CENTRAL BANK MONITORING – MARCH

2010

Monetary and Statistics Department
Monetary Policy and Fiscal Analyses Division

CZECH NATIONAL BANK

In this issue

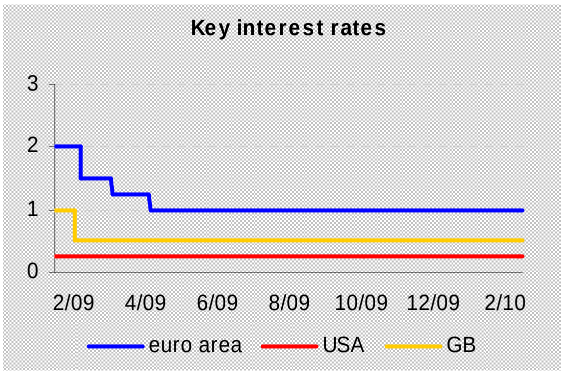
During the first quarter of 2010 we were witness to the full roll-out of the exit strategies of the Fed and the ECB. However, most of the central banks we monitor left their basic rates at low levels and continued to use unconventional monetary policy instruments. In some cases, liquidity facilities are still winding down. Economic activity is recovering, but the upswing is very gradual and inflation is rising quite slowly in most countries. At this time of relative quiet, we mark the recent 20th anniversary of the fall of the Iron Curtain by recalling in Spotlight *the monetary policies of Central and Eastern European countries over the past two decades. Our selected speech is Thomas Jordan's address on Swiss monetary policy.*

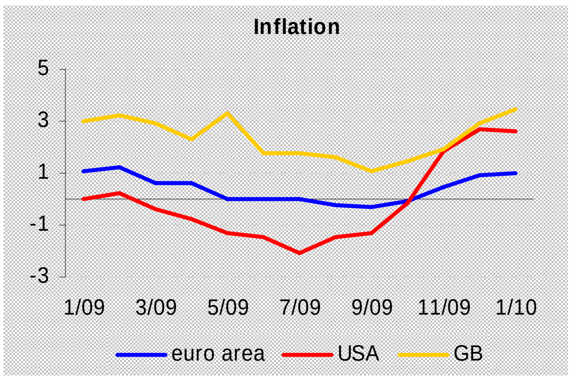
1. Latest monetary policy developments at selected central banks

Key central banks of Euro-Atlantic area

	Euro area (ECB)	USA (Fed)	United Kingdom (BoE)
Inflation target	< 2%[1]	n.a.	2%
MP meetings (rate changes)	14 Jan (0.00) 4 Feb (0.00) 4 Mar (0.00)	15–16 Dec (0.00) 26–27 Jan (0.00)	6–7 Jan (0.00) 9–10 Feb (0.00) 3–4 Mar (0.00)
Current basic rate	1.00%	0–0.25%	0.50%
Latest inflation	0.9% (Feb 2010) [2]	2.6% (Jan 2010)	3.5% (Jan 2010)
Expected MP meetings	8 Apr 6 May 10 Jun	16 Mar 27–28 Apr	7–8 Apr 5–6 May 9–10 Jun
Other expected events	10 Jun: publication of forecast	14 Apr: publication of Beige Book	12 May: publication of Inflation Report
Expected rate movements[3]	→	→	→

[1] ECB definition of price stability; [2] preliminary estimate; [3] direction of expected change in rates in coming quarter taken from Consensus Forecast survey.

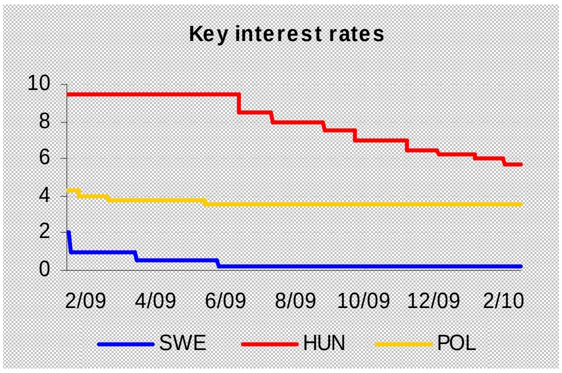


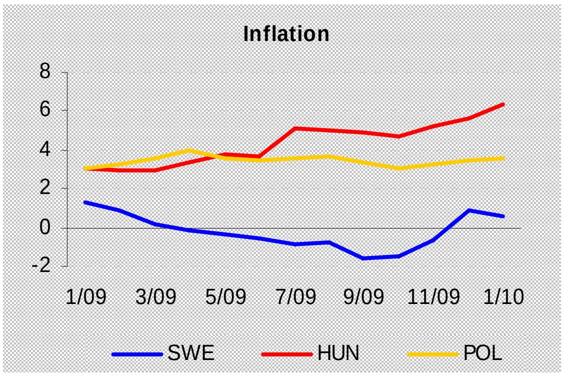


On the one hand, the Fed, ECB and BoE are still supporting their economies with low interest rates, but on the other hand the Fed and ECB are phasing out their unconventional monetary policy instruments. The **ECB** left its interest rates unchanged. It conducted its last 12M operation in December 2009 and is reducing the numbers of 3M operations. Moreover, the last 6M operation, scheduled for 31 March 2010, will be indexed to the average MRO rate and as from 28 April 2010 the regular 3M operations will be provided at a variable rate (see *News*). The recovery in economic growth has been confirmed but is uneven. Subdued inflation is expected at the monetary policy horizon. The **Fed** closed most of its liquidity facilities and swap lines with other central banks. Purchases of debt instruments are be discontinued in 2010 Q1. Economic activity in the USA is continuing to recover. Household consumption rose slightly but is being hobbled by a weak labour market, slow income growth and tight credit conditions. The **BoE** left its key rate unchanged and bought debt securities. It has now reached the planned amount of £200 billion. Although it did not increase the purchase volume any further, it agreed with the Treasury to create an Asset Purchase Facility (see *News*).

Selected central banks of inflation-targeting EU countries

	Sweden (Riksbank)	Hungary (MNB)	Poland (NBP)
Inflation target	2%	3.0%	2.5%
MP meetings (rate changes)	15 Dec (0.00) 10 Feb (0.00)	21 Dec (-0.25) 25 Jan (-0.25) 22 Feb (-0.25)	22–23 Dec (0.00) 25–26 Jan (0.00) 23–24 Feb (0.00)
Current basic rate	0.25%	5.75%	3.50%
Latest inflation	0.6% (Jan 2010)	6.4% (Jan 2010)	3.6% (Jan 2010)
Expected MP meetings	19 Apr	29 Mar 26 Apr 31 May	30–31 Mar 27–28 Apr 25–26 May
Other expected events	20 Apr: publication of Monetary Policy Report	31 May: publication of Inflation Report	26 May: publication of Inflation Report
Expected rate movements[3]	→	↓	↑





The **Riksbank** left its key rate at 0.25% in the previous quarter, but expects to increase rates rather sooner than in autumn 2010 as originally expected. The deposit rate remains at -0.25%. Economic activity is showing clear signs of a recovery and inflation is now positive. The low interest rates and expansionary fiscal measures are supporting household consumption, but the recovery in industry still seems weak and lagged. Owing to the weak labour market, the Riksbank also expects subdued inflationary pressures stemming from wage growth.

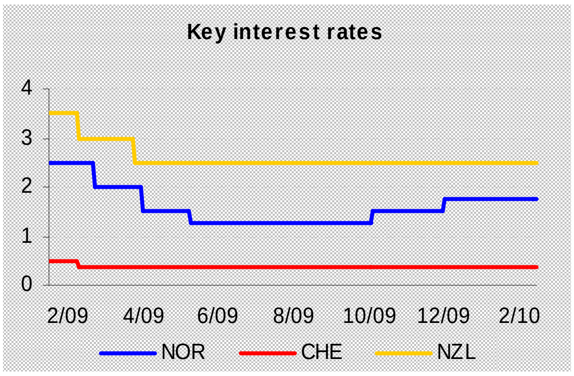
The **MNB** continued to ease monetary policy, lowering interest rates by 0.25 p.p. three times in a row to 5.75%. The MNB's forecast expects the inflation rate to be above the inflation target until 2010 Q2, mainly because of an increase in indirect taxes. According to the MNB's outlook, a sharp fall in consumption will lead to a decrease in the inflation rate below the inflation target in the next one to two years. Given the continuing decline in domestic demand and only moderate recovery in external demand, the MNB expects the economic recovery in Hungary to be slower than in the other countries of the region. The falling domestic and rising external demand helped Hungary achieve a current account surplus.

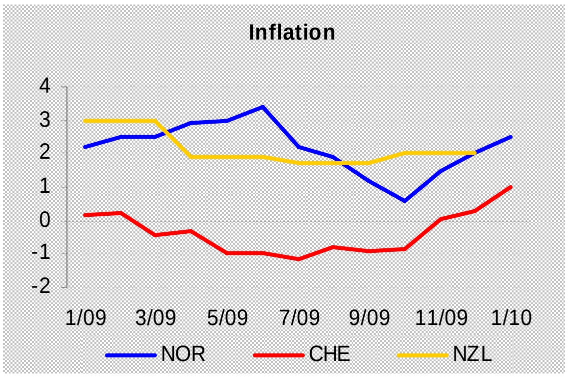
The **NBP** left its key rates unchanged. Polish GDP growth continued to recover in 2009 Q4, with the monthly indicators of economic activity confirming this trend. Inflation rose in January, reaching 3.6%. This is slightly above the upper boundary of the tolerance band around the inflation target. The rise in inflation was due to higher fuel prices and partly also to base effects. According to the NBP's February forecast, the expected inflation rate with 50% probability lies in the range of 1.3%–2.2% for 2010, assuming constant interest rates. With the same probability, GDP growth will be in the range of 2.1%–4.1% this year.

Other selected inflation-targeting countries

	Norway (NB)	Switzerland (SNB)	New Zealand (RBNZ)
Inflation target	2.5%	< 2%	2%[6]
MP meetings (rate changes)	16 Dec (+0.25) 3 Feb (0.00)	10 Dec (0.00)	28 Jan (0.00)
Current basic rate	1.75%	0–0.75%[5]	2.50%
Latest inflation	2.5% (Jan 2010)	1.00% (Jan 2010)	2% (2009 Q4)
Expected MP meetings	24 Mar	11 Mar	11 Mar 29 Apr
Other expected events	24 Mar: publication of Monetary Policy Report	22 Mar: publication of Monetary Policy Report	11 Mar: Monetary Policy Statement
Expected rate movements[3]	↑	→	→

[5] Chart displays centre of band; [6] centre of 1–3% target band.





In December 2009, the **Norges Bank (NB)** increased its monetary policy interest rate for the second time in a row by 0.25 p.p. to 1.75%. The decision was made in the context of rapidly rising property prices and growing private consumption. When communicating the December interest rate hike, the NB said that the previous (i.e. October) rate increase had had a limited impact on bank lending rates. Interest rates remained unchanged at the February meeting. The NB Executive Board's strategy is that the key policy rate should be in the interval of 1.25%–2.25% unless the Norwegian economy is exposed to new major shocks. The new strategy will be made available on 24 March 2010 in the Monetary Policy Report.

Despite favourable news regarding the Swiss economy, its recovery still looks fragile. The **SNB** left the target interval for its key interest rate (LIBOR on Swiss franc-denominated deposits) unchanged and continued to supply liquidity to the financial system, although it stopped buying Swiss franc private bonds. According to an official communication, the SNB remains ready to act decisively in the foreign exchange market. According to the SNB's new forecast, the SNB expects inflation of 0.5% in 2010 and 0.9% in 2011.

The **RBNZ** left its key interest rate unchanged at 2.50%. The current outlook for the economy is in line with the December forecast, i.e. economic activity should continue to recover, and the inflation forecast will be within the target range over the medium term. Governor Bollard expects the key rate to stay at the current level until 2010 H2.

2. News

Fed discontinues most liquidity facilities…

The Fed closed most of its liquidity facilities, credit facilities and swap lines on 1 February 2010. The Term Auction Facility (TAF) and Term Asset-Backed Securities Loan Facility (TALF) remained in force after this date. They will be discontinued on 31 March 2010 and 30 June 2010 depending on the nature of collateral.

…and modifies terms of discount window lending programmes

On 18 February, the FOMC approved the following modifications to the terms of its discount window lending programmes. The primary lending rate (i.e. the discount rate) was increased by 0.25 p.p. to 0.75% and the maturity of primary credit loans was shortened from 90 days to overnight. These steps are meant to "encourage" depository institutions to use money market funds rather than relying on discount facilities.

ECB announces details of refinancing operations

On 4 March, the ECB specified details of refinancing operations. The ECB has decided to continue conducting its main refinancing operations (MROs) as fixed rate tender procedures with full allotment at least until 12 October 2010. The regular 3-month longer-term refinancing operations (LTROs) will be conducted as variable tender procedure, starting on 28 April 2010. The amount allotted will be announced. The MRO rate will be used as the minimum bid rate in the 3-month LTROs. On 1 July 2010, the ECB will carry out an additional six-day fine-tuning operation to smooth out the liquidity effect of the 12-month LTRO dated back on June 2009.

ECB closes swap lines

The European Central Bank discontinued its US dollar swap line with the Fed and its Swiss franc swap line with the Swiss National Bank.

BoE Governor Mervyn King sends open letter to Chancellor…

The UK inflation rate reached 3.5% in January 2009, i.e. more than 1 p.p. above the inflation target. As a result, the BoE Governor sent a letter to the Chancellor of the Exchequer as he is required to do by law. In his letter the Governor mentioned three short-run factors that had driven the current measured rate of inflation above the inflation target: an increase in VAT from 15% to 17.5%, a rise in oil prices of 70%, and the effect of the sharp depreciation of sterling in 2007 and 2008, which had fed through to consumer prices.

…and BoE will continue to purchase assets under modified financing terms

The BoE will continue to purchase high-quality assets, but will now do so on behalf of the Treasury and the purchases will be financed by the issue of T-bills. For this purpose, a new fund has been created through which the BoE will purchase £50 billion of assets. This facility is intended to improve liquidity in credit markets and stimulate the issuance of debt securities by private entities.

Hungarian central bank introduces tool to support development of domestic mortgage market

On 8 February, the MNB announced a new monetary policy tool aimed at eliminating the barriers to the development of the mortgage bond market and thereby enhancing financial stability and the efficiency of the transmission mechanism. Under the programme, the MNB will purchase forint mortgage bonds and undertake regulatory initiatives in the mortgage financing area. The MNB will buy domestically issued forint mortgage bonds first in the secondary market and then in the primary market up to a total value of HUF 100 billion. All credit institutions subject to reserve requirements are allowed to participate in the programme, which is expected to be completed on 31 December 2010. The programme is designed to reduce liquidity premia in the mortgage bond markets and support the development of forint mortgage lending.

Riksbank stops offering 12-month loans

The Riksbank decided in February to cease offering loans at a maturity of 12 months. Its last operation was held on 22 February 2010. However, the bank will continue to offer variable-rate loans at maturities of three and six months until October 2010. The loans will be offered at slightly higher interest rates than previously, i.e. at the average repo rate plus the original supplement plus a new supplement. For three-month operations this means a new supplement of 5 b.p. on top of the original 25 b.p. and for six-month operations a supplement of 10 b.p. over the original 25 b.p.

Swiss central bank discontinues swaps

The central banks of Switzerland, Poland, Hungary and the euro area agreed to discontinue EUR/CHF foreign exchange swaps, as demand for liquidity provided by this type of operation had declined. The last swap operation was conducted on 25 January 2010.

3. Spotlight: Twenty years of monetary policy in Central Europe

In this issue we look deeper into the past than usual. We mark the recent 20th anniversary of the fall of the Iron Curtain by recalling the monetary policies of Central and Eastern European countries over the past two decades. In the late 1980s, the centrally planned economies of Poland, Hungary and the former Czechoslovakia had one-tier banking systems. A so-called monobank (usually falling under the ministry of finance) combined the functions of central bank and commercial banks. Its job was to implement the credit and cash plan. Prices were distorted and exchange rates were set unrealistically. The following paragraphs describe the monetary policy journey travelled by these countries' central banks since then. Despite their similar starting positions at the beginning of the 1990s, the paths they have followed turn out to have been quite diverse, especially in recent years.

Restoration of the role of central banks and their initial monetary policy objectives

The first step towards restoring monetary policy was to separate the central bank and commercial banks, although the latter remained state-owned to begin with. Hungary had already taken this step in 1987, but for the following two years its banks were only allowed to have corporate clients. In Poland, the establishment of commercial banks had been liberalised back in 1982, but it was not until February 1989 that commercial functions were spun off from the central bank. The Czechoslovak State Bank (the central bank of the then Czechoslovakia) was split into several institutions in January 1990. However, the new banking system was not without its problems in any of these countries. The commercial banks were undercapitalised and burdened with large amounts of classified loans, the newly established supervisory authorities were not up to the task, and many more problem loans were granted during the transformation period.

Annual inflation rates (in %)

	1990	1991	1992	1993	1994	1995
HU	29.0	34.2	23.0	22.5	18.9	28.3
PL	585.8	70.3	43.0	35.3	32.2	27.9
CZ	9.9	56.7	11.1	20.8	10.0	9.2
SK	10.6	61.2	10.0	23.2	13.5	9.9

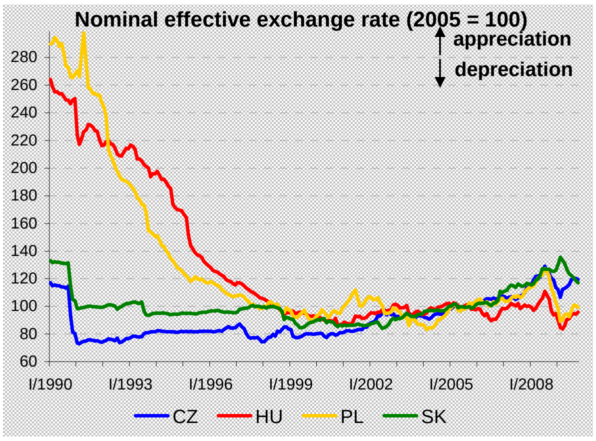
An important monetary policy goal was to combat the high inflation emerging as prices were liberalised as a natural result of insufficient supply, monetary overhang and artificially suppressed consumption and prices during the socialist era. There were other inflationary factors during the transformation – among them multiple devaluations, wide budget deficits, relaxed bank lending conditions and further price deregulation. Poland saw particularly sharp growth in prices and even hyperinflation in late 1989 and in 1990. In Hungary, prices had been gradually liberalised in earlier years, but even so inflation stayed above 20% in the early 1990s. Inflation in Czechoslovakia peaked in 1991 after the sudden liberalisation of prices and fluctuated around 10% until the mid-1990s, except in 1993 when the introduction of VAT created a one-off inflationary impulse.

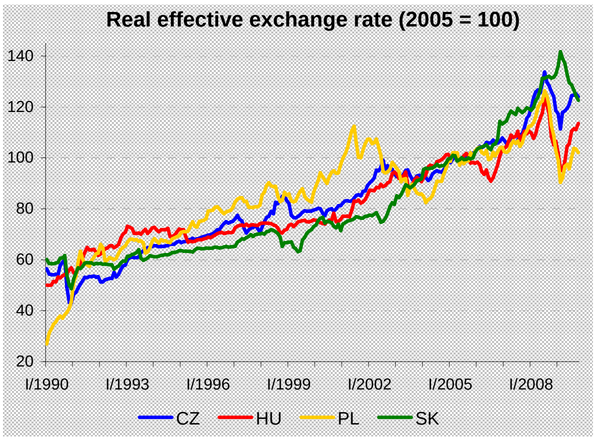
The central banks' goals at this difficult time were not entirely clear. In the first years of the transformation there was a need to create financial institutions and markets. Foreign trade turnover and economic output slumped following the collapse of the CMEA markets. Companies had problems selling their products and repaying their loans. As a result unemployment rose, which in turn put strains on national budgets. Besides stabilising the situation, it was therefore also vital to maintain price competitiveness. The push for disinflation had to be balanced with the need to reverse the economic contraction, kick-start economic growth and improve living standards.

Monetary and exchange rate regimes and monetary policy instruments in the 1990s

Monetary policy strategy was initially based on two main pillars: a fixed exchange rate to act as a nominal anchor, and money growth targets. In Poland, Hungary and Czechoslovakia, however, the monetary aggregate growth targets were really just complementary indicators and were repeatedly overshot. In Poland, a very weak fiscal position hampered the struggle against inflation. In addition, the national debt was monetised by the central bank. The effectiveness of monetary policy was also reduced by high dollarisation of the economy. In Hungary, monetary policy was governed largely by external stability considerations. External debt was high. Besides trade deficits, Hungary also had to contend with large budget deficits. The forint was devalued several times in an effort to maintain price competitiveness, but this created inflationary pressures.

As mentioned above, a fixed exchange rate (or a variation thereof) was the central plank of monetary policy for all three states in the first years of the transformation. This was intended to act as a nominal anchor. The exchange rate was simultaneously devalued to help redirect exports to Western markets. In Poland, the exchange rate was pegged initially to the dollar and later to a basket of five currencies containing the dollar and European currencies. After the devaluation, Poland introduced a crawling peg whereby the domestic currency was periodically devalued by a pre-defined percentage. In 1990, Hungary introduced a fixed exchange rate with a narrow fluctuation band against a basket of nine currencies. The next year, however, the basket was downsized to two currencies. There were frequent minor devaluations and the band was widened slightly. This system operated until 1995, when Hungary, too, switched to a crawling peg with gradual devaluation of the forint. The Czechoslovak koruna was also pegged and was devalued four times in 1990 (by a total of 113% against the currency basket). In 1992, a very narrow fluctuation band of ±0.5% was allowed. Following the separation of Czechoslovakia in 1993, the new currencies both remained fixed (the number of currencies in the basket was reduced from five to two). In its first year, the Slovak koruna was devalued by 10%. Owing to inflation, however, exchange rates appreciated in real terms in the long run.





Owing to immature financial markets, central banks were initially forced to use direct (administrative) monetary policy instruments – interest rate ceilings/spreads and credit limits/quotas. Refinancing loans were also provided to commercial banks. However, these instruments were not motivating for banks, reduced competition in the market and fostered the emergence of a non-bank financial intermediation system. In 1992–1993 indirect instruments started to be used – initially reserve requirements and later also open market operations (after the creation of capital markets and appropriate securities). These instruments are still used in modified form today.

Internal and external currency convertibility was gradually introduced in these countries. Current and capital account liberalisation also took place as part of the liberalisation of cross-border financial flows, partly in an effort to join international organisations (the OECD). Amid fixed/pegged exchange rates and high positive interest rate differentials, however, the capital account liberalisation encouraged large foreign capital inflows. By absorbing the excess supply of foreign exchange, central banks issued banks with additional liquidity, which, however, endangered the money supply growth target. The withdrawal of this excess liquidity led to growth in interest rates, which stimulated the capital inflow even more. This sterilisation trap was most marked in the Czech Republic, which had a fixed exchange rate with a very narrow fluctuation band of ±0.5%, later widened to ±7.5%. The pressures spilled over to the current account. The external imbalance, combined with uncertainty about the political situation in May 1997, was probably the direct cause of the subsequent massive outflow of short-term capital and speculative attack on the koruna. The CNB defended the currency by sharply raising interest rates and intervening on a massive scale. In the end, though, the fixed exchange rate had to be abandoned and replaced by a floating rate. The NBS likewise failed to repel speculative attacks on its currency a year later and a floating exchange rate was introduced in Slovakia as well.

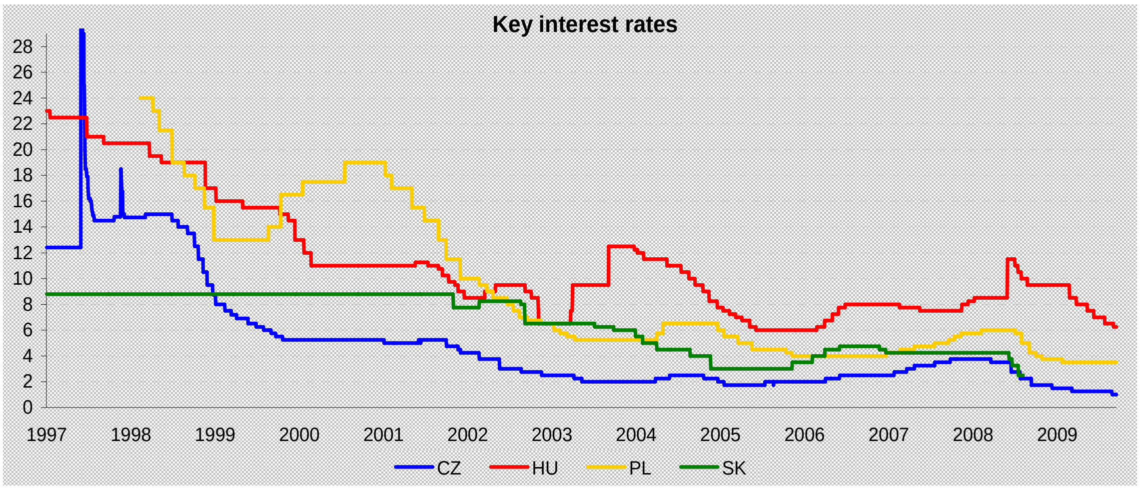
A new monetary policy coat – inflation targeting

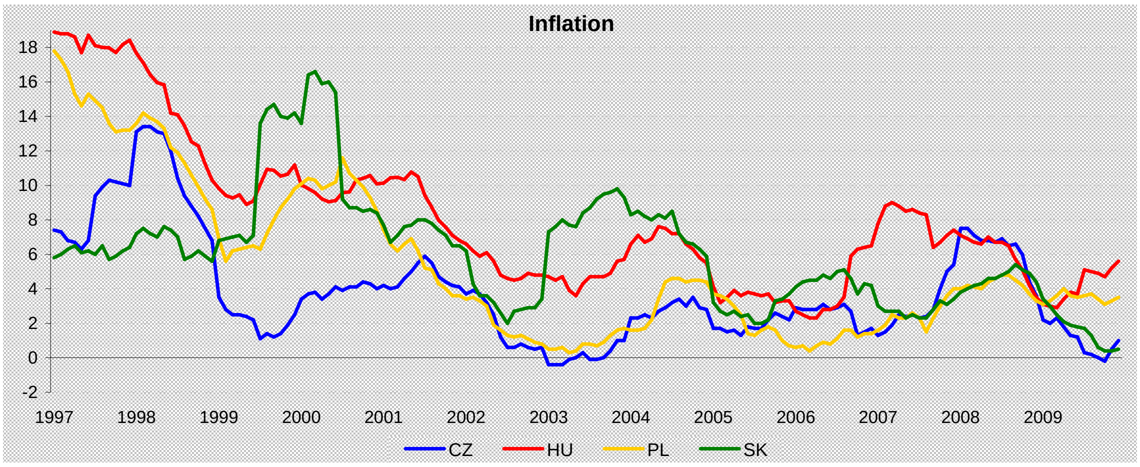
After floating the exchange rate, the CNB initially kept on targeting the money supply. However, inflation expectations were not sufficiently anchored and fostered rising inflation. In December 1997, a new monetary policy regime was chosen – inflation targeting. Owing to uncertainty regarding the rate and magnitude of price administration measures (deregulation and indirect tax increases) and given their expected large effect on inflation, the inflation targets were initially set in the form of "net inflation", i.e. inflation net of regulated price effects and the first-round effects of changes to indirect taxes. 1999 saw the introduction of "escape clauses", i.e. exemptions from the obligation to hit the inflation target. As from 2001, the targets were set in the form of headline consumer price inflation in order to make them more transparent and comprehensible.

Poland opted for inflation targeting in 1999. In April 2000, the NBP abandoned the pegged exchange rate and introduced a managed float. Unlike the CNB, the Polish central bank did not specify any escape clauses and targeted headline inflation right from the outset. Hungary switched to inflation targeting in 2001. There, too, the target was set in the form of headline inflation. Hungary retained its fixed exchange rate against the euro with a fluctuation band widened to ±15%. The MNB changed over to the regime gradually. The inconsistency of having an inflation target at the same time as an exchange rate fluctuation band led to a speculative attack on the forint in 2003. The fluctuation band of the forint was not abandoned until 2008.

The inflation targeting regime, which is still applied in the Czech Republic, Hungary and Poland today, has gradually evolved. Forecasting and decision-making processes have undergone rapid development. As the years have progressed, increasing emphasis has been put on systematic and transparent policy. The openness of monetary policy communication has also increased greatly.

Slovakia – whose economy is particularly small and open – embarked at the end of the 1990s on a different path. Until 2000 it was still officially targeting the money supply, despite simultaneously announcing inflation targets. In subsequent years its monetary policy was focused on inflation targets, although inflation targeting was not officially declared until 2005 (see below). Moreover, the NBS still monitored the exchange rate and intervened several times.





Monetary policy in the European integration process

Starting in the second half of the 1990s, monetary policy was also greatly affected by the countries' planned entry into the EU and the euro area. EU entry was conditional on achieving four fundamental freedoms: free movement of goods, services, capital and persons. The specific set of requirements was defined as the "Copenhagen criteria". The main conditions pertaining to central banks were central bank independence, a ban on monetary financing, and the setting of price stability as the primary monetary policy objective. Monetary policy instruments were also harmonised – the use of administrative instruments was eliminated, the role of setting interest rates was emphasised, the reserve ratio was gradually reduced and the basic parameters of the reserve requirement were changed.

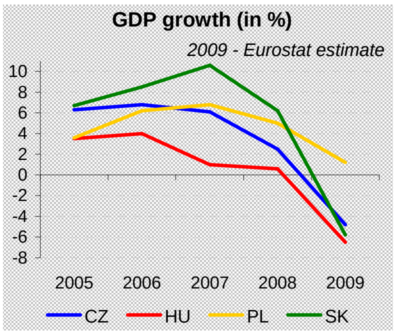
All four countries joined the EU in May 2004. Their central banks thus became part of the European System of Central Banks. On signing the accession treaty all four nations simultaneously undertook to join the monetary union in the future, after fulfilling the Maastricht convergence criteria. In addition to economic criteria (relating to public finance, inflation, interest rate stability and exchange rate stability) these conditions contain a requirement for compatibility of legislation with the Statute of the ESCB and of the ECB.

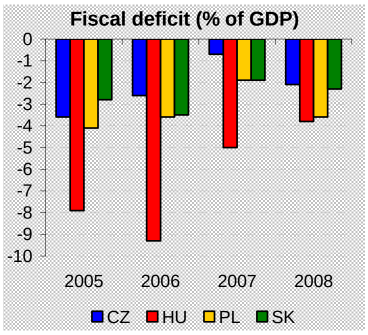
Slovakia made the decision to join the EU in 2002. Its euro adoption strategy was approved the next year. In November 2005, Slovakia began targeting inflation under the conditions of the ERM II, in which the exchange rate had to be kept within a fluctuation band of ±15% for at least two years. The central rate was devalued twice after the introduction of this regime – by 8.5% in March 2008 and by 17.6% in May 2008. The irrevocable conversion rate between the Slovak koruna and the euro was set in July 2008. Slovakia succeeded in fulfilling all the euro area entry conditions, achieving a low rate of inflation even amid rapid economic growth.

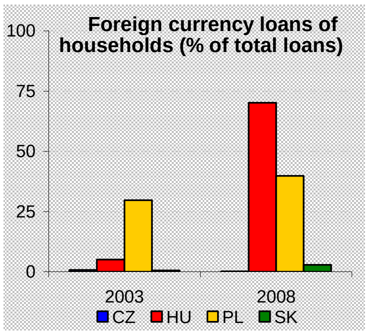
The other three countries are not currently compliant with the euro adoption criteria and have so far not even entered the ERM II. Consequently, these states cannot be expected to join the euro area in the next few years.

Financial and economic crisis

The global crisis hit all four economies with varying intensity and revealed their weak spots. Poland fared best in terms of GDP growth, as its growth remained positive in 2009. Poland was aided in this mainly by its lower degree of economic openness and large domestic market. The other economies are more dependent on exports. Czech and Slovak exports, moreover, are heavily concentrated in the automobile industry. Commercial banks in these countries owned few or no toxic assets but became more cautious after the crisis erupted both towards other banks and as regards lending to clients. The Czech, Polish and Slovak economies were thus hit mainly by the second-round effects of the crisis, i.e. by falling exports and a subsequent decline in domestic demand, growth in unemployment and pressure on public budgets.







Hungary was hardest hit, having entered the crisis with large foreign currency debt and high government debt. The events of autumn 2008 led to a financing crisis. The government bond market froze up and, after the forint plunged, the foreign exchange market did likewise. The continuing depreciation of the forint also increased repayments of foreign currency loans, triggering concerns about the soundness of the banking system. In an effort to halt the slide of the forint the MNB raised rates at a time when other central banks were easing monetary policy. There was a need to supply missing liquidity (including foreign currency liquidity) into the system and in particular to restore investor confidence. Hungary received an exceptionally large loan totalling $25 billion from international institutions. The IMF is also providing it with expert assistance, the overriding goal being fiscal consolidation. FX swap lines in euros and Swiss francs have been opened (besides Hungary also in Poland, where the proportion of foreign currency loans is also relatively high).

After the problems in Hungary erupted, the other currencies of the region also weakened. This gave some producers the advantage of improved price competitiveness during the crisis, but borrowers with foreign currency loans saw a large increase in repayments. The only country to experience no depreciation of its currency was Slovakia, which on 1 January 2009 became the sixteenth member of the euro area and changed over to the euro.

For all the countries under review, economic activity bottomed out in 2009 and began to recover very slowly. The labour market will rebound with a lag. Central banks are responding to the situation with relaxed monetary conditions with rates at historical lows. Long-term rates, however, are also being affected by problems with public finance sustainability.

Conclusion

The countries under review have travelled a long way in the last 20 years, from central planning to a functioning market economy. Their central banks have likewise been transformed. Over the last two decades they have had to deal with many difficult and unique monetary policy situations and challenges. Recent years in particular have shown that despite the similar starting positions of all the countries under review at the beginning of the 1990s, subsequent developments in the region have been quite diverse. It can be seen that the courses followed by these countries and their ability to cope with the tough conditions of a globalised world economy are determined largely by their actions in the field of economic and monetary policy.

4. Selected speech: On Swiss monetary policy

Thomas Jordan, Member of the Governing Board of the Swiss National Bank, gave a speech entitled "Swiss monetary policy and provisions" at a conference in Zurich on 10 December 2009.

Mr Jordan covered three topics in his speech: (i) the monetary policy instruments used in connection with the financial crisis, (ii) the structure of the SNB's balance sheet, and (iii) the importance of the secured part of the Swiss franc money market for the implementation of monetary policy.

From October 2008 to March 2009 the SNB carried out a massive reduction in the franc-denominated Libor target range. The most important instruments for expanding liquidity during this phase were repo transactions and currency swaps. Since the reduction of the repo rate to 5 basis points in December 2008, the SNB has been pursuing a de facto zero interest rate policy. Beginning in October 2008, the heavy foreign demand for Swiss francs was influencing the level of the Libor – which led the SNB to sign swap agreements (CHF/EUR) with some other central banks. In March 2008, in order to loosen monetary policy further amid almost zero interest rates, unconventional measures were adopted, i.e. intervention in the foreign exchange market and purchases of Swiss bonds. In addition, the maturity of repo transactions was extended to 12 months. According to Mr Jordan, the measures taken have achieved the set objectives. The three-month Libor has been close to the target range since the middle of September. Foreign currency purchases prevented the Swiss franc from rising against the euro while fostering lower volatility of this currency pair. Positive conclusions can also be drawn with regard to the bond purchases, which helped to reduce risk premia in the capital market. These unconventional measures were accompanied by an expansion of the SNB's balance sheet from CHF 110 billion before the crisis to a peak of CHF 245 billion in April 2009. The figure then declined to CHF 210 billion at the close of the year. On the asset side, this drop was mainly due to swaps. On the liabilities side, domestic banks' deposits with the SNB and SNB Bills played the most important role. Mr Jordan pointed out that the use of unconventional measures had also changed the nature of part of the liquidity created. Liquidity resulting from repos and currency swaps is temporary: it flows back to the SNB when the transactions are not renewed. Liquidity created by acquiring foreign exchange and Swiss franc bonds, conversely, is permanent. According to Mr Jordan, the SNB will keep such assets on its balance sheet for an extended period. Subsequently, liquidity absorption will be conducted through the issuance of SNB Bills.

As regards the SNB's balance sheet structure, Mr Jordan noted how important it is to have a solid equity capital buffer. Without it, the SNB would be unable to carry the risks on its currency reserves internally, nor would it be in a position to take the measures needed to stabilise the financial system. The SNB has therefore decided to strengthen this capital buffer from future profit, which it would otherwise distribute among the SNB's owners (the Confederation and the cantons).

In 2008, the SNB StabFund was used to take over UBS's illiquid assets. The fund is created, financed and managed by the SNB. The SNB's overall risk exposure arising from the StabFund's assets portfolio was reduced during 2009 thanks to asset sales, earnings on the assets and loan repayments.

The unsecured money market collapsed in summer 2007 and has not properly recovered to this day. Conversely, according to Mr Jordan, the secured money market, i.e. the repo market, in which money is lent against securities, has emerged as crisis-resistant. Since a liquid Swiss franc money market is vital for the implementation of monetary policy, the SNB has decided to open this market to financial market participants that do not enjoy the status of banks. In expanding participation in the repo market, the SNB is seeking to promote trading liquidity and thereby increase the stability and crisis resistance of the financial system.

This document is produced by the Monetary and Statistics Department of the Czech National Bank and is freely distributable. Closing date 4 March 2010. Current and past issues can be downloaded free from the *Monetary Policy* section of the CNB website. Contact: http://www.cnb.cz or info@cnb.cz