It's May be Our Currency, but It's Your Problem¹ Barry Eichengreen February 2011

It's a singular honor to have been asked to deliver the Butlin Lecture. I first met Noel Butlin when I had the pleasure of visiting Australian National University for two months in what was, from my perspective, the summer of 1985. I got a tiny glimpse of how this one man had almost single-handedly reconstructed the quantitative dimensions of Australian economic history and built a thriving scholarly community of economic historians on the Australian continent. My research on money and finance was not exactly his intellectual passion, but he was at least tolerant of those of us who work on such esoterica.

As we meet here today, the dollar is very much in the news, and not all that news is good. The Fed's decision late last year to engage in a second round of quantitative easing is seen by some, in emerging markets in particular, as an attempt to debase, or devalue, the greenback. A mounting public debt raises worries that the Fed, concerned for the impact of higher interest rates on the debt-servicing burden of the federal government, will hesitate to raise its policy rate if and when inflationary pressures eventually intensify. Inadvertently it will end up inflating away the federal government debt. Gold prices continue to scale new heights, signaling – how should I put it politely? – less than full confidence in the dollar.

The bright side, if you will, is that other currencies like the euro have problems of their own. And the dollar has the exorbitant privilege that it is not just our currency but the world's.³

The extent to which the dollar dominates international transactions is extraordinary. The dollar is currently used in 85 per cent of all foreign exchange transactions worldwide. It still accounts for 61 per cent of the foreign currency reserves of central banks and governments despite the fact that the U.S. is only 20 per cent of the world economy. Countries like South Korea and Thailand set the prices of more than 80 per cent of their trade in dollars despite the fact that only 20 per cent of their exports go to the United States. When Somali pirates ransom a ship, they demand that the ransom money be parachuted to them in dollars. When Iran gives President Karzai's people bags full of money, the money in question is dollars.

Actually, this is not an unmixed blessing. Since foreigners want dollars to finance their international transactions and to hold as insurance against financial shocks, they are willing to lend to we Americans in order to acquire them. If we are prone to excesses, for example engaging in frenzied real estate speculation, they willingly give us more rope by purchasing the securities of Freddie Mac and Fannie Mae, or close substitutes thereof.

¹ Text of the Butlin Lecture delivered to the joint meeting of the Economic History Society of Australia-New Zealand and the All-UC Group in Economic History, Berkeley 18 February 2011. The text draws extensively on my book *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System* (Oxford University Press, 2011). The title draws on John Connally.

² Thus, we have the spectacle of the Brazilian finance minister speaking of the Fed as engaged in "currency warfare."

³ The cognescenti will know that this name for the dollar's international currency status – the "exorbitant privilege" – is widely thought to have been popularized by Valery Giscard d'Estaing, Charles de Gaulle's finance minister in the mid-1960s. Others attribute it to Raymond Aron, the French philosopher and political scientist, still others to the eminent monetarist economist Jacques Rueff.

Having learned the error of our ways, we are now saving more.⁴ With Americans now spending less, we need a weaker exchange in order to crowd our exports into international markets.⁵ But we find this hard to obtain because other countries prefer to peg their currencies to the dollar.⁶ From America's point of view, this means that the dollar's exorbitant privilege is a burden as well as a blessing.

How did we get into this situation? The dollar achieved its position of dominance in the course of the first half of the 20th century – quite a bit earlier, in fact, than suggested in the mainstream historical literature – as I will explain momentarily. It reached its apex of importance after World War II when America's was virtually the only economy standing. The United States was not just the dominant industrial power but had far and away the world's largest and most liquid financial markets. All this made it logical and, indeed, highly attractive for companies and central banks to transact in dollars.

There was then a decline in the relative economic weight of the United States in the world economy, as first war-torn Europe and Japan reconstructed their economies and then we witnessed the emergence of emerging markets. But, strikingly, there has been no commensurate decline, relative or absolute, in the role of the dollar. The reason typically given is the advantages of incumbency. Incumbency is an advantage in holding onto international currency status, just like it is in holding onto public office. For importers and exporters, quoting prices in the same currency as other importers and exporters avoids confusing one's customers. And since everyone else is quoting prices in dollars, it makes sense for you to continue doing so. With everyone else buying, selling and holding dollars, it pays to similarly buy, sell and hold dollars, since markets in dollar-denominated assets will be the most liquid.

Economists refer to such situation, as this audience will well know, as one of network externalities, where it pays to adopt the same practice as everyone else. And it is easily demonstrated that situations characterized by network externalities display high levels of persistence. Once a practice becomes standard – that is, one a "standard" is widely adopted – it gets locked in.

Or so it is said. You will know that there is a tiny bit of controversy surrounding the actual historical evidence in the case of the classic illustration of network effects and lock-in: the QWERTY keyboard.⁷ I would like to suggest that precisely the same is or should be true of the literature on international currency status. More than 40 years ago, a very young Peter Lindert taught us that reserve currency status under the pre-1914 gold-exchange standard was shared by three national units: the pound sterling, French franc, and German mark.⁸ More recently, Marc Flandreau and I established that this status was similarly shared in the 1920s, in this case more or less equally, by two currencies: sterling and the dollar.

⁴ In our private-sector capacity anyway.

⁵ And achieve President Obama's goal of doubling U.S. exports in five years.

⁶ That's the currency-war problem.

⁷ Paul David, "Clio and the Economics of QWERTY," Papers and Proceedings of the American Economic Association 75 (1986), pp.332-337; Stanley Leibowitz and Stephen Margolis, "The Fable of the Keys," Journal of Law and Economics 33 (1990), pp.1-26.

⁸ Peter H. Lindert, "Key Currencies and Gold, 1900-1913," Princeton Studies in International Finance, International Finance Section, Department of Economics, Princeton University.

You might argue that the same was unlikely to have been true of other international-currency functions. Perhaps switching costs are lower – increasing returns leading to lock-in are less pronounced – in the case of central bank reserve-holdings than private decisions about the currency in which to invoice and settle trade or in which to denominate international bonds. But Flandreau and I have shown that these additional functions, as well, were shared more or less equally by the pound and the dollar in the 1920s. 9

And even if you contend that this story about network effects and lock-in had at least limited validity in the past, it is unlikely to be equally valid in the future. The notion that importers, exporters and bond underwriters all will want to use the same unit as other importers, exporters and bond underwriters in order to avoid confusing their customers holds less weight in a world where everyone carries in his or her pocket a device, called a smart phone, that can be used to compare currency values in real time. Once upon a time, comparing prices in dollars and euros may have been beyond the capacity of all but the most sophisticated traders and investors. But this is no longer true in an age when when "Currency Converter" is one of the top ten most downloaded wigits at the Apple app store. ¹⁰

So even if the costs of switching and interchangeability were high at one time, this is no longer the case. Once upon a time it could be said that there was room for only one operating system for personal computers because of high switching and interchangeability costs. Unless you were a computer hobbyist and had no interest in exchanging your data with business colleagues, you had no choice but to use Windows. Network externalities were too pronounced for it to be otherwise. But now Microsoft, Apple, Google and Linix all share the market.

And so it will be with international finance. Once upon a time, there was room for only one international currency, the dollar. But now, because switching and interchangeability costs have fallen, there is room for several international currencies.¹¹ We are heading, in other words, toward a world in which several currencies will share the international stage. I want to suggest that this change is to be welcomed, not feared. Our multipolar world economy will be more stable and smoothly functioning with a compatible multipolar monetary and financial system.

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What international currencies, specifically, am I talking about? I attach the highest probability to three: the dollar, the euro and the Chinese renminbi. ¹² I can see you raising your eyebrows. You are preparing to object that one or more of these candidates isn't ready for prime time. The problem is that you won't agree among yourselves on which ones.

⁹ Barry Eichengreen and Marc Flandreau, "The Rise and Fall of the Dollar, or When Did the Dollar Replace Sterling as the Leading International Currency," European Review of Economic History 13 (2009), pp.377-411; Barry Eichengreen and Marc Flandreau, "The Federal Reserve, the Bank of England, and the Rise of the Dollar as an International Currency, 1913-1939," BIS Working Paper no.328, Geneva: BIS (December).

¹⁰ Rankings subject to change...

¹¹ A larger world economy, which permits the coexistence of more than one national bond market with the minimum scale needed for liquidity and efficiency, points in the same direction.

¹² Some might add to this list an international unit like the International Monetary Fund's Special Drawing Rights. But a clear lesson of history market participants have little appetite for composite units (recall how efforts to create private markets in SDR-denominated instruments in the early 1980s failed to get off the ground).

Currently, pessimism is most pervasive about the euro. It's not clear that the crisis countries, being forced to make draconian spending cuts, can recover without reintroducing their own currencies so that they can devalue and grow their exports. Keeping them in the euro area would require massive transfers from Germany, and German voters would rather abandon the euro and reintroduce the deutschemark than agree to this, or so it is said.

In my view, all this euro doom and gloom is overdone. While a Greek or Irish default can't be ruled out, neither can a default by the City of Los Angeles or Nassau County. But just like a default by Los Angeles or Nassau County wouldn't mean the end of the dollar, a Greek or Irish default would not mean the end of the euro. Moreover, Greece and Ireland would almost certainly make their problems worse by attempting to reintroduce their own national currencies. And Germany, for its part, has too much invested in the larger process of European integration to turn its back on that now – which is what abandoning the single currency would entail.

But to secure the euro's position as an international currency, Europe needs to complete its common house. Europe's crisis is first and foremost a banking crisis – the continent had a tremendous lending boom in the last decade. ¹³ It therefore needs to strengthen its banks. More to the point, it needs to shift supervision and regulation of the banking system from national authorities to the EU, since you can't have an integrated banking system with disintegrated regulation (something that we've learned, at considerable cost to ourselves, in the United States). With stronger French and German banks, it will become possible to restructure Greek and Irish debts without causing a banking crisis. ¹⁴

Will Europe do these things? Whenever the European Union has experienced a crisis and faced the decision of whether to move forward or go back, it has moved forward. As Jean Monnet, the father of European integration, wrote in his memoirs, "Europe will be forged in crises." That is, when faced with the choice of going forward or going back, Europe goes forward toward deeper integration. At least that is the implication of the last 50 years of European history. The question now is whether this commitment will still prevail now that the historical imperatives that drove the process in the past – the legacy of three disastrous wars and the need to bind Germany peacefully into Europe – are no longer as powerful.

Then there are the challenges facing the dollar. Disfunctional politics continue to undermine efforts to bring the America's chronic budget deficits under control. Divided government, with the Republicans controlling the Congress and the Democrats in the White House, will not make this easier. Federal government debt will soon reach 75 per cent of GDP. For a government that mobilizes only 19 per cent of GDP in taxes in good times, this is a considerable burden. Something approaching a quarter of all taxes will go to debt service once interest rates return to normal levels. And the fiscal situation only darkens after that, as exploding health care costs are superimposed on existing debts and deficits.

The question is whether the United States will come to grips with these problems before things get out of hand or end up, whether inadvertently or overtly, inflating away the debt. The

¹³ Aside from Greece, where public sector profligacy was the problem, Europe's crisis is fundamentally a banking crisis in my estimation.

¹⁴ The EU agreed to establish and activate a new supervisory entity for banks at the beginning of 2011, but the new entity's powers are largely limited to attempting to orchestrate cooperation among national supervisors.

fact that foreigners now own a majority of U.S. treasury securities will no doubt make the second alternative tempting. But foreigners understand this. If they see the United States as unable to solve its fiscal problem, they will dump their dollars in an effort to get out of the way. A sharp drop in the dollar could be disruptive; important institutional investors could be wrong-footed. And the dollar's safe-haven status clearly would be history.

To be clear, this is not my baseline scenario. The United States. has shown itself capable of dealing with significant challenges before. I am hopeful that it will do so again. But if it doesn't, this would spell the end of the dollar's role as an international currency.

Finally there are the challenges that China will have to surmount in order to internationalize the renminbi. It will have to build deep and liquid financial markets and make them accessible to foreigners. It will have to remove many of the financial restrictions that are integral to its development model. It will have to establish rule of law. Obviously these are not processes that will be completed overnight.

That said, I believe that observers are underestimating how quickly the renminbi will be adopted as a currency in which to invoice and settle trade, denominate international financial transactions, and hold central bank reserves. The United States completed the transition from a starting point where the dollar had no international role to one where it was the leading international currency in just ten years. In 1914, zero per cent of global reserves were in dollars. Zero per cent of global trade was financed and settled in dollars. Even U.S. exporters and importers went to London to obtain trade credit, and they borrowed in pounds sterling, that being the wish of their British creditors.

But in 1914 the United States established a central bank, the Federal Reserve System, and that central bank took steps to develop the market in trade credits. It discounted and "repoed" the securitized trade credits known as trade acceptances. It allowed U.S. banks to branch abroad where they could originate international financial business. And in just ten years, by 1924, more trade finance was obtained in New York than in London and denominated in dollars than in pounds. The dollar had also become the leading reserve currency. U.S. history thus suggests that the transition can occur quickly if policy makers are committed to providing the relevant institutional support.

This is what we are now seeing. In the last year, the Chinese authorities have begun to actively promote the internationalization of their currency. The share of bank deposits in Hong Kong denominated in renminbi has quadrupled. More than 70,000 Chinese companies are now doing their cross border trade settlement in renminbi, compared to virtually zero a year ago. At last count 43 companies, following McDonald's, have issued "dim sum" bonds denominated in China's currency. Just last month the Chinese government authorized the state-sponsored Bank of China to offer renminbi-denominated deposit accounts in New York. I've opened one via the internet. Have you?

Indeed, precisely the same forces that led the U.S. to launch a concerted campaign under the leadership of Nelson Aldrich, Paul Warburg, Benjamin Strong, and Frank Vanderlip to internationalize the dollar in 1914 are at work in China today. In the U.S. in 1914, there was the

feeling that forcing exporters to obtain sterling-denominated trade credit in London exposed them to additional costs and risk relative to their foreign rivals. The feeling was that this was a burden from the point of view of their international competitiveness. Chinese policy makers say the same thing today about their firms' dependence on dollars. In the U.S. in 1914, there were complaints about the inability of U.S. banks to get a slice of the available international financial business. One hears precisely the same complaints from Chinese banks today.

So if the dollar, the euro and the renminbi all have their problems, the very fact that there are doubts about all three is a reason to think that there will be a place for each of them.

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For all these reasons, a global monetary and financial system organized around multiple international currencies is coming. The question is whether we should worry.

Some warn that a multiple-international-currency system will be dangerously unstable. With dollars, euros and eventually renminbi all trading in deep and liquid markets and all being substitutes for one another, their exchange rates will become dangerously volatile. Even a limited loss of confidence in the policies of one of the reserve-currency countries could cause central banks to rush out of its currency, aggravating financial difficulties in the problem country. The consequences for other reserve-issuing countries, which will see their currencies appreciate sharply, will be equally undesirable.

This worry is based, in my view, on a mischaracterization of the behavior of central bank reserve managers. Reserve managers do behave like hedge-fund managers. They have social responsibilities, and they know it. They do not have the high-powered financial incentives of hedge fund managers to maximize returns. They have less incentive to herd – to sell a currency because everyone else is selling. They can adopt a longer horizon because, unlike private fund managers, they do not have to satisfy impatient investors.¹⁵ They do not have to exceed their previous high-water mark in order to draw a paycheck.

Private investors can find it hard to act as contrarians. Even if they think that the price of a currency has been beaten down beyond reasonable levels, they find it hard to take a long position unless they believe that the price will recover within a reasonable period. They have to fund the position. They face impatient investors. Central bank reserve managers, with their longer horizons and guaranteed funding, are in a better position to act as stabilizing speculators, buying an asset whose price has been beaten down in a fire sale instead of following the herd. The best empirical work on this question that I've seen, by Ted Truman and Anna Wong (a graduate of this institution), is consistent with this view. If you want a concrete example, central banks bought more \$100 billion worth of dollar bonds in the third quarter of 2010 (the latest quarter for which there are data at time of writing), responding to the weakening dollar exchange rate.

¹⁶ Edwin Truman and Anna Wong (2008), "The Case for an International Reserve Diversification Standard," Working Paper no. 06-2, Peterson Institute for International Economics (May).

¹⁵ Or at least *equally* impatient investors.

¹⁷ This according to the International Monetary Fund's Consolidated Official Foreign Exchange Reserve (COFER) data.

What can be done to stabilize a multiple international currency system? Sound and stable policies on the part of the reserve-issuing countries would be the most important contribution; this may be obvious, but it is still worth saying. More generous emergency finance, whether through regional swap lines and credit (as in the Chiang Mai Initiative Multilateralization) or globally through the International Monetary Fund, would reduce the incentive for excessive reserve accumulation more generally.

What would not help are futile efforts to stabilize exchange rates between the reserve currencies. Economic conditions and therefore appropriate monetary policies will continue to differ. It is unrealistic to imagine that the United States., the euro area and China are prepared to subordinate domestic policy objectives to the defense of target zones between their currencies. Any attempt to put such zones in place will quickly come undone. This is another clear lesson of history. Maintaining stable exchange rates between currencies, whether we are speaking of positive experiences like the pre-World War gold standard and Bretton Woods or negative ones like the interwar gold standard and Europe in the 1990s, requires the clear capacity to subordinate other potential domestic policy objectives to the overarching commitment to the maintenance of exchange rate stability. This is not something that central banks and governments are in a position to promise today.

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Thank you very much for your attention. I will be happy to take questions.