

BIS | Department for Business
Innovation & Skills

**GLOBAL CONTEXT - HOW HAS
WORLD TRADE AND INVESTMENT
DEVELOPED, WHAT'S NEXT?**

Trade and Investment
Analytical Papers
Topic 1 of 18

DFID Department for
International
Development

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Summary

The rapid growth in trade and investment in recent decades has been a key driver of global growth. There have been significant changes to the pattern of trade and investment, notably the increasing role of major emerging markets (especially China), shifts in the organisation and structure of global production (including the increasing tradability of services) and shifts in the type of products traded (especially the rising share of commodities).

However, it is important to view these changes in context and remember that the majority of trade and investment continues to be between large, developed economies, a pattern that will only gradually change.

The recent economic crisis provided a significant check to trade and investments' growth. While the signs are that this should only be a temporary shock, significant risks to future trade and investment prospects remain.

1 Trends in World Trade and Investment

1.1 Rapid Growth

World trade¹ and investment² have grown rapidly in recent decades, driven by the growth of major emerging markets, rising incomes, greater taste for variety, the greater integration of the world economy, especially the growth in global supply chains, continuing trade liberalisation and reductions in communication and transportation costs.

This has led to a quadrupling of the volume of trade in goods between 1980 and 2008³ – twice the rate of growth in global GDP⁴. There has been an even more dramatic rise in investment, with the global stock of outward FDI increasing from \$ 550 billion in 1980 to almost \$ 19 trillion at the end of 2009⁵.

While there has been a rapid expansion in trade and investment, growth has not been uniform. Developed countries still account for the lion's share of trade and investment, but the most rapidly growing suppliers of exports have been emerging markets including much of Asia, but also less widely recognised successes in Africa, South America and Central and Eastern Europe.

¹ Trade is used to cover both exports and imports, generally covering both goods and services

² Investment is generally used to describe direct investment or FDI

³ 2008 is used as the end date for some analysis of historical trends as the decline in trade in 2009 due to the crisis is regarded as exceptional which could distort the trends if included.

⁴ BIS estimates based on WTO data

⁵ UNCTAD, WIR 2010

Growth in trade has been driven by changes in both the extensive and intensive margins, ie in both the number of trade partnerships and in the size of trade flows between partners. The growth of emerging markets' trade means that it is probably the extensive margin that has contributed most to the increase in world trade.

Even with investment, where developed countries role remains greater, recent years have seen the rise of the major emerging markets as both significant sources of investment and as the most popular destinations for multinationals future investment. In the latest UNCTAD survey of multinationals⁶, the BRICs⁷ plus the US are identified as the top five priority destinations for their outward investment.

1.2 Continuity

While there has been change, its impact should not be exaggerated. Many countries enjoying rapid growth in trade did so from a very low base and still only account for a small fraction of world trade. Certain aspects of the pattern of world trade and investment have remained relatively constant over the last 30 years.

For instance, in 1980, the US, Germany, France, Japan and the UK were the top five exporting and importing countries, accounting for 39 per cent of world exports and 40 per cent of world imports. Trade in goods accounted for nearly 85 per cent of total world trade⁸.

In 2008, world goods and services trade had expanded and diversified to a degree. But, Germany, the USA, Japan and France were still in the top five exporters and importers, although they had been joined by China, pushing the UK into sixth place. The top five in 2008 accounted for 34 per cent of exports and 35 per cent of imports. Trade in goods accounted for 81 per cent of total trade⁹.

So while there had been some shifts such as China's growing importance and a slightly more dispersed pattern of trade, there was little change in the list of leading trading nations, in the concentration of trade or in the balance between manufactures and services.

Although there have been shifts in investment flows, developed countries share of the stock of world outward investment has remained very high. While developed countries share has slipped slightly in recent years, they still accounted for 84% of the stock of outward investment at the end of 2009 compared with 87% in 1980¹⁰.

⁶ UNCTAD WIR 2010

⁷ The BRICs are Brazil, Russia, China and India

⁸ BIS Economics paper number 8

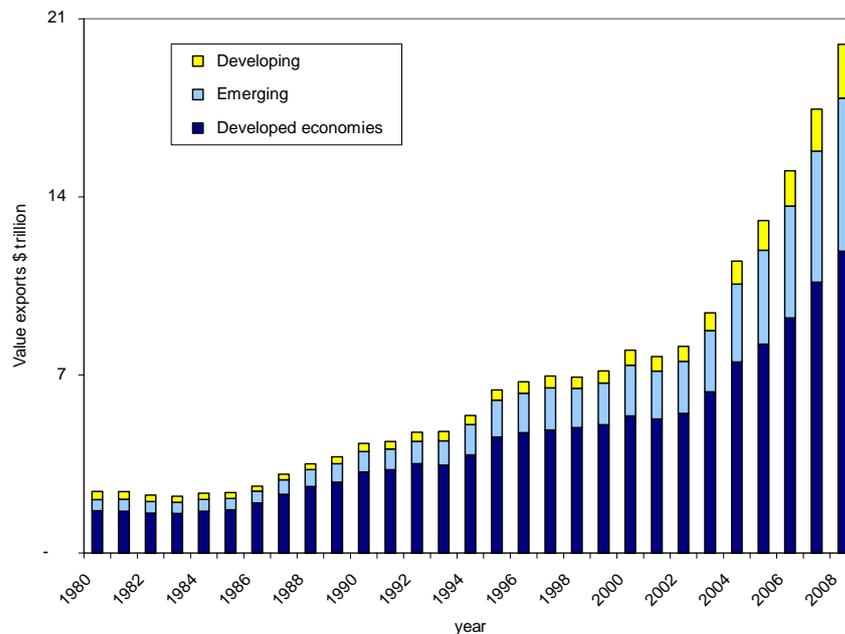
⁹ BIS Economics paper number 8

¹⁰ UNCTAD

1.3 Changes in Trade: Exports by Country Groupings

Although developed countries exports have been increasing their share of world exports of goods has been falling, as shown in Chart 1 below. All members of the OECD¹¹, except Turkey, saw their share of world exports decline.

Chart 1: Value of World Exports of Goods

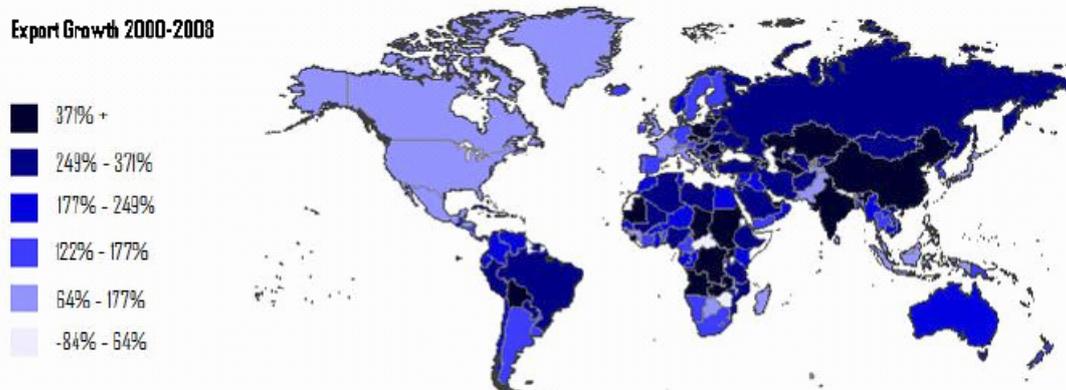


Source: BIS estimates based on UNCTAD data

This reflects the rapid export growth of major emerging markets, such as China, but also the significant growth in many other emerging and developing countries, in Africa, Latin America and Central and Eastern Europe as well as in Asia – as Chart 2 illustrates.

¹¹ Of those who joined the OECD before 1994

Chart 2: Growth in the Value of World Exports 2000-2008



Source: WTO Secretariat

1.4 Changes in Trade by Type of Product Goods vs Services

Despite a very gradual shift in global trade towards services, the ratio of goods to services within world trade has remained close to 80:20 for at least three decades. Trade in goods and services have generally fluctuated together, suggesting that there might be strong complementarities between them.

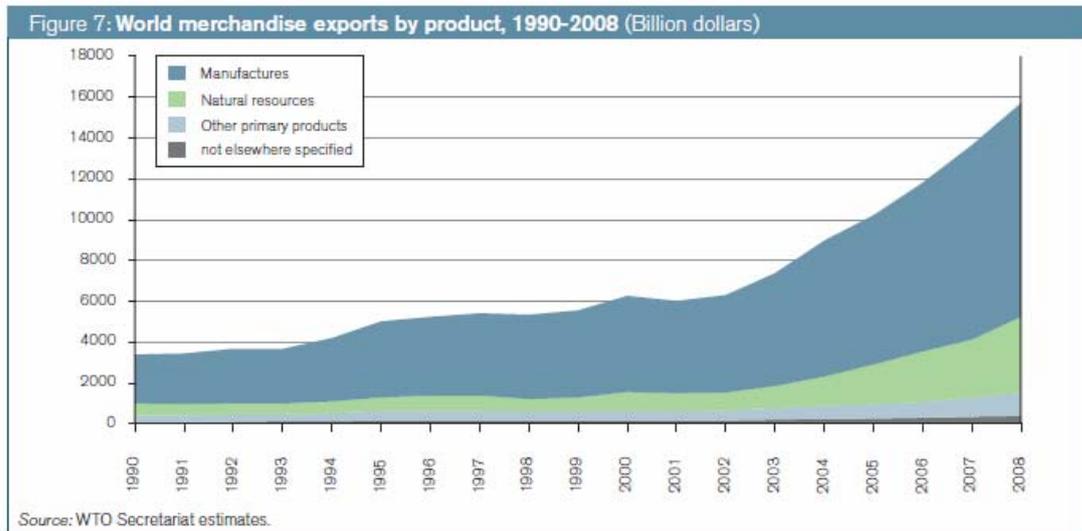
Such correlation is unsurprising given that transport and to a lesser extent travel which are direct inputs into trade in goods, account for more than half of total services trade. While transport and travel services have been declining in importance many of the growing services such as business services will also often be linked to trade in goods. When other trends such as the fragmentation of supply chains which are likely to require more trade in services to support the production of goods are factored in, it is not surprising that trade in goods and services are strongly linked.

Goods dominance of trade contrasts with services pre-eminence in national output. But, this reflects the realities of trade. Services are more likely to require or benefit from local presence for effective delivery and so are more likely to be supplied through investment rather than trade. Services are also more likely to be affected by non-tariff barriers, which are increasingly the most significant barriers to trade, after many rounds of GATT/WTO liberalisation has significantly reduced average tariffs, particularly in developed countries. However, as trade in services can be harder to measure accurately and track than trade in goods¹², the figures for trade in services may understate the internationalisation of services.

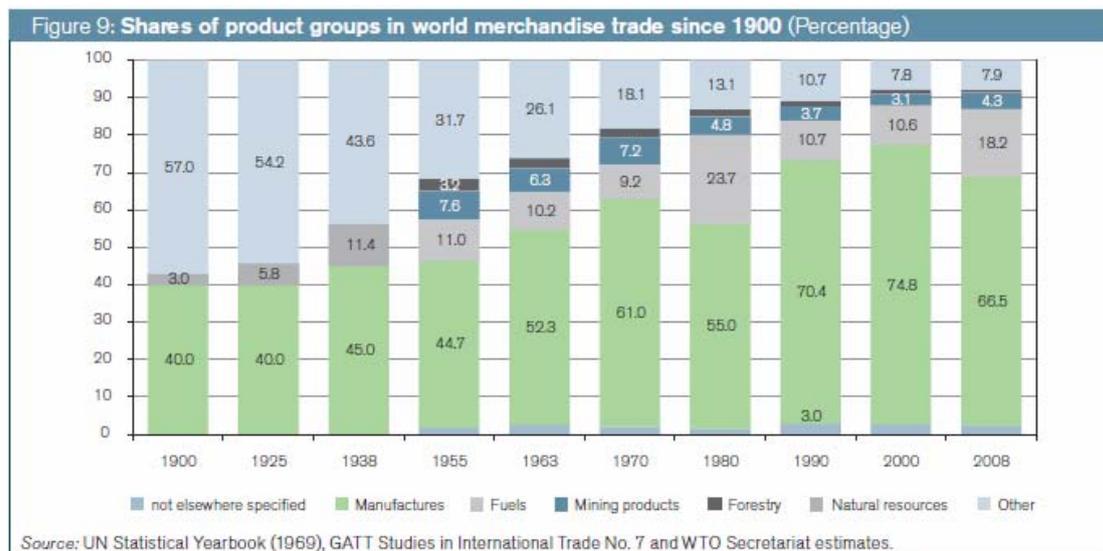
¹² For example the relationship between FDI and trade in services can be complex. As noted above, many services are often delivered through investment rather than trade. But, on the other hand, service flows within multinational firms can be a significant element of trade in other business services.

1.5 Changes in Trade by Type of Product: Commodities vs Other Goods

Within trade in goods there have also been shifts. The strength of commodity prices has led to resurgence in commodities' share of the value of world trade. As the chart below shows, natural resources' (defined by the WTO as fuels, fish, forestry products and minerals) share of world exports of goods doubled between 1998 and 2008, rising from 11.5% to 24%, with the majority of the increase accounted for by fuels driven by higher oil prices.¹³



This sort of shift is not entirely new. Previous commodity price rises, most notably the oil price shocks of 1973 and 1980-1981 had a similar affect on fuel exporters' share of trade. And, as the chart over the page shows, the relative importance of manufactures exports is still currently much higher than it was for much of the last century.¹⁴



¹³ WTO, Annual Report 2010

¹⁴ WTO, Annual Report, 2010

A sustained rise in commodity prices may in turn influence the pattern of global production, trade and investment. It may, for example, alter the dynamics of offshoring, making firms re-examine the organisation of their production and how they optimise their supply chains.

1.6 Changes in Trade by Type of Product: High-Tech and Up-Market Goods

Although developed countries share of exports of all goods has fallen, the change is not uniform either by type of good or by country. As would be expected, see table 1, developed countries have a higher share of exports of up-market (typically higher priced, branded) products. And they, particularly the EU, have tended to retain this lead over the last fifteen years.

The position regarding high-tech goods is less clear. While trade data shows that emerging markets, particularly China, have rapidly increased their share of global exports of high-tech products, this may overstate their economic input to this sector. Much of China's growth in this sector has come from processing inputs, with Chinese firms often adding little added value. The export data may thus overstate China's importance to global high-tech industries.

Table 1: Shares of World Exports of Goods by type of product

For high-tech and high/medium/low price market segments

		EU25	USA	Japan	China	India
High tech	% share 2007	16.9	13.7	8.0	21.2	0.6
	% change 1994-2007	0.8	-11.2	-12.7	17.8	0.4
Up-market	% share 2007	28.8	13.5	9.8	7.6	1.0
	% change 1994-2007	0.8	-6.0	-9.8	5.9	0.5
Mid-market	% share 2007	16.8	13.5	8.0	15.5	1.9
	% change 1994-2007	-1.5	-3.2	-10.8	11.4	1.0
Low-market	% share 2007	16.1	10.5	8.5	22.9	1.9
	% change 1994-2007	0.3	-5.4	-1.3	10.7	0.5

Source: EU Commission, based on CEPII (2010) European Export performance

1.7 Organisation of Trade: Intra-firm Trade

One of the outcomes of international investment is that much trade is now carried out within multinational firms. Although there are no precise figures on the extent of this trade, UNCTAD estimate that total sales of foreign affiliates of multinationals were around \$ 31 trillion in 2008, their value added was over \$ 6 trillion (approaching 10% of global GDP) and that these foreign affiliates contributed over \$ 6.5 trillion of exports (a third of the world total).¹⁵ UNCTAD also estimated that foreign affiliates' activities were less vulnerable to the crisis than trade with external partners, as their value-added declined by only 4–6 per cent in 2009.¹⁶

The performance of foreign affiliates varies across countries and sectors. But, there seem to be a couple of trends. Firstly there has been a switch towards emerging markets. The majority of foreign affiliates' employment is now located in emerging or developing economies and China now hosts the largest number of employees - 16 million workers in 2008, 20 per cent of the world's total employees in foreign affiliates. In contrast, employment in foreign affiliates in the US shrank by half a million between 2001 and 2008.¹⁷

Secondly there has been a shift towards services. In developed countries, employment in foreign affiliates in the manufacturing sector dropped sharply between 1999 and 2007, while in services it rose.¹⁸ This may reflect the broader shift towards services in developed economies, although it may also have been driven by an increasingly international focus adopted by many multinational service providers.

Thirdly there has been an increase in the proportion of multinationals based in emerging markets. In 2008 more than a quarter of the 82,000 multinationals counted by UNCTAD came from non-developed countries. They account for nearly one tenth of the foreign sales and foreign assets of the top 5,000 multinationals in the world, compared to only 1–2 per cent in 1995.¹⁹

1.8 Fragmentation of Production

The growth of international supply chains has been one of the features of trade in recent decades and why trade has grown faster than global GDP. Each time goods cross a border, an international transaction is recorded. If production requires a number of tasks in different countries, unfinished goods may cross national borders several times during the assembly process and so may be counted several times in world trade data. The fragmentation of production has many and complex economic implications besides its impact on trade, but due to space constraints these are not examined in this paper

The growth of international supply chains has led to vastly increased trade in intermediate goods, with the share of intermediate manufactured products in

¹⁵ UNCTAD, WIR, 2010

¹⁶ UNCTAD, WIR, 2010

¹⁷ UNCTAD, WIR, 2010

¹⁸ UNCTAD, WIR, 2010

¹⁹ UNCTAD, WIR, 2010

non-fuel world trade growing to around 40 per cent in 2008.²⁰ While the process can be more complex for services, they too especially business services such as design and marketing are increasingly supplied across borders as part of complex international supply chains.

This process of fragmentation, as it has not been uniform across countries, has made it more difficult to make cross country comparisons of trade and investment. Countries that import many inputs to assemble and then export final products may appear to specialise in producing such goods, whereas they may largely be processors, gaining limited value added from their activities and contributing relatively little to the global industry.

This can be illustrated by considering China. The share of domestic content in China's exports is estimated to be around 50%, significantly lower than many other countries. But, the proportion of domestic content is even lower for high tech products. For example it has been estimated that the value added attributable to producing iPods in China was only \$4, compared to their export value of \$ 150²¹

But, this process applies to other countries as well. For example, roughly two-thirds of Taiwan's trade in 2008 was in intermediate goods (65 per cent of its imports and 71 per cent of its exports, suggesting that it too is heavily engaged in processing.²²

One downside of fragmentation was seen in the crisis, as the impact of the decline in final demand may have been multiplied through the supply chain to trigger a much greater collapse in trade than in production or GDP.

1.9 Distributional Issues

While the growth in trade and investment has led to greater world prosperity, not everyone has benefited or at same rate. So there is a need to consider the distributional implications of the growth and changes in trade and investment.

Many less developed countries remain relatively marginalised in the global economy. However, as Chart 2 earlier demonstrated, a wide range of countries have benefited from export growth in the last ten years. This is encouraging as it suggests that given the right conditions, especially enhanced regional co-operation as well as improved access to world markets, it should be possible for even the more marginalised countries to benefit from trade.

Even for developing countries which have enjoyed an increase in trade and investment, the benefits can be unequalled distributed. For instance, while many commodity producers have enjoyed a rapid increase in the value of their exports, the benefits for their wider population can be limited.

²⁰ BIS Economics paper number 8, 2010.

²¹ Koopman, Wnag, et al, 2008

²² BIS Economics Paper number 8, 2010

Commodity extraction can be a capital intensive business that generates limited employment and there is the risk that other sectors competitiveness can be undermined by exchange rate appreciation.

In developed countries there can be concerns about falling employment and shifts in relative wages. However, the evidence suggests that technical change has generally been a more significant driver of such shifts in employment and wages than trade. Various studies have reached this conclusion, including an OECD report which concluded that trade has little net impact on overall employment and that import penetration has no significant impact on labour demand.²³

2. Impact of the Crisis

The crisis to the global economy caused a sharp fall in world trade, the worst fall since the Great Depression. At the worst point, in early 2009, exports of goods by the leading economies had fallen by a third compared to a year earlier. Even after a recovery started later in 2009, the value of exports still ended 23% lower in 2009 compared to 2008.²⁴

The greatest impact was on manufactured goods, especially durable products (machinery and vehicles) where purchases could be deferred and might have been more sensitive to the difficulties of accessing finance and to intermediate inputs, especially those heavily used in the construction industry (such as metals), as the following WTO estimates show.

	2008Q1	2008Q2	2008Q3	2008Q4	2009Q1	2009Q2	2009Q3	2009Q4	2009
Manufactures	16	18	13	-11	-28	-30	-22	0	-21
Iron and steel	15	27	43	4	-39	-56	-55	-31	-47
Chemicals	19	24	20	-7	-24	-25	-17	8	-15
Office and telecom equipment	10	13	7	-14	-29	-22	-15	8	-15
Automotive products	15	16	3	-26	-47	-46	-29	6	-32
Industrial machinery	21	22	15	-8	-29	-36	-32	-15	-29
Textiles	11	9	3	-13	-27	-27	-17	0	-19
Clothing	11	11	8	-2	-11	-15	-12	-6	-11

Source: WTO 2010 World Trade Report

As a consequence some of the greatest falls in trade occurred in countries that specialised in exporting or re-exporting these manufactured products.

While the collapse in trade was mainly driven by the sharp fall in global demand, especially for manufactured products which are more significant in trade than GDP, factors such as the impact of increasingly internationalised supply chains and the shortage of trade finance contributed. However, there is not conclusive evidence of the significance of these other factors role.

²³ OECD, 2007

²⁴ WTO

For instance while fragmented supply chains would have helped transmit the shock around the world and would have meant that the impact of declining production would have been magnified in the trade data, the costs invested in establishing such chains would have provided an incentive for firms to continue to use them. A study comparing the elasticity of trade to the growth of supply chains suggested that whilst the fragmentation of production has increased it can only explain part of the decline in trade after the crisis.²⁵ This was also the conclusion of an OECD study of the crisis²⁶.

Similarly with trade finance, while surveys²⁷ and anecdotes suggested that its availability declined and price increased, it is not entirely clear how much these changes were driven by a lack of supply compared to lower demand. As the proportion of trade covered by bank intermediated trade finance did rise slightly it suggests that there was more of a problem on the supply than demand side, but even so the fall in global demand and weaker commodity prices would have reduced demand for trade finance. Given this and as the decline in trade finance was considerably less than the decline in trade; it is generally seen as contributing to rather than driving the collapse in trade.

Although the fall in trade was sudden and sharp, the recovery has been relatively rapid, with much ground regained in 2010. The IMF is predicting growth of 7.1% in 2011 and averaging just under 7% from 2012 to 2015.

International investment was also affected by the crisis. After a 16% fall in FDI global inflows in 2008, flows declined a further 37% in 2009. The fall in FDI flows in 2009 was mainly accounted for by the decrease in cross-border mergers and acquisitions. FDI flows stabilised in 2010, estimated to have been \$ 1.12 trillion compared to \$ 1.11 trillion in 2009. However, there was an uneven pattern across regions and modes of FDI. While FDI inflows to developed countries contracted, those to emerging and developing countries recovered. Cross-border M&A volume rebounded reflecting its greater sensitivity to economic and financial market conditions and the possibility that depressed prices may have attracted bargain hunters, while greenfield investments continued to decline.

It is hoped that global inflows may return to 2008 levels by 2012, but such projections depend on many factors, including the sustainability of the global economic recovery. Changes in global FDI patterns are likely to continue post-crisis, with the relative weight of developing and emerging economies as both destinations and sources of global FDI expected to keep increasing, and for there to be a continued decline in manufacturing FDI relative to FDI in primary and services sectors.

While trade and investment are generally projected to recover, there is still significant uncertainty, especially around the pace, consistency and distribution of the global economic recovery. Asian economies are

²⁵ Escaith, Lindenberg et al, 2009,

²⁶ OECD, 2010

²⁷ See BAFT/IFSA – IMF joint surveys, ICC surveys, Berne Union statistics

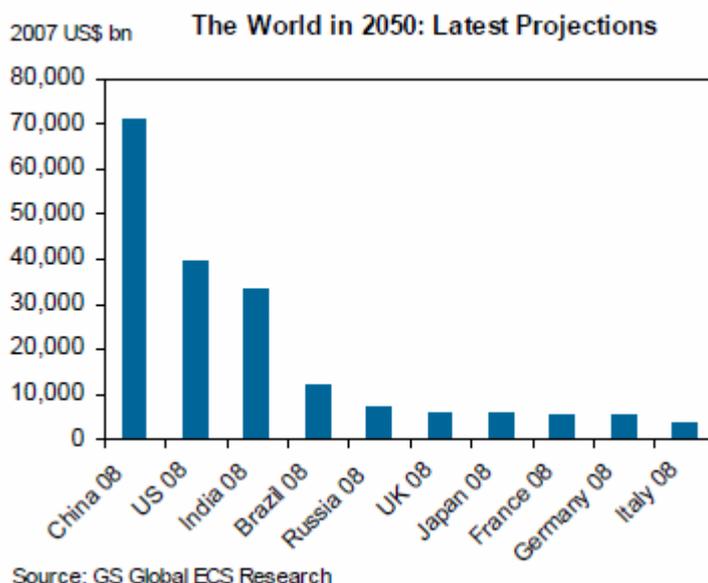
contributing strongly to growth, but growth in the US and Europe remains fragile.

3. Future Developments

As the recent crisis has demonstrated, it is extremely difficult to predict future developments, especially potential shocks that might occur. The general consensus is that the global economy will recover and resume its long run trends, although with some loss in productive capacity and output. But there is now greater recognition of the risks and shocks that could disrupt this picture.

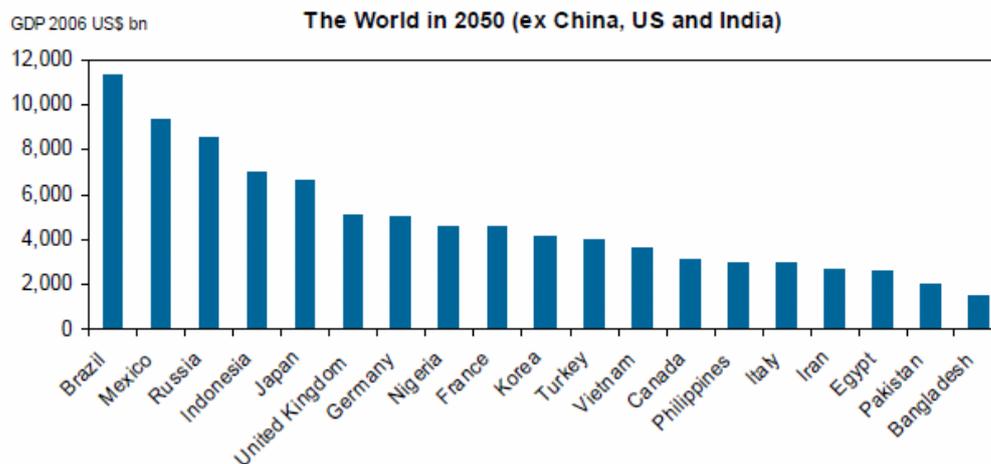
Most long term projections suggest that the shifts and changes that have occurred in recent decades will probably accelerate due to factors such as an increased middle class in emerging markets and additional liberalisation which could boost demand for trade. Furthermore increased regional co-ordination could lead to a rise in intra-regional trade, particular in Asia, and may push such regions towards the high level of intra-regional trade recorded in the EU. While the EU could further increase its own intra-regional trade through additional liberalisation and reform of the Single Market.

Over time such trends could lead to significant relative shifts in the distribution of global GDP. For example, the following Goldman Sachs projections for the BRICs illustrates how important China, the US and India could become relative to other leading economies.²⁸



²⁸ Goldman Sachs, 2009

Another feature of such projections is the broad range of countries that could grow rapidly. Many of the larger emerging markets and also some developing countries could easily follow the example of the BRICs. As these are smaller countries and are often starting from a lower base they are not projected to reach the same size as China and India. But, as the following projections of potential GDP in 2050 by Goldman Sachs suggests, they could still emerge as highly significant markets, suggesting that growth and opportunities need not be limited to the biggest emerging markets.²⁹



Source: Goldman Sachs, Global Economics Research

All such projections are highly sensitive to changes in their key assumptions such as that countries maintain policies and develop institutions that are supportive of growth. Their sensitivity, including to their starting levels can be seen by noting how the ranking of various countries in 2050 changes between the two charts above which were prepared within a couple of years of each other.

Despite these potential shifts towards emerging and developing markets, it is important to remember that developed countries and their trade are still expected to grow and that they will remain amongst the richest (in terms of GDP per capita) markets. So much trade and investment will continue to flow between existing partners.

4. Conclusion

Trade and investment are key drivers of world growth. It will be important to avoid actions, such as increased protectionism, that might threaten future trade and investment and to encourage developments such as the conclusion of the DDA that could boost them.

²⁹ Goldman Sachs, 2007

Over time there are likely to be significant changes to the distribution of global wealth, growth and trade. Emerging markets, especially China and India, but also many other emerging and developing countries will contribute a far greater share of global trade and wealth. Firms will need to adjust to these shifts, but they should not abandon traditional markets and activities in the process. Developed countries will remain large and important customers. Although the likely shifts will pose challenges to developed countries, the faster global growth that will result will also generate opportunities.

Globalisation and especially the continued fragmentation of production will increase the interconnectedness of the global economy. This will have many benefits, but may also increase the disruption that shocks can cause and will make it harder to interpret and explain the complexities of international trade and investment.

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Trade and Investment Analytical Papers

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