



Liquidity Management and the Reform of the International Monetary System

Volker Wieland

| September 2011

Abstract:

Since the global financial crisis at the latest, the question whether there is too much or too less liquidity has no longer been of a purely theoretical nature. An oversupply of the markets and short-term growth have been the results of insufficient regulation and ineffective surveillance in the run-up to the crisis – but when the latter hit, a drastic decrease in global liquidity came along with rising risk premiums and economic recessions. Nowadays in times of economic recovery, it has to be top priority on the political agenda to avoid future crises by establishing preemptive measures to control possible liquidity excesses. Therefore there is a need of implementing monitoring means, which focus on the financial market as a whole. At the same time there exists a range of possibilities to achieve sustainable financial stability through concerted interest- and monetary policy and an enhanced cooperation between central banks and supervisory authorities such as the IMF.

Zusammenfassung:

Die Frage, ob zu viel oder zu wenig Liquidität existiert, ist spätestens seit der globalen Finanz- und Wirtschaftskrise nicht mehr nur rein theoretisch. Unzureichende Regulierung und ineffektive Überwachung resultierten in einer Überversorgung der Märkte und kurzfristigem Wachstum im Vorfeld der Krise - doch als diese eintraf, ging ein drastischer Rückgang der globalen Liquidität einher mit einem starken Anstieg der Risikoprämien und schwerwiegenden wirtschaftlichen Rezessionen. Nunmehr in Zeiten der wirtschaftlichen Erholung muss es Hauptaufgabe der Politik sein, solche Krisen zukünftig zu vermeiden, indem effektive Präventionsmaßnahmen zur Kontrolle möglicher Liquiditätsüberschüsse ergriffen werden. Hierfür sind Überwachungsmaßnahmen nötig, deren Fokus auf den Finanzmarkt im Ganzen gerichtet ist. Gleichzeitig existieren verschiedene Möglichkeiten, wie durch gezielte Zins- und Währungspolitik und mithilfe einer reformierten Zusammenarbeit zwischen Zentralbanken und Aufsichtsbehörden, wie dem IWF, nachhaltige Finanzstabilität gewährleistet werden kann.

Liquidity Management and the Reform of the International Monetary System¹

Prof. Volker Wieland, Ph.D.²

Is there too much or too little liquidity? This is not merely an academic question, as policy-makers have learnt in the global financial crisis. The financial crisis originated from excessive and opaque financial risk taking. This behavior was made possible by a combination of lax regulation, ineffective supervision and overly loose monetary policies resulting in a flood of liquidity and unsustainable growth. Once the crisis struck, liquidity evaporated, risk premia shot up, credit was restrained and economies went into recession. Central banks had to reach deep into their toolbox for addressing liquidity shortages in the financial sector and the wider economy so as to avoid deflation and facilitate new growth.

As the world economy has overcome recession and resumed vigorous growth, the central task of policymakers going forward is to avoid the re-occurrence of financial excesses. Effective prevention of future crises requires watching out for excessive liquidity. Inordinate liquidity is a signal and a source of undue and unsustainable risk taking in the financial sector. It is visible in inappropriately low interest rates, depressed risk premia and exaggerated money and credit growth. Thus, policymakers need reliable benchmarks of adequate liquidity provision that alert them to the buildup of excesses.

Liquidity has a national economy-wide and a global dimension. In a world economy connected by unprecedented international flows of goods, services and capital, liquidity spills over from one economy to another. Recently, policymakers of emerging economies have deplored the impact of massive inflows of hot money that they attributed to the accommodative quantitative easing in the United States that remains the principal issuer of reserve currency. Earlier during the crisis, some emerging economies suffered extreme capital outflows and had to deploy a significant part of their international reserves. Other economies such as China have accumulated reserves to a tremendous degree raising concerns about the international economic impact of any attempts at reduction or diversification. At the same time, the G20 has taken steps to explore needs for reform of the international monetary system and international institutions such as the IMF or the BIS have provided various evaluations and proposals.

¹ This essay is based on my remarks at the G20 High-Level Seminar on the International Monetary System in Nanjing, China on March 31, 2011 as a Lead Speaker in the Session on "Global liquidity management issues (including global financial safety nets and the role of the SDR)".

² Goethe University of Frankfurt and Institute for Monetary and Financial Stability, Grueneburgplatz 1, D-60323 Frankfurt am Main, Germany; e-mail: wieland@wiwi.uni-frankfurt.de; web: www.volkerwieland.com

The international monetary system is a distinct subset of the international financial system. It comprises rules, practices and institutions regarding the management of the world's currencies. The major currencies are provided by central banks that decide independently on their monetary policy. Their stated objectives are to achieve low and stable inflation and possibly help ameliorate output fluctuations. The major convertible currencies float. In addition, there are many economies that practice some form of exchange rate pegs. Furthermore, currencies of some important members of the international monetary system such as the Peoples Republic of China remain largely nonconvertible. Countries also exhibit differences in reserves management and intervention policies.

Given reform is on the agenda, it is important to acknowledge that the rules and institutions of the international monetary system and the flexibility of exchange rates between major currencies in particular, did not cause the global financial crisis, nor did they play a crucial role in exacerbating it. Of course, this does not mean that there is no room for further improvement of the system. Individual countries' monetary policies certainly were a source of excessive liquidity provision prior to the crisis. Thus, rules and practices of monetary policymaking need to be re-evaluated, even while acknowledging that central banks were able to effectively counteract liquidity shortages during the crisis.

Not surprisingly, the question of the appropriate liquidity provision and management is high on the G20 task list. Some commentary has been that liquidity is an extremely elusive and perhaps impossible to measure concept, particularly on a global level. This view understates the usefulness of available and well-tested benchmarks for the monetary policies of the major reserve-currency issuing economies. The well-known Taylor (1993) rule, for example, implied a money market rate benchmark for the U.S. economy that was substantially above Federal Reserve policy for several years prior to the crisis. Thus, it provided a clear signal of unduly easy liquidity conditions. It is a simple rule that prescribes an interest rate setting with reference to current measures of inflation and the output gap. Taylor (2007) pointed out that the sustained deviation of Federal Reserve policy helped fuel the sub-prime housing boom.

The years prior to the crisis exhibited rapid asset price increases, spread compression and accelerating money and credit growth. These signs were not necessarily well understood at the time. Excessive money and credit growth were considered a problem by some but did not receive much attention in standard inflation-targeting monetary policy frameworks. Among central banks, the European Central Bank stood out as one that included a reference point for trend money growth in its strategy already at the start of European monetary union. To be clear, the ECB did not adopt the Bundesbank's former monetary targeting strategy. However, it emphasized cross-checking of its policy based on short-run inflation and growth projections with respect to monetary developments over the medium run. President Trichet

has pointed out repeatedly that the ECB decided to increase rates in December 2005 after almost two and half years of a rate of 2 percent because their monetary analysis in particular strongly suggested that they should, and they did so against the advice of the IMF and other international institutions (see Trichet (2008)). Taylor's rule can be combined with ECB-style cross-checking vis-a-vis trends in monetary liquidity as shown in Beck and Wieland (2007, 2008). Indeed, such a strategy would have supported monetary policy tightening more than a year prior to the move by the ECB and would have justified more vigorous action.

Central banks can reduce the likelihood of liquidity excesses by giving more weight and attention to simple benchmark rules. Policy should be made transparent and predictable. Rule-based decision-making helps avoid confusion and uncertainty. Discretionary changes, if they cannot be avoided, ought to be explained with reference to such benchmarks. Of course, these recommendations do not only apply to monetary but also to fiscal policy. Monetary stability requires sustainable government finances. Simple fiscal rules such as the Maastricht criteria or constitutional debt brakes, if implemented, avoid crises in government finances and allow monetary policy to deliver price stability.

Emphasizing simple-rules-based policy as a lesson of the crisis, and in particular Taylor's rule and monetary cross-checking, does not mean that further improvement is out of the question. Research on improving these policy benchmarks is important and potentially very useful. Can stabilization performance of these rules be improved by including a direct response to asset price inflation? Is liquidity better measured by a wider consideration of credit in the economy in place of a narrow focus on monetary aggregates? These questions are not settled. In particular, the growth of interbank credit and leverage need to be more systematically monitored by central banks, and in emerging economies cross-border interbank-lending in foreign currencies needs especially close attention (see Shin (2011)). In addition, to interest and exchange rate policies, macro-prudential measures and better coordination with regulatory and supervisory authorities can help deal with the danger of excesses.

The eruption of the financial crisis was marked by the evaporation of interbank credit and a dramatic shortage of liquidity. Thus, crisis management provides a case for aggressive liquidity expansion. During the global financial crisis, this expansion took the form of an all-you-need approach at going rates, softening of collateral requirements, then rapid interest rate cuts to near zero levels, and further quantitative or credit easing by direct purchases of government or private sector paper. Policies by central banks in charge of the major world currencies largely succeeded in avoiding deflation and furthered the resumption of economic growth. To some observers policy may have seemed to be characterized by trial and error, and pure discretion rather than any forethought or strategy. But this view neglects that research on monetary policy had already provided strategic analysis in the form of policy

rules for avoiding deflation more than ten years ago (see, for example, Orphanides and Wieland (2000) and Wieland (2010) for a review). As interest rate prescriptions from the benchmark rule turn negative, the monetary policy instrument may be expressed accordingly in monetary quantities. Impact on inflation and the real economy is achieved by influencing real balances, risk and term premia, exchange rates and interest and inflation expectations.

As growth and inflation pick up, however, it is important to avoid sowing the seeds for new liquidity excesses. In this context, it is noteworthy to point out that the Fed's second quantitative easing initiated in fall 2010 and labeled QE2 by the press, ran counter to the prescriptions from Taylor's rule, which at the time indicated that policy setting was roughly appropriate and no further accommodation needed. The "QE2" policy of additional asset purchases by the Federal Reserve was also the one criticized for triggering hot money flows towards certain emerging economies.

In the global crisis some emerging economies experienced rapid capital outflows and made use of their international reserves to help satisfy reserve currency needs of their banks. Thus, reserves proved useful and even some advanced economies decided to increase their reserves as a consequence of the crisis experience. During the crisis central banks arranged swap lines, in particular to provide easy access to US\$ funding. Central banks and financial institutions reported that these swap lines or financial safety nets proved very useful. Foreign exchange markets in the major world currencies were supposed to be very deep. Thus, it would be useful to review available data on quantities in spot and forward currency markets during those episodes and investigate the presumed market failures that were healed by such policy measures. Central banks' assessments of the benefit of swap lines provide a case for rendering these agreements more permanent.

The G20 process and international institutions have raised the question of the adequacy of international reserves. Also, concerns have been expressed regarding the linkage between the extremely large accumulation of US\$ reserves in some countries, especially the People's Republic of China, and international current account imbalances. While these imbalances were not a primary source of the global financial crisis, concerns remain regarding the danger of disorderly adjustment. Some reserve holders may want to achieve a significant reduction of costly reserves or move towards a greater diversification of reserve holdings. Of course, criteria of adequacy depend importantly on country-specific features such as the degree of financial openness, the state of development of the banking system, and the particular exchange rate system. The accumulation of US\$ reserves in China, for example, is related to its desire to manage the exchange rate. Reserve accumulation could be avoided by letting the exchange rate adjust to market forces, and allowing an appreciation if required.

If China or other countries with large reserve holdings would like to reduce reserves and diversify away from the US dollar, then it is in their own interest to adjust slowly over time. At the current juncture, there appears to be potential for some simple win-win solutions. For example, while some European economies are interested in increasing US dollar reserves, China would benefit from more diversification, and thus a direct exchange of Euro for US\$ reserve assets would help both parties. In recent years, the euro has emerged as a reserve currency and possible competitor for the U.S. dollar, though so far on a much smaller scale. Whether the Chinese Renminbi could, at some point, become an international reserve currency itself, will depend on whether it will become freely convertible, and whether it will be able to acquire the same trust of market participants that is enjoyed by leading convertible currencies. Achieving such a position would require dramatic changes in the Renminbi's institutional and political foundations.

In the context of international reserves and current account imbalances, many commentators refer to the so-called Triffin dilemma as a problem for the major reserve currency-issuing country. The additional global demand for US Dollars as a reserve asset is thought to cause a persistent current account deficit in the United States. Such a deficit may arise as the United States uses the seigniorage income to purchase more foreign goods than it exports. Conflicts between U.S. domestic policy objectives and those of other countries and the international system as a whole are feared to be the natural consequence. Originally, the Triffin dilemma was meant to apply to the Bretton-Woods system. Triffin was concerned with the convertibility of U.S. dollars into gold and the United States' inability to maintain a stable rate of exchange vis-à-vis gold in light of a growing U.S. dollar supply. In today's system the price of gold in terms of U.S. dollars can vary freely. Also, the additional seigniorage income to the United States need not necessarily cause a current account deficit. Instead, the international demand for U.S. dollars can be mirrored by an increase in U.S. claims on foreign assets. In fact, the U.S. as the most important issuer of reserve currency may be well advised to treat this income-generating power as an exhaustible resource. As long as it enjoys the role of reserve currency provider it should accumulate at least part of this income in form of savings in foreign assets, to be consumed at a later stage when it may have to share this role with other countries.

At the G20 meeting in Nanjing, on March 31, 2011, Nobel Prize Winner Robert Mundell presented his vision of a new international monetary system with fixed exchange rates and an artificial reserve currency, named INTOR by Mundell or BANCOR by Keynes in his proposal for the 1944 Bretton Woods conference. In 2009 the Governor of the People's Bank of China, Zhou Xiaochuan, had also called for reform of the international monetary system moving in this direction. He pointed to the IMF's Special Drawing Rights (SDR), which is a potential claim on the freely usable currencies of IMF members, as a candidate for a truly supra-national currency. Such a new international monetary system is hoped to increase monetary

stability by avoiding irrational and distortionary exchange rate fluctuations and to abolish the asymmetric role of the U.S. Dollar as the world's main reserve currency. Others, however, point to the benefits of exchange rates as an adjustment mechanism that improves macroeconomic stability. Certainly, recent European experience suggests that abolishing the exchange rate as an adjustment mechanism comes at some cost in terms of a greater need for adjusting prices and output in response to divergences.

Whether or not the introduction of fixed exchange rates would improve global stability is an urgent matter for research. It requires building computational representations of the world economy as laboratories for comparing the impact of different exchange rate arrangements and reserve currencies. Such computational models would need to be estimated to fit empirical data on key macroeconomic and financial variables. While there has been a surge of model building in the last decade, and most central banks have at their disposal a variety of closed- and open-economy models, there is a distinct shortage of estimated multi-country models. Multi-country models are essential for investigating the extent of macroeconomic spillovers between economies and the consequences of different economic shocks around the world. Furthermore, such models would make it possible to compare the functioning of a world economy where one country's currency is used for international reserves with a more multi-polar system.

The IMF is uniquely positioned to further modeling of the world-economy in a multi-country format and involve central banks around the world in this effort. Just recently, the IMF helped coordinate a very useful comparison exercise of the impact of discretionary fiscal stimulus in a variety of macroeconomic models (see Coenen et al (2010)). Models should take into account competing theories for representing economic behavior on a macro level. One drawback of the IMF initiative on fiscal stimulus analysis was that it employed a traditional model comparison approach whereby separate teams of researchers conduct a specific set of experiments, each team in their own model, and report outcomes. With regard to the important policy question of fixed versus flexible exchange rates and new reserve currencies, it would be advantageous to follow a modern approach to model comparison that is open access and facilitates feedback and participation by many researchers from academia and other countries.³

Can the SDR provide a promising avenue towards a more symmetric international monetary system with the International Monetary Fund at its center? First, it is important to keep in mind that the IMF is no central bank. Thus it cannot play the role of the world's lender of last resort. This function is accomplished by central banks. It relies on the public's trust in the institutional arrangements of monetary policy making and the track record of the monetary autho-

³ An example of such a model comparison platform is available on www.macromodelbase.com (see Taylor and Wieland (2011) and Wieland et al (2009)).

rities. In the recent crisis, central banks lived up to this responsibility by providing the liquidity in the key currencies that was needed if not more than that. The SDR plays a very minor role in international reserves. Large-scale issuance of SDR's to IMF member countries would imply massive provision of reserve currency liquidity at low rates and without asking for marketable collateral. At this point in time, policy makers need to guard against liquidity excesses and should not initiate new ones. Furthermore, such a large-scale SDR allocation would imply transfers of differing magnitude to a range of countries and increase moral hazard.

A separate issue under consideration is the composition of the SDR basket. Currently, it includes the US dollar, the Japanese yen, the pound sterling, and the euro. To the extent that the SDR is used for reserves it provides a naturally diversified asset as these four currencies float against each other. Of course, to the extent other currencies satisfy the requirement of free usability and may play the role of reserve currency, it would be sensible to include them in the SDR basket. Given the size of the Chinese economy and its important role in world trade, it would certainly be of interest to add its currency to this basket. To this end, steps taken towards rendering the Renminbi freely usable are very welcome. Once it is fully convertible, the Renminbi could naturally compete with the U.S. dollar, the pound, the Japanese yen and the euro as a possible reserve currency. The degree of diversification of the SDR, however, would be reduced unless the Renminbi were also released from the peg to the U.S. dollar.

What should be the IMF's role in the international monetary system? Liquidity provision is the job of central banks. The IMF should not be tasked with injecting massive amounts of liquidity at low rates and without marketable collateral as in the case of SDR allocations. Unconditional financing creates moral hazard. In fact, in managing the global financial crisis, national policy makers have already created tremendous moral hazard via bank guarantees and rescues. The IMF's experience lies in the provision of credit to governments in crisis at appropriate rates and under strict conditionality. Thus, the IMF can play a tremendously useful role as a guardian of sustainable economic policy making. To give a recent example, the IMF's involvement in the rescue packages and adjustment programs for a number of euro area member economies is very helpful in terms of ensuring effective consolidation. The IMF brings to the table much-needed expertise in managing such programs and imposing appropriate conditions, and with the extension of IMF credit come the backing and oversight of the larger community of IMF members.

References

Beck, Günter and Volker Wieland (2007), Money in Monetary Policy Design: A Formal Characterization of ECB-Style Cross-Checking, *Journal of the European Economic Association*, April-May 2007, Vol 5, No 2-3.

Beck, Günter and Volker Wieland (2008), Central Bank Misperceptions and the Role of Money in Interest Rate Rules, *Journal of Monetary Economics*, Vol 55 (1), November 2008.

Coenen, Günter, Erceg, C. J., Freedman, C., Furceri, D., Kumhof, M., Lalonde, R., Laxton, D., Lind, J., Mourougane, A., Muir, D., Mursula, S., de Resende, C., Roberts, J., Roeger, W., Snudden, S., Trabandt, M., and in't Veld, J. (2010), Effects of fiscal stimulus in structural models, IMF Working Paper No. 10/73, International Monetary Fund, March 2010.

Orphanides, Athanasios and Volker Wieland (2000), Efficient Monetary Policy Design Near Price Stability, *Journal of the Japanese and International Economies*, Vol. 14, December 2000, pp. 327–365.

Shin, Hyun (2011), Procyclicality and Monetary Aggregates, Working Paper 16836, NBER Working Paper Series, February 2011.

Taylor, John B. (1993), Discretion versus Policy Rules in Practice, *Carnegie-Rochester Conference Series on Public Policy*, 1993, 39, pp. 195–214.

Taylor, John B. (2007), Housing and Monetary Policy, in *Housing, Housing Finance, and Monetary Policy*, Proceedings of the Federal Reserve Bank of Kansas City Symposium, Jackson Hole, WY, September 2007, pp. 463–476.

Taylor, John B. and Volker Wieland (2011), Surprising comparative properties of monetary models: Results from a new data base, forthcoming in, *The Review of Economics and Statistics*.

Wieland, Volker, Cwik, T., Müller, G. J., Schmidt, S., and Wolters, M. (2009), A new comparative approach to macroeconomic modeling and policy analysis, Manuscript, House of Finance, Frankfurt.

Trichet, Jean-Claude (2008), Interview with Jean-Claude Trichet, *Frankfurter Allgemeine Zeitung*, July 18, 2008.

Wieland, Volker (2010), Quantitative Easing: A Rationale and some Evidence from Japan, in Reichlin, Lucrezia and Kenneth West (eds.), *NBER International Seminar on Macroeconomics*, NBER and University of Chicago Press, 2010.



Author

Prof. Volker Wieland Ph.D.
Universität Frankfurt am Main, House of Finance, Research Fellow at the Center for Economic Policy Research, London, former Senior Economist at the Federal Reserve Board Washington D.C.

Stiftung Marktwirtschaft

The Stiftung Marktwirtschaft (Market Economy Foundation) is a think tank that operates independent of political parties and interest groups in order to develop solutions to the most pressing economic, political, and social problems in German society. In order to ensure future prosperity and sustainability, Germany must acknowledge prevailing economic necessities and create a framework within which personal responsibility, competition, and freedom can advance.

Kronberger Kreis

In order to realise these goals, the Stiftung Marktwirtschaft, together with its scholarly advisory body, the Kronberger Kreis, develops concrete, market-oriented policies e.g. in the areas of employment, social systems, and taxation. Members of the Kronberger Kreis are:

Prof. Dr. Juergen B. Donges, Prof. Dr. Lars P. Feld (Speaker), Prof. Dr. Wernhard Möschel, Prof. Dr. Manfred J. M. Neumann and Prof. Volker Wieland Ph.D.

Person in charge: Dr. Susanna Hübner

Stiftung Marktwirtschaft | Charlottenstraße 60 | 10117 Berlin | www.stiftung-marktwirtschaft.de