

## Øystein Olsen: A changing global economy

Speech by Mr Øystein Olsen, Governor of Norges Bank (Central Bank of Norway), at the Norwegian School of Economics and Business Administration (NHH) annual Spring Conference, Oslo, 31 May 2011

*The text below may differ from the actual presentation. This speech does not contain assessments of the economic situation or current interest rate setting.*

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Over the past decade, the pace of change in the global economy has picked up. Emerging economies<sup>1</sup> have assumed a more prominent role. These developments have generated challenges and opportunities, not only in emerging economies but also in the advanced economies. In my speech today, I would like to focus on three key macroeconomic trends:

- First, the global economy has long been characterised by substantial imbalances in international trade. Large surpluses in many emerging economies have their counterpart in large deficits in traditional industrial economies. This generates tensions.
- Second, capital markets have not been able to cope with the high level of saving in emerging economies. Real interest rates have been low for a long period and new imbalances have arisen. Sovereign debt is now high in a number of countries.
- Third, growth in emerging economies has resulted in higher demand for energy and commodities. While the price of money has fallen, prices for energy and commodities prices have been pushed up. This has amplified the imbalances for many countries, but has had a favourable impact on Norway.

The last part of my speech today will focus on the consequences of these trends for our decisions in the management of the Government Pension Fund Global.

### Global imbalances

Let me start with the change in the world's economic geography and the resulting gains.

Strong economic growth in China, India and several other emerging economies has lifted hundreds of millions of people out of poverty. African countries have also experienced a growth spurt and the number of people living in extreme poverty has fallen considerably over the past two decades<sup>2</sup>. This is a continuation of a long-term trend. According to figures from the World Bank, the share of people living on less than USD 1.25 a day decreased from close to 43 per cent in 1980 to just over 21 per cent in 2005.

*Chart: GDP index 2000 and 2010*

The strong growth in the emerging economies can perhaps best be illustrated through a comparison with western economies. If GDP is set at 100 in the year 2000, GDP growth would have reached 112 for the euro area and 118 for the US up to last year.

The figure for Brazil is 142 and 271 for China. If the trend continues, China will outgrow the US to become the largest economy in the world in the course of the next 10–20 years.

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<sup>1</sup> Here, the term emerging economies includes developing economies

<sup>2</sup> Pinkovskiy, Maxim and Xavier Sala-i-Martin (2010), "African Poverty is Falling...Much Faster than You Think!", NBER Working Paper 15775.

The financial crisis hastened the pace of these changes. The global economic downturn in the wake of the crisis was marked in many countries and regions. For the OECD area as a whole, GDP fell by 3.5 per cent in 2009.

*Chart: Growth in 2009*

Emerging economies, on the other hand, sustained a high level of activity despite a sharp fall in demand for their exports. As shown in the world map, countries in South-East Asia and some countries in South America and several parts of Africa continued to grow when the rest of the world was struggling with the aftermath of the crisis.

To enable poor countries to grow more rapidly, international trade is vital. It allows countries to specialise, while giving them access to goods and services from other countries. But specialisation necessitates readjustment. Over the past decades, western countries have encountered strong competition from low-cost countries, particularly in manufacturing production. As a result, firms, and virtually whole industries, have closed down and new industries have emerged. Norway has also had experience of losing industries that have become commercially non-viable, as when the textile and clothing industry almost completely disappeared in the 1970s.

*Chart: Current account*

Imbalances in world trade have built up over the past decade. Large and rising deficits in the US economy have been driven by high consumption and a strong appetite for credit among US households. Consumption has outstripped production in the US for a long period. Private debt has increased, although it has also increased in Europe. The counterpart to these developments is a high level of saving in Asia – primarily China. Asia's willingness to purchase US Treasury bonds has allowed the imbalances to build up further.

The Norwegian economy is also part of this picture. High oil prices have resulted in substantial surpluses in oil-exporting countries' current accounts, which have been invested in international capital markets. A balance of payments surplus provides the opportunity to save and apportion revenues over time. Trade deficits and surpluses do not necessarily reflect an imbalance, but can be a prudent adjustment.

*Chart: Exports from emerging economies in Asia*

Emerging economies in Asia now account for 16 per cent of total global exports, compared with 9 per cent in 2000. With substantial labour reserves and a cost level that is considerably lower than other countries, it has been easy for emerging economies to find markets for manufactured goods. A Chinese manufacturing worker's hourly wage is about 1/20 of a US worker's wage<sup>3</sup>.

Even though there are considerable gains related to international trade and free capital movement, there are also dangers to be avoided. Over the past thirty years, a number of countries have been hit by financial crises. The Asian crisis at the end of the 1990s showed that the combination of large trade deficits, small foreign exchange reserves and a fixed exchange rate regime proved to be demanding. When international investors lost confidence in the ability of governments to defend the fixed exchange rate, the countries encountered difficulties. Sharp currency depreciations and major readjustments followed in many countries. Even though economies in this region have fared well in recent years, the experience may have left its mark.

A number of Asian countries, China in particular, have chosen to keep their currencies pegged to the US dollar. As long as the Chinese authorities are successful in keeping the exchange rate fairly fixed, competitiveness and a trade surplus will be maintained. However,

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<sup>3</sup> US Bureau of Labor Statistics. International Labor Comparisons. Manufacturing in China. <http://www.bls.gov/fls/china.htm>

such a policy is at the expense of deficit countries, which would have preferred to see an adjustment in the yuan exchange rate. China's exchange rate policy is therefore under strong pressure, especially from the US.

But China's economic strategy is based on its own experience and the experience of others. First, China has chosen to focus on the export of finished manufactured goods rather than domestic consumption as the basis for growth. So far, this has resulted in dynamic developments where growth has been kept high owing to increasing opportunities for people in rural areas to move to new jobs in towns and cities. A stable exchange rate has contributed to predictable operating parameters for a rapidly growing export industry and has held up competitiveness. At the same time, the focus on manufacturing has made China a significant player in the world economy, able to attract international expertise for further development of the corporate sector.

Second, China can take advantage of the lessons learned by others during the Asian crisis, when many countries experienced that small reserves in a period of economic turbulence can be hazardous. Third, China requires substantial savings to prepare for the future needs of an ageing population. The export surplus combined with high domestic investment may be a sound savings strategy.

Nonetheless, changes in China's policy are no doubt on their way. An appreciation in real terms seems inevitable, potentially through higher domestic cost and price pressures. There are already clear indications of this.

Western economies, however, should not primarily be looking to remedy their own trade deficits via China's exchange rate policy. The imbalances in the US and Europe are the result of countries living beyond their means. Deficit countries must come to grips with their own problems.

### **Capital flows and real interest rates**

As a mirror image of the trade imbalances, capital has flowed from emerging economies to rich countries. Normally, capital flows to the highest returns. This would imply that capital is transferred from countries with a large capital stock and inadequate savings to countries where the stock of capital is small and there are opportunities for profitable investment. In that case, capital should rather have flowed to emerging economies, and not the reverse, as we have witnessed in recent years.

*Chart: Saving and investment as a share of GDP*

Looking back on the financial crisis, the question may be raised whether international capital markets have been able to cope effectively with large capital flows. A large savings surplus in Asia has sought investment opportunities in rich countries. This has been possible, not because of high investment demand, but because of the sharp decline in saving in advanced economies. The high level of saving in Asia has been the driving force and is the reason for the decline in long-term real interest rates.

*Chart: US long-term interest rates*

The effect of global imbalances on long-term interest rates set the stage for the financial crisis. In the US, as shown in the chart, interest rates had shown a persistent downward trend. Low interest rates induced investors to seek new investment opportunities in the search for higher returns. Expected return rises with an increase in risk. A strong appetite for risk combined with financial innovation resulted in an underpricing of risk in financial markets, while low interest rates led households, enterprises and governments to overestimate their own ability to pay. Combined with weak regulation and inadequate supervision of the financial sector, these were some of the root causes of the financial crisis.

As I mentioned, trade deficits and surpluses are not in themselves unusual. But the imbalances eventually became so large that countries became vulnerable to turbulence. And when financial markets were not able to cope with the ensuing high capital flows, problems became severe.

*Chart: Public debt*

The financial crisis was followed by a debt crisis. Bank rescue packages transferred private debt to governments and central banks. In addition, tax revenues declined and social security expenses increased. In response, governments then decided to pursue expansionary fiscal policy to counteract falling demand and rising unemployment, in many cases in spite of entering the crisis with fiscal deficits and fairly high debt.

A number of governments found that the need to apply economic policy measures to sustain the level of activity was greatest when their ability to do so was weakest. An important lesson of the crisis is that fiscal policy must have a long-term anchor. Governments must save during good times to accumulate funds that can be drawn on in bad times.

Government debt in the major advanced economies is now as high, measured as a share of GDP, as it was immediately after the Second World War when the surge in military spending had been financed by borrowing. Some governments in Europe are now facing a situation where financial market confidence in their debt-servicing capacity has been severely dented. If these governments are not able to meet their debt obligations, the European banking system will be adversely affected, both through losses on government securities and as a result of economic decline. This interdependency between government finances and banks' financial strength across national borders could threaten the stability of the global economy.

The global imbalances that were behind the financial crisis are still present. Some countries will be struggling with large fiscal deficits for some considerable time. However, it is conceivable that the imbalances will gradually diminish.

Emerging economies are facing a period of considerable investment in welfare and infrastructure development. Households and firms will be able to reduce saving as welfare schemes and national capital markets are developed. In addition, many countries with an ageing population may find that an increasing number will have to draw down their wealth, resulting in a decrease in total saving. For European countries and the US, there is no doubt: deficits must be reduced and savings increased.

## **Energy and commodity prices**

Let me move on to how the changes in the world economy have influenced commodity demand and commodity prices.

*Chart: Real prices for metals, food and oil*

The price of oil is now around USD 115 per barrel. Prices for other commodities such as metals and food are also high. A weak dollar, low interest rates and an ample supply of liquidity may have contributed to the rise in prices. We have also recently seen that prices are being pushed up by political unrest in North Africa and the Middle East. Nonetheless, strong growth in emerging economies and supply-side conditions have been the dominant factors in developments since the early 2000s.

From 2000 to 2009 emerging economies accounted for 100 per cent of the growth in global consumption of primary energy sources. In the same period they accounted for 80 per cent of growth in global consumption of agricultural products and virtually all of the increase in global metal consumption.

While demand for energy and commodities is rising, there are supply-side constraints. With regard to oil, the large and easily accessible deposits were extracted first, and new finds are smaller and more expensive to extract. The same applies to a number of metals. Investment

in the energy and commodity sector has also been low. Energy prices have risen fairly markedly over a lengthy period, with some temporary disturbances.

Agriculture is facing some of the same challenges. Productivity growth in this sector has declined in recent years. In order to increase production, farmers have had to use less fertile land and the costs of food production have risen. Agricultural production has also become more energy-intensive and energy and food prices have become more closely linked. Energy now accounts for a third of the cost of grain production. In addition, with high oil prices, demand has shifted towards biofuels, with inputs such as maize and sugar. In 2010, 40 per cent of maize production in the US was used to produce biofuel. A large share of sugar production in Brazil is used for the same purpose. As we have seen in recent years, the rise in energy prices is spreading to food prices<sup>4</sup>. Prices have also risen considerably over the past year as a result of poor crop yields in many parts of the world following storms and drought.

Our analyses of the outlook for the world economy and the Norwegian economy are based on the assumption that oil prices will remain at the current level. It is difficult to predict future prices with any assertion. Should oil prices show a marked decline, the oil fund mechanism will to a considerable extent shield the Norwegian economy from the short-term negative consequences of a fall in oil revenues. However, our petroleum wealth will be reduced. On the other hand, should oil prices continue to rise, the Government Pension Fund Global and the fiscal rule provide a sound and robust system for coping with higher revenues.

### **The investment strategy for the Government Pension Fund Global**

Let me now turn to how the changes in the world's economic geography influence the investment strategy of the Government Pension Fund Global.

*Chart: Norway's terms of trade*

Norway has profited from globalisation, through both trade and capital markets. As a major commodity exporter we have benefitted from high commodity prices. At the same time, we have had access to cheap imports from emerging economies. Norway's terms of trade have improved throughout the past decade. Norway's national income has risen substantially throughout the oil age. Substantial current account surpluses and the buildup of the Government Pension Fund Global have also made Norway a significant exporter of capital.

*Chart: Market value of the Fund*

The Fund is among the world's largest funds. Performance fluctuates in step with developments in global financial markets. Nevertheless, the most conspicuous feature (see chart) is not the fluctuations, but the sharp, virtually continuous rise in the Fund's market value. The stable growth of recent years is due in part to large transfers from the Ministry of Finance in autumn 2008 while equity markets declined. The krone exchange rate also weakened through the crisis, serving to mitigate the impact on the value of the Fund, as measured in NOK.

*Chart: Return on the Fund*

Returns over the past two years have been good. After a return of more than 25 per cent in 2009, the return in 2010 was about 10 per cent. This must be seen in the context of weak performance in 2008. Following substantial losses during the financial crisis, the Fund has more than recouped these losses.

*Chart: Excess return on the Fund*

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<sup>4</sup> Rising Prices on the Menu, Finance&Development, Mars 2011, Vol. 48, No. 1, IMF (Hebling, T and Roache S.)

The figures for excess return – the return on the Fund in excess of the benchmark indices – also reflect the financial crisis. Substantial losses in the second half of 2008 have been more than made up for by the Fund's favourable performance since then. Since 1998 the annual excess return on the Fund has been above 0.3 percentage point.

The Fund came through the financial crisis without suffering losses. Nevertheless, during and following the crisis we have gained valuable experience. This experience is important as a basis for the management strategy of the Fund ahead.

A key part of Norges Bank's management task is to advise the Fund's owner on the need for changes in the investment strategy. The Fund's investment strategy is based on the Fund's comparative advantage and is formulated in a way that supports the mandate and limits defined by the owner.

I would like to highlight the following issues from our strategy plan for 2011–2013:

- regional allocation
- composition of the fixed income benchmark
- increased emphasis on absolute return

The purpose of the management of the Fund is to maximise its long-term international purchasing power. The return on the Fund must be used for importing goods and services. A key question for the investment strategy is to what extent international purchasing power is exposed to foreign exchange risk and how this foreign exchange risk can best be managed.

Norway's neighbouring countries are its largest trading partners and may be a natural choice for the investment of the Fund's capital. This will provide an exchange rate hedge for future imports from these countries. On the other hand, changes in exchange rates will often be counteracted by differences in price developments between countries. If the theory of purchasing power parity is valid, we can make decisions about which countries to invest in independently of which countries we import from<sup>5</sup>.

*Chart: GDP and regional allocation of equities in the Fund*

Today, just over half of the Fund's capital is invested in Europe. The proportion of European investments in the Fund's portfolio is considerably higher than would be implied by a market-weighted portfolio. The Fund's holdings in European equity markets, for example, are twice as large as its holdings in Latin-America and Asia. As the world's economic geography changes, it is natural to raise the question of whether the Fund's investment strategy should be adjusted to improve the ratio of return to risk.

In the annual report to the Storting (Norwegian parliament) on the management of the Fund, the Ministry of Finance pointed to a number of factors that indicate that the Fund's overweight in Europe should be reviewed. This is in line with previous advice from Norges Bank<sup>6</sup>. Capital markets in emerging economies have become more developed. As these countries account for an increasingly large share of global output and there are prospects of strong growth, it may be advisable to invest more of the Fund's capital there. A more even distribution of the Fund's capital across major regions would also reduce the Fund's overall risk. Such changes must be introduced over time.

The owner's most important investment strategy decision is the share of the Fund's capital that should be invested in equities. The size of the equity allocation has an impact on the

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<sup>5</sup> Recent research shows that the theory of purchasing power parity holds true to a greater extent than suggested by previous results. Cf.: Lucio Sarno (2011): Purchasing Parity in Tradable Goods, Working Paper for the Ministry of Finance

<sup>6</sup> Report No. 15 (2010–2011) to the Storting: The management of the Government Pension Fund Global in 2010

Fund's return and risk and has increased from zero in 1996, to 40 per cent in 1998 and to the current 60 per cent allocation adopted by the Storting in 2007. The equity allocation was increased from 40 to 60 per cent in the period from June 2007 to June 2009. Norges Bank purchased NOK 1 trillion in equities for the Fund through the financial crisis, more than doubling the Fund's total equity holdings. The owner's adherence to the strategy through the period of decline in equity prices will undoubtedly prove profitable over time.

A maximum of 40 per cent of the Fund is now invested in bonds and other fixed income instruments, which are usually associated with lower risk but also lower expected return than equities. Earlier this year, Norges Bank advised the Ministry of Finance on the design of the benchmark index for fixed income investment. The strategic benchmark index should reflect the role fixed income investment is expected to play in the Fund's portfolio. Fixed income investment should primarily contribute to reducing the fluctuations in the Fund's value. In addition, the Fund should be exposed to credit premiums.

The financial crisis taught us that different types of fixed income investments have very similar qualities when market liquidity declines. There are limited gains from holding a large number of diverse securities. Norges Bank therefore recommends simplifying the indices by substantially reducing the number of fixed income instruments.

The most commonly used benchmark indices for bonds are market-weighted. Borrowers are assigned weights according to the level of debt they hold. Increased debt can reduce debt-servicing capacity. A market-weighted index is probably not the best approach for diversifying the risk of loss given default. Norges Bank has therefore proposed the use of GDP weights instead of market weights for government debt in the Fund.

Under the fiscal rule, central government spending is to correspond to the expected real return on the Fund, estimated at an annual average of 4 per cent. As manager, Norge Bank must invest with a view to achieving a return in line with this objective.

Estimating the expected return over the Fund's long-term horizon is challenging. Some models now suggest that return requirements in equity markets are fairly normal, in spite of low yields<sup>7</sup>. This may imply a real return of 5–6 per cent in equity markets. With positive contributions in active management, property investment and fixed income management, a total return of 4 per cent is not unreasonable.

In our management of the Fund, we must do more than concentrate on relative return, or the difference between the return on the benchmark index and the return on the Fund. Investment strategy advice to the Ministry of Finance must be based on assessments of absolute returns. For the property investment portfolio, which is currently being built up, detailed knowledge of the value of the underlying assets is essential to be able to judge whether an investment will generate the desired real return over time. Knowledge about underlying values is also necessary in order to maintain an active approach to the benchmark indices – and to make adjustments as required.

## Conclusion

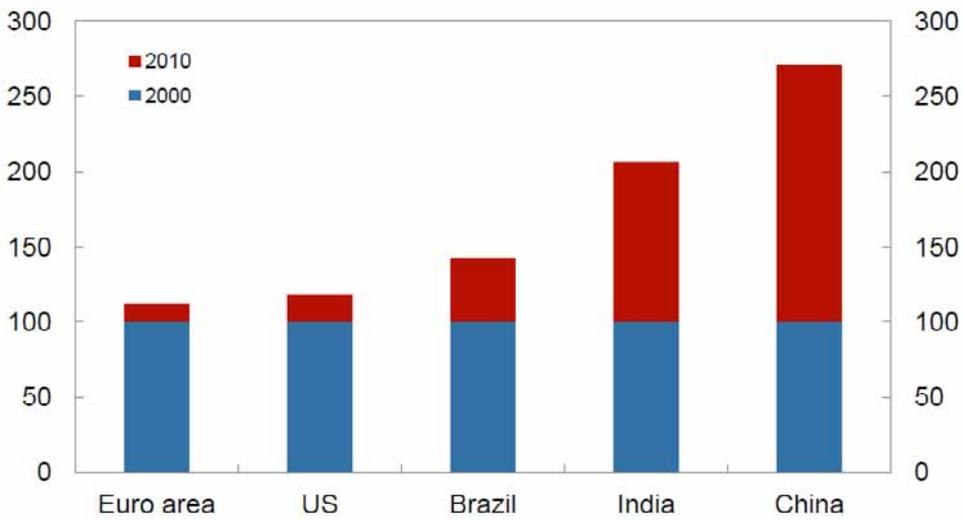
Today, I have focused on changes in the world's economic geography and the challenges they entail. Large imbalances will necessitate readjustment. The solution to the problems does not lie in restricting world trade. We should recall that the increase in trade and free capital markets has primarily resulted in substantial gains. Emerging economies have in a short space of time assumed a more prominent role in the global economy. Many people have been lifted out of poverty. These developments should be allowed to continue.

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<sup>7</sup> Bank of England: Quarterly Bulletin 1, 2011, Chart 13:  
<http://www.bankofengland.co.uk/publications/quarterlybulletin/qb1101.pdf>

# GDP

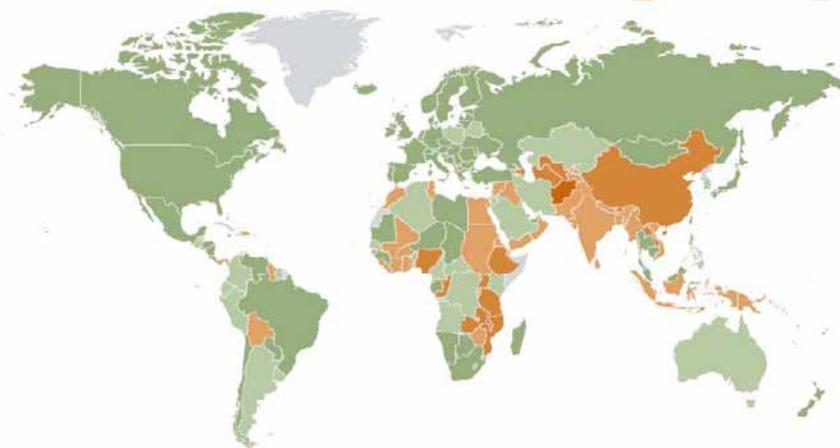
Index, 2000 = 100



Sources: IMF and Norges Bank

# Growth in 2009

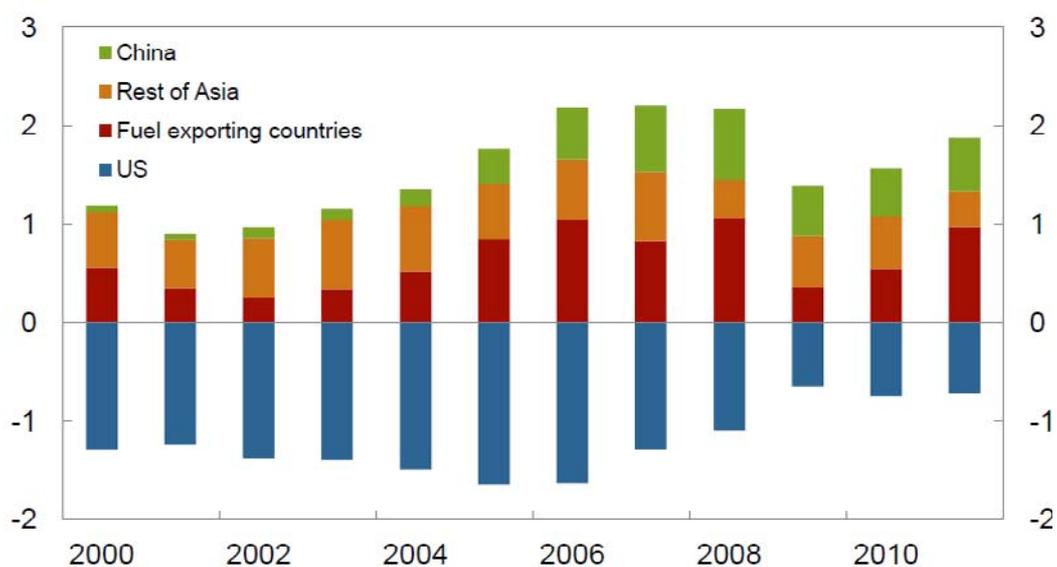
Annual, percentage change



Source: IMF

## Current account

Share of world GDP. Per cent.<sup>1)</sup> 2000 – 2011



<sup>1)</sup> IMF projections for 2011

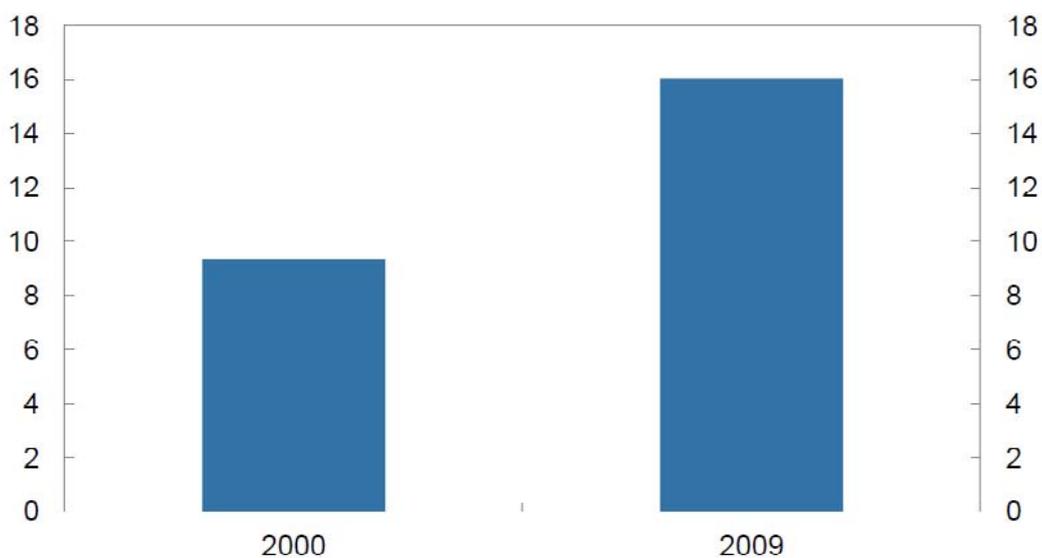
Sources: IMF World Economic Outlook April 2011 and Norges Bank

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## Exports from emerging economies in Asia

Share of world exports. Per cent



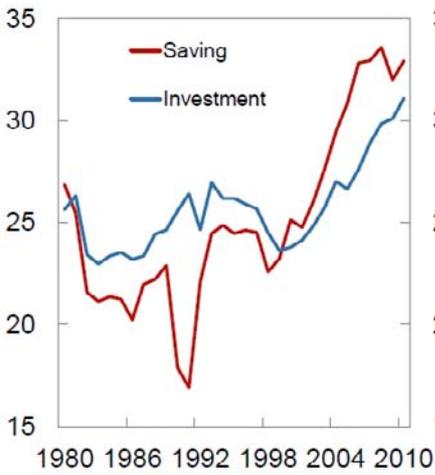
Sources: UN Comtrade and Norges Bank

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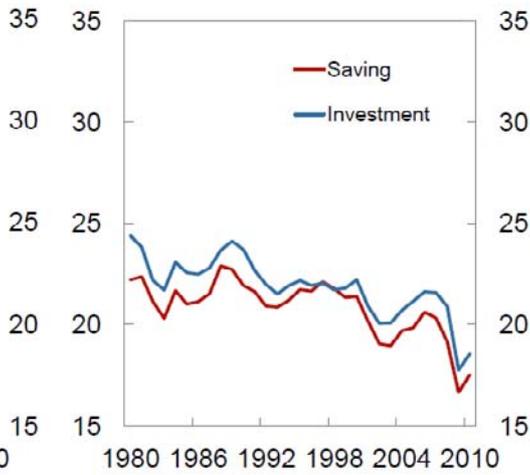
# Saving and investment as a share of GDP<sup>1)</sup>

Emerging economies and developing countries



<sup>1)</sup> 1980 – 2010

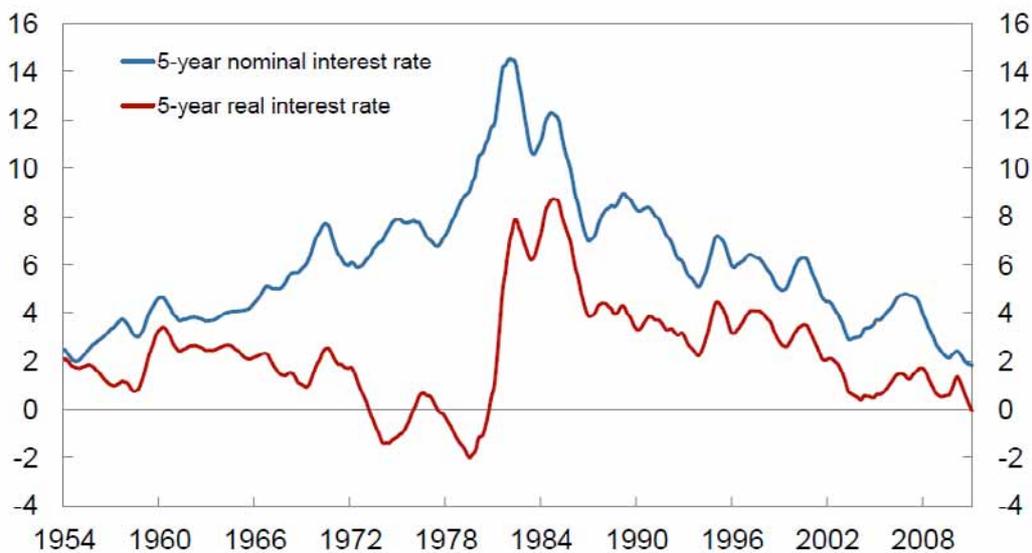
Advanced economies



Sources: IMF and Norges Bank

# US – long-term interest rates

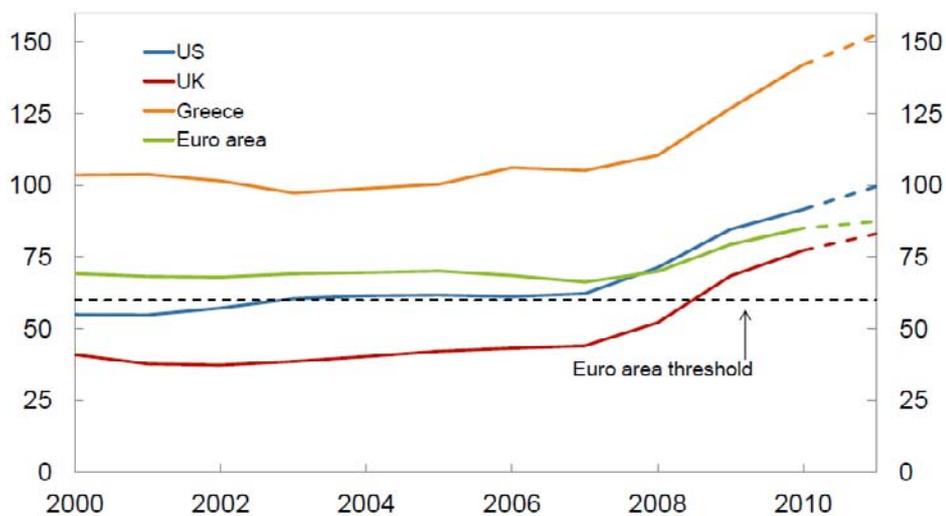
Per cent. March 1954 – April 2011



Sources: Thomson Reuters, Federal Reserve Board and Norges Bank

## Public debt

As a share of GDP. Per cent.<sup>1)</sup>



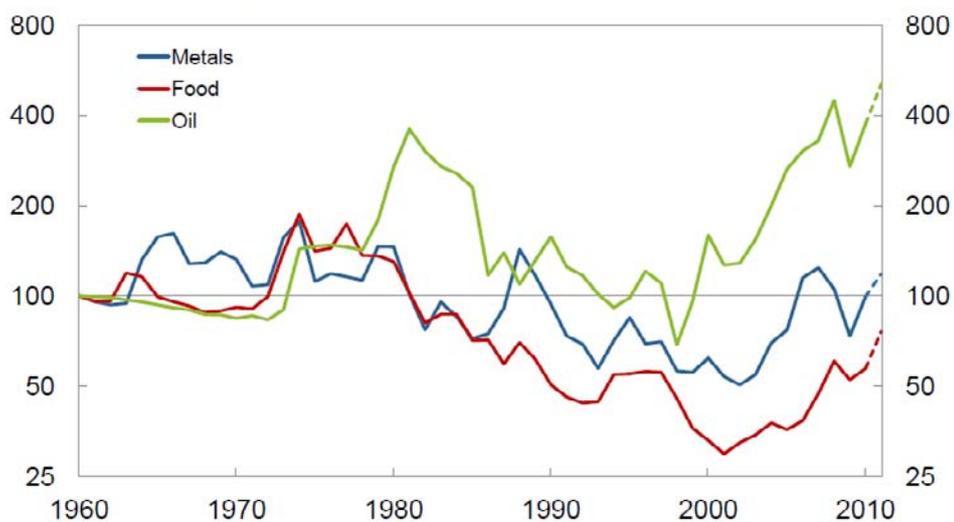
<sup>1)</sup> IMF projections for 2011. Broken lines

Source: IMF World Economic Outlook April 2011

## Real prices for metals, food and oil

In USD. US figures deflated by the CPI. Index. 1960 = 100.

1960 – 2011.<sup>1)</sup> Logarithmic scale

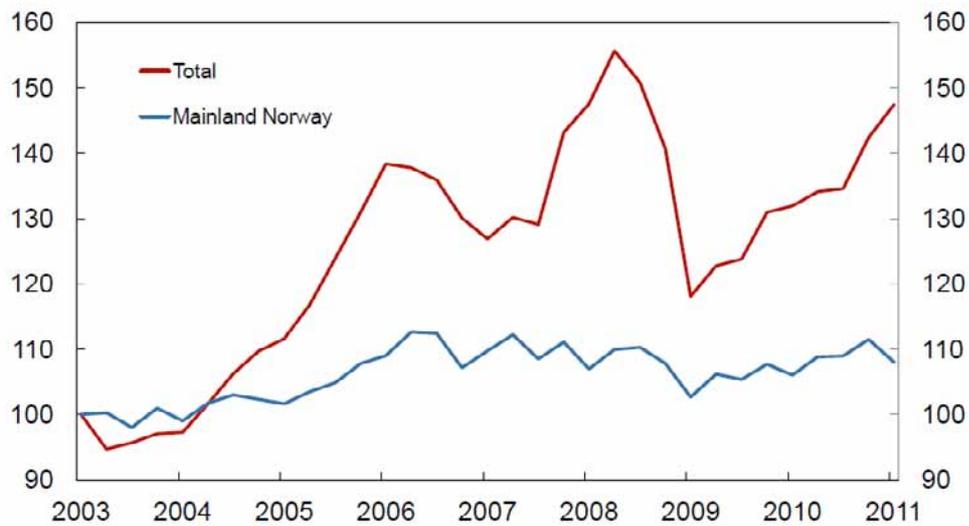


<sup>1)</sup> Figures for 2011 show the average so far in 2011

Sources: Thomson Reuters and Norges Bank

## Norway's terms of trade

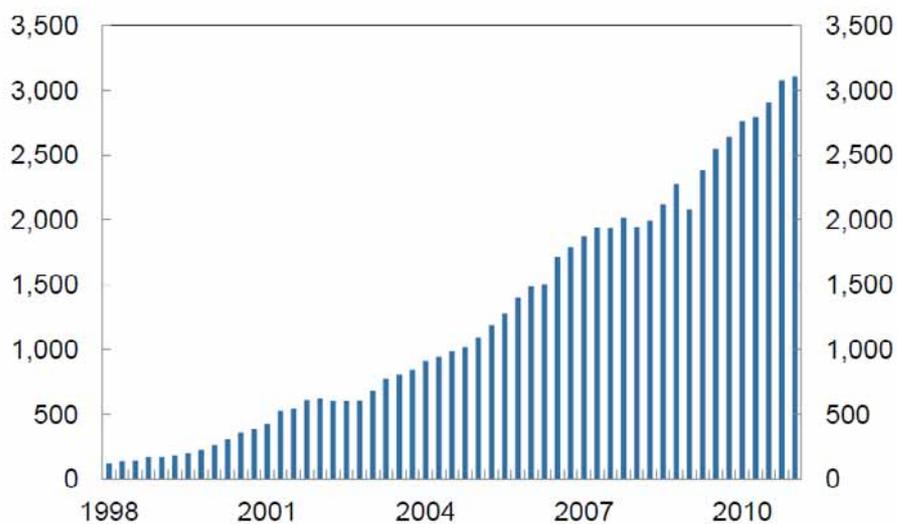
Index. 2003 Q1 = 100. 2003 Q1 – 2011 Q1



Sources: Statistics Norway and Norges Bank

## Market value of the Fund

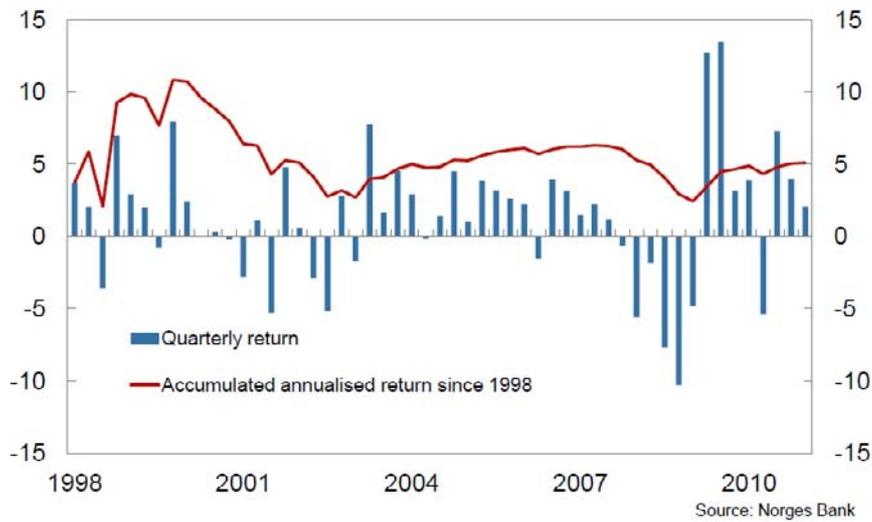
In billions of kroner. 1998 Q1 – 2011 Q1



Source: Norges Bank

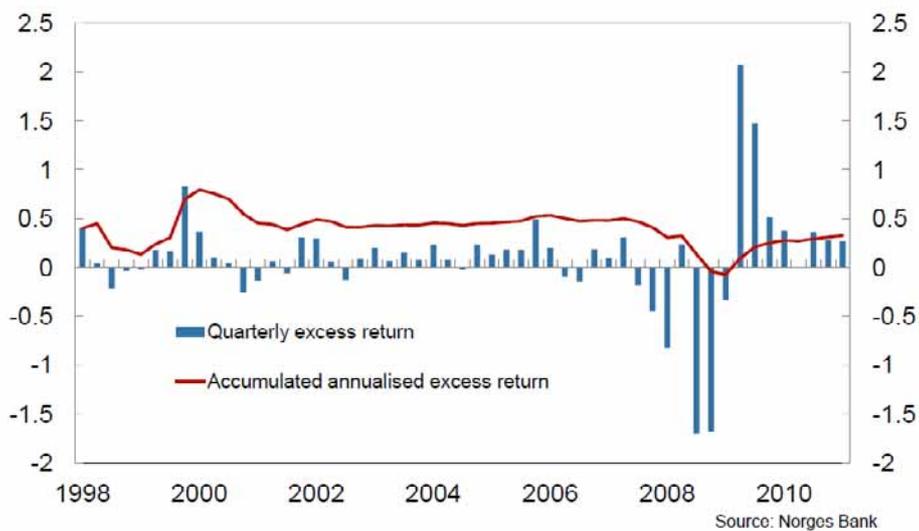
## Quarterly return and accumulated return on the Fund

Per cent. 1998 Q1 – 2011 Q1



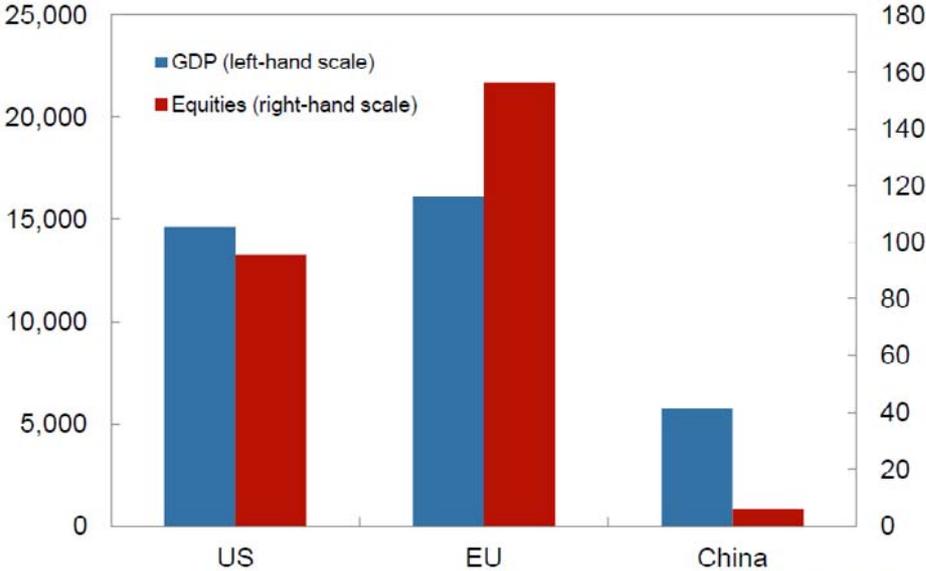
## Quarterly excess return and accumulated annualised excess return on the Fund

Per cent. 1998 Q1 – 2011 Q1



# GDP and regional allocation of equities in the Fund

In billions of USD



Sources: Norges Bank and IMF