ARTICLE – A cross-border banking sector with major assets and liabilities in foreign currency poses risks to financial stability

The banking sector in Sweden has significant assets and liabilities in foreign currency, in addition to Swedish kronor, and is thus vulnerable to liquidity risks. For banks to manage these risks, it is important that they insure themselves by holding liquid assets and ensuring stable funding also in foreign currency. It is also important that Swedish authorities are able to manage a situation of financial stress in which the banks' own liquidity buffers are not sufficient. The Riksbank maintains a foreign currency reserve to allow it to act rapidly in such a situation. The Riksbank considers that the liquidity requirement that may apply in a crisis means that the foreign currency reserve should not be smaller than it is today. The alternative to maintaining a foreign currency reserve is to acquire foreign currency when a crisis is imminent. However, it may be very expensive, difficult or even impossible to rapidly borrow as much currency as would be needed to avoid significant costs for society. The costs for that part of the foreign currency reserve that the Riksbank maintains to provide liquidity support should be transferred to the financial sector as the reserve has the character of an insurance policy. Such a solution has public finance advantages and creates a sound incentive among the banks to decrease their risks.

A country can have significant assets and liabilities in currencies other than its own. The central government, banking sector or private companies may be exposed to other countries' currencies. Among other things, such exposures entail liquidity risks in these other currencies. It is important that these risks are managed. This is particularly important in small, open economies that are strongly dependent on foreign trade, with large cross-border banking operations and without the same opportunities as countries with major trading currencies to issue debt instruments in their own currency on the international capital markets.[71]

The banks' liquidity risks in foreign currency

Sweden has a large banking sector with very extensive cross-border operations and significant assets and liabilities in foreign currency. The Swedish banking system's total assets amounted to SEK 17,250 billion in January 2017,[72] which corresponds to four times Sweden's GDP. At the end of 2016, funding in foreign currency in the four major banking groups amounted to 175 per cent of GDP that is approximately SEK 8,000 billion. Part of the borrowing that was conducted in US dollars, euros and other currencies was converted using currency swaps to Swedish kronor and other Nordic currencies to fund assets in these currencies. In addition, borrowing in foreign currencies funds, to a certain extent, assets in foreign currency that have significantly longer maturities than the funding has, for example mortgages, but also loans to non-financial corporations. The banks are thus exposed to the risk that their international financiers will be unwilling to renew the loans they have taken, at the same time as their assets in foreign currency will remain on the balance sheet. This could lead to liquidity problems for the banks. If the banks are unable to refinance themselves, they may be forced to break off new lending and may find it difficult to fund their existing lending. This could lead to the banks' customers being impacted by liquidity problems, which, in turn, could lead to credit losses in the banks.

The size and structure of the Swedish financial system, with its extensive operations in currencies other than Swedish kronor, may thus entail significant risks for financial stability and, ultimately, for the economy as a whole. These risks concern not only the Swedish economy but also our neighbouring countries, where Swedish banks have operations. The Baltic and Nordic central banks also say that, if the major Swedish banks should encounter problems, this would also threaten the financial stability of their countries.[73] In its analysis of the financial sector in Sweden, the International Monetary Fund (IMF) also points out that the Swedish banks are important to these

[71] Eichengreen, B., Hausmann, B. and Panizza, U. (2003), The Pain of Original Sin, *University of Chicago Press*.
[72] This figure excludes Swedish banks' foreign-owned subsidiaries.

[73] *Financial Stability Review* 2/2016, Eesti Pank. *Financial Stability Report* 2016, Latvijas Banka. *Financial Stability Review* 2016, Lietuvos Banka and *Bulletin* 2/2016, Bank of Finland.

countries.[74] It is therefore of the utmost importance that the Swedish banks' liquidity risks are managed well.

The banks need to insure themselves

A natural starting point is that the banks, just like other private commercial actors, should manage their liquidity risks themselves. They therefore need to insure themselves by having enough liquidity reserves and sufficiently stable funding in foreign currency. In this way they can reduce the risk that the public sector will be forced to intervene and support them in the event of a crisis. Finansinspektionen (FI) has also already placed demands for how the banks should manage their liquidity risks, among other means by requiring specific liquidity cover ratios (LCRs) in euros and US dollars.[75] The Riksbank's assessment, however, is that the banks have insufficient resilience in other significant currencies and that further requirements are needed (see chapter 3).

The central bank as liquidity supplier

Even if the banks were to have robust self-insurance, it is not certain that this would be enough in crisis situations. It is therefore important that an authority has a function as 'lender of last resort', which is to say it has the capacity to provide the banking system with liquidity in the event its banks were finding it difficult to obtain funding on the market. In Sweden, the Riksbank has this role. However, the Riksbank's possibility of acting as 'lender of last resort' is not the same for foreign currency as it is for Swedish kronor. As regards its own currency, the central bank basically has an unlimited ability to create liquidity to provide to the banking system, even if this means that the central bank incurs a credit risk. But foreign currency must be acquired. This can either be done in advance by maintaining a foreign currency reserve, or by acquiring foreign exchange when the need arises. In Sweden, this is currently managed by the Riksbank holding a foreign currency reserve. In 2009 and 2012, the foreign currency reserve was strengthened by the Swedish National Debt Office taking loans in foreign currency on behalf of the Riksbank. The Riksbank can also borrow in its own name or buy foreign currency and pay with its own currency.

Necessary to have an adequate foreign currency reserve

One advantage of having a foreign currency reserve is that it is very liquid and can thus be made accessible for liquidity support to the banking system in periods of financial stress.[76] A foreign currency reserve can thus be regarded as a liquidity insurance that provides good protection if a financial crisis arises. The Riksbank's foreign currency reserve was used, for instance, during the financial crisis 2008-2009 when Swedish banks were unable to attain sufficient dollar funding. In four weeks, the Riksbank lent US dollars equal to about SEK 200 billion. Good crisis preparedness presupposes that even larger amounts can be generated in an even shorter time-frame. A foreign currency reserve can also prevent a financial crisis by creating confidence in the central bank's ability to take action in a crisis.

Deterioration in confidence can have major consequences

Historical experiences show that a deterioration in confidence can have major consequences. For instance, Ireland's credit rating was cut substantially within the course of a couple of years in connection with the global financial crisis 2008-2009. In the central government budget, interest expenditure for central government borrowing increased from around 3 to over 10 per cent of GDP, which forced severe cuts to other public expenditure.

Another example is the developments in Iceland in connection with the financial crisis. Iceland's credit rating was also cut rapidly, and its currency depreciated substantially before trade in the Icelandic krona was finally stopped. At the same time, the Icelandic policy rate was raised to 18 per cent despite a floating currency. A government budget with a 5 per cent surplus in 2007 was transformed into a deficit of 13 per cent in 2008. Risk premiums for Iceland on the financial markets were high for a long time following the crisis, which illustrates how difficult it is to re-establish confidence once it has been damaged.

Swedish experiences also demonstrate that it takes a long time to regain confidence. The crisis suffered by Sweden in the early 1990s culminated in the country having to abandon the fixed exchange rate in 1992. The crisis also led to important reforms. Monetary policy received an inflation target, a new framework was introduced for public finances, and both the pensions and social insurance systems underwent fundamental reform. Nevertheless, interest rates in Sweden were considerably higher than in Germany for a long period of time, with a very high risk premium for a number of years.

All in all, experiences show that in times of financial stress the focus is on liquidity and the capacity to manage foreign debts in currency is extremely important. Protecting a country from the effects of financial unease requires

[74] *Sweden Financial System Stability Assessment*, November 2016. International Monetary Fund (IMF).
[75] See, among others, Short-term liquidity risks in significant currencies. *Financial Stability Report* 2016:2. Sveriges Riksbank.
[76] See, for instance, Goldberg, L. Hull, C. and Stein, S. (2013), *Do industrialized countries hold the right foreign exchange reserves?* Current issues, volume 19, number 1. Federal Reserve bank of New York, Ramaswamy, S. (1999), *Reserve currency allocation: an alternative methodology*. BIS Working paper nr 72 or *IMF Assessing Reserve Adequacy*, February 2011, International Monetary Fund (IMF).

both stable finances and rapid access to liquidity in other currencies. A sufficiently large foreign currency reserve can therefore be regarded as a robust insurance against liquidity risks. Given the Swedish financial system's large degree of international dependence, it is important and necessary to maintain international confidence in the financial system.

It may prove risky to acquire foreign currency in a crisis

The alternative to maintaining a foreign currency reserve is not to acquire foreign currency until a crisis has occured or is imminent. However, it may be difficult to quickly borrow sufficiently large amounts once the crisis is unavoidable. Moreover, it may be considerably more expensive to borrow then compared with borrowing under normal circumstances. There is also a risk that the probability of suffering a crisis increases, as resilience and confidence abroad will become lower.

Even with well-functioning financial markets, extensive borrowing can take time in order to avoid influencing market rates too much. For instance, it took several months for Swedish authorities to borrow foreign currency to the extent needed during both the 1990s crisis and the most recent financial crisis.[77]

Substantial and rapid borrowing when a crisis has actually occurred also risks pushing up the central government's borrowing costs. Furthermore, banks may need liquidity support in foreign currency at the same time as the central government has less financial strength and scope for borrowing on the capital markets and these two problems thereby risk reinforcing one another. Developments in Ireland and Iceland, for example, also show that banking crises have often coincided with sovereign debt crises and the combination has often proved particularly costly for the real economy.[78, 79] A bank crisis can also undermine the state's credit rating as the state is expected to absorb losses or because the banking crisis is expected to lead to much worse growth in the real economy. The larger the banking system is in relation to the size of the state, the greater is its influence.

As rapid or unexpected borrowing causes interest rates to rise, the central bank's scope for creating impact for its monetary policy will also deteriorate. In a small, open economy with its own currency, severe exchange rate fluctuations can aggravate the problem. A well-balanced foreign currency reserve can instead inspire confidence and counteract damaging speculations on the financial markets.

The cost of a foreign currency reserve – an insurance premium that should be paid by the financial sector

The cost, or insurance premium, of having a liquidity insurance in the form of a foreign currency reserve is at present charged to the Riksbank's earnings and central government finances and is calculated at around SEK 500 million a year.[80] In comparison, it can be mentioned that the recently proposed increase in the resolution fee entails increases for the banks of SEK 3,5 billion a year.

To create sound incentives for the banks to reduce their liquidity risks in foreign currency, it is important that the insurance is paid for by those benefiting from it. Above all, a confidence-inspiring currency reserve benefits the financial sector, primarily the major Swedish banking groups. Sweden's good public finance situation, combined with the Riksbank's currency reserve, means that the risk premium when the banks are obtaining funding on the international capital markets is lower than it would otherwise have been.

One could consider a number of different ways of transferring the cost for the part of the foreign currency reserve held by the Riksbank to be able to give liquidity support to the banks. Their common characteristic is that they all aim both to cover the cost of maintaining a currency reserve and to give the banks an incentive to reduce their liquidity risks in foreign currency.

Once conceivable model is based on a fee system, where the fee paid by a bank is proportionate to the liquidity risks in foreign currency taken by that bank – the greater the risk, the higher the fee. Another model is that the Riksbank is granted the legal conditions to introduce a reserve requirement in foreign currency aimed at promoting a safe and efficient payment system. Such a requirement would mean that a part of the banks' borrowing in foreign currency would have to be deposited in the Riksbank, where it would be available for use by the bank in the event of a financial crisis. Such a solution would mean in principle that the liquidity coverage requirements for the banks would not be needed if their reserve requirements were sufficiently large. A minimum reserve in Swedish krona could also be used for this purpose, to give the banks an incentive to reduce their risks and at the same time cover the costs of the foreign currency reserve.

[77] Consultation response to the proposal referred to the Council on Legislation regarding the Riksbank's financial independence and balance sheet, May 2017. Sveriges Riksbank.
[78] Reinhart, C. and Rogoff, K (2011), From Financial Crash to Debt Crisis, *American Economic Review 101.*
[79] de Paoli, B., Hoggarth, G and Saporta, V (2009), Output Costs of Sovereign Crisis: Some Empirical Estimates, *Working paper No. 362*. Bank of England.

[80] This is an estimate for a particular year, but an assessment of the cost should be made over a longer period, as the costs (and the revenues) have varied considerably over time. The funding cost of the borrowed part of the currency reserve is reduced by funds being invested in interest-bearing assets. The way that funds are invested and the development of the market affect the net result of the pre-financed currency reserve.

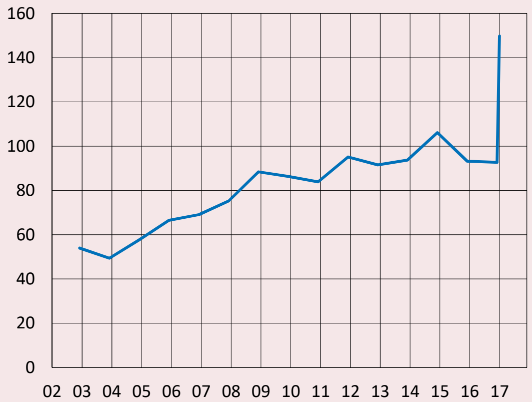
An appropriate size of the Riksbank's currency reserve

An analysis is needed of the risks that the currency reserve is intended to cope with in order to assess an appropriate size of it. The Swedish banks' foreign funding as a share of GDP has tripled since the beginning of the 2000s up until the present day, and currently amounts to 150 per cent of GDP (see chart A:1). The substantial increase in the banking system's foreign funding at the turn of the year 2016/2017 is mainly due to Nordea's transformation into a branch structure, when the legal domicile of some funding in foreign currency was moved to Sweden. At the same time, it should be pointed out that additional funding in foreign currency remains in the major Swedish banks' foreign subsidiaries, including in Nordea's mortgage lending companies in Denmark, Norway and Finland.[81]

There is a risk that the Swedish banking system's access to foreign funding can deteriorate under financial stress. An important base for assessing what is a sufficient foreign currency reserve is therefore an analysis of the Swedish banking system's refinancing requirement in different scenarios. In this way, one can estimate the banking system's potential requirement of liquidity assistance in foreign currency from the foreign currency reserve. The Riksbank has therefore made scenario analyses based on data reported by banks to Sweden's financial supervisory authority, FI. Different assumptions are then made regarding the maturity structure of the banks' lending and their funding, regarding how much of the banks' own liquidity reserves is available to meet the foreign currency outflows and regarding how long the crisis will last.

Chart A:1 Swedish banking system's foreign funding in relation to Sweden's GDP

Per cent



Note. Foreign funding refers to Swedish banks' (including Swedish subsidiaries but excluding foreign subsidiaries) market funding and deposits in foreign currency. Last data point refers to January 2017. The heavy increase at the start of 2017 is due to Nordea's previous foreign banking subsidiaries being incorporated into the Swedish parent company.

Source: Statistics Sweden

Assumptions in the base scenario

The Riksbank has defined a base scenario for a feasible crisis based on historical experiences of the in- and outflows of foreign currency and the use of liquid assets under stress. The assumptions made in the base scenario include:

- A fall in banks' deposits in foreign currency from households of 5 per cent and from companies of 25 per cent.
- The banks' lending remains unchanged, that is, there is no credit crunch for borrowers.
- The financial markets for securities funding are not available to Swedish banks.
- Only central bank money and government securities can be used to generate liquidity on capital markets; covered bonds, corporate bonds and other assets are assumed to be illiquid on private markets.
- The banks allow their liquidity buffers to fall to 75 per cent of the requirement. This means that banks do not dispose of or pledge all their most liquid assets in foreign currency to counter the currency outflows.[82]
- The scenario runs for three months.
- Holdings of US dollars and euro can be interconverted or converted to less liquid currencies such as DKK, NOK and GBP.
- Assets in domestic currency that are funded in foreign currency in the form of currency swaps can, if necessary, be replaced by funding in domestic currency.

The requirement amounts to SEK 535 billion

With these assumptions the banking system's need for liquidity assistance from the Riksbank's foreign currency reserve can be estimated at corresponding to SEK 535 billion over a three-month period. In comparison, it can be noted that the Riksbank's actual foreign currency reserve amounted to SEK 470 billion at the start of 2017. The International Monetary Fund (IMF) has made similar calculations and come to the conclusion that Sweden's foreign currency reserve should not be less than it is today.[83] In its latest global stability report, the IMF also points out a growing concern about the fact that non-US banks are increasing their dependence on funding in US

[81] If the major banks' foreign-owned subsidiaries are also included, foreign funding would amount to 175 per cent of GDP.

[82] There may be several reasons why the banks either cannot or do not want to empty their own reserves before seeking assistance from the Riksbank. For one thing, collateral may be needed to implement intraday payments, and for another thing liquidity reserves that are too low may undermine confidence that the bank can recover.

[83] *Article IV consultation with Sweden concluding statement of the IMF mission,* September 2016. International Monetary Fund (IMF).

dollars.[84] In the report, the IMF calls on countries with limited foreign currency reserves and a lack of swap lines with other central banks, like Sweden, to consider measures aimed at strengthening their resilience.

The above analyses consider neither the monetary policy arguments in favour of maintaining a foreign currency reserve nor the commitments made by the Riksbank in relation to the IMF and other international organisations or central banks.

Sensitivity analysis – summary

The uncertainty in these calculations is considerable and the calculations are also sensitive to different assumptions. With different assumptions, the currency need may be considerably larger or smaller. A brief sensitivity analysis is presented below.

Table A:1 and the accompanying sensitivity analysis illustrate how the amounts are affected when the assumptions change. As the banks' liabilities in foreign currency are so large, even small changes in the underlying assumptions can have a major effect on the currency requirement, both in absolute terms and in relation to the size of the currency reserve.

Some of the assumptions concern factors that neither the banks nor the financial supervisory authorities can affect (how liquid the banks' assets are under stress and the size of the outflows from households and companies). Other assumptions are mainly dependent on the banks' behaviour in times of stress (to what extent they choose to use their liquidity buffers and to what extent they renew loans that mature). But the financial supervisory authority can affect the degree of self-insurance needed in the banking system by regulation and choice of risk tolerance, which affects the potential liquidity requirement of the banking system. Swedish authorities have influenced, for instance, the Swedish banking system's potential liquidity requirement in dollars and euros as FI has made a conservative choice to introduce liquidity coverage ratios (LCR) in these currencies. At the same time, the sensitivity analysis shows that the liquidity

Table A:1 Liquidity requirement during three-months' financial stress
SEK billion

Liquidity reserve falls to	More liquid assets	10% credit crunch	Base scenario	Larger outflows: -15% household deposits	Larger outflows: -40% company deposits
75%	362	478	535	691	845
50%	189	219	263	354	489

Note. In the base scenario, the banks choose not to allow their liquidity buffers to fall below 75 per cent of the requirement. If banks allow the utilisation rate to fall to 50 per cent, the liquidity requirement decreases.

Source: The Riksbank

Sensitivity analysis - liquidity requirement

This box describes how the liquidity requirement is affected when the assumptions used in the base scenario are changed. The results are summarised in table A:1.

More liquid assets (SEK 362 billion)
In the base scenario, it is assumed that it is only the banks' central bank money and government securities that can be used to generate liquidity. But if the banks' other liquid assets (e.g. covered bonds) are also included, their liquidity requirement falls to SEK 362 billion.

10 per cent credit tightening (SEK 478 billion)
In the base scenario, it is assumed that the banks' balance sheets will be retained, that is, all new lending to the general public will stop and all existing lending will be renewed on an ongoing basis. But if only 90 per cent (instead of 100 per cent) of the loans that mature within three months are renewed, the banks' liquidity requirements will decrease by around SEK 50 billion, compared to the base scenario.

Larger outflows (SEK 691 and 845 billion respectively)
The base scenario assumes that 5 per cent of household deposits and 25 per cent of company deposits are withdrawn. If withdrawals instead amount to 15 and 40 per cent respectively, banks' liquidity requirements will increase by SEK 100–300 billion compared to the base scenario.

Convertibility (SEK 740 billion)
In the analysis, it is assumed that full convertibility prevails, i.e. that US dollars and euros can always be converted to less liquid currencies such as NOK, DKK and GBP. If convertibility does not prevail, it means that the Riksbank may need to step in and provide liquidity support in these currencies. If this were to be the case, the need for a currency reserve increases, all other factors being equal, from SEK 535 billion to SEK 740 billion (this part of the sensitivity analysis is not included in table A:1). The majority of this increase is due to the exposure to NOK, followed by DKK, while the effect of the exposure to GBP is relatively minor compared with the effect of the two Nordic currencies.

The banks allow their liquidity reserves to fall to 50 per cent of the requirement
If the banks allow their own currency buffers to be reduced to 50 per cent, instead of 75 per cent as in the base scenario, before they assess that they need central bank support, this will halve their liquidity requirement. If the market finds out that the banks' own holdings of eligible assets in foreign currency have fallen below certain levels, there will be a risk that the market will consider that the bank in question is no longer an acceptable counterparty. In addition to this, the banks will need a certain amount of eligible assets to be able to execute payments and manage intraday liquidity. It is not possible to determine in advance what is the bank's lowest critical limit for a liquidity

[84] *Global Financial Stability Report*, April 2017, International Monetary Fund (IMF).

reserve before requesting central bank liquidity. But on the basis of discussions with the banks and with the IMF, it appears reasonable to assume that the critical limit lies above 50 per cent, although it is impossible to state an exact figure. One way of ensuring that the buffers do not fall too far below the levels required by the supervisory authorities is for the banks to maintain extra buffers beyond the regulatory requirements. It can be added that, if they find themselves in a situation of liquidity-affecting stress, the banks do not need to comply with the LCR requirements. However, a bank that considers itself to be in such a situation is to immediately inform FI of this, in writing, stating the reason.

requirement increases substantially (from SEK 535 billion to SEK 740 billion, see the box) if it is not possible in a stressed situation to convert dollars or euros to the smaller currencies such as Norwegian and Danish kroner. If the banks' liquidity buffers in the smaller currencies had been larger, the liquidity requirement in this scenario would have been smaller as non-convertibility would not have been a major problem. This is thus an example of how a higher degree of self-insurance reduces the need for a large foreign currency reserve.

Proposal to change the conditions for the foreign currency reserve

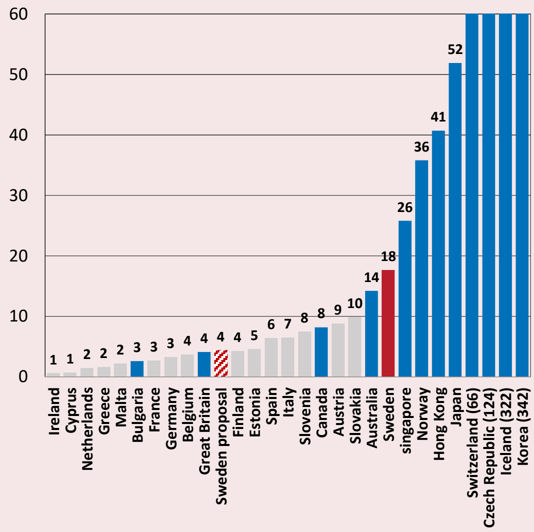
The Ministry of Finance has presented, on behalf of the Riksdag, a draft referral to the Council on Legislation regarding the Riksbank's financial independence.[85] The proposal involves significant limitations to the Riksbank's ability to fund the foreign currency reserve via loans from the Swedish National Debt Office. According to the proposal, the Riksbank shall also repay its debt, invested in the foreign currency reserve, to the Swedish National Debt Office by the end of 2017. If the Riksbank repays its loans from the Swedish National Debt Office, this may entail a reduction of the foreign currency reserve by an amount equivalent to SEK 257 billion. This means that in the short-term, it would be less than half the current size of around SEK 470 billion. According to the proposal, the Riksbank would be able to reinforce the foreign currency reserve in the future through loans from the Swedish National Debt Office of SEK 50 billion, if the Executive Board of the Riksbank considered there to be "exceptional grounds" for this. It is proposed that further reinforcement of the foreign currency reserve through the Swedish National Debt Office shall require a decision by the Riksdag and can only be done if the Riksdag considers there to be "exceptional grounds". According to the proposal, "exceptional grounds" means that Sweden is entering a financial crisis.

The proposal was put forward at the same time as Nordea adopted a branch structure for large parts of its operations in Sweden's neighbouring countries. As was mentioned above, the transformation to a branch structure means that large volumes of foreign loans and their funding will find a legal domicile in Sweden. This will double Swedish participants' short-term funding in foreign currency. The Swedish banking system, including Nordea, accounts for more than 90 per cent of these loans while the Swedish government and Swedish non-financial corporations account for the rest. At the same time, as has been described above, legislation is being proposed that could result in the foreign currency reserve basically being halved in the short term. If the proposal is accepted, it will mean all in all that the foreign currency reserve will decline in relation to Swedish borrowers' short-term liabilities from 18 per cent in 2016 to 4 per cent at the end of 2017 (see chart A:2). All in all, this can entail increased risks in the Swedish financial system.

According to the proposal, the Riksbank shall thus repay its debt to the Swedish National Debt Office. For the Riksbank to have an appropriate composition of the currency reserve, the Riksbank would need to perform extensive transactions aimed at restoring the original composition. Such a rapid transformation is costly and risks creating market disturbances. Both the Swedish National Debt Office and FI take up the practical problems

Chart A:2 Foreign currency reserve in relation to short-term liabilities in a selection of countries

Per cent



Note. Countries with grey columns are in the EMU. Sweden prior to and after Nordea's transformation into a branch structure and with Ministry of Finance proposals concerning to the foreign currency reserve.

Sources: Haver analytics, IMF and the Riksbank

[85] Draft proposal *The Riksbank's financial independence and balance sheet*, March 2017. Ministry of Finance.

and risks of substantial costs entailed in the current wording of the proposal in their consultation responses. An alternative and better way that repaying the debt directly is to allow the funds to remain in the Riksbank's balance sheet and then repay the debt when the assets mature.

Consequently, the Riksbank does not support the draft consultation response’s proposal to limit the Riksbank’s scope for borrowing foreign currency via the Swedish National Debt Office. Even if the Riksbank is able to fund the currency reserve in its own name, the most cost-efficient solution is for the Swedish National Debt Office to continue to borrow on behalf of the Riksbank. It is reasonable for the Riksbank not to have the right to unlimitedly and unilaterally decide on borrowing from the Swedish National Debt Office. The current arrangements, which mean that the Swedish National Debt Office must, within its mandate, make a government debt policy trade-off prior to a decision on borrowing to the Riksbank, should be clarified in the legislative text.