary students and patents – has experienced a rapid decline, which is also likely to continue. European growth has also disappointed in recent

years. But even if major structural reforms were to increase productivity and investment, it is unlikely that the trend of relative decline would be altered by an increase in the European economic growth rate from, say, 1.5 to 2.5 per cent.

As a result of these changes, individual EU countries have become increasingly marginal in their global significance. However, despite a falling population relative to the world, the EU will still be able to pull considerable weight in international forums in 2030 – as a unified bloc. An important question therefore is when, and if, large (and small) EU countries will realise that in order to maintain European influence in the world, more integration is necessary and that the EU institutions must ultimately be responsible for representing the EU (and the euro) on the global stage. The key for Europe might thus be to undertake the reforms necessary to prevent absolute decline but adapt to relative decline at the global level by bundling together the still considerable resources of its member states.