

The framework for short-term provision of international reserve currencies to sovereign states and their central banks

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Good afternoon, ladies and gentlemen!

Today, I would like to discuss “**the framework for short-term provision of international reserve currencies to sovereign states and their central banks**”. Let me begin by reviewing the recent evolution of global liquidity. Then, I will discuss different concepts of supplying foreign reserves and consider their recent developments. In the third part of my speech, the pros and cons of these concepts will be explored. Finally, I will point out certain trade-offs with other economic objectives and draw conclusions on the evolution of the global framework.

Let me start by highlighting current developments in global liquidity. For this purpose, I define global liquidity as the sum of monetary aggregates of the major advanced economies.

Global excess liquidity may be understood as monetary liquidity that is not needed by economic agents to finance real economic transactions. In theory, excess liquidity may be measured by comparing long-run developments in money supply and GDP. Assuming the trend of velocity of money remains stable over time, nominal GDP is a proxy for the transactions demand for money. In practice, recent disruptions in the money market substantially complicate the assessment of excess liquidity in the short to medium term. In this context, the ECB monetary policy strategy proved appropriate in taking a broad based perspective focussing on threats to price stability in the long term. This makes it possible to cross-check the results of the monetary analysis with the results of the economic analysis focussed on short to medium term developments in inflation and growth.

In recent past, the injection of liquidity by central banks was higher than at any time in the last 15 years. Its stocks remain large and continue to build up. Of course, the fast pace of excess liquidity creation reflects not only growth in money aggregates but also shrinking nominal GDP.

Before the crisis, global excess liquidity was often ascribed to global imbalances reflecting on one hand large current account deficits in countries like the US and the UK and on the other hand substantially increased savings and sizeable current account surpluses in some

advanced, emerging and oil-producing economies, which accelerated the accumulation of their foreign exchange reserves. Another source of global liquidity consisted of large interest rate differentials between major economies, which encouraged investors to engage in carry trade transactions in foreign exchange.

Short-term risks to consumer price stability are currently dampened by a drop below potential in most economies and rising unemployment. However, the situation can change abruptly. One should not underestimate the risk of prolonged excess liquidity on unwelcomed developments in specific asset classes. Global excess liquidity also reduces investors' willingness to hold liquidity at the current low level of returns and might fuel their risk appetite. This could provide a renewed chase for performance.

Recent experience indicates that even in a situation of abundant global liquidity, local markets in foreign currencies can seize up and currency shortages swiftly propagate across currencies, international markets and time zones. This highlights the importance of the global liquidity provisioning concepts to counter illiquidity of particular markets.

In a liquidity crisis, monetary authorities can engage in foreign currency liquidity-providing operations which can be classified into the following four **major concepts**: national foreign exchange reserves, pooling of reserves, inter-central bank swap lines or repos and monetary units or loan facilities by supra-national monetary authorities.

Central banks maintain foreign **reserves mainly in key currencies** but also in high-value liquid assets like gold. They may redirect the investments of such foreign reserves towards bank deposits, in an endeavor to offset the withdrawal of bank deposits in foreign currency by investors.

At the outset of the crisis, global foreign exchange reserves had reached an unprecedented Euro 3.5 trillion (USD 5 trillion) compared to only Euro 2.3 trillion (USD 2 trillion) in 2001. The share of Asian countries more than tripled during that period and China alone now holds reserves worth about Euro 1.7 trillion (USD 2.4 trillion).

Another possible strategy to ward off potential future currency crises (proper exchange rate regimes and exchange rate management notwithstanding) consists of schemes that **pool foreign reserves of several central banks**. This concept generally requires a binding arrangement between sovereign states specifying the pooling mechanism and its management.

In May 2009 the **Chiang Mai Initiative** of the ASEAN+3 group agreed to transform its network of bilateral currency swap agreements into a multilateral facility that would pool together Euro 85 billion (USD 120 billion) of reserves. So far, these arrangements have never been called upon.

An additional source of reserve currency can be **inter-central bank swap lines and repos**. These involve two transactions. First, foreign currency is delivered against collateral in form of assets or domestic currency. Second, on a specified date in the future, accrued interests are paid and transactions are unwound, which implies that currency positions or repoed assets are retransferred.

Since December 2007 certain central banks around the globe have been participating in a temporary network of inter-central bank swap lines and repo agreements. In particular, this included the US Fed supplying unlimited liquidity in US dollars to the ECB, the Bank of Japan, the Bank of England and the Swiss National Bank. Other swap lines have also been put in place, for example the ECB provides Euros to the Fed. At the peak of the crisis in December 2008, the US Fed provided globally Euro 432 billion (USD 583 billion). Since then, demand has receded continuously and the swap lines have been discontinued.

Lastly, **monetary units or loan facilities created by supra-national monetary authorities** can grant liquidity to their member states. In response to the crisis, IMF member states agreed a Euro 175 billion (USD 250 billion) general allocation of Special Drawing Rights (SDR). In times of need, members can exchange SDRs for key currencies through **voluntary trading arrangements** with other IMF member countries; otherwise SDRs count as part of the official international reserves. The discussion whether SDRs could play a greater role as an international reserve currency has been re-opened during the crisis.

In addition, the “**New Arrangements to Borrow**” boosted IMF facilities by Euro 345 billion (USD 500 billion). The IMF redesigned its lending framework with the introduction of a “**Flexible Credit Line**” for countries with a sustainable strong economy and enhanced “**Stand-by Arrangements**” that are more widely accessible.

Let me now suggest some criteria to evaluate the alternatives that I have just mentioned. These criteria include effectiveness, costs, efficiency and moral hazard.

First, effectiveness in alleviating liquidity shortages in foreign currency depends on the speed and size with which foreign reserves can be mobilized.

The discretionary nature of national reserves in foreign currency means that in principle they are available at **short notice**. In turn, this might have a reassuring effect on market confidence. The same also applies to other sources, such as standing swap lines, pooled reserves or IMF facilities that can be accessed unconditionally.

In addition, foreign exchange reserves should be available in a **size sufficient** to match outstanding demand. This can require very large volumes in a systemic crisis. While national foreign exchange reserves might alleviate temporary shortages in an individual institution or economy, their limited quantity might reduce their effectiveness during large systemic events. This suggests a need for additional sources involving cross-border cooperation.

However, measures that are provided at the **discretion of monetary authorities** are based on a case-by-case assessment and a decision by the respective lender. These will reflect several factors, including the objectives of the creditor, whether the crisis is systemic, country-specific or institution-specific and also the form of the measure: For instance the lending authorities might favor a secured repo agreement, although this removes collateral from the borrowing central bank. Compared to repo agreements, lending in the form of a currency swap preserves the potential to add new liquidity

Second, the effectiveness of liquidity provision in foreign currency has to be judged against its **economic costs**. Every time a country receives foreign currency support from an external creditor, the costs depend on the respective agreement. Foreign exchange reserves, on the other hand, bear an opportunity cost representing foregone alternative investments. An efficient international currency system based on pooling or similar concepts will require a lower overall amount of reserves. Of course, such an international system requires political agreement and additional administrative costs associated with managing the reserve pool.

A further cost is associated with **risk**. **Credit risk** arises whenever a national central bank provides liquidity to domestic counterparties. However, it will also arise when one central bank furnishes liquidity to another central bank, or when the IMF provides liquidity to a national government. Besides, foreign currency reserves fluctuate in value and are therefore also subject to **foreign exchange risk**. A priori exchange rate volatility increases the required volume of reserves as well as its opportunity costs.

A **third** criterion to judge liquidity provisioning in foreign currency is linked to **moral hazard**. This arises whenever individuals, institutions or countries expect that they will not have to bear the

consequences of their actions. This will incite them to act less prudently than they would otherwise, leaving third parties to bear some of the consequences of their behaviour.

For financial institutions, the prospect of emergency provision of foreign currency liquidity may encourage excessive risk-taking in carry trades or in foreign currency lending. This potentially increases the likelihood of a systemic crisis. For national authorities, the prospect of emergency liquidity provision from abroad might reduce the incentive to conduct sound economic policies and accumulate adequate reserves. This leads to the paradoxical situation that unconventional measures applied in a crisis might lower the incentive to maintain preventive measures during normal times. In turn this increases the likelihood that unconventional measures will be needed again in the future, i.e. crisis resolution might trade-off with crisis prevention.

These moral hazard considerations are a well-known problem whenever insurance is provided in a context of asymmetric information. Their negative effects can be mitigated to a certain extent. For instance, appropriate pricing of foreign currency liquidity provision can limit its function to that of an emergency backstop facility which is costly for banks to use.

Additionally, the framework has to be in line with global economic objectives, such as price stability, balanced growth and efficient international allocation of resources.

- Policies that preserve **price stability** in the long term should also ensure stability of the financial system. However, in short term these two objectives might appear to conflict. Even when liquidity in domestic currency is provided to another country, it might find its way back to the domestic economy and contribute to inflationary pressure, if not sterilised.
- A buildup of **national reserves** might itself contribute to **systemic instability**. A reserve framework requires stability of the reserve currency in order to act as a global store of value and an anchor for price stability. However, the Triffin-dilemma notes that the accumulation of reserves implies persistent current account deficits of the reserve-issuing country. This potentially creates instability and fuels global imbalances. Moreover, such a reserve system aggravates interdependence between the reserve accumulating countries and the reserve-issuing country. For instance, the US Treasury market relies largely on demand from emerging market central banks. This dependence is likely to increase as the Federal Reserve phases out its asset purchase program, reducing US demand.
- This is connected to potential negative side effects of reserve accumulation or intervention in foreign exchange markets. In consequence, it can **distort exchange rates and prices** of other assets and might be difficult if not impossible to disentangle from its benefits.

- Finally, an acceptable solution from the country perspective might not appear desirable from the global perspective. For instance, excessive accumulation of foreign exchange reserves might distort **international capital allocation**.

This leads me to the general conclusion that there are many practical obstacles to a first-best solution for foreign exchange reserve provisioning.

Ultimately, I will conclude with some considerations on the challenges facing the global framework for short term international reserve provisioning

- In general, the discussion requires a **common understanding of international liquidity** and its economic interlinkages with credit markets and the real economy.
- The **immediate challenges** we are facing include the implementation of exit strategies from exceptional measures of support. In terms of evolution of new concepts, it has been discussed whether it would be desirable to develop a network of standing inter-central bank swap lines. It was also proposed that central banks should consider extending their collateral requirements to accept foreign currency denominated assets or obligations booked abroad during emergency operations.
- Constitutive elements of an international **crisis prevention** setup have to be defined and the different objectives of involved parties taken into account. Thus an element of political coordination will be inevitable to set the trade-offs and accommodate different national interests. More automatic mechanisms can help reduce the need for repeated negotiations to obtain political consensus.
- Moreover, **crisis resolution** requires a provisioning framework with sufficient flexibility to respond adequately rapidly to a variety of possible shocks. This suggests relying on different sources, while preferring market solutions and turning to national foreign exchange reserves as the first line of defence.

Thank you very much for your attention!