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New Markets

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Hungary: Thoughts on Inflation Targeting

Summary: This note looks at some of the reasons why the move to inflation targeting may be relevant from a market participant's perspective. Some thought is also given to the implications of using the exchange rate as an intermediate target, along with the increased institutionalisation of the inflation targeting process.

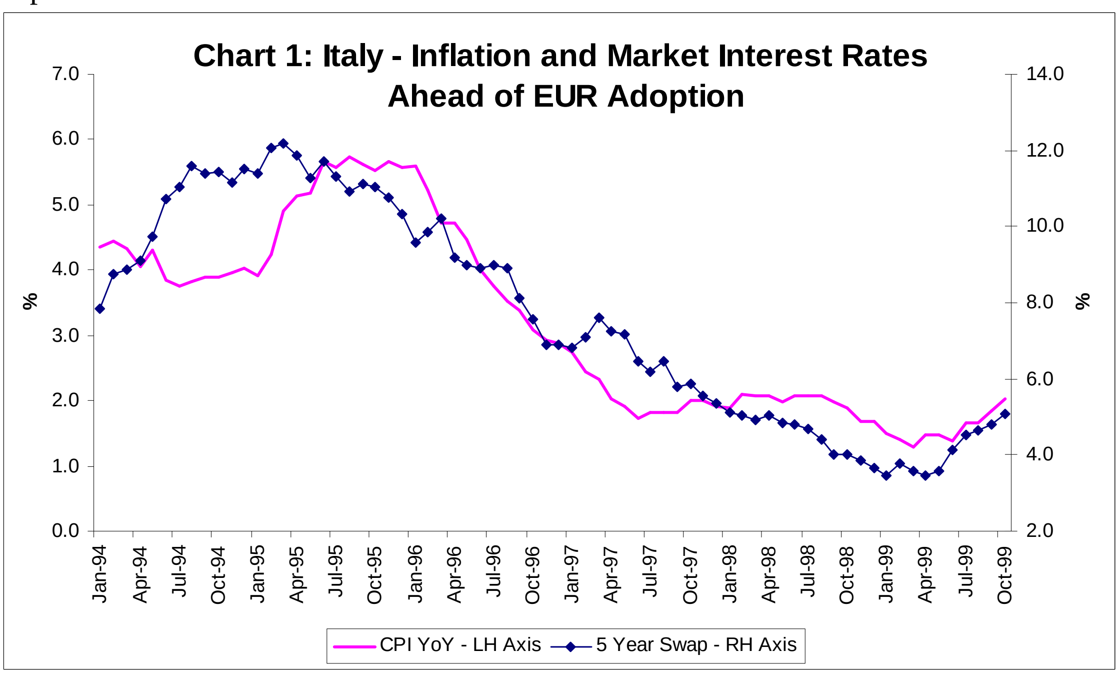
Observations of Implications of Inflation Targeting for Market Participants

As a starting point, it is perhaps useful to set out why the move to, and then the implementation of, an inflation target might be of interest to a financial market participant.

If the implementation of the inflation target is credible, the signal that provides market participants can be used in general trading strategies.

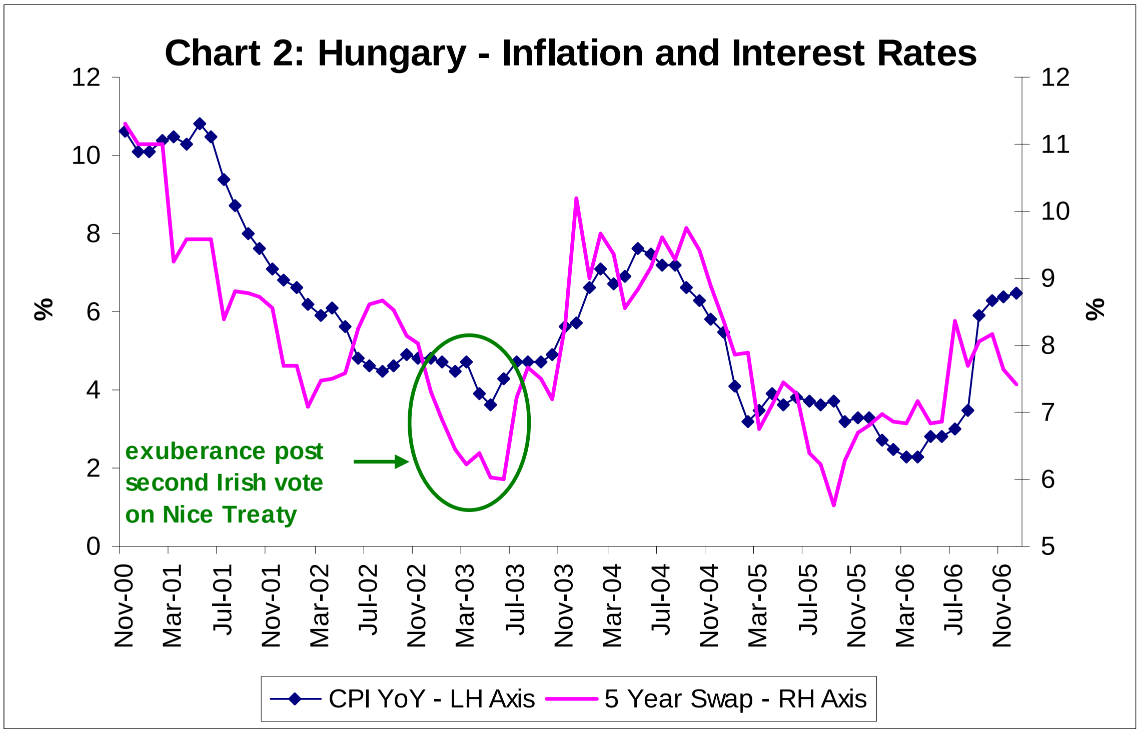
1. Policy rates and interest rates follow inflation lower

The expected inflation path will have implications for the current and expected future policy rates. Italy's experience in bringing inflation down in order to meet the Maastricht inflation criterion served as a useful benchmark for what to expect in Hungary. From a market participant's perspective, the lesson was clear: there were gains to be made from developing accurate inflation forecasts. The lesson did not only apply to spot rates. It also applied to implied forward nominal and estimated real rates.



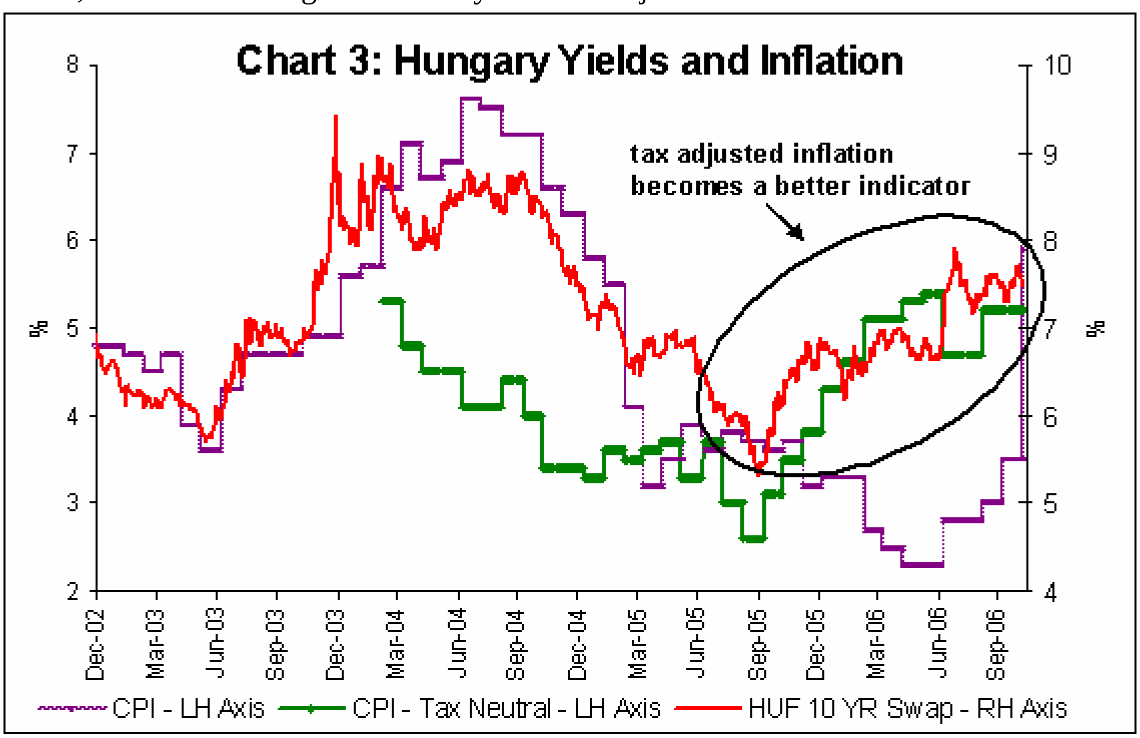
Source: Bloomberg

Hungarian inflation and interest rates have followed a similar pattern.



Source: Bloomberg

More recently, the divergence between inflation and swap rates has reflected short term tax effects, with rates trading more closely with tax adjusted inflation.



Source: MNB, Bloomberg

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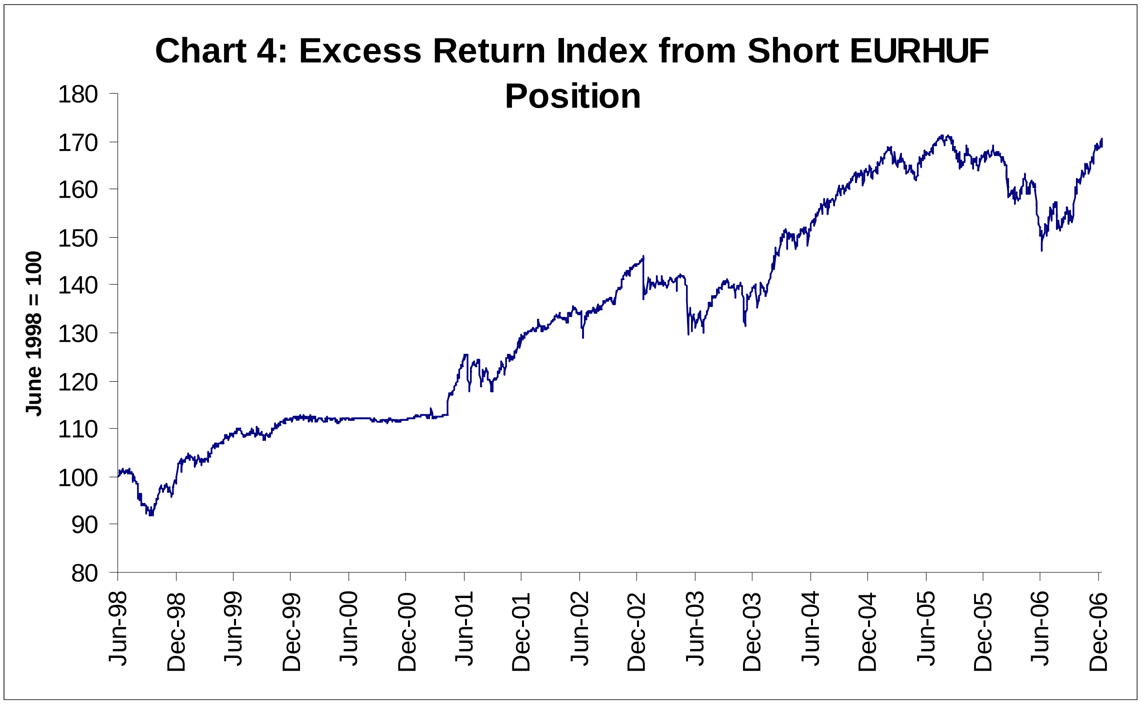
2. Monetary conditions are typically tight during disinflation periods and that is associated with currency out-performance

Aside from the direct role that a currency target might play, there is a large body of academic literature on what is typically referred to as the “forward premium paradox”. Uncovered interest rate parity tends not to hold at short horizons. In the case of the major currencies, higher yielding currencies tend to appreciate rather than depreciate. Less academic work has been done on less liquid currencies but the direction of the move in the currency appears less clear, perhaps because of what has often been much higher inflation in those countries. However, our own work suggests that there have been significant excess returns to being long a diversified portfolio of “emerging market” currencies. One of the reasons for the excess return is the existence of a “risk premium”.

In the case of Hungary, the National Bank of Hungary (MNB) has often explicitly focussed on the “risk premium”. So the MNB itself has often sought to ensure that rates are sufficient to compensate for a time varying risk premium in its efforts to keep the currency within a desired range.

In the case of European Union member Hungary, we would have expected the currency benefits of the yield differential to be reinforced by the Balassa-Samuelson effect and price convergence.

The Hungarian forint does appear to have benefited from the effects noted above. We estimate that the annual excess return on being long Hungarian forint, funded in US dollars, was almost 8.7 percent (significant at the 5% level) between June 1998 and November 2006. Perhaps more relevantly, the returns have been almost as impressive against the Euro, particularly between start of 2000 and the end of 2005 where the annual excess return against that currency has been close to 8 percent.



Source: Banque AIG

3. Trading the Euro Adoption Theme

At the time that Hungary was about to formally move to an inflation target, the Maastricht inflation criterion was seen as being the most likely binding constraint for Hungary's eventual Euro adoption – as has in the event proven to be the case in the Baltic countries – rather than the fiscal position which has been more of a challenge in Hungary. Back in 2001 lower projected inflation implied a likely faster Euro adoption. That had implications for the eventual timing of Euro adoption, the lock in exchange rate, the policy rate path and implied forward interest rates, given that Hungarian rates would become Euro rates upon Euro adoption.

Observers often used implied forward interest rates as a proxy for market expectations for the timing of Euro adoption.

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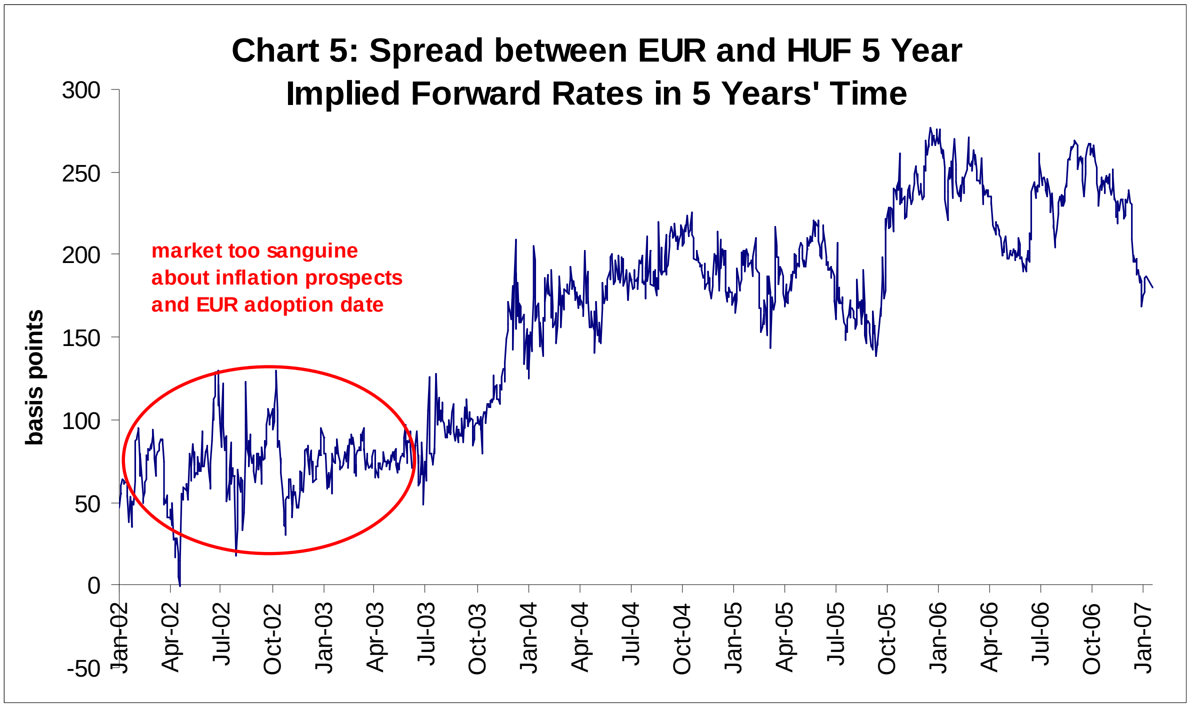
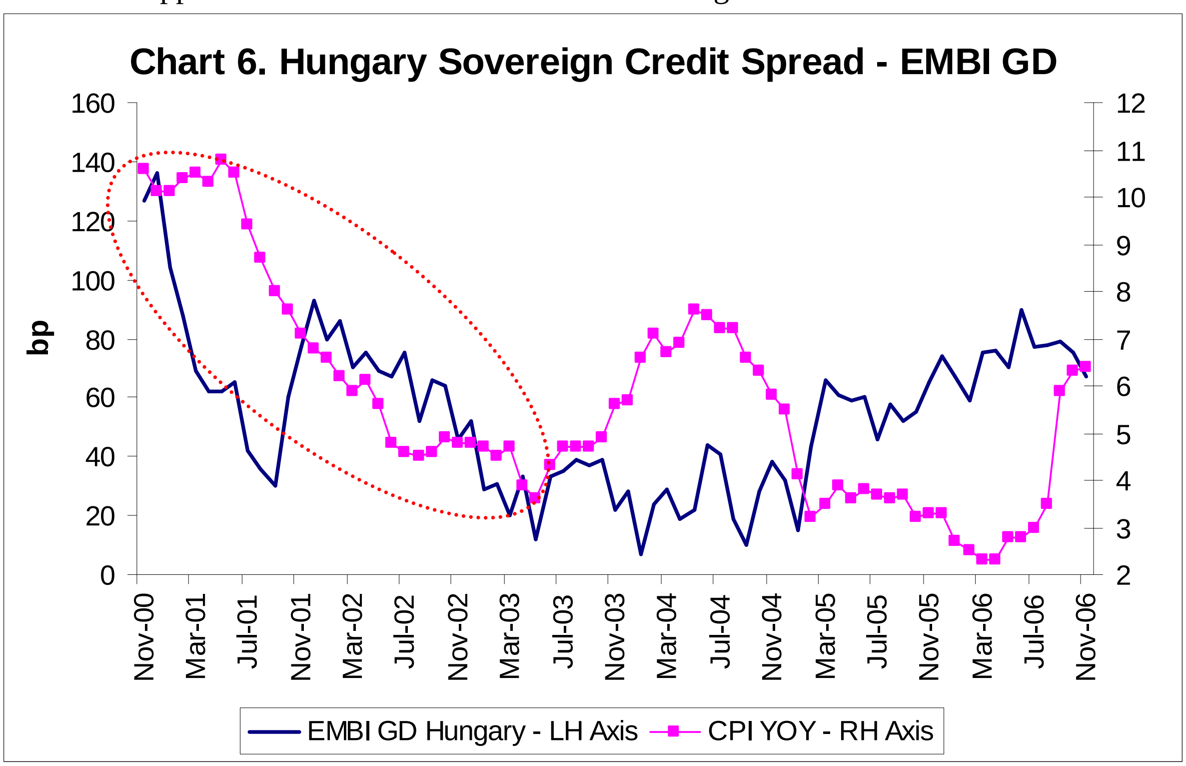


Source: Bloomberg

The process of meeting the Maastricht criteria and then the adoption of the Euro also had implications for credit spreads, with the thinking being that the process of meeting the Maastricht criteria would mean a fundamental improvement in credit quality. Market participants also assigned a non-zero probability to the possibility that Euro adoption might also mean support from other Euro-zone members during times of stress.



Source: Bloomberg, JP Morgan

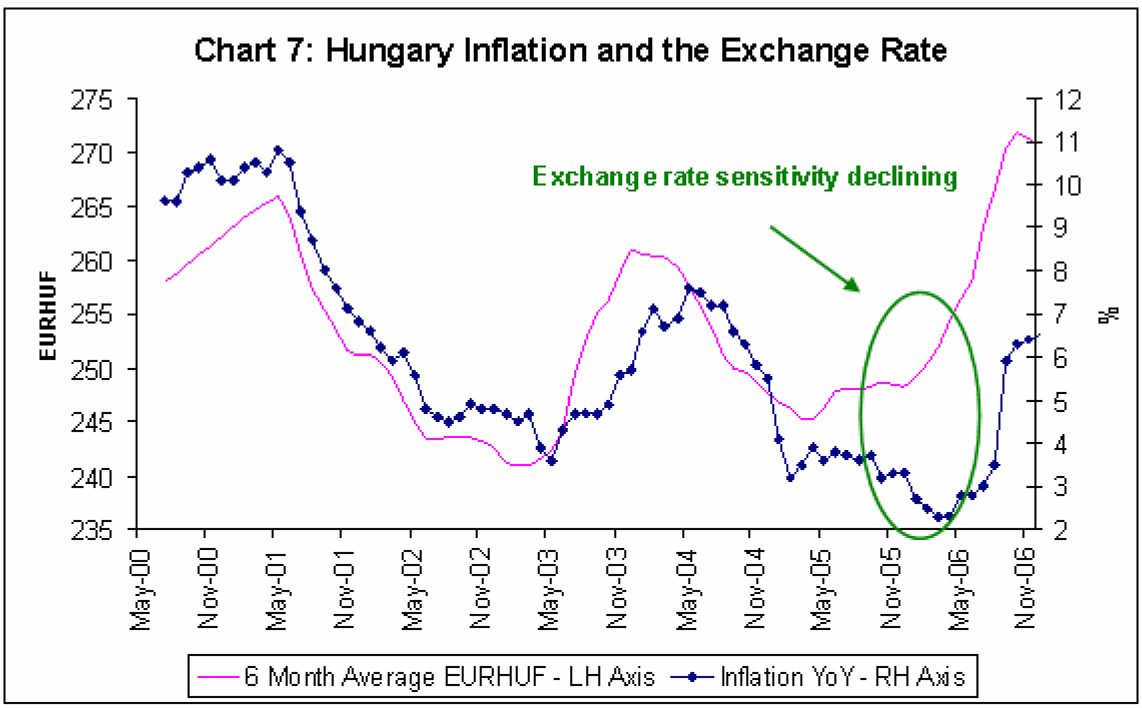
Specific Observations on Aspects of Inflation Targeting in Hungary

1. The Exchange Rate

Right from the outset the exchange rate was the key intermediate variable for targeting inflation. That was not too surprising given that:

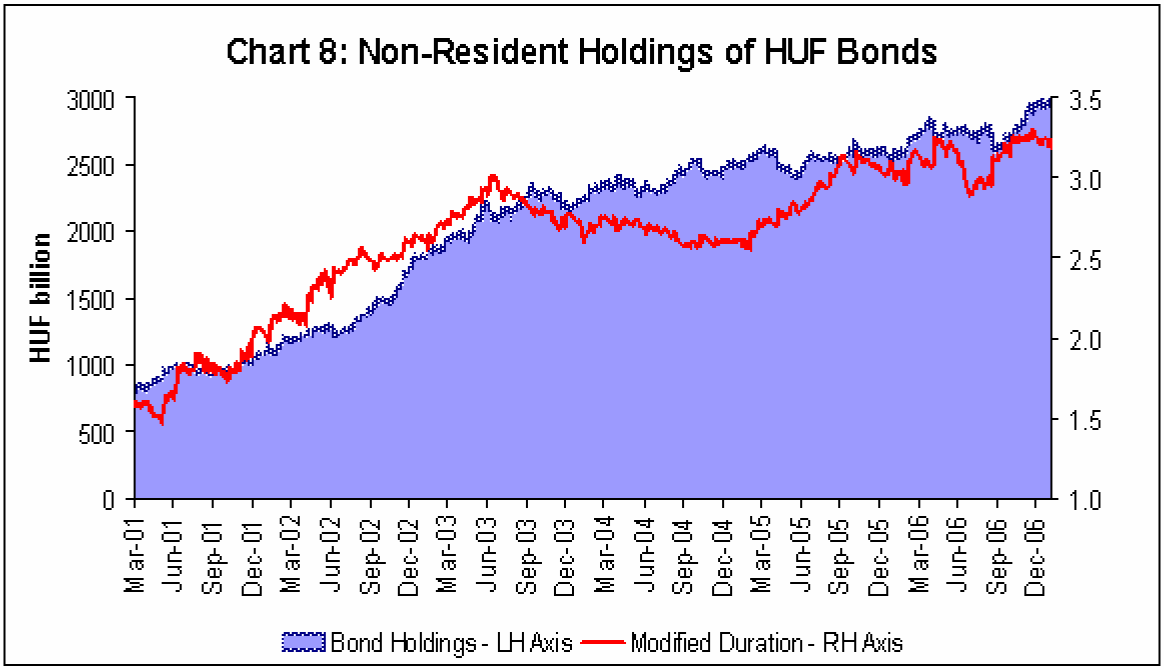
- Hungary had transitioned from a crawling peg, where the rate of crawl was eventually cut to zero;
- Hungary is a small, open economy;
- The exchange rate pass through was believed to be very high;
- The credit channel of the monetary transmission was considered weak; and
- The aim of policy was to adopt the Euro as quickly as possible and that meant transitioning to ERM II. That prompted the question of whether there was much to be gained from removing the exchange rate bands if it was only to be for a short period.

A simple chart illustrates the relationship between inflation and the exchange rate. Interestingly, that link has apparently weakened over the past couple of years.



Source: Bloomberg

An appreciating currency (or at least the perception that MNB was credibly targeting an exchange rate range stronger than implied by the forward market) proved very attractive to international bond investors.

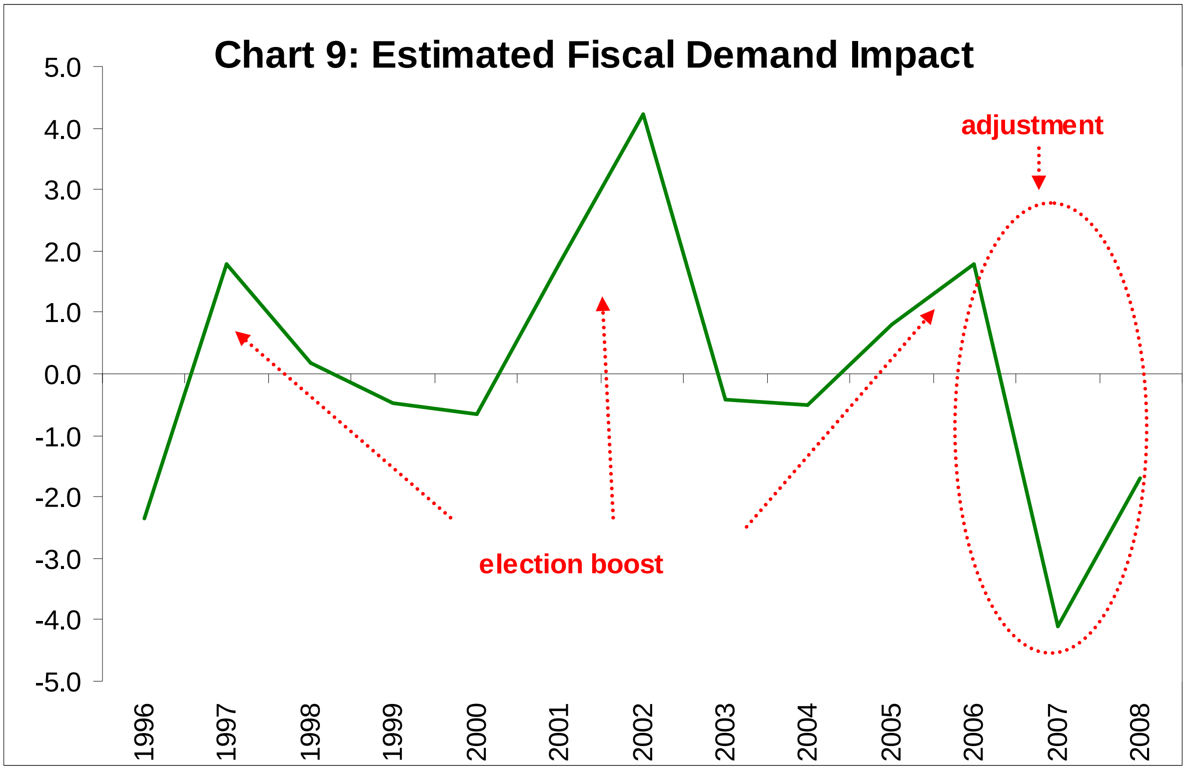


Source: AKK

Over the past few years Hungarian households have significantly stepped up their borrowing in foreign currency, particularly Swiss francs. That phenomenon had earlier been observed in Poland.

But the use of the exchange rate as the intermediate target had some undesirable consequences as the experiences of 2002 and 2003 revealed.

The 2002 election was very close, with the then government priming the pump ahead of the election and the opposition making lots of promises. The opposition won, and faced with the shadow of its mid-1990s adjustment, decided to keep many of its election promises. The result was fiscal stimulus coming into the election and following the elections.



Source: MNB

The fiscal injection, higher wages and lower risk premium for the European Union accession countries all combined to raise the inflation outlook, perhaps to a point where an exchange rate beyond the strong end of the exchange rate band would be required to meet the inflation target.

A number of market participants recognised this and thought that meant there was a chance that the band would be re-centred or, even if it was not, that the currency would remain at the strong end of the band. MNB was required to buy over EUR 5 billion in short term capital that flowed in during just 2 days. The government was not willing to contemplate a revaluation.

Market participants learned or were reminded that:

- The exchange rate bands took priority over the inflation target.
- The government needed to agree to any change in the exchange rate bands
- It is much easier to defend the strong end of the band than the weak end

MNB learned that:

- It pays to keep the currency away from the very strong end of the band

There were more lessons to be learned in 2003.

The devaluation of the forint's central parity by 2.26% on 4 June 2003 came as a surprise. It probably did not help that less than two weeks before, MNB had announced that it had finished its sales back to the market of EUR that it had acquired in January 2003. EU Commissioner Solbes' May comments on the interpretation of the exchange rate convergence criterion also increased uncertainty and further complicated the operation of the exchange rate target. The currency weakened significantly. Over the course of the next 6 months MNB ended up raising policy rates by a total of 600bp to 12.5%.

In October 2003, MNB had to bow to reality and revise up its inflation target for end 2005.

MNB and the government were reminded that:

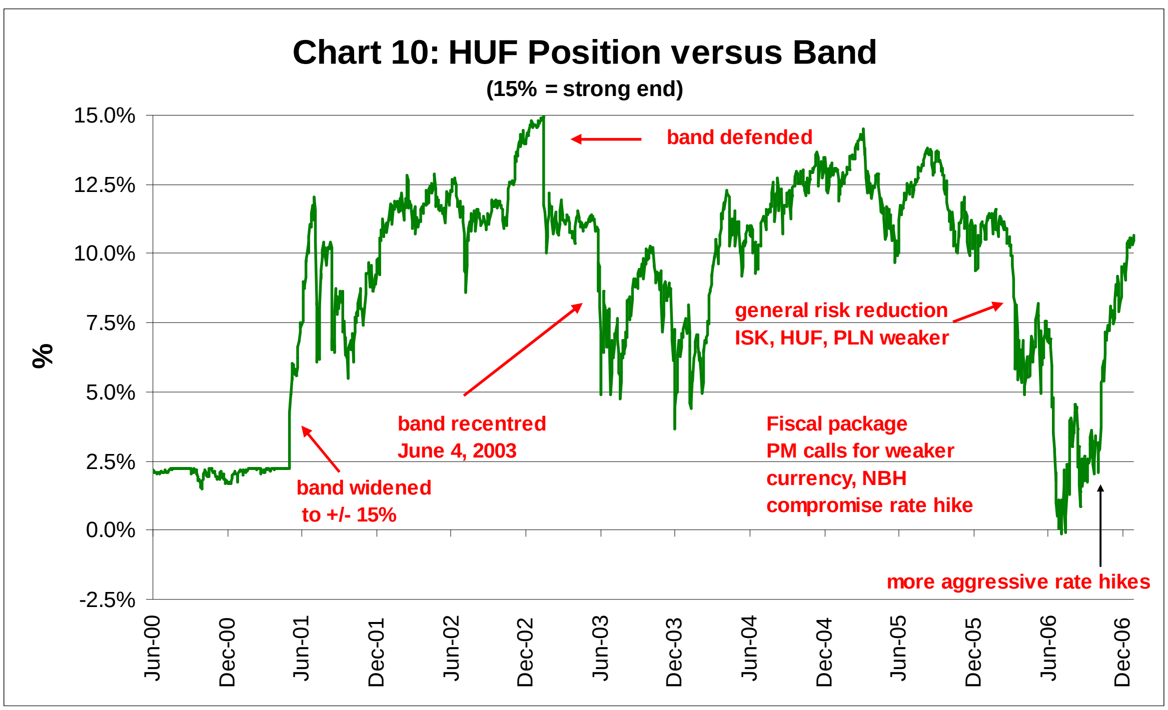
- They should be very careful in adjusting the nominal anchor. The words in MNB's August 2002 publication "Monetary Policy in Hungary" had made the key point. "When the exchange rate target is credible, it implies that the *exchange rate target is foreseeable*, that is, economic agents are able to calculate with the announced course in advance". The move was not foreseeable and some credibility was lost.

- The exchange regime was a straightjacket that took on a different complexion when there was tension between monetary and fiscal policy.

Market participants were reminded that:

- The Monetary Council was prepared to hike aggressively when needed.

The inflation and fiscal overshoots had caused market participants to revise their expectations about the timing for Euro adoption. Also, from the end of 2003 MNB stopped making its exchange rate targets explicit.



Source: MNB

Since 2004 the exchange rate has become relatively less important, not just because of the changed time path for Euro adoption but also because of the weaker relationship between inflation and the exchange rate (as shown in the chart 7 above).

The currency volatility and weakness coming into the 2006 elections provided another set of lessons:

- The Monetary Council's reaction to a weaker currency was far more muted than had been the case in 2003. Partly that can be attributed to a smaller inflation pass-through. Also, the Euro adoption date had been pushed back to some undefined time. The Monetary Council could focus more on its inflation target and the Hungarian economy rather than the now less important exchange rate target. However, as was apparent from the post- Monetary Council comments and minutes, the changed composition of the Council also likely had an effect on the policy response.

- Government comments on the exchange rate can matter. On a number of occasions, the Prime Minister had reminded observers where the middle of the exchange rate band was.

- The external background reinforced the domestic factors. Positions in risky assets were being reduced across the board in May/June 2006. It was somewhat ironic that the market sell-off in Hungary came at a time when the government had made the first serious efforts to address the fiscal deficit in years. Unlike in the past, when the beneficial effect of a benign global environment had outweighed the poor domestic fundamentals, domestic improvements in mid 2006 were outweighed by global risk reduction.

2. **Other Observations**

- The Inflation Report has been and continues to be a very valuable document for market participants. Not only does it provide information on inflation projections and the background to those projections, it was for a long time the most authoritative source for estimates and forecasts of the fiscal position. The simultaneous provision of the report in Hungarian and English is a big plus.

- The continuing improvement in the transparency of the Monetary Council is welcome. Council minutes and more recently details of voting records provide market participants with more insight into the decision making process. They also help institutionalise a Council that has in the past been subject to political pressure. The differences of view within the Council mean that additional transparency does not necessarily translate into additional predictability though.

- The move to a continuous, medium term point target for inflation serves to reinforce the credibility of the target, especially given the uncertainty over the possible timing for Euro adoption, the uncertainty over what the qualifying inflation rate might be or how that rate is determined. The medium term target also reduces the likelihood of revisions or increases such as those seen in 2002 and 2003.

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- The reduced emphasis on the exchange rate lessens the potential conflicts between monetary and fiscal policy, even if the maintenance of exchange rate bands still poses some potential dilemmas.

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