

# Memorandum

DATE: 21 August 2008

DEPARTMENT: MONETARY POLICY/ASSET MANAGEMENT

REFERENCES: Karolina Holmberg, Per Kvarnström

SVERIGES RIKSBANK SE-103 37 Stockholm (Brunkebergstorg 11)

Tel +46 8 787 00 00 Fax +46 8 21 05 31 registratorn@riksbank.se www.riksbank.se

DNR

## The foreign currency reserve and liquidity in the bank system

#### **Summary**

- Over the past year demand from the banks for loans from the Riksbank has
  declined. As the Riksbank provides for the banks' loan demand at a given
  interest rate, the size of the monetary policy repos has fallen. It can be
  observed that the demand for banknotes has declined over the past year
  and that the banks' loan requirement with the Riksbank has therefore
  declined. If the demand for banknotes continues to decline, and no other
  measures are taken, the banks will in future instead need to make deposits
  in the Riksbank.
- To avoid such a development the Riksbank can choose to sell off currency from the foreign currency reserve. Selling currency from the foreign currency reserve and purchasing SEK to a corresponding value, means that the bank system's liquidity in SEK will decline. This will increase the banks' borrowing requirement in the Riksbank.
- Another alternative is that the Riksbank change over to borrowing SEK from the banks in the weekly operations by issuing Riksbank certificates.
- One advantage of selling off the foreign currency reserve is that we can
  continue to apply the steering system in the same way as we have until
  now. It is therefore proposed that the Executive Board should decide to
  choose this alternative.

#### **Background**

The weekly lending in SEK to the banks at the repo rate – the Riksbank's repo transactions – has declined over the past year. Technically, this is largely due to a decline in the demand for banknotes. When the banks collect banknotes from the Riksbank they have to finance the banknote withdrawal by means of loans with the Riksbank. A decline in the demand for banknotes consequently means that the banks' need to borrow from the Riksbank declines. One year ago the Riksbank's lending to the banks via monetary policy repo transactions amounted to a good SEK



2 billion. At the beginning of June this year the repo volume was scarcely SEK 1 billion.

If the banks' demand for loans from the Riksbank continues to decline, the banks will not need to borrow SEK at all from the Riksbank in the future. Instead they will – all else being equal – need to deposit in the Riksbank. To simplify, one can say that the banknote stocks and the Riksbank's own capital are more than equalled by the Riksbank's holdings of foreign currency. The current monetary policy steering system means that the Riksbank will then need to change over to borrowing in SEK in the weekly operations by issuing short-term securities – Riksbank certificates.

### Selling from the foreign currency reserve

By selling assets from the foreign currency reserve and exchanging them for SEK, the Riksbank can take away SEK from the bank system. Assuming that the Riksbank does not purchase other SEK-denominated assets instead, that is, invests in bonds and other securities, the demand for loans from the Riksbank will then increase by a corresponding amount. With the current steering system this means that the volume of the monetary policy repos will increase.

It should be emphasised that an exchange of foreign currency for SEK will in practice mean an intervention in the foreign exchange market, even if the objective of the operation is not affect the krona exchange rate. For this reason it is important that the Riksbank should explain in advance the purpose of the transactions in a press release.

Advantages and disadvantages of reducing the foreign currency reserve instead of issuing Riksbank certificates

#### **Advantages**

- By reducing the assets in foreign currency, it is not necessary to make any changes to the steering system. The Riksbank will then continue as before lending SEK to the bank system in its weekly repo transactions.
- From a purely administrative point of view, selling foreign currency from the reserve is the simplest solution. The Asset Management Department sells selected assets from the foreign currency reserve and then the Monetary Policy Department sells the foreign currency and buys SEK spot on the foreign exchange market. This has a lasting effect on the banks' liquidity in SEK. No preparations for issuing Riksbank certificates are required.

### **Disadvantages**

 As the strategy of reducing the assets in foreign currency entails interventions in the foreign exchange market (sales of currency for SEK) it is possible that the Riksbank will (unintentionally) affect the krona exchange rate. There are two channels usually discussed through which foreign-



exchange interventions can possibly affect the exchange rate; the portfolio balance channel and the expectations channel, or signalling channel.<sup>1</sup>

The portfolio balance channel takes as a starting point that interventions which increase the supply of assets in foreign currency in relation to assets in SEK force investors to hold more foreign assets in their portfolios. If the investors do not regard domestic or foreign assets respectively as perfect substitutes, the portfolio changes will entail an adjustment in the exchange rates, in this case an appreciation of the krona in relation to foreign currencies. However, the empirical evidence regarding the effects of interventions via the portfolio balance channel has often been regarded as weak. In addition, the amounts concerned could reasonably be very small (according to the proposal below a total of SEK 5 billion) in relation to the average size of the investors' portfolios. It should therefore be regarded as not very likely that the exchange rate would be affected to any large degree through this channel.

According to the signalling channel, foreign-exchange interventions can affect the exchange rate by sending signals regarding future monetary policy. The assumption is then of course that the central bank de factor follows up, for instance, any pegging purchase of a currency by raising the interest rate.<sup>2</sup> By using a press release to communicate in advance the purpose of the Riksbank's SEK purchases, there should be little likelihood that the interventions are interpreted as signals of future monetary policy.

The risk of the exchange rate being affected is therefore assessed on the whole to be slight. The advantages of administering a smaller demand for loans from the Riksbank by reducing the foreign currency reserve are therefore considered to outweigh the disadvantages.

#### **Procedure**

In practice the transactions would then be implemented so that the Asset Management Department sells assets from the investment portfolios and transfers the currency/currencies to what is known as the policy portfolio. After this there are exchanges made by the Monetary Policy Department which entail selling currency for SEK.

To minimise the risk of an undesired effect on the krona exchange rate, the sales should appropriately be spread over the course of a month, for instance, with daily transactions. By spreading the purchases of SEK the size of the Riksbank's SEK-denominated assets, that is, the monetary policy repo transactions, will increase gradually in line with the purchases (all else being equal).

## Timing of the sales of the foreign currency

To avoid a situation where the banks need to deposit in the Riksbank, the sales from the currency reserve should begin in September.

<sup>&</sup>lt;sup>1</sup> See, for instance, "Does Foreign-Exchange Intervention Matter?" The Portfolio Effect", Kathryn M. Dominguez and Jeffrey A. Frankel, The American Economic Review, Vol 83. No. 5, (December 1993), pp 1356 – 1369.

<sup>2</sup> See, for instance, "Does foreign exchange intervention signal future monetary policy?" by Graciela L. Kaminsky and Karen K. Lewis, Journal of Monetary Economics 37 (1996), pp 285–312.



#### **Amount**

For the monetary policy repo transactions to remain positive, that is, for the bank system to continue to have a loan requirement from the Riksbank in the long term, the total value sold should amount to SEK 5 billion. Although the banknote stocks are expected to decline further during the current year, this amount should be sufficiently large to avoid a situation where the bank system needs to deposit with the Riksbank. This procedure can not be regarded as contrary to the Executive Board's strategic decision that the monetary policy repo transactions should normally be within the interval of SEK 0-5 billion, as the sale has a specific purpose and is aimed at raising the level.

#### Costs

A reduction in the foreign currency reserve means that the Riksbank will change over from a return with a foreign exchange risk on some of its assets to a return with Swedish interest (lending at the repo rate).

## **Proposed decision**

It is proposed that the Executive Board decide:

• To authorise the Head of the Monetary Policy Department to sell currency and buy SEK for an amount of 5 billion kronor.