International Liquidity in a Multipolar World

Barry Eichengreen
Department of Economics
University of California
549 Evans Hall 3880
Berkeley CA 94720-3880
USA
eichengr@econ.berkeley.edu
510 6422772

Session title: International Monetary Reform
Session chair: Raghuram Rajan,
Discussants: Kristen Forbes, Jean Pisani-Ferry, Raghuram Rajan

ABSTRACT

Today's global monetary and financial system, to a remarkable extent, continues to rely on the U.S. dollar for international liquidity. This reflects the currency's historic role, the liquidity of American financial markets, and the absence of alternatives. But with the emergence of emerging markets, the capacity of the United States to provide safe assets will be outstripped by the growth of international transactions. It is thus likely that other large economies, presumably Europe and China, will eventually join the United States as sources of international liquidity and that other currencies will come to share the dollar's reserve-currency status.

International Liquidity in a Multipolar World[1]

Barry Eichengreen

The adequacy of international liquidity has always been at the center of the literature on the international monetary system. In the 1920s and 1930s, when international reserves were preponderantly in the form of gold, the question was whether deflationary pressure on the world economy reflected a global gold shortage, resulting from the artificially low domestic-currency gold price at which post-World War I resumption took place, or instead the maldistribution of reserves, reflecting sterilization of inflows by chronic surplus countries, principally France and the United States.[2] Under the Bretton Woods System, when dollars were the principal source of incremental international liquidity, the central question was whether the United States could run regular balance-of-payments deficits so as to transfer dollar claims to other countries without undermining confidence in its commitment to convert those dollars into gold at a fixed price. And with the collapse of Bretton Woods and its fixed gold price, the question became whether other countries requiring additional international liquidity would continue to willingly acquire dollars and whether the United States would continue to supply them.

In the event, the answer to this last question was yes. To a remarkable extent, our current international monetary and financial system remains dollar based. The dollar still accounts for 60 per cent of total identified foreign exchange reserves. It accounts for 46 per cent of all international debt securities worldwide. It is involved in 85 per cent of all foreign exchange transactions. Of all cross-border liabilities of non-U.S. banks denominated in currencies other

[1] Department of Economics, University of California, Berkeley CA 94720 (email: eichengr@econ.berkeley.edu).
[2] [2] For the two views see Robert Mundell (2000) and Barry Eichengreen (1992), respectively

than that of the home country, fully two-thirds are in dollars.[3] The use of dollars in invoicing exports far exceeds countries' trade with the United States.[4]

While some observers invoke inertia as the explanation for why the dollar continues to account for the vast majority of international liquidity (see e.g. Menzie Chinn and Jeffrey Frankel 2008), there are in fact fundamental reasons for the greenback's continuing dominance. First, the United States remains the world's single largest economy and consequently is involved in a substantial fraction of all international transactions. Second, as late as 1990 the U.S. was the only large economy that offered unrestricted access to its financial markets, what with the principal European countries and Japan continuing to apply capital controls, either de facto or de jure. Only the dollar was truly liquid, in other words. And, third, as fiscal agent of a large economy with moderate levels of sovereign debt, the U.S. treasury had the capacity to credibly stand behind the considerable volume of government bonds and bank deposits that foreign central banks and governments accumulated as reserves.[5]

These explanations for the continued dominance of the dollar through the final quarter of the 20th century now point to the need to move to a less dollar-centric international monetary system. The United States today accounts for only some 20 per cent of global GDP.[6] It has been overtaken as an exporter by Germany and China (and by the euro zone if one classifies the latter for present purposes as a single economy). Thus, the convenience factor supporting continued use of the dollar in private and official international transactions is less. A growing number of other countries have relaxed restrictions on capital-account convertibility and enhanced the depth and efficiency of their financial markets. And as global growth continues to outpace the growth

[3] On the role of U.S. dollar as a funding currency for international banks see Hyun Shin (2011).
[4] Except where otherwise cited, data in this paragraph are from Linda Goldberg (2010).
[5] The importance of fiscal capacity for reserve currency status is emphasized by Emmanuel Farhi, Pierre-Olivier Gourinchas and Helene Rey (2011) and Maurice Obstfeld (2011).
[6] 20 per cent circa 2010 at purchasing power parities, somewhat higher at market exchange rates.

of the U.S. economy – as will likely remain the case given the logic of catch-up growth – the capacity of the U.S. government to provide a credible fiscal backstop to a stock of foreign liabilities that grows faster than the U.S. economy will eventually be called into question.

To be sure, the first two points can be disputed. The convenience of using dollars remains considerable. Some large economies, like China, continue to restrict transactions on capital account, while others, like Brazil, have placed new or higher taxes on portfolio capital inflows, limiting scope for their currencies to serve as alternatives. But the third point, that the fiscal capacity of the U.S. government to backstop the growing volume of foreign dollar claims required by a global economy that expands faster than the United States, is indisputable.

I. Multiple Reserve Currencies

It is this point that leads some observers to anticipate the development of a multiple-reserve-currency world, where the largest roles are played by the currencies of the three largest economies: the dollar, the euro and the renminbi. The combined fiscal capacity of the United States, the euro zone, and China is several times greater than the fiscal capacity of the United States alone. The joint capacity of their governments to stand behind government bonds and bank deposits, thereby providing the expanding world economy with an adequate supply of safe assets, is greater than that of the United States alone. On this basis it is argued that a multiple-reserve-currency system is coming and that this movement is to be welcomed, not feared (see e.g. Barry Eichengreen 2011).

But completing this transition requires that the dollar remain attractive as a form of international liquidity and that the euro and renminbi become so. There are challenges on all fronts. Start with the dollar. While the liquidity of the market in U.S. treasury securities remains

unsurpassed, there are worries about the stability and security of those investments. The debt ceiling imbroglio in the summer of 2011 and the possibility that political brinkmanship might precipitate a technical default on the debt did not reassure foreign investors. Changes in tax law adopted at the beginning of the last decade and extended ever since effectively reduced federal government revenue from 21 to 18 per cent of GDP, something that will constrain the ability of the Treasury to service and amortize the debt as interest rates return to normal levels.[7] Historically, whenever there has been increased uncertainty and a spike in the demand for liquidity, there has been movement into the dollar. Because the dollar exchange rate has strengthened, the Federal Reserve has been free to provide additional dollar liquidity without having to worry about any inflationary effects of currency depreciation. Were doubts about the security of U.S. treasuries to become pervasive, movement into dollars at times of heightened uncertainty could no longer be taken for granted. And the willingness of the Fed to provide an elastic supply of dollar liquidity at such times would be compromised.

Even if the U.S. succeeds in putting in place a credible medium-term plan to balance the federal government's budget, for the United States to remain the leading source of international liquidity it will be necessary to grow the U.S. economy. The explanation for why the yen is not a more consequential source of international liquidity is complex, but an important part of the story is the failure of the Japanese economy to grow. Japan has barely half the current dollar share of global GDP today that it had in 1988. For this reason alone its capacity to provide reserves on the scale required by the global economy has been diminished. The prospects for the dollar to remain the leading reserve and international currency similarly depend on the ability of the U.S. economy to grow. From this perspective what matters is not just whether there is a willingness to put the country's fiscal and financial house in order but the specifics of how this is

[7] Figures here are from Alan Auerbach and William Gale (2009).

done. Balancing the budget by cutting government support for education, basic research, and infrastructure and thereby impairing the prospects for growth would not enhance the ability of the United States to provide international liquidity on the requisite scale.

The challenges facing the euro are more formidable still. Starting from a position where the Continental European currencies accounted for a relatively small fraction of global liquidity, there was scope for the euro to gain significant market share, as it did in the course of its early years.[8] But the global financial crisis laid bare the weaknesses of the euro zone. It served as a reminder that a demographic outlook even less favorable than that of the United States makes for less favorable prospects for growth. In addition to making for more slowly growing fiscal capacity and more slowly growing international transactions, slow growth makes it more difficult for Europe's debt arithmetic to add up. It is not as if earlier observers failed to see Europe's debt and demographic problem coming, but the additional debt obligations incurred as a result of the crisis have made the problem more immediate. Austerity that only slows growth further does not help, of course. And growth-friendly structural reforms, while part of the solution in principle, take time to work in practice.

Then there is the fact that different euro-zone members have very different short-run growth prospects and very different debt burdens and that there is limited scope for transferring fiscal resources between them. The result has been to make for a less homogeneous sovereign bond market in Europe, the opposite of what the architects of the euro had in mind. The contribution of currency risk to interest-rate spreads may have been removed, but the role of credit risk has been heightened. The coefficient of variation of interest rates on the five- and ten-year sovereign bonds of euro zone members now exceeds what it was in the late 1990s. German

[8] The share of the euro in total identified global foreign exchange reserves rose from little more than 20 per cent at the beginning of 1999 to nearly 30 per cent in 2003. Its share in total outstanding international debt securities meanwhile rose from 20 to nearly 35 per cent. See European Central Bank (2011).

bunds may retain their AAA rating, but Germany lacks the economic size and fiscal capacity to provide safe assets on the scale required by the world economy. The bonds of the other large euro-area countries lack the relevant risk characteristics, while the bond markets of other smaller countries with AAA ratings lack the liquidity.

Finally there is the case of China. China is all but certain to overtake the United States in terms of absolute economic size over that span. Its government has not only rapidly growing tax revenues but also a multi-trillion-dollar reserve of dollars with which to back its own debt issues and guarantee bank deposits. China is the single largest trading country. It is engaged in large amounts of outward foreign direct investment, which the authorities now allow to be settled in renminbi, providing a way for foreigners to get their hands on the currency despite the fact that the country runs chronic current account surpluses.[9]

Chinese officials view internationalization of the renminbi as desirable. Enabling Chinese firms and banks to do cross-border business in their own currency insulates them from exchange risk and helps to minimize transactions costs. As more of China's international transactions are denominated and settled in its own currency, the need for the authorities to hold dollars as liquidity insurance is less; if the financial sector or firms engaged in merchandise trade require more liquidity, then this can be provided in China's own currency.

Policy makers are following a phased strategy for transforming the renminbi into a source of international liquidity. In the first phase they are encouraging exporters and importers to invoice and settle merchandise transactions using the currency. In 2010, the first full year in which cross-border renminbi transactions were permitted, their value was $78 billion. By the first quarter of 2011 they were running at an annual pace of $220 billion. Foreign firms have

[9] Note that this was how countries other than the United States accumulated dollars in the 1960s despite the fact that the U.S. ran trade and current account surpluses for most of the period.

been happy to accept the currency in payment for their exports to China, causing a rapidly expanding pool of renminbi deposits to accumulate in Hong Kong. Renminbi deposits there rose by more than 300 per cent in the year ending in September 2011 and now account for more than 10 per cent of all bank deposits in the special administrative region.

In the next phase, banks and firms will be permitted to tap this liquidity for a limited range of international financial transactions. In August 2010 the People's Bank of China (PBoC) introduced a pilot scheme allowing eligible offshore institutions to use their renminbi funds to invest in China's domestic interbank bond market. Foreign firms seeking to invest in China can issue renminbi-denominated bonds in Hong Kong and use the funds to invest in operations on the mainland.[10] Domestic nonfinancial institutions have similarly been encouraged to issue renminbi denominated bonds in Hong Kong for these purposes. In addition, investment in China's A-share market by qualified foreign investors can now be settled in renminbi.

If past initiatives are any guide, one can expect authorization for a growing range of cross-border financial transactions. Yiping Huang et al. (2011) suggest that Chinese policy makers are now approaching a consensus on achieving "basic convertibility" on capital account within five years, where "basic convertibility" means that the authorities may retain restrictions on cross border capital flows in a limited number of areas, such as private portfolio investment, but remove other restrictions. They will have to move in this direction in order to achieve their stated goal of transforming Shanghai into an international financial center by 2020.

The last step will be when central banks hold reserves in renminbi bonds and bank deposits. At least two, the central banks of Malaysia and Nigeria, already hold a limited share of their reserves in this form. China has sought to foster the practice by signing bilateral swap

[10] This so-called "dim sum market" tripled in size from mid-2010 to mid-2011.

arrangements denominated in renminbi with Hong Kong, Indonesia, Malaysia, New Zealand, Singapore and South Korea and, more far afield, Argentina, Belarus, Iceland and Uzbekistan.

At the same time, the obstacles to China's emergence as a significant source of international liquidity are considerable. Although China is a large economy, its financial markets are still underdeveloped. Bond market capitalization is barely a tenth that of the United States. As in Japan, the majority of government and corporate bonds are held to maturity by domestic investors (banks and credit cooperatives). Trading volume as a share of the value of outstanding bonds is barely one per cent that in the United States and Europe. China is still a considerable distance, in other words, from having the kind of deep and liquid bond markets that has made the dollar an attractive international and reserve currency.

Inducing private and official investors to hold a significant fraction of their liquidity in renminbi will require not just enhancing the liquidity of Chinese financial markets but limiting official interference in their operation. Chinese banks will have to be placed on a commercial footing where they feel no pressure to engage in policy lending. Residual doubts about the security of foreign financial investments in China will have to be removed. There will have to be a fundamental transformation of not just the country's development model but also its foreign relations, in other words. And fundamental transformations take time.

II. Reserve Pooling

If each of the major economies faces challenges constraining its ability to supply additional international liquidity, then it is essential to utilize the available liquidity more efficiently. Insofar as international transactions are staggered and macroeconomic shocks are less than perfectly correlated, reserve pooling has appeal. The simple observation that countries

will seek to use their reserves at different times thus provides a rationale for the development of actual and incipient pooling arrangements like the Chiang Mai Initiative Multilateralization (CMIM) and the Latin American Reserve Fund (FLAR). It is a justification for IMF lending facilities through which members can draw a multiple of their capital contributions.

But the limitations of the approach are equally evident. The appeal of liquidity is that it is liquid; it can be converted into real resources without delay. The appeal of own reserves is that they can be accessed immediately, without conditions. The same is not true of reserve pooling arrangements. Participants in such pools are reluctant to provide resources without conditions for fear that the borrower may be unable to repay what it is lent. This creates uncertainty about whether access can be negotiated under acceptable conditions and is a source of delay. The IMF has sought to address this by creating a Flexible Credit Line (FLC) under which countries with impeccably strong policies are able to borrow without being subject to conditions and under which they are prequalified for participation, eliminating delay. Problems here include stigma and, more fundamentally, the fact that the institution's responsibility to guard the resources of its members means that Flexible Credit Lines can be made available only to a subset of countries – the same subset that is presumably least likely to require emergency liquidity. The stigma problem might be addressed by allowing the Fund to unilaterally prequalify groups of its members. The reluctance to lend unconditionally has been partially addressed by creating a second facility, the Precautionary and Liquidity Line (previously the Precautionary Credit Line), for countries whose policies are almost strong enough for a FCL and attaching only limited conditions. But, inevitably, uncertainty and delay then creep back in.

These difficulties are if anything more severe in regional pooling arrangements. Negotiations over emergency loan conditions between neighboring governments are politically

fraught. Although euro area governments initially sought to resolve the European financial crisis themselves, the delicacy of intergovernmental negotiations led them to call in the IMF when it became necessary to provide emergency loans to Greece, Portugal and Ireland. In the wake of the 1997-8 crisis, Asian countries created the CMIM to free them from again having to apply to the IMF for resources, but the difficulty of negotiating conditionality within the region led them to create an IMF link.[11] Not only has there been no attempt to utilize the CMIM as of the time of writing, but the countries best able to make credit commitments (China, South Korea and Japan, for example) have been moving away from it by negotiating their own bilateral swap lines.

The creation of additional IMF Special Drawing Rights has also been suggested as a way of augmenting international liquidity. But to be used, SDRs must first be converted into liquid assets. This must be done through transactions with governments, since there are no private markets in SDRs. When a country wishes to convert its SDRs, the IMF first asks governments to volunteer. If volunteers fail to come forward, it then uses its so-called "designation process" to require national treasuries to provide national currencies in return. What they provide thus constitutes a claim on their fiscal capacity, like other treasury liabilities. In this sense additional SDR issuance does not finesse the need for national fiscal backing for international liquidity.

Edwin Truman (2008) has suggested that SDR claims could instead be presented directly to central banks, which could provide high-powered money in return. This would lend additional elasticity to the supply of international liquidity, since the Federal Reserve, ECB and PBoC would be providing additional dollar, euro and renminbi claims, respectively, without at the same time creating additional obligations for their treasuries. But such operations could have significant implications for the balance sheets of the reserve-currency-issuing central banks,

[11] Countries seeking to access the CMIM must enter into an IMF program if they wish to draw more than 20 per cent of their entitlement.

which would be exchanging their own respective currencies for a basket of foreign currency claims.[12] The risk of substantial exchange losses is likely to cause central banks and government to hesitate about proceeding down this road.

III. Conclusion

Today's global monetary and financial system continues to rely, to a remarkable extent, on the U.S. dollar for liquidity. This reflects the currency's historic role, the liquidity of the country's financial markets, and the absence of alternatives. But with the emergence of emerging markets, the capacity of the United States to provide safe assets will continue to be outstripped by the growth of international transactions. There is thus a high likelihood that other large economies, presumably Europe and China, will eventually join the United States as sources of international liquidity and that other currencies will come to share the dollar's reserve-currency status. There are significant obstacles to be overcome, admittedly, in order for Europe and China to assume this role. But one can only hope that these are successfully surmounted, for the alternative – a chronic shortage of international liquidity that places downward pressure on the growth of international trade and investment – is not pleasant to contemplate.

References

Auerbach, Alan and William Gale (2009). "The Economic Crisis and the Fiscal Crisis, 2009 and Beyond, an Update." Unpublished.

Chinn, Menzie and Jeffrey Frankel (2008) "The Euro over the Next 15 Years May Surpass the Dollar as Leading International Currency." National Bureau of Economic Working Paper no.13909.

[12] As well as the portion of the basket constituted by their own currency.

Eichengreen, Barry (1992), *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*, New York: Oxford University Press.

Eichengreen, Barry (2011). *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System.* New York: Oxford University Press.

European Central Bank (2011). "The Euro as an International Currency." Frankfurt: ECB (July).

Farhi, Emmanuel, Pierre-Olivier Gourinchas and Helene Rey (2011). "Reforming the International Monetary System." unpublished.

Goldberg, Linda (2010). "Is the International Role of the Dollar Changing?" *Current Issues in International Economics and Finance* 16, New York: Federal Reserve Bank of New York.

Haihong, Gao and Yongding Yu (2009). "Internationalization of the Renminbi." unpublished.

Huang, Yiping, May Yan, Jin Chang, Lingxiu Yang and Shujin Chen (2011). "China Beyond the Miracle: The Coming Financial Revolution," *Barclays Capital Emerging Markets Research* (6 October).

Mundell, Robert (2000). "A Reconsideration of the Twentieth Century." *American Economic Review* 90 (3): 327-340.

Obstfeld, Maurice (2011). "International Liquidity: The Fiscal Dimension." National Bureau of Economic Research Working Paper no.17379.

Shin, Hyun (2011). "Global Banking Glut and Loan Risk Premium." Mundell-Fleming Lecture, www.imf.org.

Truman, Edwin (2008). "On What Terms is the IMF Worth Funding?" Peterson Institute for International Economics Working Paper no.08-11.