# The exchange rate and Swiss monetary policy

Address by

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#### Introduction

Ladies and gentlemen, it is a great pleasure to welcome you to Zurich for this conference on foreign currency-related risk-taking. During these two days, you will be discussing the behaviour of households and firms in dealing with foreign exchange risk and how this behaviour affects financial sector stability and macroeconomic performance. As an active member of the international financial system, the Swiss National Bank very much welcomes research in this field. Several incidences in emerging and well-developed economies over the past decade have shown that central banks and international financial institutions need to improve their understanding of how the globalisation of financial markets may affect the stability of these markets and their impact on real economic performance. Understanding the behaviour of agents in foreign exchange markets is also of utmost importance for the Swiss National Bank, because the exchange rate channel is an important determinant of inflation in our small open economy. In the following, I would like to illustrate the role of the exchange rate in Swiss monetary policy and why we would like to encourage further research on the impact of exchange rates on inflation.

### Role of the exchange rate in Swiss monetary policy

The Swiss National Bank is mandated by federal law to ensure price stability. What the SNB understands as price stability and how we strive to achieve this goal is defined in our monetary policy strategy. Our strategy features an explicit, quantitative definition for price stability. This is to maintain consumer price inflation below 2% in the medium term. To pursue this objective, our monetary policy analysis is based on a medium-term inflation forecast, which is revised on a quarterly basis. A further important component of our monetary policy strategy is an explicit operational target. On a quarterly basis, we announce our target range as a 1% band on short-term interest rates, that is, on the three-month Libor. The SNB then steers this short-term interest rate indirectly through open market operations in the Swiss franc money market.

The Swiss franc is neither an explicit objective of our monetary policy nor a regular instrument in the implementation of this policy. Nevertheless, the exchange rate does play an important role in our monetary policy analysis because, for a small open economy like Switzerland, the exchange rate can have a strong impact on domestic inflation. It affects

the prices of imported goods, which make up roughly 30% of our consumer price index. Moreover, the exchange rate affects demand for Swiss exports, which make up well over half of our GDP. Changes in export demand may affect domestic prices, in particular through changes in labour demand and wages.

At the heart of Swiss monetary policy is a medium-term forecast of consumer price inflation. The precision of this forecast depends in part on how well we predict movements in the exchange rate, and the reactions of consumer prices to these changes. Foreign currency risk taking by households, firms and financial institutions – which is the topic of this conference – affect both of these estimates.

### Predicting movements in exchange rates

Theory suggests that, in the medium and long-term, exchange rate changes should be at least partially determined by the interest rate and purchasing power parities. The SNB, and I imagine most other central banks and market participants, therefore partly use these models to predict medium and long-term exchange rate movements. Empirical evidence, however, suggests that, in reality, exchange rate movements do not fully adhere to the interest rate or purchasing power theories. The Swiss franc is a prime example in this regard. Despite lower interest rates and lower inflation than the euro area in recent years, the Swiss franc has depreciated strongly in nominal terms against the euro, the most important foreign currency for our economy. Indeed, between 1999 and 2007, the real depreciation of the Swiss franc against the euro reached an astonishing 14%.<sup>1</sup>

Many explanations for this depreciation have been put forward. One explanation suggests that the liberalisation of our domestic economy in recent years may have narrowed the differences in the productivity of the tradable and non-tradable sectors, leading to a reverse Balassa-Samuelson effect. Another suggests that the introduction of the euro may have reduced the importance of the Swiss franc as a safe-haven currency. And finally, speculative behaviour by carry traders has been put forward as the main driving force behind the weakening of the Swiss franc.

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<sup>&</sup>lt;sup>1</sup> Roth (2007)

Ladies and gentlemen, let me be frank with you. Despite an increasing number of empirical studies in this area by our own economists,<sup>2</sup> we are far from a conclusive answer about what has been driving the developments of the Swiss franc/euro exchange rate over the past number of years. As a consequence, our estimates for the future exchange rate of the Swiss franc, which underlie our inflation forecasts, are plagued by uncertainty. I would therefore strongly welcome further research in this area.

## Predicting the reaction of prices to exchange rate movements

While we still face puzzles concerning the determinants of the Swiss franc exchange rate, we have improved our understanding of how prices react to exchange rates. In line with a wide body of international evidence, our recent research suggests that the pass-through of exchange rate changes to import prices is substantial, but their pass-through to consumer prices is weak.<sup>3</sup> Moreover, it seems that exchange rate pass-through has diminished of late. However, it is still an open question as to why the exchange rate pass-through has weakened in Switzerland and other countries. Some argue that it is due to the more stable and transparent monetary environment of recent years. In this case, current economic developments may suggest that an increase in the pass-through may lie ahead. Others argue that low pass-through has been caused by increased competition due to the globalisation of goods and service markets. This would imply that low pass-through may be a constant feature of the years to come. Ladies and gentlemen, here again I would like to encourage further research which would help us understand the determinants of exchange rate pass-through and thus how the exchange rate channel may affect inflation in the future.

## **Concluding remarks**

As central bankers, our primary task is to maintain price stability. In order to do so, we need to understand what drives households, firms and investors to choose one currency over another, how this behaviour affects the relative value of currencies and how consumer prices react to these exchange rate changes. I hope that this conference provides you with

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<sup>&</sup>lt;sup>2</sup> Ranaldo & Söderlind (2007), Mancini Griffoli and Ranaldo (2008), Reynard (2008)

<sup>&</sup>lt;sup>3</sup> Stulz (2007)

new ideas and further motivation to continue your research in this area.

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