

3

Default and the International Role of the Dollar

Richard J. Herring¹

The dollar plays a special role in world financial markets, the financing of world trade, and the provision of international foreign exchange reserves. For the moment, this role is unique and requires special consideration in analyzing motivations for and the consequences of any default on official dollar debt. I will begin with some general observations about the kinds of default and the differences between countries that are able to issue foreign debt denominated in their own currencies and those that cannot.

It is useful to distinguish between two kinds of default: a “hard default” and a “soft default.” A hard default means that a country has missed or delayed the disbursement of a contractual interest or principal due past the contractual grace period (if any). Alternatively, it may have negotiated a distressed exchange in which the government offers creditors new or restructured debt that amounts to a lower present value than the original contractual payment or the creditor may have changed laws to reduce the value of debt to foreigners. Often, to obscure the accounting consequences for creditors, negotiated exchanges are designed to keep the nominal principal value con-

¹ I am grateful to Tina Horowitz for proofreading, Christopher Trollen for graphic design and Dominic Waltz for research assistance. None, of course, should be implicated in the errors that remain.

stant and simply reduce the interest payments due or extend principal repayments far into the future. So long as reporting conventions permit creditors to conceal the present value of their claims, this can soften the perceived blow on creditors, while giving the borrower the relief that it needs.

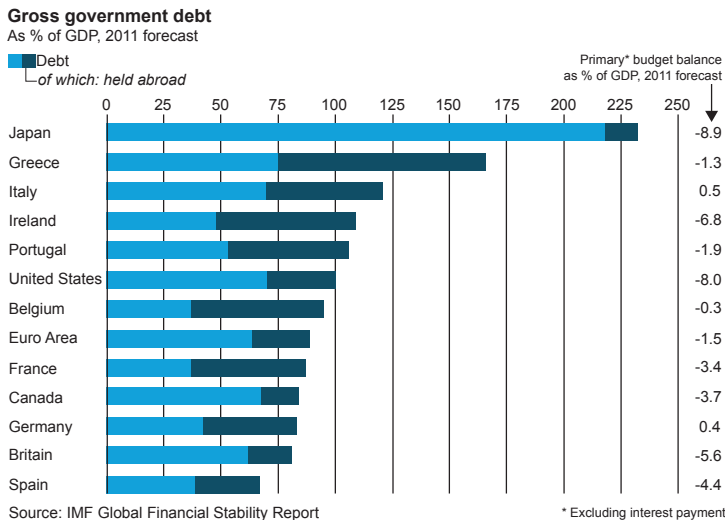
A soft default, in contrast, occurs when the borrower honors the terms of the contract, but reduces the present value of the creditors' claims by an unexpected burst of inflation, which may well be accompanied by a sharp depreciation of the exchange rate. So long as most of the debt has been contracted at fixed rates and has a reasonably long duration, this will provide the debtor with relief without setting off the legal sanctions that would permit debtors to take action to enforce their claims. These sanctions are of limited value with regard to sovereign debt because no international court has the power to enforce them.

The main motive for a sovereign debtor to honor its debts is the desire to continue borrowing. As Figure 1 shows, very few advanced industrial countries have issued substantial amounts of debt to foreign creditors; and, of those that have done so, only the United States, Canada, Britain and Japan have been able to denominate claims primarily in their own currency. Although many other advanced industrial countries have placed a higher proportion of their official debt with foreign creditors, most of these countries are members of the euro area and thus cannot issue their own currency. They must rely on decisions of the European Central Bank.

Sovereigns seldom choose a hard default if they have been able to issue a significant amount of debt to foreigners denominated in their own currency. The reason is obvious: they can almost always print enough domestic currency to service their debts in a timely manner. This avoids the legal consequences – which, although not usually enforceable in court, can amount to the threat of perpetual legal harassment in which any financial or physical asset that reaches a creditor-friendly country may be tied up in court proceedings. In practical terms, this constrains the ability of the defaulting debtor to engage in international trade under normal terms and its ability to participate in the global financial system. For most sovereigns, the ability to re-

pay is seldom in question. Sovereigns can almost always sell sufficient assets to service their debts. While this may be technically possible, however, political constraints often limit or even prevent consideration of this option. But for sovereigns that have been able to issue claims in their own currency, the ability to print money avoids the politically-charged issue of selling assets to foreigners. Exceptions occur mainly when a new regime wishes to repudiate the obligations of the previous regime, which may involve the issuance of a new currency. Alternatively, countries that are especially inflation averse – often because they have experienced the pain of a hyper-inflation – may prefer the consequences of a default to those of increased inflation. Moody's (2011), in a survey of sovereign defaults from 1983 to 2010, notes only three defaults on domestic currency-denominated debt.² Of these, only the Russian default in August 1998 fits this mold. The Russians preferred the consequences of a hard default to the possibility of yet another bout of hyperinflation.

Figure 1: Vulnerability to foreign holdings of debt depends on whether denominated in a foreign currency or own currency



² Historically, hard defaults on domestic currency debt have been much more common. Reinhart and Rogoff (2008) have identified sixty-eight instances of hard defaults on domestic currency debt since 1800. The mechanisms during these earlier defaults included forcible conversions, reductions in coupon rates, unilateral reductions in principal, and suspension of payments. But this number is small relative to the 250 hard defaults on foreign-currency-denominated debt that occurred over the same period.

The other two examples were entirely different. The first could be termed a default through incompetence. During 1998, Venezuela delayed interest payments by a week (on contracts that did not contain a grace period) simply because a bureaucrat forgot to initiate the payment process. The other default, by Turkey in 1999, was motivated by considerations of equity. The outstanding debt had been incurred at interest rates that reflected expectations of very high inflation rates and, after a successful stabilization program, politicians took the view that the resulting real interest rates were excessive. They imposed a retroactive withholding tax on interest payments that, in principle, maintained the real present value of its debt relative to the terms under which it was originally contracted.

Although defaults on domestic-currency debt have been quite rare over the past thirty years, it would be unwise to ignore the mounting pressures on government balance sheets in many of the largest industrial countries. (See Figure 2 for a stylized balance sheet in present-value terms.) Already many of these countries have substantial amounts of gross debt outstanding, and the net present value of future social expenditures is something few countries are willing to acknowledge fully, in part because pay-as-you go funding for such expenditures is simply not plausible in the face of declining population growth and rising dependency ratios. Defense expenditures are a major concern for only a very few countries, but they are difficult to predict in a multi-polar world where what were once considered isolated regional conflicts can easily have major international consequences. In many countries, the scope for increasing future tax revenues seems limited without distorting incentives to such an extent that it is counterproductive. In others, particularly the United States, the binding constraints are largely political, but no less difficult to resolve in the short to medium term. All countries own significant assets that could be sold, but political constraints are likely to intervene. Balance sheet identities can be fudged, but they cannot be denied. Pressures on government spending must ultimately be resolved by raising taxes, reducing expenditures, selling assets or reducing the value of debt.

Figure 2: Archetypal Government B/S

Assets	Liabilities
<ul style="list-style-type: none"> • Net present value of future tax revenues • Other financial assets such as loans, cash, etc. • Equity holdings such as stakes in bailed out companies or financial institutions • Real assets such as land, buildings, military equipment, etc. 	<ul style="list-style-type: none"> • Net present value of future social expenditures • Net present value of future defense expenditures • Gross debt <hr/> <ul style="list-style-type: none"> • Taxpayer Equity

As EU President Juncker of Luxemburg has wryly observed, politicians know the right thing to do, but they do not know how to do get re-elected if they do it. Thus, governments are likely to issue more debt so long as it can be placed on the market at acceptable terms. Inevitably, at some point, markets will judge new issues of debt to be unsustainable and, having run out of less painful options that could have been taken earlier, governments will be forced to take sharp, painful measures. Understandably, elected governments hope that such unpleasant choices can be deferred to their successors. The key issue then is how much debt will be judged by the markets to be unsustainable and when. This is difficult to answer because it is as much a political consideration as an economic one.

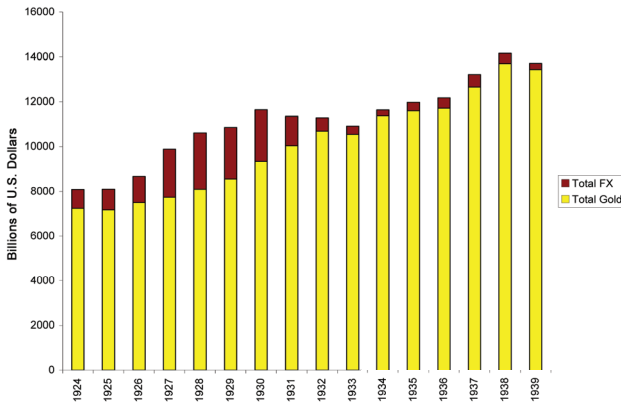
The United States enjoys an extra degree of freedom in this regard because of the international role of the dollar. Although Valéry Giscard d'Estaing has described this as an "exorbitant privilege" enjoyed by the United States, this characterization is misleading. No official body decided to confer this "privilege" on the United States.³ Rather, it was a convenient solution to an international problem that emerged slowly over a long time. It was the result of a number of decisions made independently by a wide variety of institutions, governments and investors.

The reserve currency system arose because the supply of gold could

³ Cooper (2009) draws the analogy with the adoption of English as an international language. Rather than being the result of some internationally negotiated agreement, it was the outcome of practice and experience.

not keep up with the needs of the growing world economy. Figure 3 shows that this trend, which began in the 19th century, was well underway by the 1920s. As world trade collapsed in the Great Depression and risk aversion intensified, gold increased in importance, but after World War II, as world trade recovered, gold quickly declined in importance relative to reserve currencies. The pound sterling was the first major reserve currency to emerge, but after World War I, the U.S. dollar began to displace it.

Figure 3: The Reserve Currency System Arose Because the Supply of Gold did not Grow Fast Enough to Support a Growing World Economy



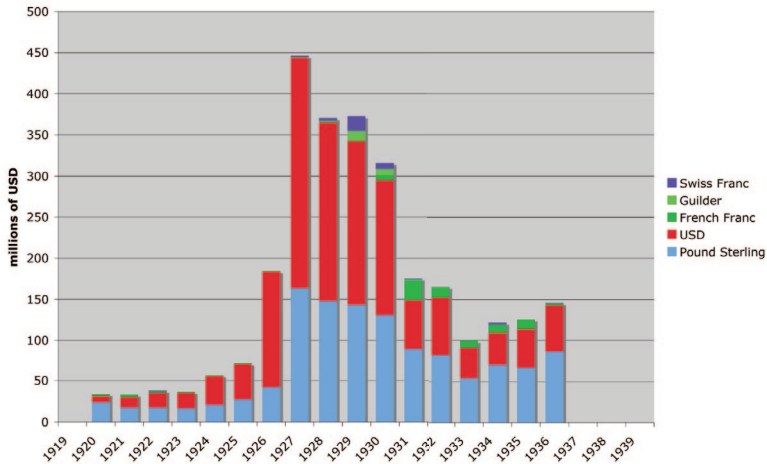
Source: Authors' estimates, based on Nurkse 1944 (gold and foreign exchange reserves pre-1932), Board of Governors of the Federal Reserve System (gold post 1932) and League of Nations *Memoranda on Central Banks* (foreign exchange reserves post 1932).

Source: Eichengreen & Flandreau, "The Rise & Fall of the Dollar or When did the Dollar Replace Sterling as the leading Reserve Currency?"

Figure 4 shows data painstakingly compiled by Eichengreen and Flandreau (2008) that indicate the dollar had surpassed the pound sterling in importance as a reserve currency in the mid-1920s. With the onset of the Great Depression and the Roosevelt Administration's decision to devalue the dollar from \$20.67 to \$35 per ounce, the dollar's importance as a reserve currency declined both in absolute terms and relative to the pound sterling.⁴

⁴ The relative strength of the pound sterling in this era was mainly due to the use of the pound sterling within the British Commonwealth. After having abandoned the gold standard at the outbreak of World War I, an attempt was made to reintroduce a version of the gold standard in 1925 at the pre-war peg. This policy, however, was abandoned in September 1931, during the Great Depression.

**Figure 4: The Rise & Fall of the \$
(or the Power of the British Commonwealth)**



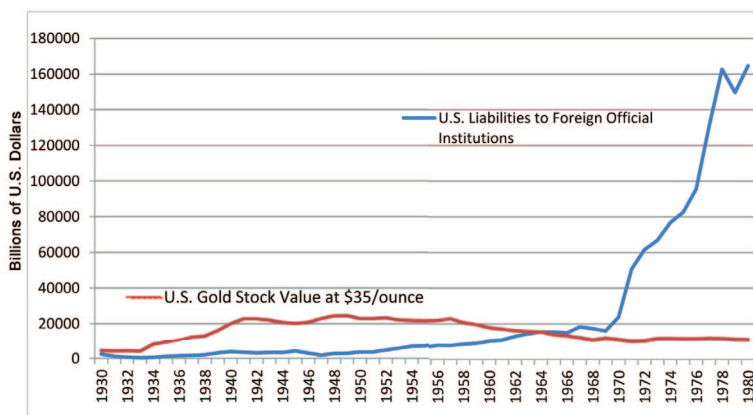
Source: Eichengreen & Flandreau, "The Rise & Fall of the Dollar or When did the Dollar Replace Sterling as the leading Reserve Currency?"

As Figure 5 shows, at \$35/ounce, the dollar was not only as good as gold (because U.S. holdings of gold greatly exceeded dollar-denominated liabilities to foreign official institutions), it was unambiguously better than gold. After all, gold bears no yield (other than anticipated capital gains), it consumes storage and safekeeping costs, and it cannot be transformed at low cost into currencies that are useful for intervening in foreign exchange markets. The dollar provided a strong basis for the expansion of the international monetary system until the mid-1960s when foreign official holdings of dollars exceeded the U.S. stock of gold valued at \$35/ounce. Several countries – most notably, France and Switzerland – began to redeem dollars for gold and the U.S. began to experience large capital outflows. President Nixon responded, on August 15, 1971, by closing the gold window, refusing to redeem dollar obligations to official institutions with gold. During December 1971, the U.S. increased the official price of gold to \$38/ounce and then, during February 1973, to \$42.22/ounce. But this was a very odd price: it was the price at which the U.S. would neither buy nor sell gold.

One might have expected that cutting the link between the dollar and gold would have reduced the official demand for dollars as a reserve currency. But that would have completely underestimated the

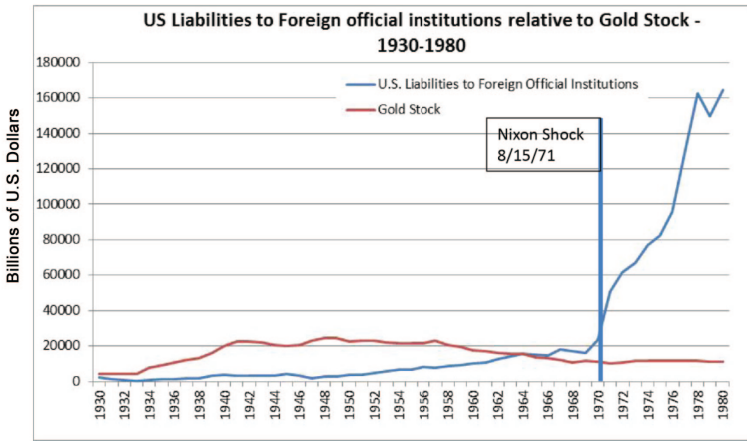
advantages that dollar markets had gained relevant to all possible alternatives.⁵ The U.S. offered short-term money markets that were incomparably broader, deeper, and more resilient than any alternative country or currency area. Official institutions could undertake large transactions at low cost, with little fear that their transactions would move prices against them. Equally important, the U.S. was free from the capital controls that constrained most other capital markets throughout the world during the 1970s and the dollar represented a relatively stable store of purchasing power that could be used to buy a broad range of goods and services. Thus, as Figure 6 makes clear, the official demand for dollars as a reserve currency actually accelerated after the “Nixon shocks.” The network externalities achieved by the dollar are powerful and, to a certain extent, self-reinforcing.

Figure 5: After WWII, \$ Has Been Dominant: Good as Gold Until Mid ‘60s



Nonetheless, many other countries have continued to resent what Jacques Rueff described as “deficits without tears” – the ability of the U.S. to run current account deficits unconstrained by its stock of foreign exchange reserves. This resentment has led to attempts to introduce an artificial currency, the Special Drawing Rights, which might replace the dollar as a way of expanding the reserve base of the international monetary system.

⁵ Similarly, one might have expected the demand for dollars to fall when the rating on government obligations was dropped from AAA by Standard & Poor's. In fact, the inflow of dollars brought short-term rates to new lows.

Figure 6: Demand for Dollar Reserves Soars after Nixon Shock

In addition, the Japanese had plans to become a reserve currency – at least for Asian transactions. These plans ran aground, however, because the Japanese found it difficult to generate sufficient current account deficits and, more fundamentally, because of the near collapse of their financial system during the 1990s. Many countries, not least the members of the euro area, had hoped that the introduction of the euro, which provided purchasing power over an even larger array of goods and services than the U.S., would supplant the U.S. dollar as the principal reserve currency. Unfortunately, the euro area failed to develop financial markets that could approach the U.S. in terms of depth, breadth, and resiliency. These qualities are essential to holders of reserve currencies that may wish to make transactions as large as tens of billions of dollars at a time. Indeed, official holdings of the euro barely exceeded the proportion of international reserves that had been held in Deutsche Marks before the formation of the European Currency Union. Of course, the desire for an alternative to the dollar as a reserve currency is quite genuine, and some Europeans thought that the Chinese, in particular, would value the option of maintaining the euro as a viable alternative to the dollar to such an extent that they would be willing to make a large contribution to the European Financial Stability Fund. To a limited extent they were right. The Chinese were willing to contribute, but only if the IMF would bear the credit risk. The desire for an alternative to the dollar is genuine, but not at any price.

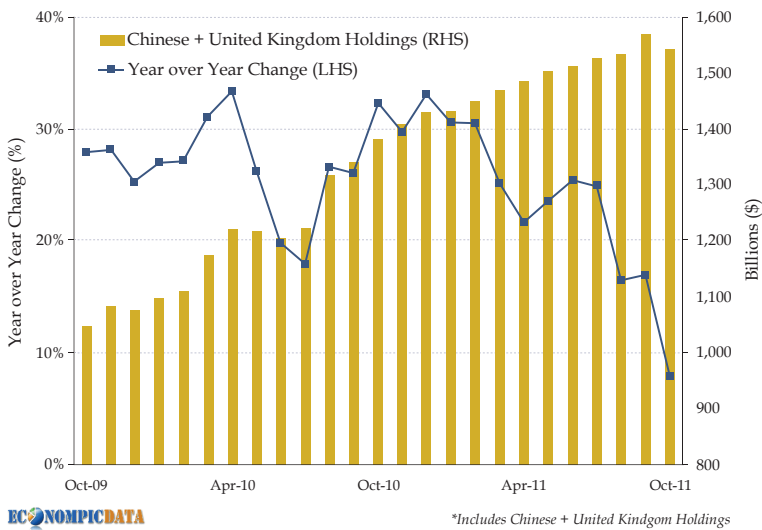
What are the actual advantages of “the exorbitant privilege” to the U.S.? First, and most obvious, is seignorage. About \$500 billion in U.S. currency is held outside the U.S. (in some cases, one suspects, for nefarious purposes). Almost 70 per cent of \$100 dollar notes and 60 per cent of \$50 notes and \$20 notes are held abroad. This means that foreigners have given up goods and services for dollar-denominated IOUs that offer a zero interest rate. While this benefit is certainly positive, it is by no means of overwhelming importance. If we were to pay a typical short-term rate of interest on these liabilities of, say 4 per cent, the magnitude of the benefit would be only \$20 billion/year, a negligible fraction of a roughly \$14.5 trillion GDP. The U.S. also benefits to the extent that it earns higher returns than it pays in interest on the borrowed funds that it employs. (Unfortunately, when foreign borrowings are used mainly to finance government deficits, this is a dubious bargain.) Some argue that it has permitted the U.S. to borrow much more relative to its GDP than would otherwise be possible, but this is not self-evident. Australia, for example, has borrowed even more relative to its GDP, but the Australian dollar plays no significant role in foreign exchange reserves. Others would argue that the reserve currency role provides the U.S. with profits and employment advantages for serving as a world financial center for dollar activities, but the British have demonstrated that it is perfectly possible to retain these advantages without issuing the dominant reserve currency.

Moreover, the role of reserve currency does not come without costs. As provider of the reserve currency, the U.S. must run a passive foreign exchange policy – that is, the foreign exchange value of the dollar is determined by the intervention decisions of other countries. The resulting foreign exchange value of the dollar is probably higher than it might otherwise be, because many countries that intervene in foreign exchange markets prefer to maintain undervalued exchange rates to encourage their export sectors. Moreover, on occasion, the large external holdings of dollars must be factored into monetary policy and bank supervisory decisions – although, to be sure, this does not happen to the extent the rest of the world would prefer.

Most concerns about the reserve currency role of the dollar have focused on China, which has amassed more than \$1.5 trillion in U.S.

Government bonds (see Figure 7). This has led to Chinese holdings of U.S. Government Treasury and Agency securities that approach 40% of the outstanding amount. The size and persistence of the imbalances between the U.S. and China, the two largest economies in the world, has led to mutual suspicion and discomfort. On the one hand, the Chinese are deeply ambivalent about their holdings of dollars. They are very concerned with maintaining the purchasing power of their huge stock of dollar assets and resent the pressure that dollar inflows put on their monetary policy, requiring increasingly aggressive measures to sterilize inflows to avoid a higher rate of inflation than they prefer. On the other hand, they are reluctant to let the yuan float because control over the exchange rate has been an important tool of stimulating growth and maintaining high levels of employment.

Figure 7: China has Accumulated huge holdings of US Government Bond
Chinese Holdings* of Treasury Securities



In contrast, factions in the U.S. hold two distinctly inconsistent views. One faction fears the potential leverage that might be inherent in such a heavy concentration of claims on the U.S. government held by one foreign government. They fear that a threat to disrupt financial markets might be used by the Chinese to gain political advantage. The other faction is concerned that the Chinese might

suddenly decide to diversify their foreign exchange holdings for economic reasons, with the result that the U.S. might face much higher costs to finance its debt and deficits that it appears politically unable to manage fiscally – at least in the short run.

In my view, both the Chinese and U.S. views are misplaced. Interdependence on this scale tends to align incentives rather than exacerbate differences. Even with the depth, breadth, and resilience of U.S. financial markets, the Chinese would drive rates sharply against themselves if they tried to reallocate a large portion of their portfolio. And the question remains: reallocate to what? At the moment there is no credible alternative foreign currency market to place their funds. Countries with attractive currencies such as Switzerland or Singapore could not possibly absorb the magnitude of inflows, nor would they tolerate the consequent appreciation of their exchange rates. The euro area surely looks less promising as a refuge than the U.S. at present and the Chinese are likely to rule out the Japanese yen on a number of grounds.

The history of the pound sterling suggests that reserve currency status need not last forever. Nonetheless, it would take a dramatic shock to the system – much larger than the recent financial crisis – to eliminate the enormous network advantages the U.S. currently enjoys. Of course, a hard dollar default that is not cured immediately could be precisely that sort of shock. Although the benefits of issuing the predominant international reserve currency may not be overwhelmingly large, the costs of suddenly abandoning that role would have systemic consequences not only for the U.S., but equally for the rest of the world.

What other currency might ultimately challenge the dollar in its reserve currency role? The Chinese government is taking the first steps toward enhancing the international role of yuan. China has the natural advantage of an enormous, well-diversified economy, but, to date, the development of their financial markets has substantially lagged behind the development of their economy. In June 2011, however, the Chinese allowed most corporations to pay for imports in yuan. Then 365 Chinese companies were allowed to sell exports for yuan.

During August 2011, this privilege was extended to 67,359 companies. Not surprisingly, foreigners prefer to sell goods and services for yuan rather than to purchase Chinese exports with yuan. (Their presumption is that the yuan will inevitably appreciate relative to most other currencies.) The result is that there is an increasing offshore pool of yuan ('redbacks') held mainly in Hong Kong. A nascent offshore market in yuan-denominated bonds has emerged (the dim sum market) based mainly in Hong Kong, but with recent issues in London.

Nonetheless, all of this activity is far short of what would be required to launch the yuan as a major reserve currency. To do so, China would need to end its policies of financial repression and capital account controls – which have been important tools to sterilize reserve inflows and manage the economy. China would also need to give up setting its exchange rate, which has been a key policy tool, and permit itself to run sizeable current account deficits to accommodate the reserve currency demand for the yuan. This agenda is not impossible. Indeed, it would probably be in the best interests of China's citizens. But the difficulty in moving from China's current financial system to the open financial system necessary to sustain a reserve currency should not be underestimated. The measures necessary to open domestic capital markets might, indeed, undermine the current political structure.

What can be concluded from the preceding observations? First, if the U.S. should default on its obligations it is likely to be a soft default, not a hard default. The main risk that should concern foreign holders of dollars is the risk of diminished purchasing power that is not compensated for by higher nominal interest rates. Second, although the reserve currency role of the dollar is not overwhelmingly valuable, it cannot be renounced without global systemic impact. Third, in view of the substantial network advantages that the dollar has achieved, the loss of its role as the principal reserve currency would occur only if a viable substitute emerges slowly over time, or in the aftermath of a truly major shock such as a hard default on dollar obligations.

References

Casciani, Dominic, 2010, "Why criminals love the 500 euro note," BBC News <http://news.bbc.co.uk/2/hi/8678979.stm>.

Cooper, Richard N., 2009, "The Future of the Dollar," Policy Brief, Peterson Institute for International Economics, September.

Eichengreen, Barry and Marc Flandreau, 2008, "The Rise and Fall of the Dollar, or When did the Dollar Replace Sterling as the Leading Reserve Currency?" paper prepared for a conference in honor of Peter Temin, Cambridge, May 9.

Moody's Investors Service, 2011, "Sovereign Default and Recovery Rates, 1983-2010," May 10.

Reinhart, Carmen and Kenneth S. Rogoff, 2008, "The Forgotten History of Domestic Debt," Working Paper 13946, <http://www.nber.org/papers/w13946>.