

Will the global economy be affected by a slowdown in the US?

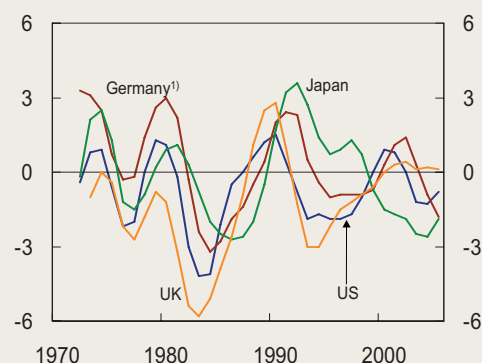
Historically, there has been a high degree of business cycle correlation across industrialised countries (see Chart 1). The correlation may result from exposure to the same type of shocks or the spread of shocks from one country or region to other parts of the world. Economic downturns in the US can spread to other countries via trade, financial markets and expectations.

In spite of slower growth in the US in recent years, the world economy has expanded at a sustained rapid pace (see Chart 2). An important driving force is the integration of China and other emerging economies into the world economy. These countries have accounted for a large share of global GDP growth in recent years. Potential production in the world economy has increased as a result of increased availability of highly competitive labour from these countries. Integration has led to higher real income both in emerging economies and in the US and Europe, generating considerable impetus to the world economy. In the euro area, growth has also picked up. An important question is whether the driving forces behind the expansion in Asia and Europe are sufficiently strong to sustain global growth should the growth in the US economy slow significantly.

Lower growth in the US will reduce demand in the US household and business sector, which will push down demand for import goods. Via the *trade channel*, this will dampen the activity level in countries that export to the US. In addition, a downturn in the US may lead to a depreciation of the US dollar, which will then amplify the adverse effects on exports from other countries.

Euro-area direct exports to the US as a share of GDP are low and have fallen somewhat since 2000 (see Chart 3). Exports to other EU countries and Asia have increased. Via the direct trade channel, the euro area is thus less vulnerable to a slowdown in the US than few years ago. At the same time, growth in the euro area is stronger than it has been for a long time. Through 2006, the contribution from domestic demand has increased (see Chart 4). Investment growth is solid. Household demand is expected to increase as a result of lower unemployment.

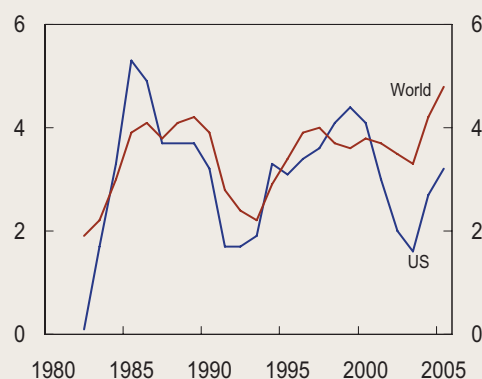
Chart 1 Output gap. 3-year moving average. Per cent. Annual figures. 1972 – 2005



¹⁾ Estimated on the basis of data for West Germany in the period 1970 – 1990 and Germany in the period 1991 – 2005.

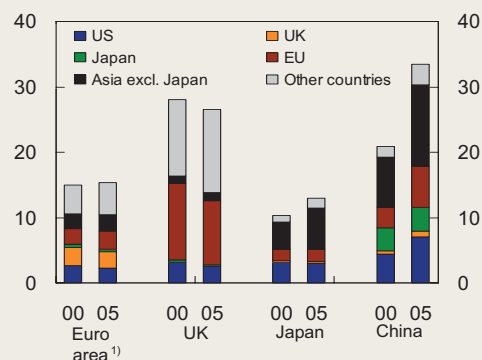
Sources: OECD *Economic Outlook* and Norges Bank

Chart 2 GDP. Annual rise. 3-year moving average. Per cent. Annual figures. 1982 – 2005



Sources: IMF *World Economic Outlook* September 2006 and Norges Bank

Chart 3 Exports as a share of GDP. Per cent. Annual figures. 2000 and 2005



¹⁾ Exports to the EU cover only exports from the area to other EU countries.

Sources: Reuters (EcoWin) and Norges Bank

The emerging economies in Asia have long been dependent on exports. In recent years, the share of exports to the US and the EU has declined, while intraregional trade has increased (see Table 1). China has grown into a trade and production centre in Eastern Asia. Goods flows from Eastern Asia to western countries increasingly go via China. On the whole, Asia's exports still seem to be highly dependent on the US, but also on developments in China. However, growth is also robust in sectors other than the exports sector in many Asian countries.

After China joined the WTO in 2001, exports as a share of GDP increased considerably (see Chart 3). China is now the economy in Eastern Asia that accounts for the largest share of US imports. (see Chart 5). In isolation, this may imply increased vulnerability to a slowdown in the US. On the other hand, the strong growth in Chinese exports is being driven by rapidly rising capacity and substantial cost advantages, which have boosted the competitiveness of Chinese goods. China has thus won market shares across a broad range of products and in many countries (see Table 2). In the event of a fall in demand in the US, China may gain further market shares, reducing China's vulnerability to a US downturn. A fall in demand will then be felt to a greater extent in other regions such as Europe and other Asian countries.

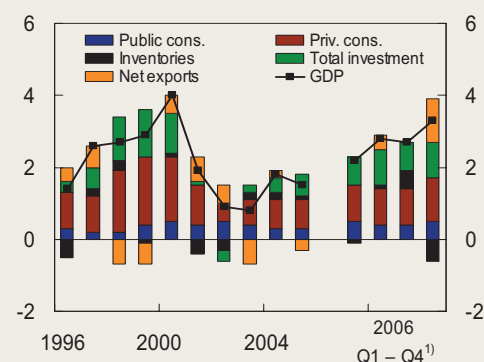
Equity prices and long-term interest rates covary to a large extent across countries. Financial market integration has increased over time. This indicates that the *financial channel* has become an increasingly important source of transmission of economic disturbances across countries. The recent weeks' global financial market turbulence is a clear example of this. A downturn in the US will normally lead to both a fall in equity prices and long-term

Table 1 Chinese and Asian exports to other countries. In percent of total exports.

	China		Emerging markets in Asia	
	2000	2005	2000	2005
US	20.9	21.4	21.3	17.4
EU 25	16.4	18.9	15.5	15.7
Japan	16.7	11.0	11.8	9.3
China	-	-	8.7	12.8
Emerging markets in Asia	33.2	32.8	39.1	43.0

Sources: IMF Direction of Trade Statistics Yearbook 2006 and Norges Bank

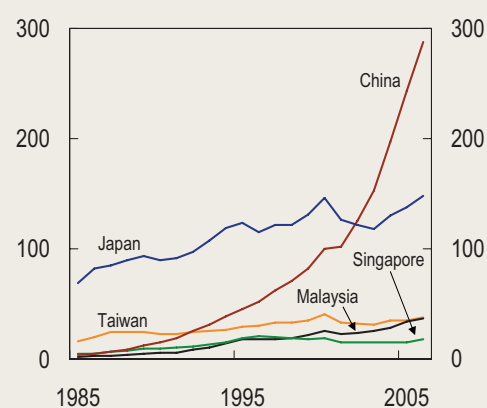
Chart 4 The euro area. Contributions to annual growth in volume. Per cent. Annual figures. 1996 – 2005. Quarterly figures. 06 Q1 – 06 Q4



¹⁾ 4-quarter growth.

Sources: Reuters (EcoWin) and Norges Bank

Chart 5 US. Imports from some countries in Asia. In billions of USD. Annual figures. 1985 – 2006



Source: Reuters (EcoWin)

Table 2 Chinese exports of different product groups. As a share of the world's total exports of these product groups.

	2000	2005
Agricultural products	3.0	3.4
Energy and mining products	1.4	1.8
Iron and steel	3.1	6.1
Chemicals	2.1	3.2
Office and telecommunication equipment	4.5	17.7
Cars	0.3	1.1
Textiles	10.3	20.2

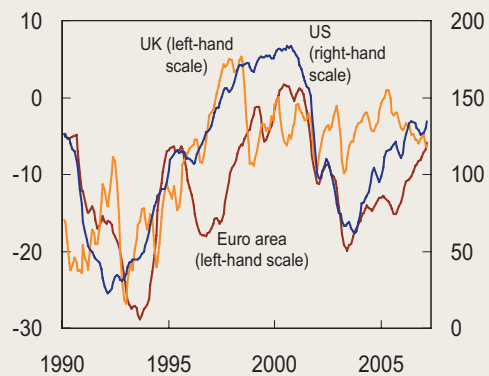
Sources: WTO Statistical Database 2006 and Norges Bank

interest rates. A fall in world equity prices may increase the cost of and reduce the supply of equity finance, dampening global investment. Lower long-term interest rates would have the opposite effect, stimulating both global consumption and investment. The yield differential between government bonds in emerging economies and the US tends to widen when there is disturbances in major financial markets. Lower long-term interest rates may thus provide less impetus to Asian economies than to the euro area.

A downturn in the US may also influence growth *expectations* in other countries. This could translate into weaker growth in private consumption and business investment. Studies show that European confidence is influenced by developments outside the individual country. There is a high degree of correlation between business confidence in the US and the euro area. Consumer confidence indicators in the US and the euro area have in periods shown a strong correlation (see Chart 6). The degree of correlation seems to be highest when the US and the euro area are affected by the same type of shock, as in 2000/2001.¹ Consumer expectations do not seem to be an important source of contagion in the event of country-specific shocks. The degree of correlation between consumer confidence in the US and the euro area has been lower in recent years than around the turn of the millennium.

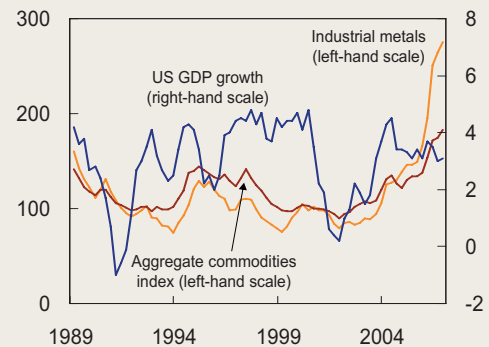
Developments in the US are also important for Norway. The Norwegian economy is influenced through exports both to the US and US trading partners. Norwegian exports are to a large extent commodity-based. The most import effects of developments in the US will thus come through prices for our main commodity exports. In recent years, Norway has reaped considerable benefits from the rise in prices for oil and industrial metals as a result of the global expansion. Weaker growth in the world economy normally leads to lower commodity prices, which have a particularly strong adverse affect on the Norwegian economy. Metal prices are particularly sensitive to cyclical fluctuations (see Chart 7). In recent years, demand for oil and other commodities has increased steadily in China and other emerging economies. In the period 2000-2005, China alone accounted for 30% of the global increase in oil demand and for more than 50% of the increase in global demand for industrial metals.

Chart 6 Consumer confidence indicator.
Index values. 3-month moving average.
Monthly figures. Jan 90 – Feb 07



Sources: Reuters (EcoWin) and Norges Bank

Chart 7 US GDP growth¹⁾ and commodity prices²⁾.
Quarterly figures. 89 Q1 – 06 Q4



¹⁾ 4-quarter growth.

²⁾ The Economist's commodity price indices. 2000 = 100.

Sources: OECD Economic Outlook,
Reuters (EcoWin) and The Economist

Estimates published by the IMF² and the UN³ indicate that a slowdown in the US will have a considerably stronger impact on growth in China than in the euro area and Japan. In the UN report published in January this year, calculations show the impact on the global economy of a 1.7 percentage point decline in US growth in 2007 as a result of a weak housing market. Growth in China would then decelerate by 1.9 percentage points, while growth in both the euro area and Japan would slow by 0.4 percentage point.

These calculations are based on historical data. The world economy has changed considerably in recent years, however. China has grown in importance for all of Asia. The country has substantial cost advantages and can take market shares else-

where if exports to the US fall. Moreover, growth in domestic demand in Asia is solid. Even if Asia is still heavily reliant on exports to the US, we therefore expect the effects of a slowdown in the US on Asia to be less pronounced than implied by the estimations above. In addition, the euro area has to some extent shifted exports away from the US, and lower exports may be counteracted by higher domestic demand in this region as well. The effects via the financial channel are not clear, but owing to increasing financial integration economic turbulence may spread more rapidly and with greater intensity across countries.

Even though a downturn in the US will affect the world economy, the global economy appears to be more robust than earlier. Hence, the Norwegian economy also seems to be less vulnerable to a downturn in the US than a few years ago.

¹ The downturn in 2000/2001 was triggered by a correction in the IT sector in the beginning of 2001. The IT bubble burst, which had a negative impact on equity prices in many countries.

² IMF Country Report No. 06/279; "United States: 2006 Article IV Consultation—Staff Report; Staff Statement; and Public Information Notice on the Executive Board Discussion", 2006.

³ UN World Economic Situation and Prospects 2007.