Eswar Prasad, the author of The Dollar Trap,* which is excerpted in the following pages, possesses one of those résumés that would make a mom proud. He’s been chief of the financial studies division of the IMF’s research department and, before that, headed the IMF’s China division. Currently, he occupies distinguished chairs at both Cornell and the Brookings Institution. ¶ Probably most relevant here, Prasad is the rare economist with a sophisticated understanding of how the world (as opposed to the mathematical models of the world) really works. And he writes about it in ways that folks lacking PhDs can understand. We’ve excerpted Prasad’s thoughts about the future role of China’s currency in global finance and (a not unrelated issue) the prospects for a major dive by the U.S. dollar. His conclusions, I suspect, will surprise even readers who are well-versed in international finance. — Peter Passell

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Promoting the Chinese currency’s international role is tied up with many complex domestic and geopolitical considerations. As with all of its policies, China is working toward multiple objectives.

Although there may not be a grand strategic plan guiding specific actions taken by the government to promote the renminbi’s prominence, remarkably, the component parts all point to a slow but consistent degree of progress on each objective.

Chinese government officials have been far less prone to unbridled enthusiasm about the renminbi’s prospects than are many commentators outside China. These officials recognize that the currency’s increasingly prominent role is a mixed blessing. In the short run, it could increase the demand for the renminbi and intensify appreciation pressures on the currency. Although these pressures would be unwelcome, there is a broader but subtler motivation behind the concept of making the renminbi a global reserve currency. In an article published in The Wall Street Journal in February 2012, I wrote:

An intriguing possibility is that we are seeing a Trojan horse strategy in play – reform-minded policymakers using the goal of making the yuan [aka the renminbi] a global currency to promote much-needed domestic reforms to improve the balance and sustainability of China’s growth. Uniting the country’s citizens behind this nationalistic objective would build popular support for reforms needed to make it a reality – a better banking system, broader financial markets, a more flexible currency and other reforms.

The idea that a great economic power should have a currency to match its clout in other economic dimensions is certainly an appealing one. A convergence of popular sentiment within China around this idea could have beneficial effects for the broader agenda that reform-minded officials have sought to push forward. Conversations with reformers in the Chinese government indicate that they clearly understand the domestic dynamics at play, but are careful not to overexpose or overplay their hand, preferring to nudge rather than aggressively push forward the renminbi’s internationalization.

The renminbi’s prospects as a global currency will ultimately be shaped by broader domestic policies, especially those related to financial market development, exchange rate flexibility and capital account liberalization. Capital account liberalization could have broader benefits. For instance, an open capital account would catalyze progress toward China’s objective of making Shanghai an international financial center. The various policy reforms that are needed to support the international role of the renminbi could thus create significant changes in China’s economy and the patterns of its capital inflows and outflows.

To support its broader international ambitions without waiting for domestic policy to
catch up, China will continue promoting the international use of the renminbi by employing Hong Kong as a platform. Hong Kong’s fear is that its fate may be that of a discarded lover when Beijing determines that its own financial markets are finally strong enough to allow for a more open capital account. Promotion of Shanghai as an international financial center would then take precedence and could hurt Hong Kong, especially if the territory has become highly dependent on renminbi business by then.

While using Hong Kong as the main staging ground for the internationalization of the renminbi, the Chinese government is also working to promote competition among financial centers eager to do renminbi business. Regional and international financial centers from Bangkok to Singapore to London to Tokyo are all being baited with small doses of opportunities to engage in renminbi transactions. This competition is useful for Beijing to be able to continue its program of internationalizing the renminbi without the usual prerequisite of opening its capital account and providing more renminbi liquidity. What keeps the various financial centers in Beijing’s thrall is, of course, the possibility that renminbi business will expand sharply one day, when China finally opens its capital account. Every one of these financial centers wants to be well positioned when that day comes.

The approach Beijing has taken toward capital account liberalization fits in with the government’s broader objectives. Rather than ceding too much ground to the private sector, the government continues to play an important role in capital outflows, through its sovereign wealth fund, state-owned banks and state enterprises. Their investments are consistent with China’s broader economic and geopolitical goals, including acquiring advanced technology and increasing the country’s sphere of influence around the world – especially in developing economies.

Given its size and clout, China is adopting a unique approach to the renminbi’s role in the global monetary system. As with virtually all other major reforms, China is striking out on its own path to a more open capital account. This strategy is likely to involve removing explicit controls while retaining “soft”
control over inflows and outflows through administrative measures, such as registration and reporting requirements. Within the next few years, China will have a far more open capital account than it does today, but one with numerous administrative controls and regulations still in place. This approach will allow the renminbi to play an increasingly significant role in global trade and finance, but in a manner that allows the government to retain some control over capital flows.

An interesting issue is whether there is a policy goal short of full capital account convertibility that provides a better benefit/risk trade-off. Joseph Yam, the former head of the Hong Kong Monetary Authority, has been actively engaged in advising the Chinese government on these issues. In an influential paper, Yam argued that the long-term objective for China ought to be full convertibility, which he defines as relaxation of capital controls, but with some administrative controls for regulatory purposes. He draws a careful distinction between this regime and one with entirely unfettered capital flows, referred to as “free capital account convertibility.” This is a subtle but important distinction that has resonated well with the Chinese leadership, given that full convertibility by this definition provides a path to an open capital account without entirely ceding control to market forces.

THE IMPACT ON THE WORLD

Yi Gang, the deputy governor of the People’s Bank of China [the central bank], has clearly articulated how China sees the renminbi internationalization project as a gradual process that is tied to other aspects of China’s own development:

> Whether the pace of the internationalization is a little bit quicker or slower, it is always and completely the choice of the market. I would be actually pleased to see people have more confidence in the renminbi and choose it over other currencies thanks to a more sophisticated market, better implementation of China’s monetary policy, China’s macroeconomic stability and social stability, and stronger rule of law.

In other words, China is in no hurry and will make progress on the internationalization of the renminbi at a pace and manner of its choosing. Yi’s carefully chosen words also signal a clear understanding that internationalization is not an end in itself and must proceed in tandem with other aspects of domestic financial and institutional development.

Even with only gradual financial market development, my prediction is that the renminbi will be included in the basket of currencies that constitute the IMF’s SDR [special drawing rights, a sort of supermoney used to settle accounts among central banks] basket within the next three to five years. The IMF needs China a lot more than China needs the IMF and the prospect of the renminbi’s inclusion in the SDR basket could be seen as a way for the IMF – and the international community that it represents – to exercise leverage over China in internalizing the global repercussions of its domestic policies.

The idea is that this leverage would come from a sense of moral obligation among China’s leadership to pay more heed to the interests of the rest of the world if the elevation of the renminbi to the SDR basket signified the acceptance of China as a great economic power. Perhaps fear of this leverage is why, after putting the subject on the table, Chinese officials have been rather more circumspect in pushing for an expansion of the SDR basket and have tried to bring other emerging-market currencies into the discussion as well.

Although China’s rapidly growing economy and its dynamism are enormous advantages that will help promote the international
use of its currency, China’s low level of financial market development is a major constraint on the likelihood of the renminbi attaining reserve currency status. Moreover, in the absence of an open capital account and convertibility of the currency, it is unlikely that the renminbi will become a prominent reserve currency, let alone challenge the dollar’s status as the leading one. A huge gulf still exists between China and the U.S. in the availability of safe and liquid assets, such as government bonds. The depth, breadth and liquidity of U.S. financial markets will serve as a potent buffer against threats to the dollar’s preeminent status. I anticipate that the renminbi will become a competitive reserve currency within the next decade, eroding but not displacing the dollar’s dominance.

Could the dollar hit a tipping point and sink?

In 1987, Per Bak, Chao Tang and Kurt Wiesenfeld published a paper in Physical Review Letters on self-organized criticality in nature. In their model, a system is spontaneously attracted to its critical state and, once it reaches this state, the effects of small changes become unpredictable. A good example is a sand pile on which grains of sand are being sprinkled in no specific order. Once it has reached its critical state, one more grain of sand either has no effect or causes large avalanches that could lead to the collapse of the entire pile.

The principle is quite different from that of phase transitions, where the critical point is attained by precisely tuning a particular parameter. For instance, there are specific combinations of pressure and temperature points at which water turns into ice or into steam. These are big but predictable changes, and to some extent can be controlled. The insight in the pathbreaking paper was the discovery of a mechanism by which complexity could emerge spontaneously from simple local interactions, without requiring careful fine-tuning of any parameters of the system.

To an ant on the sand pile, the system looks as stable after it has reached its critical state, even just before the pile collapses. The challenging question for those of us on the sand pile that is the global monetary system is whether it is already in a critical state, vulnerable to collapse at the slightest tremor.

There are some ominous signs. The macroeconomic data paint a sobering picture of worsening public debt dynamics and a sharply rising public debt burden in advanced economies, along with a high level of dependence on foreign investors in search of a safe haven in the case of the U.S. These economies have had the benefit of being able to issue sovereign debt in their own currencies, in effect allowing them to transfer currency risk to the foreign purchasers of their sovereign debt.
Advanced economies have not been subject to “original sin” (being able to issue debt only in foreign currencies), but their accumulated sins might eventually catch up with them. With low levels of population growth, rapidly aging populations and rising costs of health care and other entitlement programs, the U.S. and other advanced economies could be in far worse shape beyond this decade if they do not bring their public finances under control.

High and rising public debt levels among advanced economies pose serious risks to global stability. At present, there is strong demand for government bonds of the reserve currency economies, but this is a fragile equilibrium. As demonstrated by recent events in the euro zone, bond investors – both domestic and foreign – can quickly turn against a weak country with high debt levels, leaving the country little breathing room on fiscal tightening and eventually precipitating a crisis.

The U.S. is large, special and central to global finance, but the tolerance of bond investors may have its limits. If so, where are the limits?

RESEARCH ON TIPPPING POINTS: HANDLE WITH CARE

Based on their extensive research on debt crises, Carmen Reinhart and Kenneth Rogoff of Harvard University suggest that once public debt exceeds 90 percent of GDP, additional accumulation is associated with lower growth. Gross public debt in the U.S. is now over 100 percent of GDP, which puts the U.S. in the growth danger zone based on this criterion.

In their academic writings, Reinhart and Rogoff were careful to point out that they had only detected a correlation, not a causal relationship between high debt and growth. But these subtleties became blurred in translation to the world of public policy. The research
proved influential during the fiscal austerity debates in the U.S. and Europe. It has subsequently come under fire, partly on account of some conceptual and data issues, and partly because some policymakers and technocrats have used these findings to argue for fiscal austerity on the grounds that high debt levels cause lower growth. Still, these findings cannot entirely be dismissed, as other researchers have also found that high levels of government debt are associated with lower growth.

But even taken at face value, this research does not support the notion of a tipping point for the level of debt, beyond which bond markets would force the borrowing costs on public debt to increase sharply and threaten a country’s solvency. Other recent research that directly tackles the question of whether there is such a tipping point suggests that countries with public debt above 80 percent of GDP and persistent current account deficits are vulnerable. This could happen if investors get nervous about the level of debt, pushing up interest rates and making the debt problems more severe.

It certainly has not been a problem for the U.S., even though all the danger signs identified by such researchers are flashing red. Whether this benign outcome is simply an artifact of the unconventional monetary policy actions of the Federal Reserve, which have included directly purchasing large quantities of government bonds and holding down long-term interest rates, remains to be seen.

The high level of U.S. debt, implying a large pool of debt securities, as well as the stability and liquidity of its government bond markets, give the U.S. a tremendous advantage. But a tipping point could come if investors lose faith in the ability of the U.S. to honor its debt obligations without resorting to inflation. This does not mean that the U.S. will actually have to pay off its stock of outstanding debt, but the ability to roll over that debt will shrink as the level of debt rises.

For now, foreign investors are locked into U.S. debt, but that could change as other economies’ financial markets, especially those of emerging market economies, develop and offer a broader range of “safe assets.” That nothing catastrophic has happened in U.S. debt markets so far despite rising debt levels is not, or ought not to be, much cause for complacency.

Although this logic is compelling, the reality appears quite different. The available evidence, in fact, suggests that there are more reasons to be sanguine than concerned. It is also possible that the research showing a correlation between higher levels of public debt and lower growth is less relevant for the U.S. than other economies, given the strong demand for safe assets and large official capital outflows from emerging markets.

So, is the dollar immune from a precipitous fall? History tells us that crises have a way of sneaking up on financial markets. One important lesson from past crises is that if something looks too good or too strange to last, it probably won’t. More often than not, the longer the inevitable is postponed, the greater the likelihood that there will be an explosive burst rather than a painful but smaller pop.

What could trigger a tipping point that sends U.S. bond prices tumbling? There are many wild cards, with most of them seen as low probability events. However, the global financial crisis should have made it clear that “black swans” are not just figments of the imagination but represent real risks of ignoring very low probability but extremely disruptive events.

A RED WILD CARD
Take one potential tipping factor: China. Among foreign purchasers of U.S. Treasury bonds, China has been a force to reckon with.
Its reported purchases of U.S. Treasuries over the period 2008-12 amounted to about $750 billion, nearly a quarter of overall foreign investors’ purchases of $3.2 trillion. During this period, rumors that China might be taking steps to increase the currency diversification of its foreign exchange reserves and shift away from the dollar were enough to cause tremors in currency markets. Even before that, the pronouncements of Chinese officials were being sifted carefully for evidence about China’s intentions concerning its dollar reserves.

Yu Yongding, an Oxford-educated Chinese economist, has been on the front lines of advocacy for greater liberalization of China’s exchange rate. He was an academic member of the PBC’s monetary policy committee from 2004 to 2006, a period in which he made waves by pushing for further liberalization. On November 25, 2004, he was at an event in Shanghai, where he was quoted as saying that China had taken steps to reduce its holdings of U.S. Treasuries. Right after his speech was reported, the dollar fell against other major currencies. The next day, following reports that Yu said he had been misquoted, the dollar was back up.

Although it is hard to know what drives currency movements day to day, these and other widely reported episodes of Chinese officials’ statements rattling currency markets indicate how fragile sentiments in markets are.

Would China consider the use of its holdings of Treasuries as a weapon against the U.S.? In the Q&A posted on its Web site in 2011, China’s State Administration of Foreign Exchange attempts to be clear that its investment decisions will be based only on rational economic factors and that its reserves will not be used as a weapon of international diplomacy:

Q: Will China use its foreign exchange reserves as a trump card or as an atomic weapon?
A: We have always emphasized our role as a responsible long-term investor. During the investment and operations of our foreign exchange reserves, we will strictly follow the rules of the market and the laws and regulations of the country concerned … we will use the reserves as a financial investor and will not seek control over those investments … we will actively cooperate with those countries that welcome our investment. But if any country is doubtful, we will slow down and try to reach agreement through communications. As has been proven by the facts, the above concerns and worries are completely ungrounded.

Perhaps this response is meant more as a reassurance to the rest of the world rather than to Chinese citizens. The conventional wisdom is that China would be playing with fire if it tried to dump a significant portion of its dollar reserves. Attempting to sell even 10 percent of its reported holdings of U.S. Treasuries, which would amount to at least $130 billion, would probably be enough to set off panic in bond and currency markets.

In ordinary circumstances, this amount would not be large enough to create tremors in such a deep and liquid market. But these are not normal times. With bond investors already nervous about the high and rising level of U.S. debt, such an action could act as a trigger around which negative market sentiments coalesce, especially if China’s actions were seen as presaging similar moves by other foreign central banks.

The cost of U.S. government borrowing would rise, and the dollar would fall, which would certainly hurt the U.S. But China would hardly be immune and would itself stand to lose a lot. A fall in Treasury bond prices would result in a substantial drop in the capital value of China’s existing holdings of U.S. government bonds. Moreover, if the dollar depreciated against the renminbi, then the value of those bonds denominated in renminbi would fall even more – in short, a bad deal for China in many respects.
It is also not easy to envision what China could do with the money if it pulled significant sums out of U.S. Treasury bonds. Its sovereign wealth fund has enough challenges on its hands trying to find good investments, the gold market remains small and other global bond markets simply do not have the capacity to absorb hundreds of billions of dollars.

This suggests that China cannot credibly threaten to disrupt U.S. financial markets without shooting itself in the foot. The logic is correct in purely economic terms. But politics sometimes overrides economics, and that may be the true wild card.

**WHEN GEOPOLITICS TRUMPS ECONOMIC INTEREST**

In early 2008, China cracked down hard on rioters in Tibet. These actions had a palpable effect on Taiwan’s presidential election cam-
paign, which was heading into its critical phase. Before the riots in Tibet, a victory for Taiwan’s Kuomintang party candidate Ma Ying-jeou, who favored stronger linkages with Beijing, looked like a sure bet. But the events in Tibet shifted momentum toward Frank Hsieh, the candidate of Taiwan’s ruling Democratic Progressive Party, which preferred a harder line toward Beijing. As China made it clear that it was not happy with the way things were going, the U.S. dispatched two aircraft carriers for joint military exercises with Taiwan, further inflaming tensions in the region.

I made a trip to Beijing in March 2008 while these tensions were brewing. This was a few months before the city was to host the Olympic Games. China clearly viewed the Olympics as an opportunity to show the world that it had definitively established itself as a major sporting, economic and political power. Beijing was being spruced up and its grimier side was being sanitized, so no signs of poverty or disorder would be allowed to besmirch the reputation of a great power. Plans were even afoot to limit traffic on the streets and get factories around Beijing to shut down for a short period before the games started in order to alleviate concerns about pollution.

Clearly, the games were a big deal, and no expense or effort was going to be spared to ensure their success. Imagine, then, my surprise when, at virtually every meeting with senior officials during that visit, the one theme that inevitably came up was Taiwan.

They made it clear that if Taiwan were to make any move to exert freedom from the mainland, China would have no choice but to intervene by force. They dismissed as being of
little consequence any threat that military intervention could invite a boycott of the Olympics by certain countries, such as the U.S. The subtext was that national pride and sovereignty were far more important than any damage to China’s moment in the sun as the host of the Olympics.

This is consistent with a pattern that China has demonstrated in its past actions, making it clear that it puts territorial sanctity above other political and economic considerations. A more recent example of this is the dispute with Japan over a string of barren islands in the East China Sea, referred to by China as the Diaoyu Islands and by Japan as the Senkaku Islands.

These uninhabited islands are claimed by China, Japan and Taiwan. The islands have no intrinsic value, but are strategically valuable because they are close to key shipping lanes and fishing grounds, and there is also the prospect of oil reserves nearby. In September 2012, the Japanese government purchased three of the disputed islands from their private owner. The objective was ostensibly to prevent the owner or others from using the islands for nationalistic expressions that would inflame tensions with China. But it had the opposite effect.

The Chinese saw the purchase as a provocative move by Japan to reinforce its territorial claim. Official condemnations from Beijing followed swiftly, along with street protests in many cities around China. Cars made by Japanese automakers were burned or smashed on the streets of many Chinese cities, and many Japanese manufacturers temporarily shut down their factories in China to avoid further damage.

China clearly did not feel the need to be subtle or nuanced in showing its displeasure about the escalation of the territorial dispute with Japan. In October 2012, as Japan was preparing to host the prestigious IMF-World Bank annual meetings in Tokyo, Chinese banks started pulling out of events they had sponsored. At the last minute, China’s senior officials also boycotted the meetings, which featured the senior-most officials – finance ministers and central bank governors – from practically every other country in the world.

China’s finance minister and central bank governor were conspicuous by their absence from the meetings. PBC Governor Zhou Xiaochuan had been slated to give the prestigious Per Jacobsson lecture on the last day of the meetings. His lecture was instead read out by another Chinese official.

China’s actions were obviously intended as a slap in Japan’s face at a time when Tokyo was hoping to showcase its economic restoration after the March 2011 Sendai earthquake and tsunami. Chinese officials’ no-show became one of the big stories of the meetings, which was certainly not what the hosts had hoped for.

An article published in *China Daily*, an official newspaper, summed up China’s views on the matter. It laid out the official view that China did not see the island purchase as a matter of negotiation but as a land grab by Japan that needed to be beaten back:

China has used its diplomatic channels to make it clear to the international community that it wants to resolve the Diaoyu Islands dispute with Japan through diplomatic negotiations. China’s State leaders, the Ministry of Foreign Affairs and other government agencies and civil organizations have declared time and again that the so-called nationalization of the Diaoyu Islands by Japan is illegal and China will “make no concession” on issues concerning its sovereignty and territorial integrity.

The article then went on to make it clear, in case there were remaining doubts, that China’s actions, such as senior officials’ boycott of the IMF-World Bank meetings, were
intended to convey the government’s displeasure with Japan’s stance on the matter:

China has not only canceled many activities to commemorate the 40th anniversary of the normalization of its diplomatic relations with Japan and called off high-level governmental and military reciprocal visits, but also boycotted a series of international conferences and cultural activities in Japan, showing its determination to safeguard national sovereignty and territory.

The takeaway from these episodes is that, in line with a pattern demonstrated by its past actions, China is raising the stakes on geopolitical maneuvering. For the Chinese Communist Party, maintaining legitimacy is a tricky balance between delivering economic growth and stoking nationalistic pride. Given its unwillingness to entertain any serious moves toward an open democracy, unleashing nationalistic sentiments provides a safety valve for social restiveness. Perhaps one ought to be cautious about dismissing as impossible a situation in which, even at a short-term economic cost to itself, China might be willing to put the U.S. through the economic wringer.

**HOW BIG WOULD THE DISRUPTION BE?**

The credibility of any threat to dump U.S. Treasury bonds depends on how disruptive such a move would be to those bond markets. Estimates by researchers at the Federal Reserve suggest that a decline in foreign official inflows into U.S. Treasuries of about $100 billion in a given month could push up five-year Treasury bond yields by about 40-60 basis points (100 basis points = one percentage point). But such an increase in bond yields would also be likely to pull in more foreign investors, dampening some of the initial rise and reducing the effect to about 20 basis points.

In principle, these numbers suggest that it would take a big shift in foreign official inflows to raise interest rates by a full percentage point. It should be noted that the estimates are based on the effects of foreign inflows on Treasury bond yields in normal times, as the researchers’ data set ends in 2007 and excludes the crisis period. With the financial crisis fresh in investors’ minds, a significant shift in patterns of official inflows could have unpredictable effects on other investors and on bond markets. A big move away from U.S. Treasuries by the central banks of China and other emerging markets could spook private investors as well and set off more panic. This is uncharted territory, however, and any predictions about how investors will behave at a time of enormous stress in financial markets may have little to do with patterns of behavior in normal times.

Extrapolating from some aspects of what happened during the financial crisis, one cannot rule out the alternative possibility that turmoil in U.S. bond markets could spill over into even greater turmoil in other financial markets. The latter would eventually drive more money into U.S. bond markets on account of the safe-haven effect, thereby more than offsetting the initial rise in bond yields.

Moreover, the Fed has left little doubt that it would step in and take extreme measures when necessary to stabilize the U.S. financial system. The Fed could easily mop up any debt sold by foreign official investors, given its demonstrated willingness to expand its balance sheet by buying Treasury bonds when it deems such a step to be necessary. This willingness substantially reduces the credibility of any foreign government’s threat to destabilize U.S. bond markets by dumping even a portion of its holdings of those bonds.

In a report to Congress in July 2012, the U.S. Department of Defense examined the national security risks to the U.S. that China’s ownership of U.S. debt posed. The conclusion
of the report was relatively sanguine:

At tempting to use U.S. Treasury securities as a coercive tool would have limited effect and likely would do more harm to China than to the United States. As the threat is not credible and the effect would be limited even if carried out, it does not offer China deterrence options, whether in the diplomatic, military or economic realms, and this would remain true both in peacetime and in scenarios of crisis or war.

The United States apparently does not view China’s holdings of U.S. debt as a threat or as giving the Chinese any leverage in bilateral negotiations.

THE RISK OF AN “OWN GOAL”

The U.S. Treasury bond market is vulnerable enough that one does not necessarily need to count on external agents to bring things to a tipping point. Even domestic investors may at some point start to have second thoughts about relying on U.S. Treasury bonds for safety, or at least start demanding higher returns for investing more in those bonds. The high level of public debt is risky, because a small change in interest rates can have a large effect on debt financing costs. The U.S. Congressional Budget Office has warned that:
A growing level of federal debt would … increase the probability of a sudden fiscal crisis, during which investors would lose confidence in the government’s ability to manage its budget, and the government would thereby lose its ability to borrow at affordable rates.

With the level of debt held by the public (excluding the Fed’s holdings) equivalent to three-fifths of annual GDP, a one percentage point increase across the entire spectrum of interest rates could mean an increase of about 0.60 percentage points of GDP in government expenditure on debt financing. Such increases can quickly squeeze out other discretionary government expenditures.

In practice, though, the increase in financing costs is likely to be lower, as it depends on the maturity structure of government debt—the time-profile for repayment or refinancing of that debt. Longer-term debt does not have to be refinanced as often, whereas short-term debt is more exposed to interest rate increases. The average maturity of U.S. Treasury debt had fallen steadily from a peak of 71 months in 2001 to 48 months in late 2008. This meant that the U.S. needed to refinance an amount equivalent to half its entire stock of debt roughly every two years.

After the crisis hit, even as the stock of U.S. net public debt was exploding, the maturity structure of debt was in fact turning more favorable. This happened because the U.S. Treasury wisely used to its advantage the rising global demand for longer-term bonds. By June 2013, the average maturity had risen to 66 months, well above the average of 58 months for 1980-2010.

Part of the increase was accounted for by the Fed’s purchases of Treasury notes and bonds (securities with a maturity of more than one year) as part of its quantitative easing operations. From the end of 2008 to June 2013, the level of outstanding Treasury bonds and notes held by the public (including the Fed) rose by $5.5 trillion. Fed purchases of these securities accounted for $1.4 trillion or roughly one quarter of this increase. Thus, the increase in the average maturity of debt
held by private investors is somewhat smaller. Nevertheless, the increase in the average maturity of Treasury debt provides a layer of security, as a rise in interest rates will not immediately feed through into a proportionate increase in debt financing costs.

Still, the sheer volume of debt, the expected trajectory of future debt, and the prospect that market turmoil could lead to a sharp spike in rates leaves little room for comfort. The amount of expected future accumulation of debt is enormous. The U.S. Office of Management and Budget forecasts that net borrowing from the public will amount to more than $4 trillion over 2013-17 and an additional $3 trillion or more over the following five years.

**MIXED SIGNALS**

A complex balance of forces is at play in the market for U.S. Treasury debt. An increase in bond yields for the right reasons – a recovery in economic activity, a tighter labor market and a modest increase in expectations of wage and price inflation – would not be such a bad thing. Interest rates typically rise and fall along with the business cycle, so higher bond yields relative to those that prevailed in 2012 and through the summer of 2013 would signal a return to normalcy. It could create the right incentives for fixed-income investors to come back into the bond market for the traditional reasons – the prospect of earning a modest rate of return with little risk.

Their reappearance would be healthier than the force that is now driving investors into that market: the willingness to accept practically a zero rate of return to minimize risk in a highly volatile environment. In contrast, an increase in bond yields attributable to rising concerns about the level of debt and a possible surge in inflation without a strong recovery would be harmful. It could quickly spin out of control as investors rush for the exits. The trouble is that these two outcomes are observationally equivalent in the short run, and investors who are unable to tell them apart could mistake one for the other, setting off a panic-driven dumping of U.S. Treasury bonds and dollars.

Still, it is not easy to envision a scenario in which the dollar comes crashing down. Indeed, one small and somewhat dubious source of comfort is that such a situation of panic might again be self-correcting. Individual investors could find small supplies of other high-quality assets, such as investment-grade corporate paper, to shift their savings into. But larger institutional investors, and the market as a whole, simply lack viable alternatives either in the U.S. or abroad. Thus, in yet another irony, the panic set off by such an event would simply lead to money pouring back into the dollar.

**A BLAST FROM THE PAST**

Although the dollar has been at the center of the international monetary system for decades, it has come under threat on many occasions in the past, and there have been times when the U.S. needed financing from abroad to support the dollar's external value. Those episodes might seem to provide an object lesson on how a dollar crisis might unfold. Instead, they actually illustrate how sticky the dollar trap is.

In 1961, when the international monetary system was still on the gold standard, there were concerns that the dollar was vulnerable to a run by countries that wanted to convert their dollar holdings into gold. Many foreign central banks had built up large holdings of dollars, well beyond the levels needed to ensure their own currencies' convertibility into dollars. U.S. gold stocks, which in 1950 were enough to cover foreign central banks' dollar holdings...
many times over, had fallen by 1960 to a level barely sufficient to cover those holdings.

Robert Roosa, then the undersecretary for monetary affairs at the U.S. Treasury, went on the offensive on multiple fronts to protect the dollar’s primacy in the international monetary system. He pushed for the creation of a “gold pool,” a mechanism for merging gold reserves of major central banks to thwart speculation, helped create a new lending facility at the IMF called the General Arrangements to Borrow, and jawboned current-account surplus countries like Germany and Japan to stimulate their economies to boost domestic demand.

The final arrow in his quiver was the creation of what came to be called “Roosa bonds.” These were non-negotiable U.S. government bonds denominated in foreign currencies that were sold to foreign central banks. The bonds transformed a portion of dollar holdings of foreign central banks into longer-term debt that was protected from a fall in the dollar’s value, and were therefore designed to slow the conversion of foreign dollar holdings into gold. The bonds could be redeemed whenever their holders chose.

Some central banks were reluctant to buy Roosa bonds. But for others, these bonds made it easier to justify their large dollar holdings. From 1962 to 1974, the U.S. issued $4.7 billion worth of Roosa bonds, which were purchased by the central banks of Austria, Belgium, Germany, Italy, the Netherlands and Switzerland.

Roosa bonds and currency swap lines that existed in the 1960s have been characterized as “bribes” in the form of a portfolio substitute for gold offered by the U.S. to other central banks. These facilities have served as a substitute for conversion of dollars into gold at times of crises.

Such measures taken by the U.S. Treasury and Fed were designed to stabilize the international monetary system and, more importantly, to maintain the dollar’s primacy. And it is worth noting how other countries reluctantly but eventually fell in line with these plans, as a precipitous fall in the dollar’s value would have hurt them as well by causing turmoil in global financial markets.

That would not be the only time in recent history when the U.S. issued government bonds denominated in foreign currencies. In the fall of 1978, there were growing concerns about weak U.S. macroeconomic policies, with inflation rising rapidly. Currency markets were in disarray, with the U.S. dollar under severe downward pressure and falling against other currencies, including the German deutsche mark and the Japanese yen. On November 1 of that year, the Carter Administration announced a multipronged dollar defense package.

The package included a sharp, one percentage point increase in the main policy interest rate (the Fed’s discount rate) and a $30 billion package of foreign currency resources to facilitate exchange market intervention. The $30 billion comprised $15 billion in currency swaps with foreign central banks, $5 billion from the IMF and up to $10 billion in “Carter bonds.” These bonds were to be denominated in foreign currencies (à la Roosa), so the U.S. Treasury was encouraging foreign central banks to buy the bonds by taking upon itself the currency risk that would arise from a falling dollar. Their issuance could also be seen as signaling a commitment by the U.S. to take necessary steps to support the dollar’s external value.

By January 1980, the U.S. had issued about $6.5 billion of Treasury securities denominated in deutsche marks and Swiss francs. The dollar defense package was an impressive one. Because it was backed up by strong monetary and other macroeconomic policy
changes, it proved effective. The package quickly stabilized the dollar’s value, and the dollar even rose in subsequent years, earning a tidy profit for the U.S. government when it retired the Carter bonds fully in July 1983.

**OBAMA BONDS?**

In principle, the U.S. could issue similar instruments now if global demand for dollar-denominated assets were to decline and the economy needed financing for its large current account deficits. This action might temporarily prop up the value of the dollar, which would otherwise have to decline to bring down the current account deficit. Of course, the U.S. government would be unlikely to take such an action at a time when it has been trying to guide the value of the dollar downward to boost exports. After all, the whole point of the ongoing currency wars is that other countries are doing all they can to prevent their own currencies from appreciating against the dollar, as that would hurt their export competitiveness.

Either way, the U.S. would be in a favorable position, even if it did issue such bonds. If the dollar stayed strong, the U.S. would continue getting cheap funding from foreign countries. If the dollar fell in value and U.S. inflation rose, the country would face a loss on its new foreign currency bonds – but would foist on foreign central banks and other foreign investors an even larger loss on the enormous stock of dollar-denominated assets that they already hold. In short, any drastic changes to the dollar-centric system would be a lose-lose proposition for foreign countries, strongly favoring the perpetuation of the status quo.

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One legacy of the global financial crisis is the stripping away of the veneer of safety in a broad class of other financial assets, even as it has created greater demand for safe assets. So even if the world recognizes it is on an unstable sand pile, its only option seems to be to try to reinforce the foundations of that sand pile to avoid being hurt by its collapse.