Øystein Olsen: Economic perspectives

Address by Mr Øystein Olsen, Governor of Norges Bank (Central Bank of Norway), to the Supervisory Council of Norges Bank and invited guests, Oslo, 16 February 2012.

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Demanding time for Europe

> *"The year started without much hope, and it had to be expected that the pressure on business and industry would intensify, but however dim the prospects might have appeared, the outcome was darker than anyone had imagined. I need not enumerate the successive collapses that spread from country to country."*

This was the opening of the annual address delivered by Norges Bank Director Nicolai Rygg 80 years ago. Britain had abandoned the gold standard and one country after the other, including Norway, followed suit. Interest rates had increased. Financial markets were turbulent.

Although the tremors were on a greater scale in the 1930s, Nicolai Rygg's description could serve as an apt retrospective today as well. In the course of the past two years we have seen economic problems spread across debt-laden countries in Europe. Greece was the first country to experience a financial collapse. The Greek government had to resort to external financial assistance in spring 2010, followed by Ireland and Portugal. The turbulence spread further in autumn last year. Interest rates on public debt rose markedly for Spain and Italy and thereafter Belgium and France.

Several euro area countries are now struggling with soaring public debt and weak competitiveness in addition to restructuring and public budget cuts. Confidence in some countries' ability to service debt has been weakened. The monetary union is under pressure. (Chart 1: Current account)

The crisis has its roots in global trade imbalances, with high saving in emerging economies and comparably large deficits in many advanced countries. The imbalances drove down long-term interest rates to very low levels and the appetite for risk grew. Inadequate financial sector regulation led to a further deepening of the imbalances. (Chart 2: Yield on 10-year government bonds)

Four years after the financial crisis engulfed the world, a European version has now emerged. Both market participants and the authorities failed in their assessments after the introduction of a single currency. Prior to the introduction of the Economic and Monetary Union, there were wide differences between interest rates facing different European countries, which primarily reflected different inflation expectations across countries. But through the 1990s, long-term interest rates drifted down to German levels. Over the next 10 years, sovereign interest rates were fairly similar – and very low – for all euro area countries despite wide differences in debt levels, budget deficits and growth rates. Market participants did not take into account differences in sovereign creditworthiness. Sovereign debt was treated as virtually risk-free, both in the markets and by the authorities. The period contrasts with the recent two to three years during which interest rates on sovereign debt have widened sharply. For many countries, interest rates have reached very high levels. In retrospect, we see that market participants failed in their risk assessment through the ten years following the introduction of the euro.

Economic policy also failed. EU rules relating to budget deficits and public debt were disregarded early on when Germany and France exceeded the limits they had so eagerly advocated when the European Monetary Union was established. Other countries followed their example. Low interest rates made it easy to finance deficits by issuing new debt.

When financial markets collapsed in autumn 2008, the authorities had to intervene. Bail-out packages for banks shifted debt from private to public hands. Governments increased spending to curb the fall in activity.

But Keynesian policy – increased spending to stimulate demand during a downturn – requires a willingness to exercise fiscal restraint during an upturn. Many countries had large budget deficits and high debt already before the crisis despite many years of prosperity. Limited growth capacity in the private sector also came into evidence when some countries could no longer stay afloat on borrowed funds. Good times turned into bad with the need for crisis-related measures. The burden became heavy to bear.

Many countries are now attempting to rein in large deficits and rising government debt. Structural reforms are being implemented in Europe. Pension rules are being tightened and tax systems are under review. The cost of such reforms would have been lower in good times. (Chart 3: Current account for selected countries)

A lack of fiscal discipline is not the only factor behind the relatively high interest burden facing Greece, Portugal, Spain and Italy. Public deficits rose in tandem with a fall in private saving. Countries lived beyond their means and accumulated current account deficits and substantial debt while their debt-servicing capacity weakened. The result is a deterioration in their creditworthiness. (Chart 4: Current account and fertility rate)

The combination of large deficits and growing demographic problems is particularly challenging, as is the case for southern European countries where fertility rates are well below the replacement rate and lower than the average for advanced countries.

The demographic challenge will be even greater ahead. In some of the countries the number of pensioners will be close to the number of economically active. The basis for economic growth is thus weakened. The burden of rising debt and pension payments will be heavier. Financial markets are already now demanding a high interest rate on loans to troubled countries.

It takes a long time to reverse demographic trends. The ideals associated with fertility from the mythologies of Aphrodite and Venus might provide some impetus – not only in Mediterranean countries, but in most OECD countries. Financial incentives would probably be more effective, however. Norway, with favourable support schemes for families with children, has a relatively high birth rate. In other European countries, there is a risk that these hard times will exacerbate the demographic challenge. Unemployment, in particular among youth, has risen sharply and many people have a dark view of the future.

In the meantime, the acute crisis in the euro area must be addressed. Banks and governments have fallen into a vicious cycle. Banks were rescued by extensive government measures during the financial crisis, but banking sector exposure to sovereign debt is substantial. This debt has not vanished, but shifted hands. When a country's debt-bearing capacity is called into doubt, it also has an adverse impact on banks.

The events of recent years have brought fresh experience and reminded us of several historical lessons.

Economic policy must be sustainable. Governments must save during upturns in order to weather downturns. At the same time, there are limits to what economic policy can accomplish if the economic foundations are eroded. A competitive business sector is crucial to maintaining growth and welfare. This also applies to Norway.

The financial crisis was a reminder of how risk can be mis-assessed. Moreover, risks that operators seem to be managing well individually may prove to be a considerable strain on the financial system as a whole, which warrants contemplation of the new macroprudential surveillance framework that is now in the making.

Norway, which is in a surplus and net asset position, faces some particular challenges. As investor and manager of the Government Pension Fund Global, we have seen that prices and yields can react strongly to uncertainty about the future. In light of the financial turbulence and shifts in the world economy, it is now appropriate to look at the investment strategy in connection with the management of our financial wealth.

New steps in the management of financial wealth

(Chart 5: Government Pension Fund Global) Norway invests a large proportion of its petroleum revenues in international equity, bond and real estate markets via the Government Pension Fund Global. Norway's welfare must continue to build on the value created within its own borders. The investments via the Fund provide us with a share of the value created outside our borders.

The Fund should be invested with a view to maximising future purchasing power. At the same time, investments must be diversified in order to reduce the risk of losses also during periods when markets are shrouded in fear and uncertainty.

As investor, Norway is different from most others. The Fund does not need to borrow in order to invest. There are no short-term liquidity requirements or regulation that can force it to make unfavourable investment choices. These distinguishing features allow the Fund to apply a long-term horizon – to sit tight in periods of heightened uncertainty. Hence, equities make up the largest share of the Fund's investment portfolio as equities are expected to provide a higher return than bonds over time.

As a long-term investor, the Fund is well poised to take advantage of large swings. For us it can be profitable to buy equities following a price decline, if expected returns are high. During the financial crisis, the Fund's ownership share in global production doubled. Such a counter-cyclical investment strategy – also known as rebalancing – can be implemented more effectively if Norges Bank is given wider responsibility for balancing the Fund's overall risk and return. A simplified, publicly available regulation for rebalancing the Fund would be an advantage.

The value of the Fund – in krone terms – is continuously updated on our website and is now close to NOK 3.5 trillion. This is almost twice as high as mainland annual GDP. The size of the Fund allows us to take advantage of investment opportunities worldwide. The Fund has recently started investing in real assets. In the first round 5 percent will be allocated to real estate. (Chart 6: Growth in GDP)

The world's economic geography is changing. While growth in advanced economies has been weak and slowing, growth is robust in Latin America and Asia. Several countries in Africa are now catching up. (Chart 7: Growth in GDP and real return on Government Pension Fund Global)

In line with the guidelines, the Fund has considerable ownership interests in Europe. Its holding in an average European company is around three times as high as in the Americas and Asia. The chosen regional distribution is related to Norway's import pattern and can be viewed as a form of currency hedging. But the result has been that a large proportion of the Fund is invested in a region that has experienced weak growth over the past decade.

A more even distribution of the Fund's ownership will provide us with the opportunity to take part in the value creation in regions with strong growth. This implies a reduction in the allocation to European equities and an increase in the allocation to the Americas and emerging economies. High economic growth in Asia can provide sound returns on investments in that region even though today's equity prices already reflect expectations of higher growth in eastern than in western regions. A more even distribution will nonetheless improve the trade-off between risk and expected rewards.

The currency composition of the bond portfolio should also be adjusted. According to the guidelines, the distribution in the bond portfolio should be based on the volume of sovereign debt issued by each country. This has resulted in rising loans to countries that have issued new debt. The risk linked to that strategy came into evidence in the wake of the financial crisis. A distribution of government bonds that is based on GDP will reduce this risk. Moreover, it has been proposed that government debt issued by emerging countries also be included in the portfolio. The consequence of this is the same as for the equity portfolio, that is to say a reduction in the Fund's European holdings.

The financial crisis showed that many securities move in tandem. The number of bonds in the portfolio has been more than halved over the past few years. We can likely achieve the same risk distribution with substantially fewer securities. This will also reduce operational risk and bring down management costs in the long run.

Petroleum revenue spending

In the book *"Over Evne"*[1] [Beyond our power] about the history of the Ministry of Finance, the historians Einar Lie and Christian Venneslan describe how the discovery of oil at the end of the 1960s brought bright prospects for the future and considerable eagerness to spend the revenues. Oil would give us a *"qualitatively better society"*[2]. But the oil nation stumbled at the start. The current account surplus at the end of the 1960s had been reversed to a deficit of 12 percent of GDP by 1977. The deficit was three times as large as that recorded by Italy and Spain last year. The International Monetary Fund came knocking at Norway's door. Fiscal policy had to be tightened and many Norwegians experienced a decline in income.

Norway was hit by oil price shocks in the following years and economic reforms were implemented in several areas. After a period it became clear that the central government budget would be in surplus and that transfers would be made to the Fund.

Norway's experience from its first 30 years as an oil-producing nation led to the introduction of the fiscal rule, which has been a key element of Norwegian economic policy for the past decade. Report no. 29 to the Storting of 2001 laid down guidelines for the phasing-in of petroleum revenues into the Norwegian economy, establishing two main principles: economic policy must contribute to *stable economic developments* and be *sustainable over time*.

By linking petroleum revenue spending to the expected real return on the Fund – and not to current petroleum revenues – the fiscal rule provided for a gradual and sustainable phasing-in of the revenues. If we can restrict spending to the return, the Fund will never shrink. Norway will also be less vulnerable to fluctuations in current petroleum revenues. (Chart 8: Effect on the size of GPFG of change in oil price and return)

In the first ten years after the establishment of the fiscal rule, the pace of the Fund's growth was determined by oil prices. Prospects in 2001 indicated that a 25 percent higher oil price over a 10-year period would increase the size of the Fund by almost NOK 800 billion. Uncertainty with regard to the return on the Fund was far less important for growth.

This situation will change as the Fund grows and oil and gas production declines. From 2020 to 2030, the oil price will play a less prominent role for the size of the Fund, while the return on the Fund will be all the more important.

In the initial years, the actual return, adjusted for inflation and costs, was close to 4 percent. In recent years, with the financial crisis and the sovereign debt crisis, the real return has been lower, averaging about 2½ percent since 1998.

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1 Source: Lie, E. and C. Venneslan: Over evne. *Finansdepartementet 1965–1992* [Beyond our power. Ministry of Finance 1965–1992]. Pax forlag, 2010.

2 See Report no. 25 to the Storting (1973-74): "Petroleumsvirksomhetens plass i det norske samfunn" [The role of petroleum activity in Norwegian society].

We should be careful about taking a rear-view mirror approach to forming expectations about the future. Equity prices fluctuate considerably and there is a possibility that the results of the past few years will be counterbalanced by good years ahead. But changes in the global economy affect the growth outlook and the balance of risks, and hence financial market returns as well. (Chart 9: Real return on 10-year government bonds)

The yield on the presumably safest long-term government bonds can provide a basis for estimating the return on the Fund. Returns exceeding this will reflect the risk we are willing to take.

In 2001, real interest rates on long-term government bonds averaged around 3 percent internationally. Real interest rates have since fallen and long-term real interest rates are now at a historical low of between 0 and 1 percent.

At the moment, it would seem that economic growth ahead will be more modest than in the favourable pre-crisis years. We must therefore be prepared for an extended period of lower returns, even though growth and financial market returns do not always go hand in hand.

Over time, we expect equities to yield a higher return than bonds. Over the past few years, the Fund has increased its allocation to equities, compensating to some extent for low bond yields. However, the excess return on equities must be considerable to keep up the overall return on the Fund. This is not impossible, but perhaps more than we can expect. A bolder investment strategy could compensate for low interest rates, although the risk of substantial losses would also increase. This is hardly a tempting path. (Table: Estimated real return)

Today's situation is different from when the fiscal rule was drawn up in 2001. At that time, a real return on the Fund of 4 percent, or a little higher, based on the then prevailing distribution between equities and bonds, was a reasonable assumption. Today, calculations yield a lower figure for expected real return[3].

The real return on bonds in the Fund's portfolio can now be estimated at 1 percent. With a normal risk premium on equities, the real return on the whole Fund can be quantified at 3 percent. There is a possibility that the real return will be higher, but it may also be lower.

If we spend more than the annual return on the Fund, we will be eating into the savings portion. If the return on the Fund actually proves to be 3 percent, we will have drained almost NOK 1 trillion from the Fund over the next 20 years with the current 4 percent rule. This corresponds to the value of the large North Sea oil discovery in the Johan Sverdrup field.

The phasing-in of petroleum revenues through the public sector has the effect of crowding out exposed sectors. Even though petroleum revenues are phased in gradually, a phasing-out of manufacturing and other private industries may not be as smooth. Entire industries could be lost. If spending proves to be excessive, such structural changes may be difficult or impossible to reverse.

The conclusion is that a more robust approach would now be to base fiscal policy on an annual expected real return on the Fund of 3 percent. Such an adjustment would underpin the main principles that were behind the establishment of the fiscal rule – *stability and sustainability.* (Chart 10: Structural non-oil deficit and different rules for withdrawal from GPFG)

In 2011 the structural non-oil budget deficit was about 3 percent of the Fund, which is close to such a new path. Adapting petroleum revenue spending to a lower expected return should not therefore be particularly demanding. If we wait, a necessary policy adjustment could be far more painful at a later date.

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[3] See Norges Bank Staff Memo 6/2012.

Challenges to monetary policy

Central banks in other countries are deploying strong measures to buoy up economic activity and inflation. Key interest rates in many countries are close to zero. Central banks in the US, UK and Japan have made large-scale bond purchases and thereby expanded their balance sheets in order to push down long-term interest rates. The European Central Bank (ECB) is still the bankers' bank – not the government's bank. But the ECB has also stretched itself, for example by providing long-term loans to banks, which must be seen in the light of low growth in Europe.

The EU is working on measures to restore financial market confidence – and public confidence. In March this year, 25 countries are to sign the fiscal compact – an agreement on stricter surveillance of fiscal policy and binding deficit limits. Banks have been instructed to increase their core capital. Both measures could contribute to improved budgetary discipline in the public as well as the private sector the next time they are tempted to overspend.

The Norwegian economy is still well equipped to withstand the negative effects of the financial crisis. Oil prices are high and are in large part behind Norway's favourable terms of trade. Growth is being sustained by high activity in the oil industry. We have room for manoeuvre in economic policy. However, a number of enterprises are feeling the impact of the downturn abroad. Some segments of the export industry are feeling the effects of lower turnover and a strong krone. At the same time, house prices and household debt are still rising.

Investors' view of the economic outlook has improved since the beginning of the year, and financial market funding has been more accessible. Banks should make use of the opportunity to obtain more long-term funding. This will increase their resilience to any further deepening of the crisis in Europe. The current optimism may be fragile. Should credit markets dry up again, Norges Bank is prepared to implement measures to enable banks to maintain normal credit standards. However, liquidity provision by Norges Bank should not replace sound liquidity management in banks or banks' long-term market funding. Any decisions regarding the use of the government's or taxpayers' creditworthiness to enable banks to obtain more long-term funding are the prerogative of the government and the Storting (Norwegian parliament). (Chart 11: Underlying inflation)

The operational target of monetary policy is annual consumer price inflation of close to 2.5 percent over time. Recently, inflation has been low, close to 1 percent. Inflation will be brought back to target, but how long this will take depends on the disturbances to which the economy is exposed and the effects on the prospects for the path for inflation and the real economy ahead. (Chart 12: Norges Bank's key policy rate)

In order to prevent inflation from becoming too low and to dampen the impact of weaker developments abroad on the Norwegian economy, the key policy rate was reduced to 1.75 percent in December 2011. With high money market premiums and elevated credit premiums, low key rates are not passing through fully to banks' lending rates. The difference between various lending rates is unusually wide at present. Many households pay a mortgage interest rate of around 4 percent, and rates on corporate loans are between 5 and 6 percent.

Monetary policy is the first line of defence in demand management. Norges Bank still has room for manoeuvre in interest rate setting – in both directions.

The question nonetheless remains of whether it is desirable to use monetary policy to accelerate the pace of inflation when the countries around us are in a recession. Even if the krone depreciates somewhat, relatively high cost growth in Norway that could quicken the pace of inflation might lead to a further deterioration in competitiveness. This cannot be the way to go. Moreover, low interest rates over a prolonged period tend to amplify an upward spiral in house prices and lending. Imbalances that build up in credit and property markets can have severe ripple effects further ahead, with a substantial impact on output and employment. Many Americans and Europeans have recently experienced this, as Norwegians did 20 years ago.

Furthermore, external conditions are not likely to help push up inflation in Norway in the period ahead. Many countries are facing the prospect of stagnation or decline, and the rise in prices for imported goods is low.

Our objective is inflation of close to 2.5 percent over time. Inflation will be brought up gradually, but not so rapidly as to generate imbalances in the economy. Under the current outlook, it will likely take several years before inflation is back on target.

New measures to promote financial stability

There is an inscription on Åmodt Bridge here in Oslo– *"100 mand kan jeg bære, men svigter under taktfast marsch"* [A hundred men I can bear, unless in step they march]. Bridge designers have long known that when a large number march across a bridge in step, self-reinforcing oscillations can arise, causing the bridgeheads to collapse.

Likewise, financial market participants can trigger self-reinforcing economic fluctuations. During upturns, banks tend to vie with one another to lend. House prices and other property prices rise, fuelling credit growth. Risks and vulnerabilities in the financial system increase. In downturns, credit lines are tightened, and households and enterprises face stricter credit standards. When financial market participants march in step, fluctuations in the economy are amplified – potentially forming bubbles that burst. The events of autumn 2008 were a reminder of this.

As long as the music is playing, individual banks will be tempted to get up and dance. Banks and investors will not necessarily take into account the overall risk in the financial system.

The consequences came into clear evidence during the financial crisis: banks had inadequate equity capital, excessive short-term wholesale funding and insufficient buffers of highly liquid assets. A new and tighter international regulatory framework is intended to remedy this situation. Stricter capital adequacy and liquidity coverage standards are in the offing. The authorities will also be able to tailor banks' capital requirements to the overall risk in the financial system. During upturns, these requirements can be raised, so that banks will have to hold more capital for their loans. This will smooth out lending growth and better equip banks to bear losses during downturns. It will ease the impact of the marching steps on the bridge.

There will be a need for higher capital buffers when economic growth is solid and debt builds up. This may restrain the build-up of imbalances. But when there are no clouds on the horizon, it is easy to lose sight of more long-term considerations. The government authorities should therefore provide a clear mandate that ensures independence and delegates the responsibility for determining capital buffers. In this regard, we can build on the experience with the framework for monetary policy. And any change in capital requirements must be made on the basis of an assessment of the overall risk in the financial system – not only in a single institution.

During the financial crisis, extensive government bank bailouts were necessary in many countries in order to sustain economic activity. When the bridge is unsteady, the authorities need to stabilise it. But when taxpayers foot the bill, banks take on excessive risk. Not until owners have to bear losses will banks' balance sheets fully reflect risk.

To achieve this, there is an international effort to improve tools for dealing with crises. It should be possible to wind up banks without causing major economic shocks and without governments assuming banks' losses. Those who take risks must also bear them.

There are high ambitions behind the new financial regulations. However, it would be unrealistic to believe that we can eliminate all sources of financial turmoil. Unlike the sergeant, we cannot give the *"route step march"* command to break the cadence when bridges are to be crossed. Our ambition is not to control every step on the bridge. But we can make considerable headway by reinforcing the foundations of the financial system and cushion the load from marching in step.

Conclusion

I began by quoting Nicolai Rygg's annual address from 1932. Near the end of his speech, he turns his gaze towards the future: *"Unfortunately, not much can be said about the outlook for the coming year. It appears to be shrouded in darkness."*

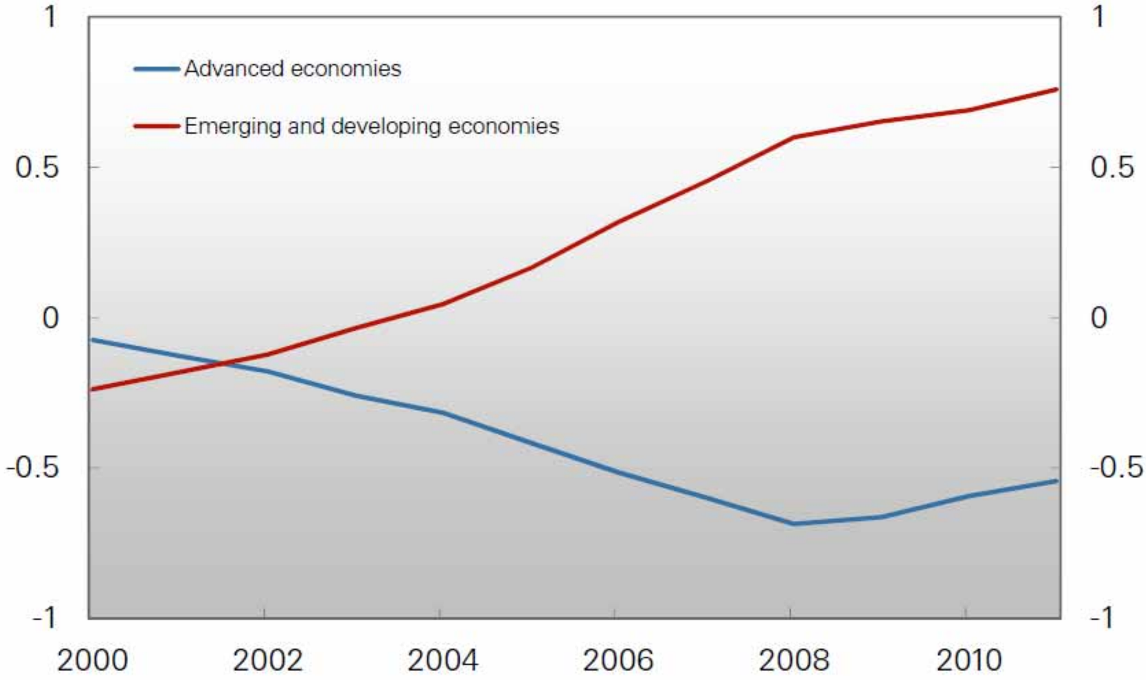
Rygg was referring to the international credit crunch and what he called *"intricate political questions".* Yet at the same time, he saw possibilities: *"Successfully solving them in a satisfactory manner will undoubtedly have far-reaching consequences in the economic and financial spheres, and the year might end better than it began."*

While times are difficult abroad in our day too, there are bright spots. Growth in Asia remains robust and some figures for the US economy have been positive recently. Europe is facing the challenge of remedying economic imbalances in the face of weak growth prospects. For many countries, demographic developments will in a few years add to the pressure on fiscal budgets. While austerity measures will improve government finances, in the short term they will stifle activity and delay a recovery. This is a very difficult balancing act. But euro area countries have no choice. There is a need to agree on measures to restore confidence in financial markets.

Just like 80 years ago, it is difficult to predict where we are heading. The Norwegian economy should be able to hold a steady course. But we will have to take into account that the return on the Fund's investments may be lower than expected a decade ago. And wage and price inflation is likely to be low for some time to come.

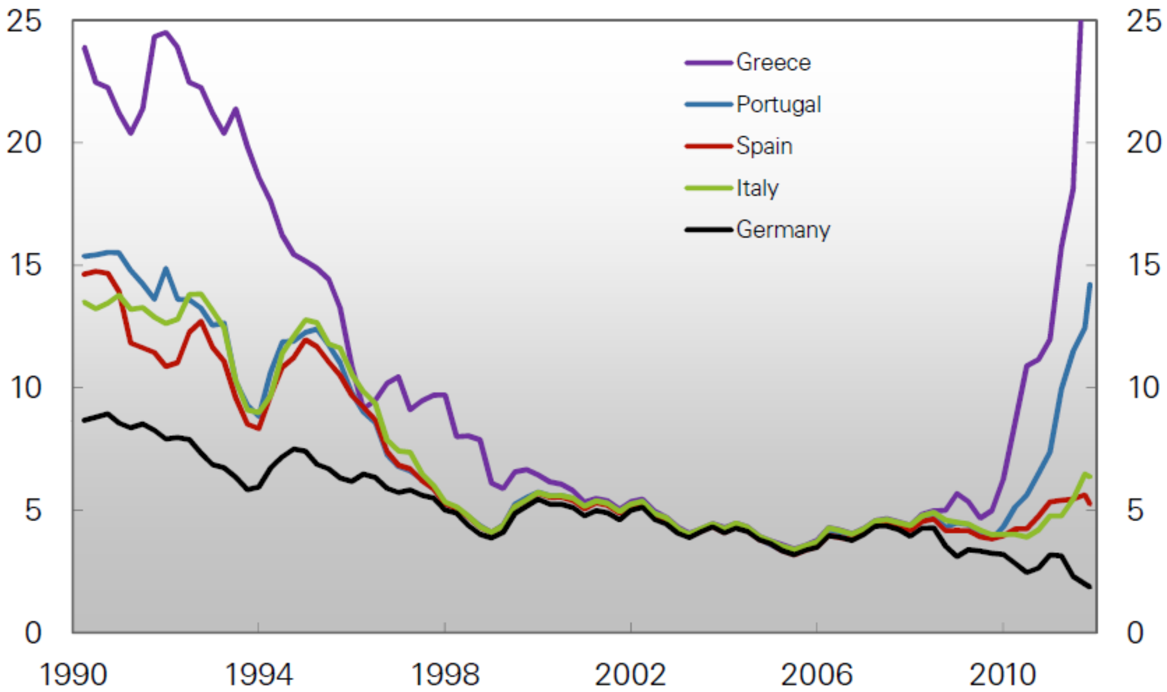
Rygg's hopes were partly realised. In Europe the crisis bottomed out in 1932. Cycles and confidence may shift rapidly and when we least expect it. After hard times come good times. Come what may.

Chart 1 Current account[1)]
10-year moving average. As a percentage of world GDP. 2000 – 2011



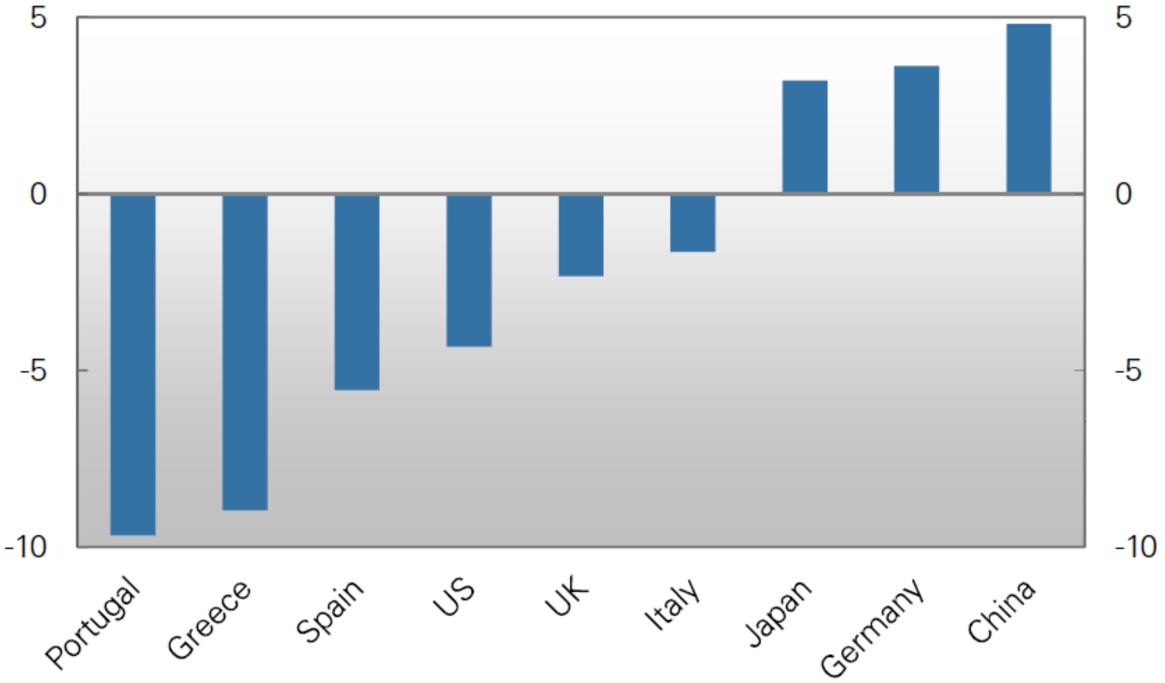
1) Estimates for 2010 and 2011
Sources: IMF and Norges Bank

Chart 2 Yield on 10-year government bonds
Percent. 1990 Q1 – 2012 Q1[1)]



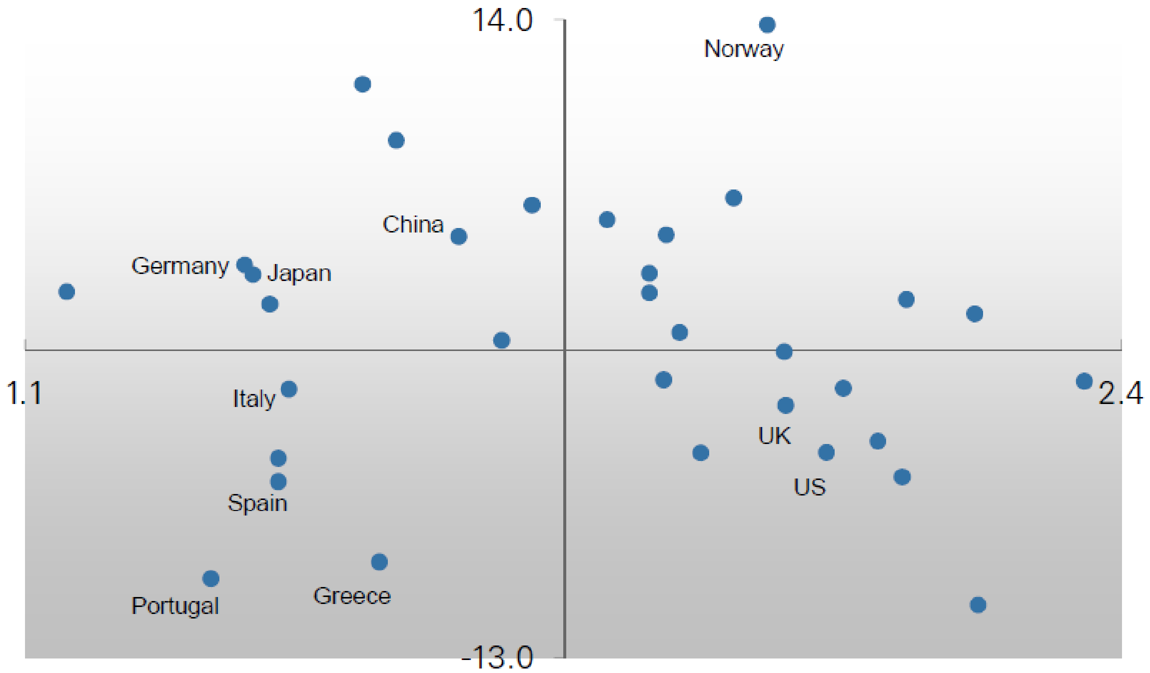
1) Figures for 2012 Q1 are the average of daily figures up to and including February 8, 2012
Sources: Eurostat, Thomson Reuters, IMF and Norges Bank

Chart 3 Current account for selected countries[1)]
As a percentage of GDP. Average 1999 – 2011



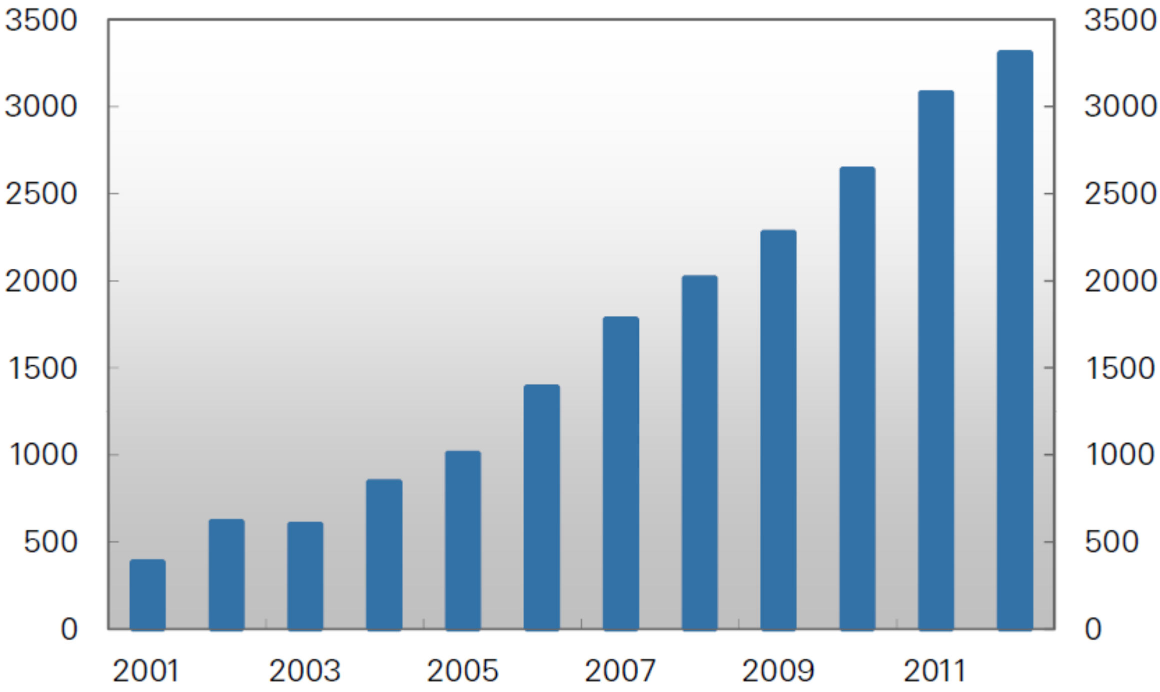
1) Estimates for 2010 and 2011
Sources: IMF and Norges Bank

Chart 4 Current account and fertility rate[1)]
Current account average 1999 – 2011. Fertility rates 2009



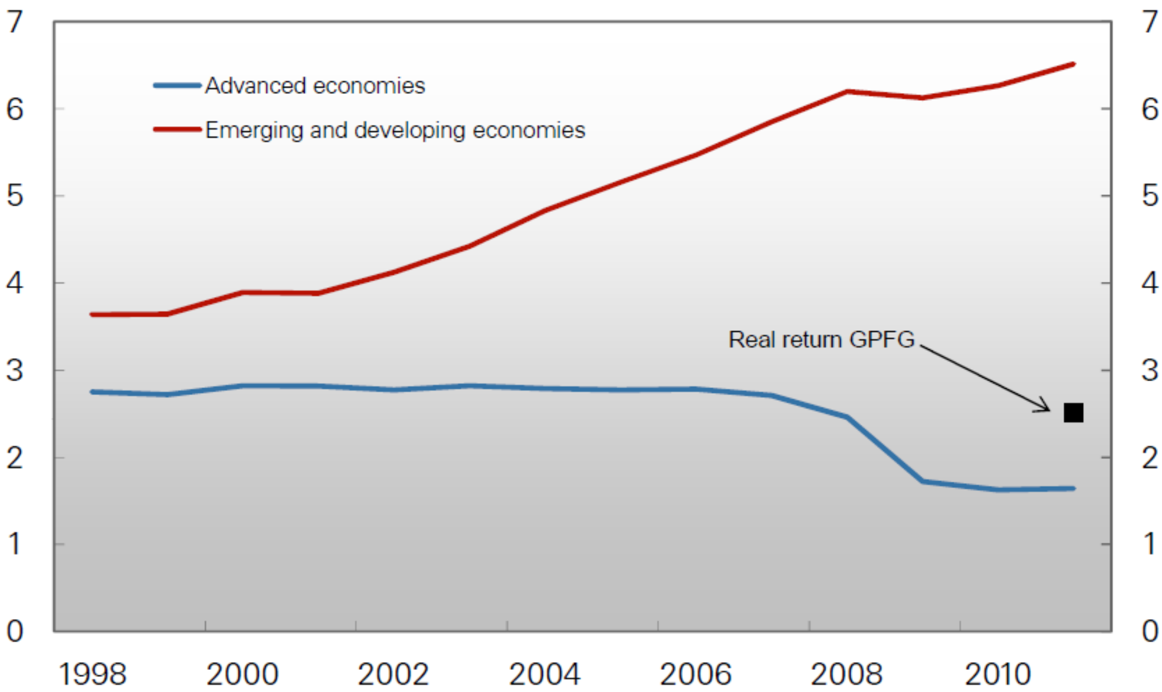
1) Current account as a percentage of GDP on y-axis and fertility rate on x-axis
Sources: IMF, OECD, World Bank and Norges Bank

Chart 5 Government Pension Fund Global (GPFG)
In billions of NOK. Value of GPFG at the start of the year. 2001 – 2012



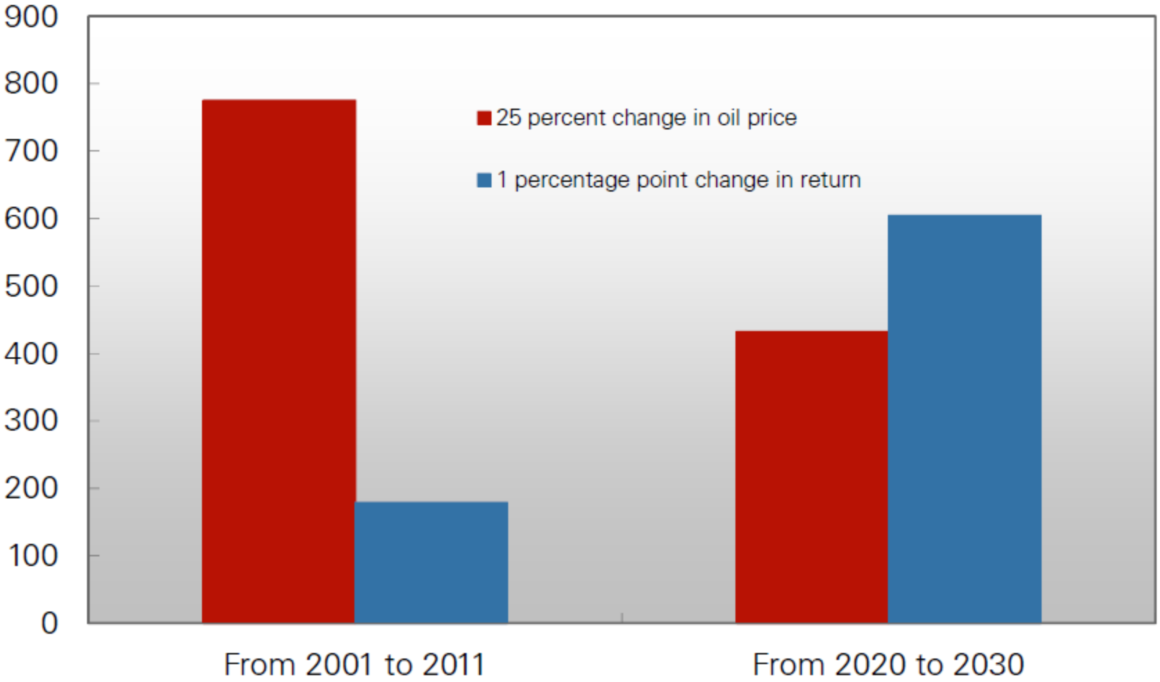
Sources: Ministry of Finance and NBIM

Chart 6 Growth in GDP[1] and real return on GPFG[2]
Percent. 1998 – 2011



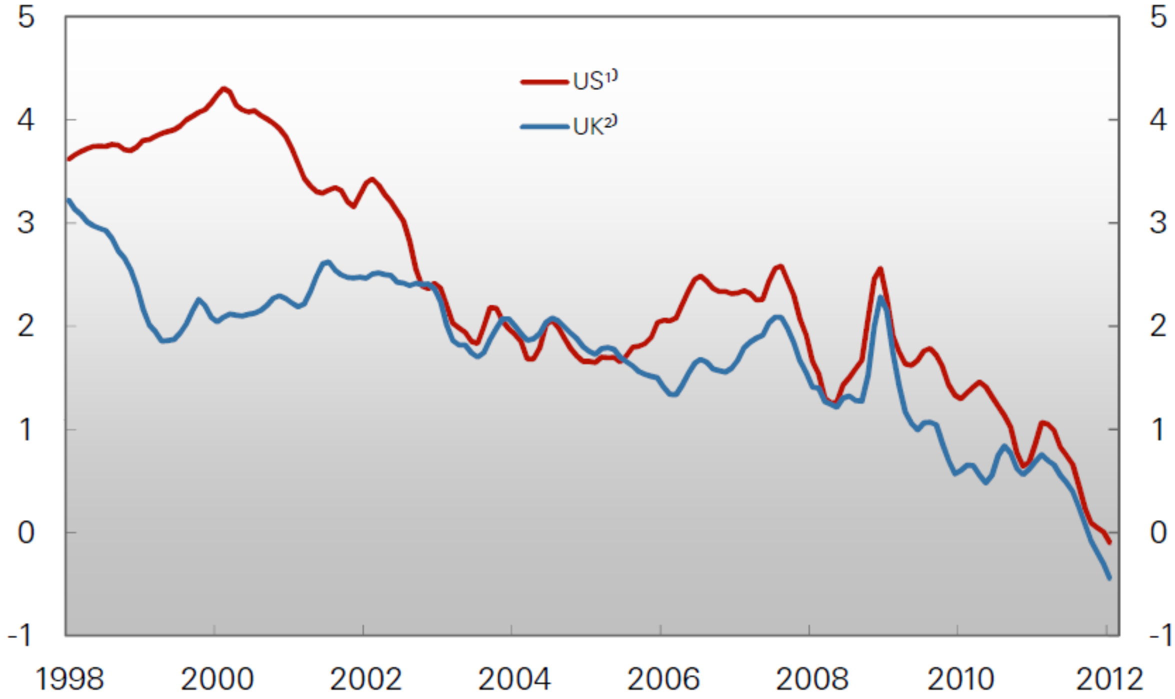
1) GDP weights. 10-year moving average. IMF estimates for 2010 and 2011
2) Government Pension Fund Global. Annualised growth (real return) since 1998
Sources: IMF and Norges Bank

Chart 7 Effect on the size of GPFG[1)] of change in oil price and return
In billions of NOK. Constant 2012 prices



1) Government Pension Fund Global. Effect on the size of Fund after 10 years.
See Norges Bank Staff Memo 6/2012
Sources: Ministry of Finance and Norges Bank

Chart 8 Real return on 10-year government bonds
Percent. 3-month moving average. January 1998 – January 2012



1) Treasury Inflation Protected Securities (TIPS)
2) Index-linked Gilts
Sources: Bloomberg and Norges Bank

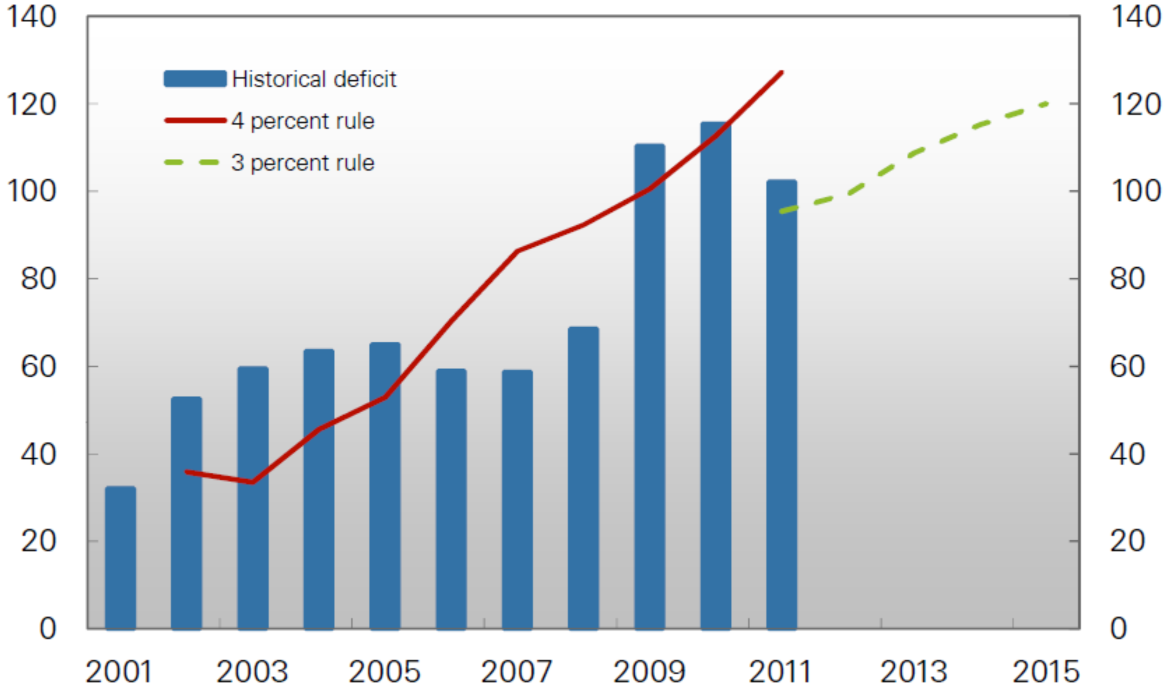
Table. Estimates of real return[1]. Percent

	2001 40% equities 60% bonds	2012 60% equities 40% bonds
Return on equities	7½	4¼
Return on bonds	3	1
Return GPFG[2]	**4¾**	**3**

[1] See Norges Bank Staff Memo 6/2012
[2] Government Pension Fund Global

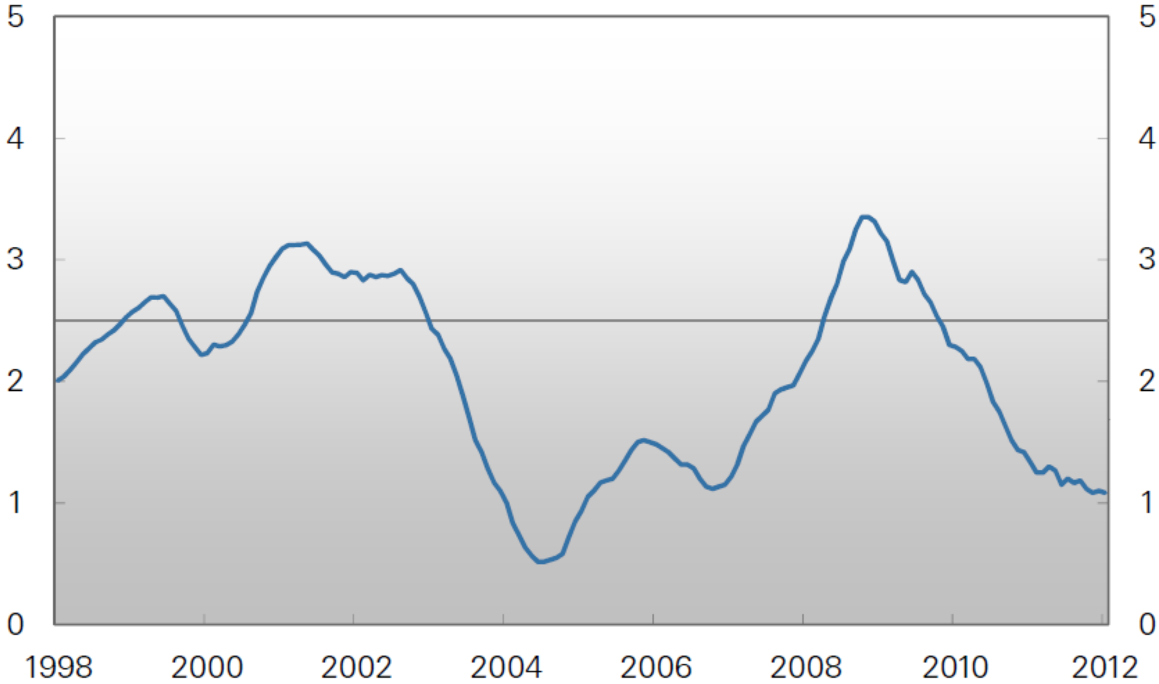
Source: Norges Bank

Chart 9 Structural non-oil deficit and different rules for withdrawal from GPFG[1)]
Constant 2012 prices.In billions of NOK. 2001 – 2015[2)]



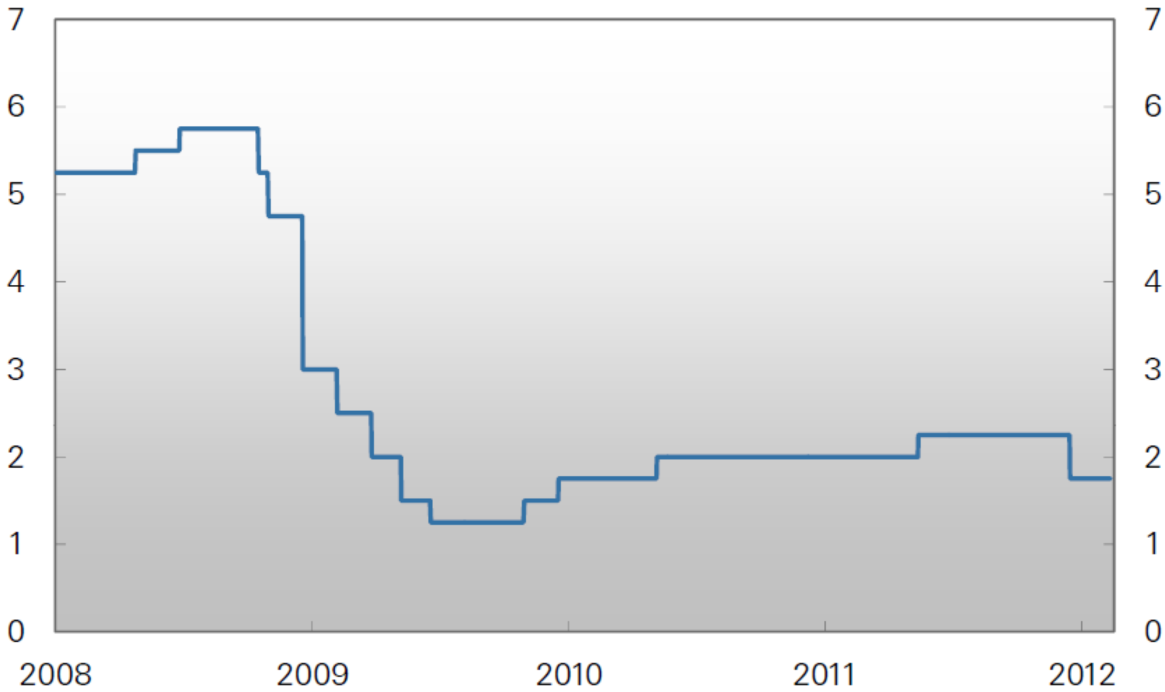
1) Government Pension Fund Global
2) See Norges Bank Staff Memo 6/2012
Sources: Ministry of Finance and Norges Bank

Chart 10 Underlying inflation[1)]
CPIXE[2)]. Percent. 12-month change. January 1998 – January 2012



1) 6-month moving average
2) CPI adjusted for tax changes and excluding temporary changes in energy prices. Real time figures from August 2008. See Norges Bank Staff Memo 7/2008 and 3/2009
Sources: Statistics Norway and Norges Bank

Chart 11 Norges Bank's key policy rate
Percent. 2 January 2008 – 15 February 2012



Source: Norges Bank