# CENTRAL BANK MONITORING – MARCH

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Monetary and Statistics Department
Monetary Policy and Fiscal Analyses Division

CZECH NATIONAL BANK

## In this issue

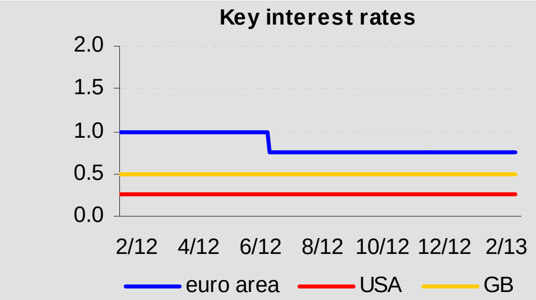
*The past quarter saw no major monetary policy surprises. Switzerland introduced a countercyclical capital buffer owing to sustained rapid growth in mortgage loans. The issue of household indebtedness was again discussed in the Swedish Riksbank. The US Federal Reserve decided to replace Operation Twist with direct bond purchases. The central banks of Sweden, Hungary and Poland lowered their key interest rates. The remaining central banks under review left their interest rates unchanged and stable rates are expected in the coming quarter for all the monitored central banks except Hungary. In* Spotlight *we look at the history of the Japanese economy and monetary policy since the 1950s. Our* Selected Speech *summarises the observations of the Governor of the Bank of Canada Mark Carney on the role of economic agents' expectations from the central bank perspective*.

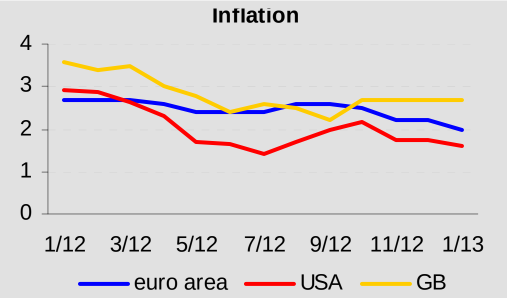
## 1. LATEST MONETARY POLICY DEVELOPMENTS AT SELECTED CENTRAL BANKS

### Key central banks of the Euro-Atlantic area

| | Euro area (ECB) | USA (Fed) | United Kingdom (BoE) |
|---|---|---|---|
| **Inflation target** | < 2%[1] | 2%[2] | 2% |
| **MP meetings (rate changes)** | 10 Jan (0.00)<br>7 Feb (0.00)<br>7 Mar (0.00) | 12 Dec (0.00)<br>29–30 Jan (0.00) | 9–10 Jan (0.00)<br>6–7 Feb (0.00)<br>6–7 Mar (0.00) |
| **Current basic rate** | 0.75% | 0–0.25% | 0.50% |
| **Latest inflation** | 1.8% (Feb 2013)[3] | 1.6% (Jan 2013) | 2.7% (Jan 2013) |
| **Expected MP meetings** | 4 Apr<br>2 May<br>6 Jun | 19–20 Mar<br>30 Apr–1 May | 3–4 Apr<br>8–9 May<br>5–6 Jun |
| **Other expected events** | 6 Jun: publication of forecast | 17 Apr: publication of Beige Book | 15 May: publication of Inflation Report |
| **Expected rate movements[4]** | → | → | → |

[1] ECB definition of price stability; [2] January 2012 definition of inflation target; [3] flash estimate; [4] direction of expected change in rates in coming quarter taken from Consensus Forecast survey.




The **ECB** left its policy rate unchanged at 0.75%, although it did discuss lowering it. The inflation risks are broadly balanced. Eurostat's GDP growth estimate indicates a contraction of 0.6% quarter on quarter for 2012 Q4, but recent data from the economy suggest that economic activity should start stabilising in the euro area in the first part of 2013. A gradual recovery is then expected, supported by strengthening global demand and accommodative domestic monetary policy. The ECB projections foresee average annual real GDP growth in a range between -0.9% and -0.1% in 2013 and between 0.0% and 2.0% in 2014. The inflation forecast is in a range between 1.2% and 2.0% in 2013 and between 0.6% and 2.0% in 2014.

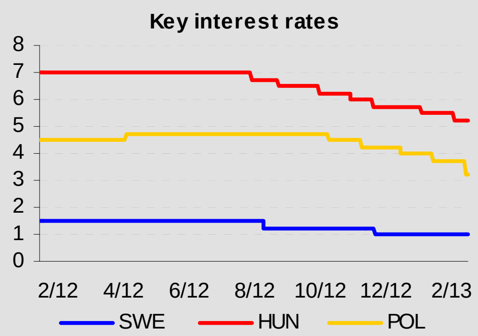
The **Fed** left its key rate unchanged. Moreover, the FOMC said it would keep rates unchanged at least as long as the unemployment rate remained above 6.5%, inflation is projected to be no more than half a percentage point above the longer-run goal, and longer-term inflation expectations continue to be well anchored. Operation Twist (the sale of US government bonds with short maturities and the purchase of long-term bonds), which ended in December 2012, was replaced by a longer-term Treasury purchase of the same size (USD 45 billion per month). Information received at the end of last year suggests that growth in economic activity has paused, in large part because of weather-related disruptions and other transitory factors. The unemployment rate reached 7.7% in February. Household spending is gradually rising and the housing sector is showing signs of further improvement.

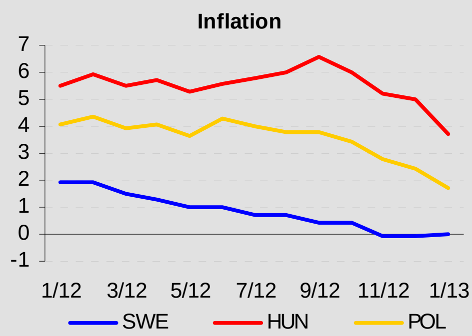
The **BoE** left its key interest rate unchanged at 0.50% and maintained its Asset Purchase Programme at GBP 375 billion. Although GDP is broadly flat, the inflation rate is still above the target and is likely to rise further in the near term. Inflation will probably remain above the target for the next two years, mainly because of changes to administered prices and the recent depreciation of sterling.

**Selected central banks of inflation-targeting EU countries**

| | Sweden (Riksbank) | Hungary (MNB) | Poland (NBP) |
|---|---|---|---|
| **Inflation target** | 2% | 3% | 2.5% |
| **MP meetings (rate changes)** | 18 Dec (-0.25)<br>12 Feb (0.00) | 18 Dec (-0.25)<br>29 Jan (-0.25)<br>26 Feb (-0.25) | 8–9 Jan (-0.25)<br>5–6 Feb (-0.25)<br>5–6 Mar (-0.50) |
| **Current basic rate** | 1.00% | 5.25% | 3.25% |
| **Latest inflation** | 0.0% (Jan 2013) | 3.7% (Jan 2013) | 1.7% (Jan 2013) |
| **Expected MP meetings** | 16 Apr<br>2 Jul | 26 Mar<br>23 Apr<br>28 May | 9–10 Apr<br>7–8 May<br>4–5 Jun |
| **Other expected events** | 3 Jul: publication of Monetary Policy Report | 26 Mar: publication of Quarterly Report on Inflation | 2nd half of March: publication of Inflation Report |
| **Expected rate movements[1]** | → | ↓ | → |

[1] Direction of expected change in rates in coming quarter taken from Consensus Forecast survey.




The **Riksbank** cut its monetary policy rate by 0.25 percentage point to 1.00% in December 2012 in response to a sharper-than-expected slowdown of the Swedish economy compared to the October projection and to falling inflation expectations. One member of the Executive Board even voted to lower the repo rate by 0.50 percentage point at the December meeting. Households' high level of indebtedness was again discussed and the board members again differed in their assessment of the risks and their effect on the economy. At the February meeting, the monetary policy rate was held unchanged.

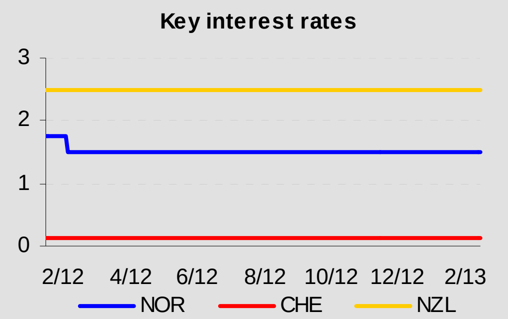
The **MNB** lowered its monetary policy rate by 0.25 percentage point rate three times in the last quarter, i.e. by a total of 0.75 percentage point to the current level of 5.25%. Inflation in January 2013 slowed more than anticipated by the MNB. The decline was related to a wide range of goods and services. An overall weakening of economic activity and subdued domestic demand are apparent in the Hungarian economy. According to preliminary data for 2012 Q4, the performance of the economy fell by more than the MNB had expected. The MNB is nonetheless predicting renewed slight growth of the economy this year.

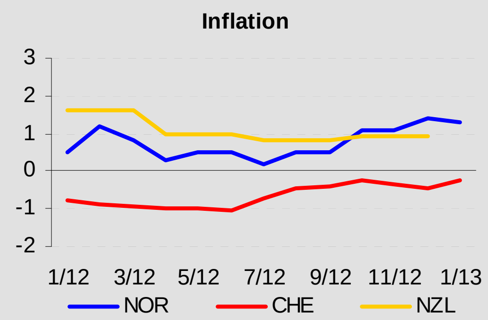
In response to the risk of undershooting its inflation target, the **NBP** cut its policy rate by three times in the last quarter, by a total of 1 percentage point to 3.25% (and by 0.50 percentage point at its most recent, March meeting). The series of rate reductions in 2013 Q1 complements the monetary policy easing cycle commenced in November 2012. There was a marked economic slowdown in 2012 Q4. Weakening consumer demand was accompanied by a slower decline in investment. Net exports continued to contribute positively to GDP growth. Low economic growth is forecasted for early 2013, accompanied by falling employment in the corporate sector and rising unemployment, which will hold back wage growth. The NBP projection foresees inflation running in the range of 1.3–1.9% in 2013. Annual GDP growth should be contained within 0.6–2.0% in 2013.

### Other selected inflation-targeting countries

| | Norway (NB) | Switzerland (SNB) | New Zealand (RBNZ) |
|---|---|---|---|
| **Inflation target** | 2.5% | < 2% | 2% |
| **MP meetings (rate changes)** | 19 Dec (0.00) | 13 Dec (0.00) | 31 Jan (0.00) |
| **Current basic rate** | 1.50% | 0–0.25% [1] | 2.50% |
| **Latest inflation** | 1.3% (Jan 2013) | -0.3% (Jan 2013) | 0.9% (2012 Q4) |
| **Expected MP meetings** | 14 Mar<br>8 May | 14 Mar<br>20 Jun | 14 Mar<br>24 Apr |
| **Other expected events** | 14 Mar: publication of Monetary Policy Report | 21 Mar: publication of Monetary Policy Report | 14 Mar: publication of Monetary Policy Statement |
| **Expected rate movements[2]** | → | → | → |

[1] Chart displays centre of band; [2] direction of expected change in rates in coming quarter taken from Consensus Forecast survey or, in the case of New Zealand, from RBNZ survey.




The **Norges Bank** left its key monetary policy rate unchanged at 1.50%. According to Deputy Governor Jan F. Qvigstad, the main reasons for this decision were weak growth among Norway's trading partners, very low interest rates abroad and low inflation in Norway. However, the Norwegian economy is growing at a solid pace. Unemployment is low and capacity utilisation is above the normal level. Risk premiums on bank bonds have declined. Banks' access to market funding has improved compared to the previous quarter.

The **SNB** is maintaining rates in the lower part of the 0–0.25% target range and is continuing to maintain a minimum exchange rate of CHF 1.20/EUR. The impact which past appreciation of the Swiss franc is having on the price level is rather stronger than had originally been expected by the SNB. According to the SNB's forecast, the rate of inflation will be -0.1% in 2013 and 0.4% in 2014. According to SNB there is no risk of inflation in Switzerland in the foreseeable future. It expects GDP growth of 1.0% in 2012 and 1.0–1.5% in 2013. Persisting growth in imbalances on the residential mortgage and real estate markets motivated the SNB to introduce a countercyclical capital buffer (see *News* for more details).

The **RBNZ** left its key interest rate at 2.50%. The inflation rate fell below the bottom of the central bank's inflation target range. This reflects subdued import price inflation due to the strengthening New Zealand dollar, whose overvaluation is currently troubling exporters. Economic activity is continuing to be affected by the weak performance of New Zealand's trading partners, although growth is also being depressed by a weak labour market and fiscal consolidation. The RBNZ expects economic growth to strengthen over the coming year, reducing spare capacity and bringing inflation slowly back towards the central bank's target.

## 2. NEWS

### ECB sets guidelines for early repayment of 3-year refinancing operations…

The European Central Bank has clarified the procedure to be followed by counterparties when they intend to make early repayment of the three-year longer-term refinancing operations allotted to them in December 2011 and March 2012. The counterparties can repay the amount of their choice. By the end of February 2013, about one-fifth of the total amount allotted had been repaid (EUR 212 billion of the total amount of EUR 1,018 billion).

### …and publishes details on securities acquired under the SMP

Following the termination of the Securities Markets Programme (SMP) and the introduction of Outright Monetary Transactions (OMTs) the ECB decided to publish the breakdown of the Eurosystem's SMP holdings per country of issuer. Italian bonds account for almost half of the total amount. The total remaining maturity averages 4.3 years.

| | Ireland | Greece | Spain | Italy | Portugal | Total |
|---|---|---|---|---|---|---|
| Nominal amount (EUR billion) | 14.2 | 33.9 | 44.3 | 102.8 | 22.8 | 218.0 |
| Avg. remaining maturity (in years) | 4.6 | 3.6 | 4.1 | 4.5 | 3.9 | 4.3 |

### Central banks once again extend existing swap arrangements

The central banks of Canada, the UK, the Eurozone, the USA and Switzerland extended their existing temporary US dollar liquidity swap arrangements and their bilateral liquidity swap arrangements until February 2014. In addition, Mervyn King of the Bank of England in February discussed the establishment of a reciprocal 3-year renminbi/sterling currency swap agreement with the Governor of the People's Bank of China Zhou Xiaochuan.

### BoJ introduces price stability target and open-ended asset purchasing method

At the beginning of 2013, the Bank of Japan introduced a price stability target and set it at 2%. At the same time, it announced new conditions for its Asset Purchase Program as from 2014 – the BoJ will purchase a certain amount of financial assets every month without setting any termination date. The central bank and the Japanese government also released a joint statement recognising that the critical challenge for Japan's economy was to overcome deflation. The current *Spotlight*, dedicated to Japanese monetary policy, provides more details.

### US Treasury's credit protection for TALF is terminated

The credit protection provided by the US Treasury for the Term Asset-Backed Securities Loan Facility (TALF) has been terminated, as the accumulated fees collected exceed the amount of loans outstanding (USD 743 million vs. USD 556 million). The total amount provided to investors under TALF, introduced in March 2009 to support credit availability in the economy, was USD 71 billion. According to the Fed, TALF supported the origination of, among other things, nearly 3 million auto loans, more than 1 million student loans and nearly 900,000 loans to small businesses.

### MNB to publish its underlying measures of inflation with monthly frequency

Magyar Nemzeti Bank has decided to publish its own measures of underlying inflation with a monthly frequency. Previously, they have been released quarterly. These indicators tend to be less volatile than the headline consumer price index, as they are adjusted for short-term factors, and thus have a key role in monetary policy. By making them publicly available, the MNB expects its transparency to be improved. The indicators covered are indirect tax-adjusted core inflation, demand-sensitive inflation and sticky price inflation.

## BoE releases results of sterling money market survey

The Bank of England published a report on developments in the sterling money market, which plays a central role in the Bank's pursuit of its monetary and financial stability policy objectives. The report gathers the results of a survey conducted in November 2012, with a survey sample comprising over 30 financial institutions. The survey reveals that there was an increase in the value of secured transactions, while the value of unsecured transactions remained roughly unchanged. The majority of transactions continued to take place at overnight maturity. Perceptions of sterling money market functioning improved slightly. The survey is conducted by the BoE on a biannual basis and was launched in May 2011. Selected results have been published in the Bank's Quarterly Bulletin. From this year on, the BoE has decided to publish them on a standalone basis.

## Financial stability issues at SNB and RBNZ

At the SNB's proposal, the Swiss Federal Council activated a countercyclical capital buffer targeted at mortgage loans financing residential property located in Switzerland. Compliance with the buffer (at a level of 1% of associated risk-weighted positions) is required as of September 2013. The activation of the buffer is motivated by strong growth in both bank credit and real estate prices over the last several years. These tendencies intensified so much during the second half of 2012 that the SNB views them as a risk to the stability of the banking sector and hence to the Swiss economy.

The Reserve Bank of New Zealand initiated a public consultation on its proposed framework for macro-prudential policy. The consultation paper sets out the proposed decision-making, governance and accountability framework, as well outlining four specific tools.

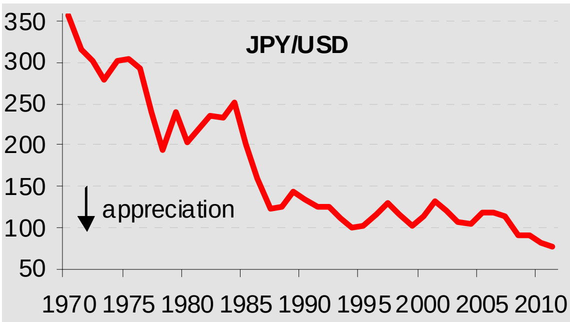
## New governors of MNB, BoJ and BoI

The central banks of Hungary, Japan and Israel will all have new governors in the near future. Stanley Fisher has decided to step down from his position at the end of June after eight years as BoI governor. By contrast, the terms of office of András Simor (MNB) and Masaaki Shirakawa (BoJ) will expire in March and April respectively. In both these countries the new governor is chosen by the prime minister; Viktor Orbán has nominated his economy minister Gyorgy Matolcsy, while Shinzō Abe's choice is Haruhiko Kuroda, the hitherto president of the Asian Development Bank. Following the announcement of Mark Carney's relocation to the top job at the Bank of England, a new central bank head will also have to be chosen in Canada.

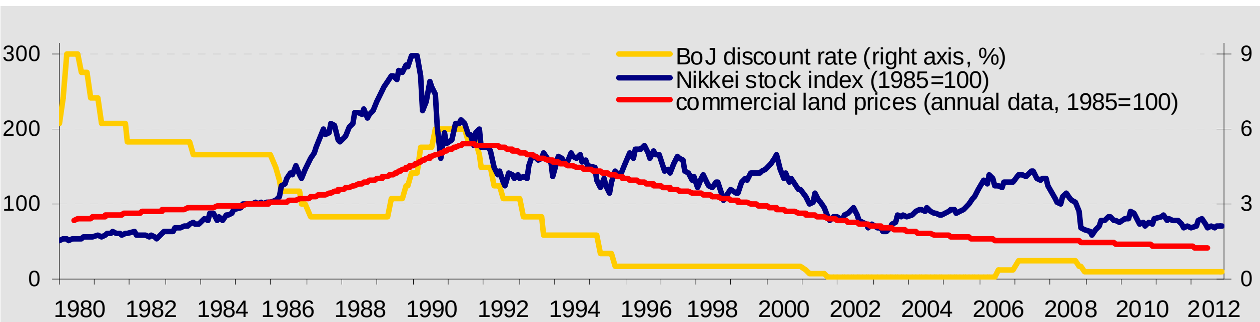
## 3. SPOTLIGHT: MONETARY POLICY IN JAPAN

*Developed economies, which have been suffering from weak economic growth in recent years, may have something to learn from Japan, which has been grappling with deflation and very low growth for two decades. The following text gives a brief account of events in Japan since World War II – the years of economic success, the asset bubble, the burst and the subsequent recession. The Japanese central bank (Bank of Japan, BoJ), which did not gain formal independence until 1998, has long been working in an environment of zero interest rates, so its monetary policy has been, and still is, geared primarily towards unconventional tools.*

Between the mid-1950s and the early 1970s Japan recorded very high economic growth (around 10% a year on average), with inflation of around 4.5%. The monetary policy of the Japanese central bank, which at that time took instructions from the government, operated under a fixed exchange rate regime and primarily used credit limits to manage the domestic monetary situation. At the start of the 1970s, Japan was hit by global price shocks, and following the collapse of the Bretton Woods system the Japanese yen started to appreciate. In an attempt to combat the strong currency and maintain fast economic growth the government – despite the disagreement of the BoJ – implemented an expansionary monetary policy, which at the time already functioned on the basis of interest rates. Inflation then soared (to above 20% in 1974), partly as a result of an oil shock. This experience, however, strengthened the central bank's position. The period between 1975 and 1985 was one of sustained economic growth, price stability and financial liberation. The BoJ was de facto independent at this time, despite still being formally dependent on the government.




In the mid-1980s the economy was looking good and sustained growth was forecasted. In the years that followed, however, equity and property prices surged. Land prices almost doubled in a few years, and the stock market surged even more strongly. As inflation was low and the yen was appreciating, however, monetary policy was not tightened. The subsequent interest rate hike (the discount rate was raised from 2.50% to 3.25% in May 1989 and rose further to 6% over the next 15 months) contributed to the burst of the bubble – equity prices collapsed and property prices also gradually declined. The slump in asset prices strongly depressed consumption and investment and led to a sharp deterioration in the financial position of banks and other financial institutions. The subsequent recession was thus accompanied by distress in the financial sector. The burst of the bubble also revealed mistakes in financial market regulation and supervision, and the traditional instruments in this area proved inadequate in the new environment. Monetary policy was gradually relaxed in the first half of the 1990s in response to the recession.



In the mid-1990s it might have seemed that the economic situation was starting to improve gradually. However, a tax increase in 1997 (totalling around 1.8% of annual GDP) dealt the fragile recovery a heavy blow. In addition, banks still had massive amounts of non-performing loans, and at the same time new capital requirements were being imposed on them. In an environment of difficult access to financing, the problems in banks gave rise to a severe credit crunch. This was exacerbated by the erupting Asian crisis. Japan's problems peaked in November 1997 with the failure of two major financial institutions, which further undermined public confidence and raised international concerns. There was a further fall in equity prices and a rise in the so-called Japan premium (the interest rate mark-up for Japanese banks), which, given relatively small differences between individual financial institutions, reflected an overall lack of international confidence in the Japanese banking sector.

The Japanese finance ministry also met with growing distrust and criticism of its actions. In addition, it colluded with banks in hiding information on the amount of non-performing loans. The problems culminated in financial scandals, with the police conducting raids on the finance ministry. The central bank, which had already begun to lose public support due to the bubble and its subsequent burst, was also rocked by scandal. Central bank staff were criticised for being overpaid and, in some cases, for consorting with people from the private sector. One senior BoJ official was arrested for passing confidential information to a private company, and the governor and deputy governor ultimately resigned.

**The Big Bang – monetary policy independence**

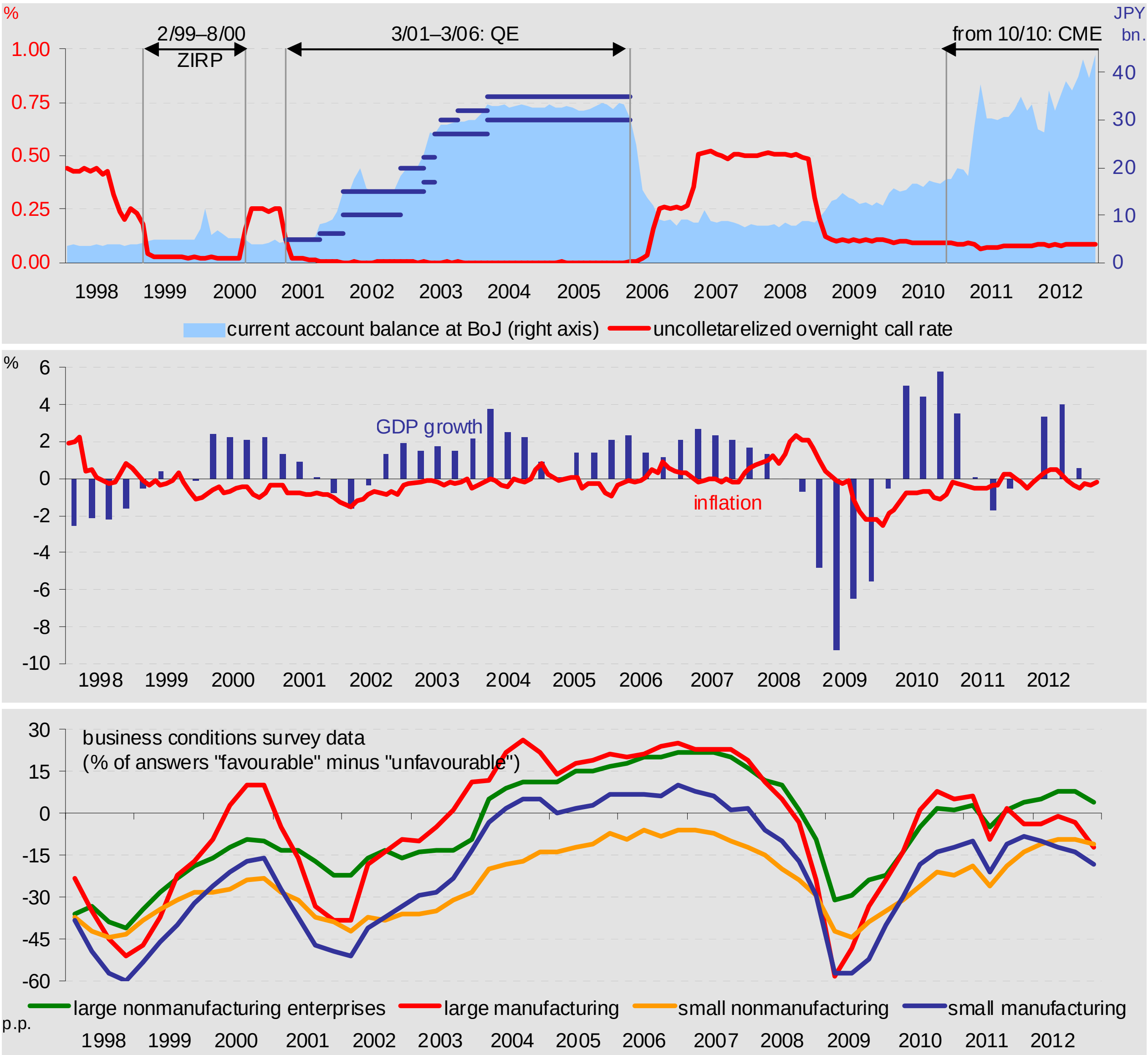
A reform was already in the pipeline in Japan at that time. The Big Bang, as it was known, deprived the finance ministry of certain powers, established a new supervisory institution for the financial market, deregulated foreign exchange trading and revised the very outdated 1942 central bank law. The BoJ gained formal independence when the new law took effect in April 1998. The BoJ board's role was strengthened and price stability was defined as the main goal of monetary policy. Transparency of the BoJ was also enshrined in the new law.

A new management team led by Governor Masaru Hayami subsequently took over the reins of the reformed central bank. The above changes raised hopes that the BoJ would improve its performance and return to the successful monetary policy of the preceding decades. But the situation was rather bleak. For several years, Japan had been experiencing stagnating economic activity followed by recession. In February 1999, the BoJ introduced a zero interest rate policy (ZIRP) and injected large amounts of liquidity into the financial markets. By 2000, however, the central bank was becoming over-optimistic in its assessment of the situation, announcing that the risk of deflation was disappearing and the period of zero rates was coming to an end. And in August 2000, despite protests from many economists, it raised the uncollateralised overnight call rate to 0.25%.

In March 2001, the BoJ returned to the zero interest rate policy and launched a quantitative easing (QE) programme, committing itself to keeping this policy in place until annual consumer price inflation stabilised at zero or positive values. The operating target was changed from the overnight call rate to the current account balances held by financial institutions at the BoJ. Japanese government bonds were purchased in order to fulfil the operating target.

The BoJ maintained the QE programme when Toshihiko Fukui (who had resigned as deputy governor in 1998 in the wake of the scandal at the BoJ) became the bank's new governor in 2003. Fukui raised the target current account balance to JPY 30–35 billion (as against JPY 5 billion in 2001). The BoJ also changed the wording of its commitment to this policy, defining two necessary conditions for discontinuing QE: (1) inflation should be zero or above over a few months, and (2) the inflation forecasts of BoJ board members should be above zero.

The economy started to recover very gradually. Inflation jumped above zero in late 2005 and stayed slightly positive in early 2006. The BoJ expected inflation to fluctuate in a range of 0–1% in 2006 and to reach just below 1% in 2007, and with that it discontinued the QE policy in March 2006. The uncollateralised overnight call rate became the operating target again. At the same time, the BoJ introduced a new framework for the conduct of monetary policy. The centrepiece of this framework was a clarification of the bank's understanding of medium- to long-term price stability. According to this, inflation should fluctuate approximately between zero and 2%, with a median of 1%, which should be reviewed annually. This was the first time price stability had been defined numerically. However, it was set at a low level (lower than in other advanced economies). This was justified by the fact that Japan had experienced a prolonged period of very low inflation, hence the rate of inflation at which households and firms perceived price stability was also lower than elsewhere. The BoJ then raised rates from zero to 0.25% in July 2006 and again to 0.5% in February 2007.




The third governor since the establishment of the independent BoJ, Masaaki Shirakawa, took over the helm of the central bank at the start of the global economic and financial crisis. As a result of this crisis the Japanese yen began to appreciate. Inflation went up in Japan in

summer 2008 due to rising global commodity prices, but fell back again as the inflation pressures abated and the recession spread. The BoJ thus very soon started cutting rates again. In December 2009, it introduced three-month and later also six-month liquidity-supplying operations as well as special operations aimed at facilitating corporate financing. It also released a clarification of its understanding of price stability, namely inflation in a positive range of 2% or lower with a midpoint of around 1% (i.e. zero was removed from the "understanding of price stability").

In October 2010, the BoJ launched a new phase of quantitative easing (comprehensive monetary easing, CME), the principal measure of which was an Asset Purchase Program targeted at a wider (and riskier) spectrum of securities than the preceding QE policy. Unlike QE, CME was focused on the asset side rather than the liability side of the BoJ's balance sheet. It was aimed mainly at reducing long-term rates and risk premiums. The original target of JPY 35 billion, set for the end of 2011, was increased five times during 2012.

In February 2012, the BoJ defined a price stability goal of 2% or lower, with a short-term goal of 1%. In October of the same year, the central bank and the government released a joint statement recognising that the critical challenge for Japan's economy was to overcome deflation. The planned size of the Asset Purchase Program for the end of 2013 was increased to JPY 101 billion. At the start of this year, the BoJ announced a price stability target of 2% and changed the Asset Purchase Program with effect from 2014 – the bank will purchase up to JPY 13 billion every month without setting any termination date. The total size of the programme will be increased by about JPY 10 billion in 2014.

**Conclusion**

The Japanese economy has got into a very difficult situation. It has long been grappling with structural problems and population ageing. Its huge public debt represents a risk. On reaching zero rates, the BoJ has tried to stimulate the economy with a quantitative easing policy, which seems to have fostered a decline in expected future rates but has not led to significant credit growth needed to support the real economy. The BoJ has been criticised for not being aggressive enough in its measures. It has also tended to repeatedly underestimate the problems (for example, it was too hasty in raising rates in 2000 and probably prematurely discontinued QE in 2006). One should bear in mind, though, that at the time there was no similar international experience indicating the right path to follow and the BoJ was entering uncharted territory and becoming a pioneer of modern unconventional monetary policy. However, the BoJ was indecisive in defining price stability. Even after many years of deflation, it still considered zero inflation to be a suitable target despite the fact that price measurements are usually skewed upwards and the true rate of inflation is therefore even lower. Traditional Japanese culture and restraint are reflected not only in everyday life and thus in the functioning of the economy, but also in monetary policy decision-making. Meanwhile, clear and decisive action is often recommended as being more effective than small, gradual changes, which do not have such a large impact on financial markets. Communicating, shaping expectations and, above all, building confidence are crucial. Even slight mistakes can wreck an institution's credibility and compromise the functioning of monetary policy.

The question arises whether Japan should adopt (or should have adopted) inflation targeting, a framework with which a whole range of quite diverse economies have good experience. However, central banks have usually adopted inflation targeting in order to reduce inflation, and not in a deflationary environment. At this time of global recession, many inflation-targeting central banks have also reached the zero-interest-rate bound and are resorting to unconventional instruments. Today, more than ever before, the flexibility of inflation targeting is being emphasised. Still, it remains widely favoured, thanks mainly to its clarity, its transparency, its clear targets and its ability to anchor expectations.

Prime Minister Shinzō Abe has nominated a new governor, Haruhiko Kuroda, a long-term critic of the BoJ's actions, along with two new deputy governors, to take charge of the Japanese central bank in March. We will see what changes they bring to Japanese monetary policy.

## 4. SELECTED SPEECH: GUIDANCE

*Mark Carney, the Governor of the Bank of Canada, who will be replacing Mervyn King as head of the Bank of England, delivered a speech at the Chartered Financial Analysts Society in Toronto on 11 December addressing the guidance aspect of monetary policy communication.*

At a time of economic turbulence, the ability to guide the expectations of financial markets and other economic agents about the future actions of the central bank becomes a crucial tool of monetary policy, according to Mark Carney. Expectations of future monetary policy have a substantial impact on long-term rates and asset prices, usually more so than the current monetary policy stance. From this point of view, it is important not only to transparently communicate the decisions already taken, but also to let the markets foresee the reactions of the central bank to the arrival of news.

In an ideal world, expectations of future monetary policy would be anchored by a combination of an explicit inflation target and a publicly known monetary policy rule (such as the Taylor rule). These two would ensure that economic agents have the best available information about the future course of monetary policy. In the real world, monetary policy does not follow a simple rule, but rather operates in an environment of complex uncertainty, which creates a need to communicate additional information. This can be done, for example, through central bankers adopting a hawkish/dovish tone in their speeches. Another means of communication is to directly publish interest rate forecasts. Carney notes, however, that the markets do not pay enough attention to long-term interest rate forecasts. In normal times, i.e. in the absence of large shocks, the Bank of Canada therefore only occasionally indicates how it intends to achieve its target, subject to the economic conditions.

The ability of the central bank to guide expectations of future policy becomes important when monetary policy rates get constrained by the zero lower bound. Strategic forward guidance can be used as an unconventional policy tool to achieve monetary easing when the room for short-term interest rate cuts is exhausted. In 2009, the Bank of Canada succeeded in raising inflation expectations using a conditional commitment to hold interest rates at zero until the inflation outlook increased. To enhance the credibility of the commitment, the central bank can explicitly set conditions defining when, at the earliest, it will start raising interest rates. The Federal Reserve switched its time-defined commitment (not before the end of 2014) to a commitment defined by unemployment (not before it drops below 6.5%) and the inflation outlook (not before it rises above 2.5%).

If an even larger monetary stimulus is needed, Carney admits that inflation targeting can be swapped for nominal GDP-level targeting. The main distinctive feature of this strategy, compared to inflation targeting, is that it is history-dependent. If the nominal GDP-level target is missed, it will be necessary to compensate for the past deviation in the future. In a situation where the zero interest rate bound prevents further monetary easing, targeting the nominal GDP level translates to a commitment of stronger easing in the future. This would raise inflation expectations and, through the expectations channel, transmit to higher inflation and fulfilment of the inflation target. This strategy, however, suffers from communication problems – to achieve the desired effect on expectations, the public needs to fully understand what the central bank is doing, which may be difficult to explain. As Bank of Canada research shows, another problem is that the gains from exploiting the expectations channel through history-dependence are rather modest under normal circumstances. The benefits of such a regime therefore have to be carefully weighed against the effectiveness of other unconventional monetary policy tools that do not require a change of monetary policy regime.

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