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Currency Wars and the Erosion of Dollar Hegemony

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CURRENCY WARS AND THE EROSION OF DOLLAR HEGEMONY

Lan Cao*

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INTRODUCTION

In recent years, much attention has been paid to the wars in Iraq, Afghanistan, and Syria, and the nuclear ambitions of Iran. Wars and breaches of the peace are of paramount importance and thus are rightly matters of international and national concern. But there are other forces at work, perhaps less conspicuous but nonetheless debilitating to the United States and the dollar-based international system, that merit more attention. The dollar's role in the international economic system and its valuation remain, as a former head of the German Bundesbank called it, "a riddle inside an enigma."¹ And as John Connally, Secretary of Treasury under President Nixon declared to the world, "the dollar is our currency but your problem."²

The dollar and the international monetary system have been inextricably intertwined. The Bretton Woods system was created by the United States after World War II and reflects American domination. Dollar hegemony has been part and parcel of American economic and military power. Although the U.S. economy seems to have emerged strong from

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1. Otmar Emminger, *The International Role of the Dollar*, *ECON. REV.* (Sept.-Oct. 1985), at 23, <https://www.kansascityfed.org/PUBLICAT/ECONREV/econrevarchive/1985/3-4q85emmi.pdf>.

2. *Id.*

the 2008 financial crisis, serious fault lines exist under the American-dominated international economic system. Whether dollar hegemony can continue despite economic volatility or whether it is being eroded and more worryingly, undermined and attacked, by internal and external forces, is one of the main issues examined in this Article.

What does dollar hegemony mean? When I was a child in South Vietnam, my mother hid gold bars and U.S. dollars in a safe because everyone knew that the dollar was as good as gold; it is also lighter and easier to carry than gold bars. When the Communists entered Saigon after South Vietnam collapsed in 1975, they went house to house, hammering open brick walls in search of hidden dollars.

Americans and other individuals carrying the U.S. dollar can rely on its privileged status when traveling abroad. That the U.S. dollar is accepted worldwide not just by banks and hotels but also by local small businesses and street peddlers is a reflection of international trust in the U.S. dollar. Moreover, in international business, the dollar is the top dog currency because importers and exporters settle their transactions in dollars, even when the underlying imports and exports have no territorial connection to the United States. As Kishore Mahbubani suggests, “Americans can purchase products at a marginally cheaper rate than other nations, which must exchange their currency with each purchase and pay a transaction cost.”³

For example, more than 80 percent of the trade between South Korea and Thailand is set in dollars, even though only 20 percent of their exports are destined for the United States.⁴ Although less than 6 percent of Australia’s exports go to the United States, 70 percent are invoiced in dollars. Oil (and other commodities) is priced in dollars,⁵ requiring countries that are oil consumers to accumulate dollars to pay for oil—mostly by exporting their goods and services to receive dollars as payment.⁶

Oil producing countries with excess dollar profits invest them in U.S. debt securities held in Western or U.S. banks. Half of international debt securities are in dollars.⁷ And when central banks hold foreign currency

3. KISHORE MAHBUBANI, *THE GREAT CONVERGENCE: ASIA, THE WEST, AND THE LOGIC OF ONE WORLD* 71 (2014) (citation omitted).

4. BARRY EICHENGREEN, *EXORBITANT PRIVILEGE* 2 (2011). This means that a Thai company exporting to South Korea receiving payments in dollars incurs an additional cost of converting those dollars into the Thai baht, the currency it uses to pay its workers and purchase its materials. But a U.S. exporter receives payment in the same currency (the dollar) that it also uses to pay its own workers, managers, suppliers, shareholders.

5. See generally DAVID E. SPIRO, *THE HIDDEN HAND OF AMERICAN HEGEMONY, PETRODOLLAR RECYCLING AND INTERNATIONAL MARKETS* (1999).

6. By contrast, the United States itself is able to purchase oil or any other commodities and products it wishes with the requisite currency—the dollar—simply by printing.

7. Similarly, a Swiss bank accepts deposits in Swiss francs. When it makes foreign loans, it does so in dollars and would need to worry about exchange rate moves. If the dollar depreciates against the franc, the value of its assets (its loans) goes down relative to its liabilities (its deposits). EICHENGREEN, *supra* note 4, at 3. Of course, the Swiss bank can “protect itself by buying a forward contract that converts the receipts on its dollar loan into francs

reserves, more than sixty percent of such reserves are dollars. The world's central banks also "hold close to \$5 trillion of the bonds of the U.S. treasury and quasi-governmental agencies like Fannie Mae and Freddie Mac,"⁸ and because they continue to desire these dollar securities, they are willing to pay more to hold them. As a result, the interest rate the United States has to provide on these securities is relatively low. This allows Americans to have "access to a vast supply of credit and permit[s] the public to borrow at lower interest rates for homes and automobiles and the government to finance larger deficits longer and at lower interest rates."⁹ This in turn allows U.S. households to live beyond their means; indeed, this state of affairs means that ironically, "poor households in the developing world ended up subsidizing rich ones in the United States."¹⁰ And despite the havoc wreaked by the 2008 financial crisis, the world nonetheless continued to turn to the dollar because it deemed the U.S. currency a safe haven in a world of financial turbulence. Even in 2008, when the world was gripped by the most debilitating financial crisis in more than eighty years, the U.S. federal government was still able to borrow at low interest rates because foreigners believed the dollar to be a safe haven currency amidst a world of great turmoil.¹¹

Although it only costs a few cents for the U.S. government to print a \$100 bill, other countries have to provide added value in the form of goods or services in order to receive \$100 dollars. Approximately \$500 billion of U.S. currency circulates outside the United States which foreigners acquired, not because their governments printed the dollars but because they had had to provide the United States with \$500 billion of actual goods and services.

This privileged position of the dollar is not intrinsic nor inevitable but is rather a reflection of U.S. domination and conversely, international trust in U.S. stewardship of the dollar and the dollar-based system. But even U.S. allies, such as France's Charles De Gaulle, have complained about the dollar's unique status. His finance minister, Valéry Giscard d'Estaing, grumpily called it an "exorbitant privilege" available to no other country.¹² This privilege might have made sense after World War II when the United States was the undisputed superpower, the largest importer, the primary source of trade credit and the leading source of foreign capital.¹³ When central banks around the world needed to stabilize their currencies

when the loan matures, at a rate agreed when the loan is made." *Id.* But this means incurring additional transactions costs that U.S. banks are spared.

8. EICHENGREEN, *supra* note 4, at 4.

9. See MAHBUBANI, *supra* note 3, at 72. See also Liam Halligan, *The Dollar's 70-year Dominance Is Coming to An End*, THE TELEGRAPH, July 19, 2014, <http://www.telegraph.co.uk/finance/comment/liamhalligan/10978178/The-dollars-70-year-dominance-is-coming-to-an-end.html> [hereinafter Halligan, *The Dollar's Dominance*].

10. EICHENGREEN, *supra* note 4, at 5.

11. *Id.*

12. *Id.* at 4.

13. *Id.* at 2.

against the dollar, it also made sense for those banks to hold dollars in reserve.¹⁴

But in today's world, both Chinese and German exports exceeded U.S. exports, with the American share of global exports only 13 percent. The United States accounts for less than 20 percent of foreign direct investment in recent years, compared to a high of 85 percent between 1945 and 1980¹⁵. This diminished economic position of the United States can certainly be viewed in benign terms – it is rightfully due to the welcomed economic progress of others, including, for example, Europe, Japan, China, and India.

But the criticism has become more vociferous for other reasons as well. The pressure on the dollar, needed but unloved by the world,¹⁶ has been building and will erupt at some point. Simply put, the dollar has not been backed by gold or convertible into gold since 1971¹⁷ when the U.S. unilaterally ended its post-World War II dollar-gold conversion commitment. It is simply paper money issued by the U.S. government. Yet, “U.S. economic dominance was so assured that even after President Nixon renege on the dollar’s previously unshakeable convertibility into gold, amounting to a massive default, dollar demand kept growing.”¹⁸

Other countries also question the fairness of a system that facilitates the establishment of one country’s currency as the international reserve currency for all countries. Consequently, they also resent the unfair benefits accrued to the United States as a result of this system. For example, they “question whether the U.S. should have been permitted to run current account deficits approaching 6 percent of GDP in the run-up to the crisis [of 2008].”¹⁹ They question why the United States does not have to “worry about balance of payments crises as it can pay for imports in dollars the Federal Reserve can just print.”²⁰ Emerging economies in particular complain that when their central banks accumulate dollar reserves to finance the expansion of their economies, they were, in effect, providing cheap finance for the persistent U.S. external deficit.

For years, in the face of Soviet threat, Europe, Japan, and the oil exporting countries depended on the United States for their national security and thus were willing, indeed, were expected, to line up and defend the dollar when called upon by their American protector. But things have changed. More and more critics have complained that the United States “has not been a worthy steward of an international currency . . .”²¹ be-

14. *Id.*

15. *Id.*

16. See generally RONALD I. MCKINNON, *THE UNLOVED DOLLAR STANDARD: FROM BRETTON WOODS TO THE RISE OF CHINA* (2012).

17. See *infra* text accompanying notes 183–86. Under the Bretton Woods system, the United States undertook to convert dollars into gold upon demand at \$35 per ounce of gold.

18. Halligan, *The Dollar's Dominance*, *supra* note 9.

19. EICHENGREEN, *supra* note 4, at 5.

20. Halligan, *The Dollar's Dominance*, *supra* note 9.

21. EICHENGREEN, *supra* note 4, at 6.

cause of its heavy debt and chronic budget deficits. There is a vigorous debate about debt, particularly government debt and what is acceptable and constructive versus what is excessive and destructive.²²

Moreover, financial, not just military tools are becoming powerful weapons in this economically interdependent and multipolar world. One surefire way of undermining a country's economy is to go after its currency. In 2013, the Xinhua News Agency, China's state press agency, issued the following denunciation of the United States "[I]nstead of honoring its duties as a responsible leading power, a self-serving Washington has abused its superpower status and introduced even more chaos into the world by shifting financial risks overseas"²³ The solution for an international system hostage to U.S. domination and abuse: "the introduction of a new international reserve currency that is to be created to replace the dominant U.S. dollar"²⁴ That is an explicit challenge to the dollar and the dollar-based system.

Critics contend that it is not only that China and other countries might see the United States as irresponsible. Rather, it is also that they are concluding that the system itself—global and multipolar economically yet national and unipolar monetarily—is becoming unstable and even unsustainable. Such systemic internal stress was severely compounded by external stress posed by "the 2008 financial crisis . . . [which] highlighted the financial fragility of the U.S. while underscoring the strength of emerging markets."²⁵

In response to the impending crash and fear of severe deflation following Lehman Brothers' collapse,²⁶ the U.S. Federal Reserve (the "Fed") since 2008 has printed over \$3 trillion of new money.²⁷ Although the political limits of frenetic dollar printing may not have been reached as far as

22. For sources discussing the danger of increased debt, see KWASI KWARTENG, *WAR AND GOLD: A FIVE-HUNDRED-YEAR HISTORY OF EMPIRES, ADVENTURES, AND DEBT* 5-6 (2014); Carmen Reinhart & Kenneth Rogoff, *Growth in a Time of Debt*, 100 *AM. ECON. REV.* 573 (2010); Carmen M. Reinhart, Vincent R. Reinhart & Kenneth S. Rogoff, *Public Debt Overhangs: Advanced-Economy Episodes Since 1800*, 26 *J. ECON. PERSPECTIVES* 69 (2012). For skeptics, see Paul Krugman, *The Excel Depression*, *N.Y. TIMES*, Apr. 18, 2013; Thomas Herndon, Michael Ash & Robert Pollin, *Does High Public Debt Consistently Stifle Economic Growth? A Critique of Reinhart and Rogoff*, (Pol. Econ. Research Inst., University of Massachusetts Amherst, Working Paper No. 322, 2013).

23. Liu Chang, *Commentary: U.S. Fiscal Failure Warrants a De-Americanized World*, *XINHUA NEWS AGENCY* (Oct. 10, 2013, 9:57 AM), http://news.xinhuanet.com/english/indepth/2013-10/13/c_132794246.htm.

24. *Id.*

25. EICHENGREEN, *supra* note 4, at 150.

26. Deflation is a general decline in prices caused by a reduction in money or credit. When cash is scarce and more valuable, businesses and people hoard and save rather than invest, crushing aggregate demand and causing GDP to plunge. Deflation can be caused by a decrease in spending, government or personal, or investment. Declining prices can lead to a downward spiral—declining profits, factory closure, increasing unemployment, declining incomes, and defaults on loans by businesses and individuals.

27. JAMES RICKARDS, *THE DEATH OF MONEY* 10 (2014) [hereinafter RICKARDS, *DEATH OF MONEY*].

the United States is concerned, as discussed later in this Article, this kind of dollar printing has created dangerous cracks in the international monetary system, with countries such as China, Russia and others waiting in the wings to exploit U.S. monetary instability.

It might seem anachronistic to write about dollar troubles when the dollar is currently strong (as of October 2016) or to warn about profound challenges posed by China and others to the dollar-based system when China's economy seems to be decelerating. Despite its weakening economy and stock market plunge in late 2015 and early 2016, China remains the world's second largest economy with annual growth of 7 percent and impressive employment figures resulting from China's mostly smooth transition from a manufacturing to a more service-oriented economy.²⁸ Moreover, the sudden yuan devaluation in August 2015 was not a sign of Chinese weakness but actually "a point-blank, double-barreled shotgun blast aimed at U.S. markets."²⁹ Pressured for years by the United States to stop devaluing the yuan because a devalued yuan makes Chinese exports cheaper and more competitive against American products, China's 2015 devaluation could not be faulted because it was ostensibly made under the cover of market forces – China could claim it was playing by free market rules in order to prepare the yuan for inclusion into the basket of world money called Special Drawing Rights (SDR) managed by the International Monetary Fund (IMF).

The international economic picture is evolving in complex ways. The purpose of the article is to connect the dots, look at long-term trends, and warn about fundamental fault lines and global headwinds that are not immediately obvious—all the more necessary when the economic snapshot of U.S. markets, and relatedly of the dollar, may appear more rosy than it should be.

In a highly influential book, *Unrestricted Warfare*, written by two Chinese military leaders and published by The People's Liberation Army of China, the authors observed that even countries with "the dual advantages of money and technology" have been unable to challenge U.S. domination.³⁰ They suggested:

[A] breakthrough in our thinking can open up the domain of the weapons kingdom at one stroke. As we see it, a single man-made stock-market crash, a single computer virus invasion, or a single rumor or scandal that results in a fluctuation in the enemy country's exchange rates or exposes the leaders of an enemy country

28. Peter Eavis, *China's Economic Turmoil Sends Ripples to Global Markets*, N.Y. TIMES (Jan. 7, 2016), <http://www.nytimes.com/2016/01/08/business/dealbook/chinas-economic-turmoil-sends-ripples-to-global-markets.html>.

29. James Rickards, *China Destroys the August Myth*, DAILY RECKONING (Aug. 14, 2015), <http://dailyreckoning.com/china-destroys-the-august-myth/>.

30. COLONEL QIAO LANG & COLONEL WANG XIANGSUI, UNRESTRICTED WARFARE 15 (1999), <http://www.c4i.org/unrestricted.pdf>.

on the Internet, all can be included in the ranks of new-concept weapons.³¹

As these authors noted in a colorfully worded chapter called “The War God’s Face Has Become Indistinct,” the cause of the debilitating 1997 East Asian currency crisis was “[a] surprise financial war attack that was deliberately planned and initiated by the owners of international mobile capital [which] ultimately served to pin one nation after another to the ground – nations that not long ago were hailed as ‘little tigers’ and ‘little dragons.’”³² From this perspective, the 1997 Asian currency crisis, accompanied by riots and bloodshed from Thailand and Indonesia to South Korea, looked like a Western plot to destabilize the Asian economies. Then Prime Minister Mahathir bin Mohamad of Malaysia lashed out at the currency speculator George Soros and blamed international speculators for “the attempts to push us back by a decade through forced devaluation of our currency, through the rape of our share market.”³³

The 1997 Asian economic crisis made an indelible impression on China and brought to the forefront the possibility of financial calamity unleashed by currency crises. The authors warned that,

financial war is a form of non-military warfare which is just as terribly destructive as a bloody war, but in which no blood is actually shed. Financial warfare has now officially come to war’s center stage. . . . The main protagonist in this section of the history book will not be a statesman or a military strategist; rather, it will be George Soros.³⁴

Any attack on the dollar, via massive foreign sell-off of U.S. securities, for example, would drive up interest rates for the U.S. government as well as for everyday Americans (because higher interest rates would be needed to entice people, domestic and abroad, to buy otherwise less desirable securities). Yet, although this possibility and other developments have eroded the efficacy of the post-World War II dollar-based system and threatened to cause significant damage to U.S. national interests, they have occurred without much critical analysis in the international law literature.

To be clear, certain incidents have been noted but few have connected the dots to present a full picture. For example, in the past ten years, as I explain below, certain developments have been reported, but as separate rather than as a connected accumulation of instances that together, point to the imminence of global financial instability and the increasing reliance

31. *Id.* at 25.

32. *Id.* at 51. See also Steven Vines, “Unscrupulous” Soros Fires a Broadside at Mahathir the “Menace,” *THE INDEPENDENT* (Sept. 22, 1997), <http://www.independent.co.uk/news/business/unscrupulous-soros-fires-a-broadside-at-mahathir-the-menace-1240660.html>.

33. Alan Friedman, *Soros Calls Mahathir a ‘Menace’ to Malaysia*, *N.Y. TIMES* (Sept. 22, 1997), <http://www.nytimes.com/1997/09/22/news/22iht-soros.t.html>.

34. LANG & XIANGSUI, *supra* note 30, at 51-52.

by many countries on financial warfare instead of traditional use of force. The search for control of natural resources, gold, silver, commodities and something of value is all the more important when what the post-Bretton Woods system considers of value—paper money—is becoming increasingly abundant, freely printed by governments operating on chronic deficits.

Note the following examples. On October 28, 2008, RIA Novosti, one of the largest news agencies in Russia, reported that Russian Prime Minister Vladimir Putin proposed that Russia and China switch to national currency payments, instead of the U.S. dollar, when engaged in bilateral trade.³⁵ On November 15, 2008, Reuters covered Iranian conversion of financial reserves into gold,³⁶ while four days later, various news outlets reported that the central bank of China was considering raising its gold reserves by 4000 metric tons from 600 tons to diversify dollar risk.³⁷ Five years later, China determined that its gold reserves should be further increased to “ensure national economic and financial safety, promote yuan globalization i.e., the renminbi as reserve currency and as a hedge against foreign-reserve risks i.e., a dollar meltdown,” according to Gao Wei, an official from the Chinese Department of International Economic Affairs of Ministry of Foreign Affairs.³⁸ On March 23, 2009, without referring explicitly to the dollar, the Governor of the People’s Bank of China (PBOC) called for “an international reserve currency that is disconnected from individual nations and is able to remain stable in the long run”³⁹ Over a span of five years, countries such as China, Brazil, India, Mexico, Japan, South Korea, Iran, Russia, and the United Arab Emirates have not only quietly increased their gold holding but have also engaged in currency swap agreements in which they agreed to use each other’s currencies in

35. *PM Putin Suggests Russia, China Ditch Dollar in Trade Deals*, RIA NOVOSTI (Oct. 28, 2008), <http://en.ria.ru/russia/20081028/117991229.html> (statement of Vladimir Putin) (“We should consider improving the payment system for bilateral trade, including by gradually adopting a broader use of national currencies.”).

36. Fredrik Dahl, *Iran Switches Reserves to Gold*, REUTERS (Nov. 15, 2008, 3:14 AM), <http://www.reuters.com/article/2008/11/15/us-iran-gold-idUSTRE4AE1F820081115>.

37. *China PBOC Mulls Raising Gold Reserve By 4,000 Tons*, FXSTREET (Nov. 19, 2008), <https://www.fxstreet.com/news/82afe43d-8d3c-494d-894d-113c196ed750>; Dan Popescu, *China’s Gold Reserves Updated: Surprised?*, GOLD BROKER (Aug. 10, 2015), <https://www.goldbroker.com/news/china-gold-reserves-updated-surprised-824>; see also World Gold Council, *China Gold Report: Gold in the Year of the Tiger 50* (Apr. 2010) http://www.exchange-tradedgold.com/media/ETG/file/WOR5797_Gold_Invest_Report_China_Web.pdf (the State Council advisor Ji Xiaonan suggested that China should invest in 1,000 tons of gold each year, with a goal of achieving 6,000 tons in three to five years and 10,000 tons in eight to ten years).

38. Jeff Nielson, *China Puts Gold Where Its Money Is*, THE STREET (May 3, 2013), <http://www.thestreet.com/story/11913810/1/china-puts-gold-where-its-money-is.html>.

39. *China Eyes SDR as Global Currency*, CHINA DAILY (Mar. 23, 2009), http://www.chinadaily.com.cn/business/2009-03/23/content_7607627.htm; see also Zhou Xiaochuan, *Zhou Xiaochuan’s Statement on Reforming the International Monetary System*, COUNCIL ON FOREIGN REL. (Mar. 23, 2009), <http://www.cfr.org/china/zhio-xiaochuans-statement-reforming-international-monetary-system/p18916> (proposing a “super-sovereign reserve currency managed by a global institution”).

bilateral or regional trade. In yet another type of deal, countries also agreed to engage in a barter system—Iranian oil for Chinese goods.⁴⁰

Against this background, two developments are particularly important because they show the beginning of the erosion of dollar hegemony. First, note the concerted actions by Brazil, Russia, India, China, and South Africa (BRICS) to pursue a dollar-alternative path, most notably the establishment by BRICS of a New Development Bank (NDB) as a rival to the Western-dominated Bretton Woods system.⁴¹ And second, take as an example the historic gas deal worth 400 billion, between Russia and China, concluded after ten years of negotiations, to provide the world's fastest growing economy with the natural gas it needs for the next thirty years,⁴² most likely to be transacted in yuan, not dollars, undercutting both the primacy of the U.S. dollar as the top dog currency used in oil trades and its role as the international reserve currency.⁴³

These are not random developments. Despite apparent signs of strength—depending on when a financial snapshot is taken—the dollar-based system and indeed, the dollar itself, are increasingly challenged. In a world of fiat money,⁴⁴ massive dollar printing via Quantitative Easing (QE)⁴⁵ by the Fed since the 2008 crisis has had enormous consequences

40. See Najmeh Bozorgmehr, Anna Fifield & Leslie Hook, *China and Iran Plan Oil Barter*, FIN. TIMES (July 25, 2011), <http://www.ft.com/cms/s/0/2082e954-b604-11e0-8bed-00144feabdc0.html#ixzz1T8N4nYws>. Although the deal was precipitated by U.S. sanctions against Iran, which have blocked China from paying at least \$20 billion for oil, it has nonetheless resulted in the dollar being bypassed.

41. This is in addition to China's formation of a China-led Asian Infrastructure Investment Development Bank (AIID), which, combined with the BRICS Bank, poses a challenge to the World Bank and the IMF. Lawrence Summers, Secretary of the Treasury under President Clinton, characterized the founding of the AIID "as the moment the United States lost its role as the underwriter of the global economic system." Lawrence Summers, Editorial, *Time U.S. Leadership Woke up to New Economic Era*, FIN. TIMES (Apr. 5, 2015), <http://www.ft.com/intl/cms/s/2/a0a01306-d887-11e4-ba53-00144feab7de.html#axzz3msNDL2Ml>. According to Summers, there has been "no event since Bretton Woods comparable to the combination of China's effort to establish a major new institution and the failure of the U.S. to persuade dozens of its traditional allies, starting with Britain, to stay out of it." *Id.*

42. *Russia and China Agree 400 Billion Natural Gas Supply Deal*, THE GUARDIAN (May 23, 2014), <http://www.theguardian.com/business/2014/may/23/russia-china-agree-gas-supply-chain>.

43. Matt Clinch, *What Russia China Relations Mean for the Dollar*, CNBC: CURRENCIES (May 27, 2014), <http://www.cnbc.com/id/101705303> [hereinafter Clinch, *Russia-China Relations*].

44. Fiat money is money whose value is derived from government decree or regulation. By contrast, commodity money is based on the value of the commodity itself, such as gold or silver, which has other uses besides use as a medium of exchange. See JOHN MAYNARD KEYNES, *The Classification of Money*, in *A TREATISE ON MONEY* 7 (1930); see also N. GREGORY MANKIW, *PRINCIPLES OF ECONOMICS* 659 (5th ed. 2008) ("Fiat money, such as paper dollars, is money without intrinsic value: It would be worthless if it were not used as money.")

45. Quantitative easing is a monetary policy used by the Federal Reserve to purchase government and other securities. The Federal Reserve creates new money, increases the money supply, and lowers interest rates. By putting more money into the financial system, it is hoped banks will lend it to consumers and businesses to jumpstart the economy and avoid

for the United States and the rest of the world.⁴⁶ Briefly, QE is a policy used by central banks such as the Fed to create new money which is then used by the government to buy assets and spur economic recovery and growth. First, countries that have held dollars as reserves worry about the value of their dollar holdings when Fed floods the market with dollars. The devaluation of the dollar during QE has resulted in the overvaluation of other currencies—Brazil’s currency, the real, for example, rose to a ten-month high against the dollar in 2010, prompting Brazil’s Finance Minister to declare that “[w]e’re in the midst of an international currency war. This threatens us because it takes away our competitiveness.”⁴⁷ Indeed, because most countries have to export to get U.S. dollars, a strong currency hurts their exports because it makes their goods expensive to foreign buyers.⁴⁸ Second, despite the creation of so much new money through QE, the United States was able to avoid unleashing inflation domestically because inflation was exported to the world instead, causing, as I discuss later in the Article, additional angst with the dollar-based system. QE became an American weapon, especially against China.

Some countries have found ways to fight back. When the United States warned Russia about Russian aggression in the Ukraine and Crimea, Russian Presidential Advisor Sergei Glazyev shrugged, noting that “[w]e hold a decent amount of treasury bonds—more than \$200 billion—and if the United States dares to freeze accounts of Russian businesses and citizens, we can no longer view America as a reliable partner We will encourage everybody to dump U.S. Treasury bonds, get rid of dollars as an unreliable currency and leave the U.S. market.”⁴⁹

Attacking a country’s currency means attacking it on many fronts. “The value of a nation’s currency is its Achilles’ heel. If the currency col-

deflation. Relatedly, when more money is created, the value of the currency also goes down. Prices will likely go up—hence no deflation, but possibly inflation. Devalued currency also has the benefit of boosting U.S. exports. Michael Janda, *Your Questions: Quantitative Easing Explained*, ABC NEWS (Sept. 20, 2012), <http://www.abc.net.au/news/2012-09-14/what-do-you-want-to-know-about-quantitative-easing/4260828>.

46. Devaluation is a double-edged sword. Countries like China that rely on exports do not want their currencies to appreciate much because that would make their exports more expensive to others. On the other hand, no one wants a devalued, worthless currency either. But because the U.S. dollar is a reserve currency, its devaluation has global implications, as this Article explains.

47. *Brazil Warns of World Currency War*, REUTERS (Sept. 28, 2010), <http://www.telegraph.co.uk/finance/economics/8029560/Brazil-warns-of-world-currency-war.html>.

48. The term “currency war” has been used to describe competitive devaluations by countries to achieve a low exchange rate for their currencies. But at the same time it is important to realize that no one country wants its currency to be so devalued that it becomes the least valued currency or a worthless currency. Carolyn Cui, *Foreign Reserves Slip in Emerging Markets, Raising Risks*, WALL ST. J., June 23, 2015. Sales of U.S. dollars are designed to prop up the value of their own currencies.

49. Greg Morcroft, *Ukraine Crisis Takes New Spin as Russia Threatens to Dump US Treasuries if Sanctions Imposed*, INT’L BUS. TIMES (Mar. 4, 2014), <http://www.ibtimes.com/ukraine-crisis-takes-new-spin-russia-threatens-dump-us-treasuries-if-sanctions-imposed-1559238>.

lapses, everything else goes with it.”⁵⁰ Despite globalization, the market for bonds and stocks is still segmented—not so with currency because “stocks, bonds, commodities, derivatives and other investments are all priced in a nation’s currency. If you destroy the currency, you destroy all markets and the nation.”⁵¹ This Article examines how and why the dollar is being challenged. Part I provides a brief history of the U.S. dollar, showing how it has evolved from something with intrinsic value to something that has no intrinsic value, except via government fiat. Part I traces the evolution of money in the United States, from its original foundation in commodities and gold and silver coins, to the creation of money via Federal Reserve notes which function as money substitutes, that is, paper instruments that represent gold and silver and presumably can be converted into real money. The aim of Part I is to show that money was originally rooted in something of value and that over time, its value was debased and became more attenuated and symbolic rather than intrinsic.

Part II examines U.S. power after World War II and the rise of the dollar as the preferred currency of the international economic system. It will focus on the dominance of the dollar-centered global economy and discuss the “exorbitant privilege”⁵² the system has given the United States. For example, to protect this system and the privilege it bestows on the United States, the United States pressured its allies, particularly Germany, to refrain from demanding that dollars be exchanged for gold.

The situation today is starkly different. The first serious crack in this system began in 1971 when President Nixon severed the dollar from the gold-dollar link. Once the dollar’s gold convertibility was broken, the dollar has no intrinsic value—yet for years, managed to retain its dominance despite this severance. “For better or worse, contemporary fiat currency systems do not *require* bullion in order to function. What they do require is faith. ‘Credit’ and ‘credible’ come from the same root word, after all.⁵³ We come back to the notion of trust.⁵⁴ When trust in paper money is eroded, the system cracks further.

But over the years, the United States has managed to contain these incipient cracks. Despite its severance from gold, the dollar’s unique status has been ensured by linking it to oil. “Implicitly since 1945 and explicitly since 1974, the United States has guaranteed Saudi Arabia’s security in exchange for Saudi support for the dollar as the sole medium of exchange for energy exports”⁵⁵ Any country that buys Gulf oil must pay in dollars—hence the term petrodollars. The global demand for dollars contin-

50. JAMES RICKARDS, CURRENCY WARS: THE MAKING OF THE NEXT GLOBAL CRISIS 145 (2012) [hereinafter RICKARDS, CURRENCY WARS].

51. *Id.* at 146.

52. EICHENGREEN, *supra* note 4, at 4.

53. *Central Bank Gold Reserves: Monetary Economics with a Vengeance*, THE ECONOMIST (Jan. 18, 2013), <http://www.economist.com/blogs/freeexchange/2013/01/central-bank-gold-reserves>.

54. *Id.*

55. RICKARDS, DEATH OF MONEY, *supra* note 27, at 156.

ues because the global demand for oil continues. Part II shows that despite the immense advantages the dollar has received as a result of the agreement to price oil in dollars, the stresses and fractures responsible for the rupture of the dollar-gold link continue to this day, exacerbated by internal dysfunction and external challenges.

Part III explores the consequences for the United States and the international system if and when the dollar-based system erodes. The dollar faces both endogenous and exogenous threats. Indeed, the decline of the dollar-based system is caused by the convergence of many factors. Some are self-inflicted, that is, a result of a crescendo of debt, deficit and dysfunction. Some may be the inevitable result of other countries catching up to the United States so that U.S. absolute dominance is diminished if measured from its heights after World War II. But it is also fair to say that many countries have worked to diminish the dollar's role as an international reserve, to usher in a different international economic system, and to benefit from this new de-Americanized world.

Part III also studies the 2008 financial crisis and how global economic decline and U.S. actions ironically created a double edge sword, preventing deflation, but also precipitating mistrust in and resentment of dollar domination. Through QE, the Fed created new money to buy government bonds and other assets to finance the government's ballooning deficit. As Philip Coggan argues, "[t]he world now operates with a system where money can be created at will or by decree,"⁵⁶ increasing debt and deficit. As more dollars are printed, dollars became cheaper. Part III shows how dollar devaluation during the QE period has upset countries with large dollar holdings and produced deep fault lines in the international economic system.⁵⁷ Part III also studies the effect of QE on China specifically, a large holder of dollar assets and on other emerging economies generally. China does not welcome the devaluation of its dollar holdings and in fact, sees "[m]aintaining the real value of its reserves [as] one of [its] keys to maintaining internal social control."⁵⁸ China has in fact taken

56. PHILIP COGGAN, PAPER PROMISES: DEBT, MONEY, AND THE NEW WORLD ORDER 3 (2011).

57. At the time, QE weakened the dollar abroad. But as Europe and Japan have begun their own QE, the dollar has been rising in value. Jeff Sommer, *The Strong Dollar Is Always Good, Except When It Isn't*, N.Y. TIMES (Jan. 24, 2015), <http://www.nytimes.com/2015/01/25/business/the-strong-dollar-is-always-good-except-when-it-isnt.html>.

58. RICKARDS, *supra* note 50, at 159

The value of China's massive foreign exchange reserves, the fortunes of exporters and the flows of hot money into the country are all shaped by the [U.S. dollar/renminbi] USD/RMB exchange rate and the international currency system. China has a greater stake in the dollar system than many other countries because of its massive foreign currency reserve and heavy reliance on trade-related growth. China has found itself constrained by the enduring systemic power of the United States and the centrality of the dollar in the international monetary system.

Gregory Chin & Wang Yong, *Debating the International Currency System: What's in a Speech*, 6 CHINA SECURITY 1, 3-4 (2010).

countermeasures to prevent financial loss and to carve, in the long run, an alternative route to the one dominated by the dollar.

Part III also looks at how QE not only devalues the dollar but also exports inflation to many countries, wreaking financial and political havoc in the process. When the United States used QE to create new money, “the money that the US printed to stimulate the US economy did not stay in the US. It flowed out into the rest of the world and generated a lot of financial volatility, which in turn negatively affected the livelihoods of billions of people.”⁵⁹ As one commentator analogized, it is as if

America, living in one of the cabins on our global boat, encountered some dirt in its cabin and decided to give it an almighty scrub by using a lot of soap and water. However, as it did so, it swept all its dirty water out of its own cabin and “allowed” it to flow into other cabins on the boat.⁶⁰

The massive amount of dollars flowing out of the United States, where interest rate was already close to zero, in search of higher yield in other countries, led to inflation elsewhere. Chen Deming, the Chinese Commerce Minister, charged the United States with irresponsible money printing. “Because the U.S.’ issuance of dollars is out of control and international commodity prices are continuing to rise, China is being attacked by imported inflation.”⁶¹ The Chinese government remembers all too well that commodity inflation was also a catalyst of the June 1989 Tiananmen Square protests. And as many commentators have noted, it is not coincidental that civil unrest and riots erupted in Tunisia in early 2011, spreading to Egypt, Yemen, and beyond, when poor countries in the Middle East strained their budgets to alleviate the worst effects of food inflation⁶² partly caused by U.S. QE unleashed.

Despite the considerable advantages of incumbency and the lack of viable alternatives to the U.S. dollar, it is by no means certain that the United States can successfully maintain dollar hegemony. In fact, the dollar almost lost its status as the world’s reserve currency in 1978—when the Federal Reserve dollar index plummeted and the U.S. Treasury had to

59. MAHBUBANI, *supra* note 3, at 70.

60. *Id.*

61. *Id.* at 71.

62. Scott Miner, *U.S. Will Win from Middle East Domino Effect*, FIN. TIMES (Feb. 28, 2011), <https://www.ft.com/content/31874fd2-4337-11e0-ae2-00144feabdc0>

By printing almost \$2,000bn dollars and using that money to buy assets, the United States created a rising tide of liquidity that has lifted all asset prices, including commodities, and more specifically agricultural products. Just as chronic food shortages were a big catalyst in the 1991 revolution in the Soviet Union, rising food prices have been a catalyst for the social unrest in the Middle East and north Africa.

See also infra notes 253-61 and accompanying text.

issue government bonds denominated in Swiss francs precisely because foreign creditors lacked confidence in the dollar as a store of value.⁶³

Although the word “collapse” sounds apocalyptic, the international monetary system has already collapsed three times in recent history—in 1914, 1939, and 1971. Moreover, that one country can make another country’s currency collapse cannot be surprising. The United States itself has waged a currency war against Iran, wreaking devastation on Iran and the Iranian currency, the rial.⁶⁴ As Part III shows, U.S. sanctions—against Iran and Russia, for example—has also meant, ironically, that alternative non-dollar-based systems are being created by those countries and others as a counterpunch or as a way to bypass those sanctions. Different countries are also entering into bilateral trade, using their own currencies, rather than the dollar, as payment. But more threatening to the dollar’s supremacy is the decision by many to sever the dollar-oil link, which would decrease global demand for dollars.

What could trigger collapse? For example, China could dump its dollar-denominated assets, including U.S. Treasury bonds, causing a sharp rise in U.S. interest rates, inflation, possibly the collapse of the dollar on foreign exchange markets, and destruction of capital formation. But that could also mean economic suicide for China, given its own large dollar holdings. China could also diversify its cash reserves away from dollar-denominated securities of any kind, and even if the yen, euro, and sterling instruments are not deemed appealing, it could acquire, instead, commodities such as gold, oil, copper. Indeed, it has done precisely this. As many have reported, China has been secretly accumulating gold, ranking now as both the largest producer as well as the largest importer of gold.⁶⁵ One can see that the accumulation of gold by China, as well as Russia, “presages a shift to a new reserve asset.”⁶⁶ Gold accumulation is a hedge against dollar devaluation or dollar collapse.⁶⁷ Accumulating gold is a way of “getting out of paper money and into hard assets, while immunizing those assets from a stock exchange closure . . . [It] is also a hedge against inflation and financial panic.”⁶⁸

Alan Greenspan, the Fed’s thirteenth Chairman, warned, “If China were to convert a relatively modest part of its \$4 trillion foreign exchange

63. RICKARDS, DEATH OF MONEY, *supra* note 27, at 1.

64. *Id.* at 54; Jay Solomon, *Iran Central Banker Akbar Komijani Seeks Economic Turnaround*, WALL ST. J. (July 1, 2014), <http://www.wsj.com/articles/iran-central-banker-akbar-komijani-seeks-economic-turnaround-1404257967> (“The sanctions the Obama administration placed on Bank Markazi blocked the institution from conducting financial transactions with virtually any foreign bank and drastically cut Tehran’s ability to repatriate most oil revenues.”).

65. Shu-Ching Jean Chen, *China’s Secret Vaults: Where Is All the Missing Gold*, FORBES (Mar. 18, 2014), <http://www.forbes.com/sites/shuchingjeanchen/2014/03/18/chinas-secret-vaults-where-is-all-the-missing-gold/>.

66. RICKARDS, DEATH OF MONEY, *supra* note 27, at 12.

67. Clinch, *Russia-China Relations*, *supra* note 43.

68. RICKARDS, DEATH OF MONEY, *supra* note 27, at 171.

reserves into gold, the country's currency could take on unexpected strength in today's international financial system."⁶⁹ Although a return to the gold standard is not likely to occur in today's world of paper money and floating exchange rates, Greenspan's caution about the unique status of gold and its continued relevance bears special scrutiny. According to Greenspan,

gold has special properties that no other currency, with the possible exception of silver, can claim. For more than two millennia, gold has had virtually unquestioned acceptance as payment. . . . No questions are raised when gold or direct claims to gold are offered in payment of an obligation; it was the only form of payment, for example, that exporters to Germany would accept as World War II was drawing to a close. Today, the acceptance of fiat money . . . rests on the credit guarantee of sovereign nations endowed with effective taxing power, a guarantee that in crisis conditions has not always matched the universal acceptability of gold.⁷⁰

Indeed, the fact that central banks all over the world still hold gold reserves is proof of its continuing importance even in a world of fiat currency. Not only has Germany begun the process of bringing its gold stored in New York back, it also wants the gold unencumbered. In this post-2008 financial crisis world, "the debate over a collapse of strictly paper-based currency is experiencing a renaissance—as is the dispute over the gold reserves."⁷¹ For example, German Chancellor Angela Merkel rejected the suggestion floated by many European partners to use Germany's massive gold reserves as collateral for European bonds.⁷² And China, as Greenspan noted, continued to hold on to its nearly 13 million ounces of gold, even boosting its holdings as it became the world's fifth-largest sovereign holder of gold.⁷³

The accumulation of gold and other developments described in Part III together constitute a serious challenge to the dollar-based system. These developments include the establishment of the NDB and other BRICS actions to undermine and replace the dollar with other currencies; the historic gas deal between Russia and China and equally significant, the strategic decision *not* to denominate the deal in dollars; the increasing international concern over the long term strength of the dollar and the continuing requests by different countries to repatriate their gold holdings

69. Alan Greenspan, *Golden Rule, Why Beijing Is Buying*, FOREIGN AFF. (Sept. 29, 2014), <https://www.foreignaffairs.com/articles/united-states/2014-09-29/golden-rule> [hereinafter Greenspan, *Golden Rule*].

70. *Id.*

71. Sven Böll & Anne Seith, *Precious Metal Abroad: Why Germany Wants to See Its U.S. Gold*, DER SPIEGEL (Oct. 30, 2012), <http://www.spiegel.de/international/germany/german-politicians-demand-to-see-gold-in-us-federal-reserve-a-864068.html>.

72. *Id.*

73. Greenspan, *Golden Rule*, *supra* note 69.

from the United States; and the accumulation of gold by China in particular, whether by mining in China or outside of China.

Although it is beyond the scope of this Article to describe the specifics of a future non-dollar universe,⁷⁴ it is a crucial first step that challenges to the system be understood and diagnosed. Already, as of November 2015, the yuan was designated by the IMF as one of five elite currencies in the world, fit for inclusion in the SDR basket of currencies comprised of the dollar, the euro, the pound, and the yen. This development carried not only symbolic weight but also reflected new fault lines in “changing currency dynamics . . . [and] new geopolitical concerns.”⁷⁵ As discussed later, the rise of the yuan will make it easier for many countries to bypass the dollar in economic transactions or to evade Western sanctions.⁷⁶ And it is likely that if and when the yuan is ready to dethrone the dollar as a premier reserve currency, it would, unlike the dollar, be backed by gold.⁷⁷

As the two Chinese authors of *Unrestricted Warfare* astutely observed, the disintegration of the Soviet Union was swift and astonishing:

A powerful empire collapsed without a single shot being fired, vividly corroborating the lines of the famous poem by Kipling, ‘When empires perish, it is not with a rumble, but a snicker.’ Not only was this true for the former Soviet Union, today the Americans seem to be following in the footsteps of their old adversary. . . .⁷⁸

To close the Introduction, I include this apt quote from John Maynard Keynes: “There is no subtler, surer means of overturning the basis of society than to debauch the currency.”⁷⁹

74. As some scholars indicate,

Within a decade or so, a ‘reserve currency basket’ may emerge, with central banks storing wealth in a mix of dollars, yuan, rupee, reals and roubles, as well as precious metals. Perhaps some kind of synthetic bundle of the world’s leading currencies will be developed, with emphasis placed, after years of western money-printing, on assets backed by commodities and other tangibles.

Halligan, *The Dollar’s Dominance*, *supra* note 9.

75. Keith Bradsher, *China’s Renminbi Is Approved by I.M.F. as a Main World Currency*, N.Y. TIMES (Nov. 30, 2015), http://www.nytimes.com/2015/12/01/business/international/china-renminbi-reserve-currency.html?_r=0 [hereinafter Bradsher, *China’s Renminbi*].

76. *Id.*

77. L. Todd Wood, *The Day China Says Its Currency is Backed by Gold*, WASH. TIMES (Aug. 18, 2015), <http://www.washingtontimes.com/news/2015/aug/18/l-todd-wood-day-china-says-its-currency-backed-gol/>.

78. LANG & XIANGSUI, *supra* note 30, at 23.

79. VINCENT BARNETT, JOHN MAYNARD KEYNES 82 (2012).

I. A BRIEF HISTORY OF MONEY

A. *Commodities, Coins, and Paper Money*

What is money exactly? The noted Nobel economist Milton Friedman defined money simply as “whatever is generally accepted in exchange for goods and services—accepted not as an object to be consumed but as an object that represents a temporary abode of purchasing power to be used for buying still other goods and services.”⁸⁰ Money is used “as a medium of exchange, as a unit of account, and as a store of value.”⁸¹ A dollar bill qualifies as it plays all three roles. It is a unit of account because it is a measure of the value of goods and services. It is a medium of exchange because it is exchanged to acquire something, and it is a store of value because “it is a repository of purchasing power over time.”⁸²

The earliest forms of money were commodities—animal skins, live-stock, beads, shells, corn, olive oil, tobacco, salt, etc.⁸³ To be considered money, “it should itself possess value, and it must therefore have utility as the basis of value.”⁸⁴ When English settlers arrived in Massachusetts in 1620, they brought English money with them but when their supply ran out, the colonists had trouble finding a substitute because the English monarchs prohibited the export of coins and because the colonists did not have a mint or permission to establish one.⁸⁵ Commodity currency became legal tender. Trade with Native American tribes involved the exchange of furs, skins and other commodities for wampum, snail, and clam shells. Because many of these commodities had disadvantages of spoilage and bulk, the colonists continued their search for other forms of money, such as coins. Although they could obtain English coins by exporting, it was easier to get Spanish coins from the West Indies, through smuggling and piracy.⁸⁶

The preference for coins, however, was displaced when the colonies declared independence. Without an adequate supply of gold and silver, also known as specie,⁸⁷ to pay for the war, the Continental Congress issued paper money⁸⁸ and IOUs or continentals. Individual colonies also

80. MILTON FRIEDMAN, *MONEY MISCHIEF* 16 (1992).

81. FREDERIC S. MISHKIN, *THE ECONOMICS OF MONEY, BANKING AND FINANCIAL MARKETS* 49-51 (6th ed. 2001). (discussing the functions of money).

82. *Id.* at 51.

83. WILLIAM STANLEY JEVONS, *MONEY AND THE MECHANISM OF EXCHANGE* 19-29 (1875).

84. *Id.* at 32.

85. EICHENGREEN, *supra* note 4, at 9.

86. *Id.* at 9-11.

87. As understood by the Founders, specie was gold or silver. See *Specie Payments, Suspension, and Resumption of*, ENCYCLOPEDIA.COM (2003), <http://www.encyclopedia.com/history/dictionaries-thesauruses-pictures-and-press-releases/specie-payments-suspension-and/>.

88. KWARTENG, *supra* note 22, at 40-41 (“One popular work of what became known as political economy, translated from French by none other than Thomas Jefferson, and recommended by John Adams, referred to paper money as a ‘theft’ which was ‘ruinous’ since ‘in this money there is absolutely no real value.’”).

issued their own bills, resulting in “bills trading at a confusing variety of different prices, inflation, and the disappearance of gold and silver from circulation.”⁸⁹ The bills constituted a promise of the Continental Congress to pay face value of each bill in silver coin to any holder on demand.⁹⁰ Nonetheless, it was widely suspected that the continentals were not truly backed by silver or gold and the paper bills were often refused as payment. Congress passed a resolution declaring that any person who refused to receive bills of credit would be considered an enemy and ostracized from the community.⁹¹ The Committee on the Treasury recommended that the quantity of paper money be reduced to prevent depreciation.⁹² As Karen Flamme outlines in a 1995 Annual Report, “[w]ithout solid backing and with rising inflation, the Continentals soon became worthless, thus the expression ‘not worth a Continental.’”⁹³ Despite efforts by Congress to support the continentals, the market sent a different message: the continentals were discounted, so that those who paid their debt in continentals were charged more than those paying with gold or silver.⁹⁴

The Continental Congress’ failed experiment with paper money was not forgotten at the Constitutional Convention in 1787. Many writers from the founding period wrote extensively about the evils of paper money.⁹⁵ John Adams warned that paper money would be “as cheap as oak leaves.”⁹⁶ Gold and silver have reliably served as the preferred money of the world all over because supply is limited and “because the people were confident that everyone would always accept them.”⁹⁷ William Blackstone explained the value of gold and silver in this way: “Money is a universal medium, or common standard, . . . a sign, which represents the respective values of all commodities. Metals are well calculated for this sign, because

89. EICHENGREEN, *supra* note 4, at 11.

90. 3 JOURNALS OF THE CONTINENTAL CONGRESS 1774-1789, at 407 (Worthington Chauncey Ford ed., William S. Hein & Co. 2005) (1905) (The bill of credit entitled “the bearer to receive Spanish milled dollars or the value thereof in gold or silver, according to a resolution of Congress passed at Philadelphia, November 29, 1775”).

91. 4 JOURNALS OF THE CONTINENTAL CONGRESS 1774-1789, at 49 (Worthington Chauncey Ford ed., William S. Hein & Co. 2005) (1906); *see also* TOM GITTINGS & KEN GOLDSMITH, MONEY MATTERS: THE AMERICAN EXPERIENCE WITH MONEY 4 (2000), <http://files.eric.ed.gov/fulltext/ED456074.pdf>.

92. 13 JOURNALS OF CONTINENTAL CONGRESS 1774-1789, at 492, 493 (Worthington Chauncey Ford ed., William S. Hein & Co. 2005).

93. KAREN FLAMME, THE FEDERAL RESERVE BANK OF SAN FRANCISCO, 1995 ANNUAL REPORT: A BRIEF HISTORY OF OUR NATION’S PAPER MONEY (1995), http://www.frbsf.org/files/1995_annual_report.pdf.

94. GITTINGS & GOLDSMITH, *supra* note 91, at 4.

95. KWARTENG, *supra* note 22, at 42 (“To the oddly named Pelatiah Webster . . . paper money ‘polluted the equity of our laws, turned them into engines of oppression, corrupted the justice of our public administration, destroyed the fortunes of thousands who had confidence in it . . . and went far to destroy the morality of our people.’”).

96. JOHN ADAMS, THE WISDOM OF JOHN ADAMS 20 (Kees de Mooy ed., 2003).

97. JAMES WILLARD HURST, A LEGAL HISTORY OF MONEY IN THE U.S., 1774-1970, at 47 (1973); *see also* PETER L. BERNSTEIN, THE POWER OF GOLD: THE HISTORY OF AN OBSESSION 15, 242 (2001).

they are durable . . . and a precious metal is still better calculated for this purpose, because it is the most portable.”⁹⁸

At the Constitutional Convention, the Framers debated the issue of paper currency and the prevailing sentiment was that “almost all the speakers feared that if the government held broad power to issue paper money, it could not be trusted to avoid disastrous inflation or legislative disturbance of vested money claims.”⁹⁹ Article I, Section 8 of the Constitution provides that Congress shall have power “to coin money, regulate the value thereof, and of foreign coin”¹⁰⁰ Article I, Section 10 provides: “No state shall . . . coin money; emit bills of credit; make anything but gold and silver coin a tender in payment of debts.”¹⁰¹

From then until the Civil War, the federal government did not issue a paper currency.¹⁰² But the Civil War, which launched a cash-strapped government into financial crisis, changed the monetary landscape. As the Supreme Court described it, “the public treasury was nearly empty, and the credit of the government . . . had become nearly exhausted. . . . The entire amount of coin in the country . . . was insufficient to supply the need of the government three months, had it all been poured into the treasury.”¹⁰³ Congress used the power to borrow money on the credit of the U.S., enumerated in Article I, Section 8, Clause 2, to create paper money. For the first time since the issuance by the Continental Congress of the Continentals, Congress authorized Demand Notes, printed in \$5, \$10, and \$20 denominations and green in color—hence the name “greenbacks”—which could be redeemed in coins.¹⁰⁴ In 1862, Congress issued new Legal Tender Notes or U.S. Notes also printed with green ink. “Confidence in the notes waned somewhat when the Treasury stopped redeeming them in coins during the Civil War to save gold and silver. However, redemption resumed in 1879 following the war.”¹⁰⁵

Several important features characterized these notes. They were declared to be legal tender in payment of public and private debts.¹⁰⁶ “Thus, greenbacks were no longer promissory notes redeemable into constitu-

98. William Blackstone, *Commentaries on the Laws of England* 266 (1765) (William S. Hein & Co., Inc. eds., 1992).

99. HURST, *supra* note 97, at 14.

100. U.S. CONST. art. I, § 8.

101. U.S. CONST. art. I, § 10.

102. Privately owned banks did issue paper money known as bank bills or banknotes, redeemable upon demand by the issuing bank for a specified amount of specie. Ali Khan, *The Evolution of Money: A Story of Constitutional Nullification*, 67 U. CIN. L. REV. 393, 408 (1999); John J. Chung, *Money as Simulacrum: The Legal Nature and Reality of Money*, 5 HASTINGS BUS. L.J. 109, 128 (2009).

103. *Knox v. Lee*, 79 U.S. 457, 540-41 (1870).

104. Flamme, *supra* note 93, at 4. In 1862, Congress passed a bill authorizing the Secretary of the Treasury to issue, on the credit of the United States, 150 million paper dollars, officially known as U.S. notes. Act of Feb. 25, 1862, ch. 33, 12 Stat. 345.

105. *Id.*

106. Chung, *supra* note 102, at 131 (quoting Kenneth W. Dam, *The Legal Tender Cases*, 1981 SUP. CT. R. 367, 373 (1981)).

tional money. Rather, they were designed to circulate as the new official currency.”¹⁰⁷ Second, although greenbacks were not redeemable into gold or silver, they had investment value, that is, the holders could convert them into 6% interest twenty-year bonds.¹⁰⁸ Congress thus has “introduced a cycle of monetized paper. The greenbacks could be converted into interest-bearing investment paper, that is, government bonds and certificates. The bonds and certificates were redeemable, but only in greenbacks. In this cycle of conversion, paper for paper, the constitutional coin disappeared.”¹⁰⁹

Inflation meant that the greenbacks fell in value against gold which raised questions about whether creditors could refuse payment in greenbacks and demand gold.¹¹⁰ In *Knox v. Lee*, the Supreme Court held that Congress had Constitutional authority to endow what is essentially paper money, called treasury notes, with the legal qualities of money and that the legal tender legislation was constitutionally applicable both to preexisting as well as subsequent debts.¹¹¹

This case provoked strong dissent. Justice Clifford observed, for example, that the Framers understood that “gold and silver were adopted to serve the purpose of exchange by the tacit concurrence of all nations . . . [t]hey not only knew that the money of the commercial world was gold and silver, but they also knew . . . that paper promises . . . were utterly worthless as a standard of value.”¹¹²

The central question is how to make paper money, which is essentially worthless, into something acceptable and valuable in ordinary times, and perhaps more spectacularly, in the case of the dollar, into something that the entire world believes is valuable as well.

B. *Central Bank, Federal Reserve and the Rise of the Dollar*

In the early years, the United States did not have a central bank, and “American banking was a hodgepodge of state-chartered banks with no federal regulation or uniformity in operating laws.”¹¹³ After the 1907 bank panic, it was determined that without a central bank, the federal government was not able to expand or contract the nation’s money supply to smooth out booms and busts. “In 1913 a major change in paper currency

107. Khan, *supra* note 102, at 425.

108. *Id.* (citing Act of Feb. 25, 1862, ch. 33, §1, 12 Stat. 345).

109. *Id.*

110. In *Hepburn v. Griswold*, the issue was “whether Congress has [the] power to make notes issued under its authority a legal tender in payment of debts which, when contracted, were payable by law in gold and silver coin.” 75 U.S. 603, 610 (1869).

111. *Knox v. Lee*, 79 U.S. 457, 553-54 (1870). Some Founders such as Madison recognized the need to take into consideration national emergencies, whereupon the government would be allowed to issue promissory notes. However, Madison would not allow the government the power to make them legal tender. Khan, *supra* note 102, at 405, 427.

112. *Knox*, 79 U.S. at 605.

113. Flamme, *supra* note 93.

occurred with the passage of the Federal Reserve Act . . .”¹¹⁴ creating a Federal Reserve System of regional reserve banks guided by a Board whose members would not be picked by bankers but rather by the president and subject to Senate confirmation.”¹¹⁵ The Fed’s main role is to serve as a lender of last resort “to furnish an elastic currency . . . and to establish a more effective supervision of banking in the U.S.”¹¹⁶

The Fed creates money through open market operations conducted by the Federal Reserve Bank of New York. When the federal government needs money because it is short of funds, the Federal Open Market Committee approves the purchase of U.S. government bonds, issued by the Treasury Department, on the open market. The Federal Reserve Notes are issued to the regional federal banks at the discretion of the Board of Governors of the Federal Reserve System.¹¹⁷ The Federal Reserve Act of 1913 specifically provided that the Federal Reserve Notes “shall be redeemed in gold on demand at the Treasury Department of the U.S., in the city of Washington, District of Columbia, or in gold or lawful money at any Federal reserve bank.”¹¹⁸ A written legend appeared on the face of the Notes—“redeemable in gold on demand.”

World War I provided a significant boost to American finance. Although it was a neutral country, the United States provided around 75 percent of Britain’s foreign loans.¹¹⁹ “[T]he commitment of New York to keeping gold payments ‘provided the plainest possible evidence to the outside world that the United States was at the moment . . . the one locality in which the world’s floating capital could be safely lodged without fear of depreciation of its value.’”¹²⁰ Because the war damaged the ability of banks in Europe to provide credit, capital to finance trade became scarce. As a result, “German and British banks turned to New York to accept endorsed bills for their clients’ imports . . . [t]he credit they received was denominated in dollars because this was the currency with which the New York banks were familiar.”¹²¹ These developments “accentuated the need for a national currency for ‘global invoicing, payments, and reserve purposes.’”¹²²

The dollar’s ascendancy was also accelerated by the sterling’s decline. The British government suspended gold payments in 1914 and in 1915, forbade British banks from lending to borrowers outside the British Em-

114. *Id.*

115. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 51-52.

116. Federal Reserve Act, 1913, ch. 6, 38 Stat. 251 (codified in various sections of 12 U.S.C.).

117. Federal Reserve Notes are authorized by Section 16 of the Federal Reserve Act of 1913 (codified at 12 U.S.C. § 411).

118. Federal Reserve Act, 1913, ch. 6, 38 Stat. 251; Federal Reserve Act, 1913, ch. 16, 38 Stat. 265.

119. KWARTENG, *supra* note 22, at 105.

120. *Id.*

121. EICHENGREEN, *supra* note 4, at 26.

122. Khan, *supra* note 102, at 435 (citation omitted).

pire, prompting Alexander Noyes, a noted financial journalist of the 1920s, to declare that by this decision, London “ceased to be the money centre of the world.”¹²³ U.S. banks quickly expanded abroad and by 1920, American banks had opened 181 branches outside the United States—importers accepted drafts in dollars drawn by American exporters; exporters exporting to the United States also drew in dollars on U.S. banks.¹²⁴

Capital flowed from the capital-rich United States to capital-scarce Europe as “American banks arranged bond issues for European governments and corporations, denominating them in dollars so they could be marketed to American investors.”¹²⁵ By 1924 the foreign exchange reserves of central banks consisted of more dollars more than sterling.¹²⁶

Despite advantages of incumbency, the sterling was speedily displaced after World War I by the dollar. Perhaps it took a shock like World War I and an aggressive, gung ho Fed to displace the sterling. Still, incumbency can only do so much. It is not inconceivable that despite its dominance in today’s economy, the dollar too, under a combination of circumstances, can be displaced.

C. *The Dollar in the Depression*

The Great Depression had a catastrophic effect on the dollar. Between 1929 and 1933, real output in the United States fell nearly 30 percent and the unemployment rate rose from 3 percent to nearly 25 percent.¹²⁷ The stock market plummeted, banks failed, and businesses and households declared bankruptcies. Trade contracted because of a fall in output and spending, and governments everywhere imposed tariffs and quotas to protect domestic industry.¹²⁸

Not surprisingly, “with the decline in international transactions came a decline in the international role of the dollar.”¹²⁹ Fewer international transactions meant fewer dollars, as foreigners were not purchasing U.S. imports. Consequently, “the tendency to hold balances in New York to service such obligations declined commensurately.”¹³⁰

Globally important currencies suffered during the Depression as well. For example, when the financial crisis spread to Germany, Berlin stopped payments owed to London banks,¹³¹ damaging both the London banks’ financial well-being as well as Britain’s balance of payments. By July 1931,

123. KWARTENG, *supra* note 22, at 107-08.

124. EICHENGREEN, *supra* note 4, at 28.

125. *Id.* at 31.

126. *Id.* at 32.

127. Ben S. Bernanke, H. Parker Willis Lecture in Econ. Policy at Washington and Lee Univ., Money, Gold, and the Great Depression (Mar. 2, 2004), <http://www.federalreserve.gov/boardDocs/speeches/2004/200403022/default.htm>.

128. EICHENGREEN, *supra* note 4, at 33.

129. *Id.*

130. *Id.* at 34.

131. See RICKARDS, CURRENCY WARS, *supra* note 50, at 67.

financial instability in England became all the more acute when investors took gold and money out of England, converting sterling into foreign currency and depositing it elsewhere. The sterling's depreciation raised fears about the specter of other depreciation, such as that of the dollar.

As Ben Bernanke, Fed Chairman from 2006 to 2014, said,

Central banks as well as private investors converted a substantial quantity of dollar assets to gold in . . . 1931, reducing the Federal Reserve's gold reserves. . . . Fearing imminent devaluation of the dollar, many . . . depositors withdrew their funds from U.S. banks in order to convert them into gold or other assets.¹³²

In response,

the Fed decided to ignore the plight of the banking system and to focus only on stopping the loss of gold reserves to protect the dollar. To stabilize the dollar, the Fed once again raised interest rates sharply, on the view that currency speculators would be less willing to liquidate dollar assets if they could earn a higher rate of return on them. The Fed's strategy worked, in that the attack on the dollar subsided and the U.S. commitment to the gold standard was successfully defended, at least for the moment.¹³³

As England and other countries went off the gold standard in 1931,¹³⁴ their currencies went down and thus the costs of their exports also went down,¹³⁵ making their exports less expensive and thus more competitive than the domestic goods of the importing countries. The United States chose not to devalue the dollar against other currencies because competitive devaluation by one country would have resulted in a tit-for-tat cycle of retaliatory devaluation by others. Therefore, "[r]ather than devalue against other paper currencies, FDR chose to devalue against the ultimate currency—gold."¹³⁶

132. Bernanke, *supra* note 127, at 67.

133. *Id.* See KWARTENG, *supra* note 22, at 127 ("[T]he Federal Reserve did precisely the opposite of what modern bankers would have done. They raised interest rates when they should have lowered them.").

134. RICKARDS, CURRENCY WARS, *supra* note 50, at 70.

135. Devaluation causes a country's exports to become less expensive, making them more competitive on the global market. This in turn means that imports are more expensive and domestic consumers are less likely to buy them. If one U.S. dollar equals 93 Japanese yen, a car that costs 2,325,000 yen would cost \$25,000 U.S. dollars when exported to the United States. See BARBARA GOTTFRIED HOLLANDER, HOW CURRENCY DEVALUATION WORKS 42 (2011). But if the yen were devalued so that one U.S. dollar now equals 100 Japanese yen, a car that costs 2,325,000 yen would cost 23,250 dollars. When the yen went down in value, Japanese exports cost less to U.S. consumers, thus boosting the sale of Japanese products.

136. RICKARDS, CURRENCY WARS, *supra* note 50, at 70. For a discussion of actions taken by President Franklin Delano Roosevelt to address the gold-dollar convertibility, see KWARTENG, *supra* note 22, at 130-31.

But gold was held not only in the Federal Reserve Banks; it circulated privately as legal tender and was also secreted in private safe deposit boxes. Although it was possible for the government to devalue the dollar against gold simply by using the President's emergency economic powers to declare that gold could be redeemed at, for example, \$25 dollars per ounce instead of the gold standard price then of \$20.67 per ounce, this benefit would accrue to private gold hoarders. It would not put gold back into circulation. Rather, it could motivate people to use their paper dollars to buy more gold and hoard it in the belief that the dollar could be further devalued and the value of gold would be further increased.¹³⁷ One of the main objectives was

to ensure that any gains from the revaluation of gold would go to the government and not the hoarders, while citizens would be left with no forms of money except paper. If gold could be removed from private hands and if citizens could be made to expect further devaluations in their paper money, they might be inclined to start spending it rather than hold on to a depreciating asset.¹³⁸

For the government's plan to work, hoarding or possessing gold had to be prohibited. Furthermore, to protect the government's own dwindling gold reserves, President Roosevelt outlawed all redemption of gold. Joint Resolution of 1933 declared that obligations, public or private, that required payment in gold "obstruct the power of the Congress to regulate the value of the money of the United States . . ." ¹³⁹ The Gold Reserve Act of 1934 providing that U.S. currency could not be redeemed in gold¹⁴⁰ was upheld by the Supreme Court in *Norman v. Baltimore & O.R. Co.* on the ground that Congress had the constitutional authority to regulate currency and establish a monetary system without undue interference by private parties via contract.¹⁴¹

Additional measures include President Roosevelt's Executive Order 6102, which not only banned private ownership of gold by U.S. citizens but also required U.S. persons, with few exceptions, to surrender their gold in exchange for paper money at the exchange rate of \$20.67 per ounce.¹⁴² To further increase the U.S. hoard of gold, President Roosevelt prohibited the export of gold from the United States and ordered U.S. gold mines to sell their production to the government at a price determined by the Treasury Department.¹⁴³

137. RICKARDS, CURRENCY WARS, *supra* note 50, at 70-71.

138. *Id.* at 71.

139. H.R.J. Res. 192, 73d Cong. (1933).

140. Gold Reserve Act of 1934, Pub. L. No. 73-87, § 6, 48 Stat. 337, 340.

141. 294 U.S. 240 (1935).

142. RICKARDS, CURRENCY WARS, *supra* note 50, at 71; *see also* Exec. Order No. 6,102, reprinted in 12 U.S.C. § 248 (1933).

143. RICKARDS, CURRENCY WARS, *supra* note 50, at 72.

Fast forward to 2016 when the connection between the dollar and gold is completely severed (as discussed below). Interestingly, although Fed notes no longer contain a printed ledger promising redemption on their face, the law still allows for redemption, but not for gold—only for “lawful money on demand at the Treasury Department of the United States, in the city of Washington, District of Columbia, or at any Federal Reserve bank.”¹⁴⁴ Apparently, Fed notes and “lawful money” are deemed to be different and thus the intriguing question is what is considered lawful money? For example, is gold coin lawful money as referred to in the Federal Reserve Act? Although “[t]he gold coin, first adopted a unit of currency in the Coinage Act of 1849 . . . remains the lawful money of the United States,”¹⁴⁵ Congress does not allow the Treasury Department to mint one dollar gold coins.¹⁴⁶ Treasury may mint and sell gold but only for numismatic purposes and the Fed cannot redeem Fed notes at par using these numismatic coins.¹⁴⁷ One can reasonably conclude that “therefore, lawful money exists in the form of gold coins but not for the stated redemption.”¹⁴⁸

Consequently, currently, there is in fact no real “lawful money” to redeem Federal Reserve notes. Even when redemption of money substitutes into constitutional currency—gold—was suspended during times of national emergencies, such as the Great Depression, it was still understood that there is a distinction to be drawn between lawful money and money-substitutes. Today, ironically, “paper money is convertible only into another form of paper money . . . ”¹⁴⁹ and the dollar is quintessentially fiat money.

II. THE BRETTON WOODS AGREEMENT AND THE RISE OF THE DOLLAR

As noted above, although there was no overarching international monetary system before 1945, “[f]or about 35 years prior to the outbreak of World War I, the major Western countries . . . tied their currencies to gold, so that the rate of exchange among the principal currencies was essentially fixed.”¹⁵⁰ By contrast, the disastrous interwar years were characterized by extreme instability with countries alternating between maintaining and severing the link to gold. As World War II wound down,

144. 12 U.S.C. § 411 (1934).

145. Khan, *supra* note 102, at 439.

146. *Id.* at 440.

147. *Id.*

148. *Id.* In the case of silver, “[s]imilar to numismatic gold coins, silver coins are both legal tender and lawful money. Thus, lawful money in the form of numismatic silver coins exists but not for the redemption of Federal Reserve notes.” *Id.*

149. *Id.* at 441.

150. THOMAS COTTIER, JOHN H. JACKSON & ROSA M. LASTRA, *INTERNATIONAL LAW IN FINANCIAL REGULATION AND MONETARY AFFAIRS* 53 n. 1 (2012); Andreas F. Lowenfeld, *The International Monetary System: A Look Back Over Seven Decades*, 13 J. INT’L ECON. L. 575, 576 (2010).

in July 1944, representatives of forty-four nations assembled in Bretton Woods, New Hampshire, to create a new organization for a post-war financial system.

After World War II, the United States experienced unparalleled growth and its currency became the unquestioned top dog currency of the international system. Bretton Woods may be cast as a grand international system, but it reflected American preferences.¹⁵¹ Although the dollar played a key role pursuant to Bretton Woods, the system remained anchored in gold to “the extent to which gold was seen as a symbol of stability.”¹⁵² However, this gold standard came with a new twist. The system was anchored to gold *through* the dollar at a fixed price of \$35 dollars an ounce of gold.¹⁵³ “For foreign central banks and governments the dollar was as good as gold, since the United States stood ready to sell gold at a fixed price of \$35 an ounce.”¹⁵⁴

Other countries that could have issued international currencies lacked either open financial markets or financial stability, like Germany and France respectively.¹⁵⁵ The French franc was once an important reserve currency, but the war in Algeria drained the French central bank which lost two-thirds of its reserves in 1955–1957.¹⁵⁶ By the 1970s, West Germany could have been a legitimate rival to the United States but given German history of hyperinflation, the German central bank was preoccupied with keeping inflation in check by tightening monetary policy and raising interest rates. High interest rates, however, predictably attracted international capital seeking higher returns, creating in turn an excess of credit which again stoked fears of inflation. As a result, Germany restricted nonresidents from buying money market instruments by imposing various forms of controls, making the deutsche mark unattractive as a reserve currency.¹⁵⁷

Similarly, the British sterling never recovered from its decline during World War I, and although Japan became a rising power in the third quarter of the twentieth century and the second largest economy in the world by the 1970s, its currency was never an international powerhouse. Asia still harbored resentment against Japanese colonialism and given the Japanese policy of development via export promotion, “a hypercompetitive exchange rate”¹⁵⁸ had to be maintained to ensure Japanese exports remained cheap and competitive. For the yen to achieve reserve status,

151. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 79.

152. KWARTENG, *supra* note 22, at 4; *see also id.* at 4-5 (“The move back to some form of ‘gold exchange standard’ was an attempt to restore a degree of order to a world still devastated by world war and depression.”).

153. *Id.* at 143 (describing how Bretton Woods was not just a fixed exchange rate system, like the pre-1974 gold standard system, but also a more rigid system).

154. EICHENGREEN, *supra* note 4, at 39.

155. *Id.*

156. *Id.* at 42-43.

157. *Id.* at 44.

158. *Id.*

foreigners must also be allowed to invest freely in the country, which could have potentially undermined the government's industrial policies.¹⁵⁹

Thus, the dollar became unquestionably the top dog currency. Although central banks could still accumulate gold, the gold supply was limited, which made a currency such as the dollar more appealing. Moreover, the two main producers of gold were despised regimes—the Soviet Union and South Africa—and so accumulating gold would mean benefiting them.¹⁶⁰

The dominance of the dollar and of the United States meant great economic advantages for the country and the American people. For example, U.S. consumers and investors could buy foreign goods and acquire foreign companies by using dollars that would be freely accepted. At the same time, the U.S. government did not have to worry that the dollars accumulated by foreigners would be redeemed for gold, because foreigners were willing to accept and keep dollars – as dollars were as good as gold.¹⁶¹ “This ability to purchase foreign goods and companies using resources conjured out of thin air was the exorbitant privilege of which French Finance Minister Vaéry Giscard d’Estaing so vociferously complained.”¹⁶²

Under the original Articles of Agreement of the IMF, pursuant to Article IV (4)(a): “Each member undertakes to collaborate with the Fund to promote exchange stability, to maintain orderly exchange arrangements with other members, and to avoid competitive exchange alterations.” Member states were not allowed to devalue their currencies unless permitted by the IMF, and permission would be granted only in cases of persistent trade deficits and high inflation.

Mandatory contributions to the Fund are payable one-quarter in hard assets (under the original articles, in gold, and under the amended articles, in special drawing rights) and three-quarters in their own currencies.¹⁶³ Each member state is assigned a quota and a country with a large quota is required to make a greater contribution, but is also entitled to greater drawing rights from the Fund's resources.

Countries suffering from balance of payments deficits could draw on this pool to fulfill their obligation to maintain the par value of their currencies,¹⁶⁴ assuming they meet IMF conditions. The dollar's dominance is

159. *Id.* at 44-45.

160. *Id.* at 39.

161. *See id.* at 40.

162. *Id.*

163. Articles of Agreement of the International Monetary Fund, art. 3-4, Dec. 27, 1945, 2 U.N.T.S. 39.

164. Lowenfeld, *supra* note 150, at 580. Under IMF rules,

drawing rights . . . were to have the function of reserves, that is, the resources drawn could be used to settle accounts with creditor countries. Indeed, if a creditor country knew that the debtor country had the right to draw from the Fund up to a stated amount, it might well prolong the credit and not insist on immediate settlement.

reflected in its preeminent position within the IMF. For example, because “only a few members’ currencies were generally acceptable for settlement of international accounts—the so-called ‘freely usable’ or ‘freely convertible’ currencies,” typically the member state with balance-of-payments problems would draw U.S. dollars from the IMF.¹⁶⁵ Under Article V of the original Articles, the member state would purchase dollars or some other freely usable currency with its own currency and would be obligated to repurchase its own currency within a stated period.¹⁶⁶

From 1946 to 1971, the system worked well, and when hiccups occurred, the United States assured countries it stood ready to meet “the commitment . . . to buy and sell *gold* at the existing price of \$35 an ounce.”¹⁶⁷ Concern about the United States, however, grew as the Vietnam War and the Great Society programs created great strain on the U.S. treasury. Because the value of the dollar was not linked to other currencies but rather to gold, speculators who suspect a dollar devaluation would buy gold and would turn to the London gold market. This market had been defined by the so-called London Gold Pool since 1961, which is a price-fixing albeit open market operation run by the United States and other countries which are committed to use their gold and dollar reserves to keep the market price of gold at \$35 dollars per ounce as agreed to at Bretton Woods.

The Gold Pool was both seller and buyer, buying and selling as much as needed to maintain the \$35 price. By 1965, the pool was mostly a selling operation. As gold supplies fell off, Gold Pool members had to dump gold to keep its price (in dollars) from rising on the London market.¹⁶⁸

But the pressure on the dollar continued unabated. For example, denied military ambitions after the war, Germany and Japan focused on their economies, became economic powerhouses, mostly by exporting, and succeeded in accumulating all the dollars they needed. In some ways, this was also good for the United States because those same dollars could be used to pay for imports of U.S. goods. But this was a double-edged sword. The system was founded on the notion that the dollar was the equivalent of gold. If there are now more foreign-held dollars than U.S. gold holdings, the threat to the system could be serious if foreign holders were all to redeem dollars for gold.

This problem was identified early on by the Belgian economist Robert Triffin and has been referred aptly as the Triffin Dilemma. The Triffin Dilemma stated that if the United States did not run trade deficits, that is, if it were not willing to supply the trading system with an unlimited supply of dollars (for countries that received dollars when they exported), trade would contract, growth would be stunted, and the contraction would dam-

165. *Id.*

166. *Id.*

167. Statement by the President Following the Action by the United Kingdom, 3 WEEKLY COMP. PRES. DOC. 1599 (Nov. 18, 1967).

168. See EICHENGREEN, *supra* note 4, at 51-52; KWARTENG, *supra* note 22, at 211-12.

age the international economic system. On the other hand, if the United States continued to run trade deficits and hence provide an unlimited supply of dollars to the rest of the world, confidence in the U.S. ability to convert dollars to gold would diminish.¹⁶⁹ Pressure on the dollar would not be sustainable in the long run and Triffin recommended that an artificial unit of money be used instead of the dollar which would allow governments to accept them in international transactions.¹⁷⁰

Pressure on the dollar was exerted in other ways as well. In 1965, President Charles de Gaulle of France denounced both the Bretton Woods system as “abusive and dangerous”¹⁷¹ and the dollar’s prominence in the international monetary system, calling for a return to the classical gold standard, that is, “an indisputable monetary base, and one that does not bear the mark of any particular country. In truth, one does not see how one could really have any standard criterion other than gold.”¹⁷² France and Spain converted \$150 and \$60 million of their respective dollar reserves into gold, creating great pressure on the dollar and a huge drain on U.S. gold reserves.¹⁷³

Fortunately, the United States was able to rely on Germany, a Gold Pool country, to support the dollar. Germany was a crucial country because of its large dollar holdings accumulated through trade surpluses with the United States. German demand for redemption of dollars for gold would have triggered a serious dollar crisis.¹⁷⁴ But, most German politicians sought to preserve the security alliance with the United States. In a secret letter, the President of the Deutsche Bundesbank assured the Federal Reserve that because

expenditures resulting from the presence of American troops in Germany [could] lead to U.S. losses of gold . . . [T]he Bundesbank . . . has not converted any . . . dollars . . . into gold. . . . You may be assured that in the future the Bundesbank intends to

169. EICHENGREEN, *supra* note 4, at 50; ROBERT TRIFFIN, GOLD AND THE DOLLAR CRISIS: THE FUTURE OF CONVERTIBILITY 8-9 (1960); *see also* JOSEPH E. STIGLITZ ET AL., THE STIGLITZ REPORT: REFORMING THE INTERNATIONAL MONETARY AND FINANCIAL SYSTEMS IN THE WAKE OF THE GLOBAL CRISIS 157-58 (2010) (describing how the Triffin dilemma—“the use of a *national* currency (the U.S. dollar) as the *international* reserve currency”—tends to create excess demand for the currency of the issuer, in this case the United States. This excess demand means the United States has to continue providing liquidity to the world by issuing debt denominated in dollars and continuing to run trade deficits, which in turn erode confidence in the dollar as a store of value).

170. In the 1960s, it was Europe and Japan that accumulated dollars as they rapidly expanded after World War II. Today, it is emerging markets such as China and India that are rapidly accumulating dollars and worried that their dollar holdings would lose value. EICHENGREEN, *supra* note 4, at 50-51.

171. *Id.* at 52.

172. RICKARDS, CURRENCY WARS, *supra* note 50, at 82.

173. *Id.*

174. *Id.* at 83.

continue this policy and to play its full part in contributing to international monetary cooperation.¹⁷⁵

But, even with German cooperation, the dollar continued to suffer from external pressure as other countries relentlessly exercised their right to gold claims against the dollar. By March 1968, the Gold Pool collapsed. At \$35 per ounce, gold was now valued too low—indeed the problem was “an excess of paper money in relation to gold [and] [t]his excess money was reflected in rising inflation in the U.S., the United Kingdom and France.”¹⁷⁶ With a gold shortage at the price of \$35 per ounce, the IMF eventually had no choice but to create a new form of international reserve asset called the special drawing right (SDR),¹⁷⁷ an asset unbacked by gold or any other tangible commodity and allocated to members in accordance with their IMF quotas. It was “linked to gold at a value equal to one U.S. dollar.”¹⁷⁸ Referred to as “paper gold,” it was an asset that could be used to address balance of payments deficits in the same way that gold or reserve currencies had been used.¹⁷⁹

On August 15, 1971, however, reality set in. Even allied countries were worried and rumor had it that the Bank of England had requested American guarantees against devaluation of its \$3 billion holdings or had asked for conversion of its dollars into gold.¹⁸⁰ H.R. Haldeman, President Nixon’s Chief of Staff, wrote in his diary that “if we gave it to them, other countries might follow suit. If we didn’t, they might wonder if we had enough gold to support the dollar. In either case, it was a major crisis.”¹⁸¹

President Richard Nixon declared that the United States would close the gold window. Referred to as the Nixon Shock, this move meant that the United States would no longer convert dollars held by foreign central banks to gold, or any other reserve assets and that it would no longer intervene in the market to maintain the par value of the dollar against gold.¹⁸² By July 1973, the central banks stopped intervening in the markets to maintain any particular exchange rate and all the major currencies were

175. *Id.*

176. *Id.* at 84-85.

177. EICHENGREEN, *supra* note 4, at 56-57. At French insistence, the term “Special Drawing Rights” was used instead of “reserve drawing rights” to emphasize that the new unit was not a currency but a loan subject to repayment and thus could not be inflationary.

178. *Id.* at 56.

179. *Id.* at 56-57. SDRs have their own limitations. They can only be used in transactions with other governments and with the IMF as they are not available for use between governments and private parties. In addition, before SDRs can be issued members holding 85% of the voting power in the IMF had to agree. This was a provision designed to protect against the danger of excessive liquidity creation.

180. KWARTENG, *supra* note 22, at 217.

181. *Id.* at 217-18 (quoting H.R. HALDEMAN, *THE HALDEMAN DIARIES* 340 (1994)).

182. The ability of other holders of dollars to ask for conversion of dollar to gold ended many years before. *See* RICKARDS, *CURRENCY WARS*, *supra* note 50, at 86.

floating.¹⁸³ The IMF declared the death of Bretton Woods, which “officially ended the role of gold in international finance and left currency values to fluctuate against one another at whatever level governments or the markets desired.”¹⁸⁴

Despite the collapse of gold convertibility, dollar dominance was nonetheless maintained because Nixon was able to modify the system to prevent the dollar from becoming “simply paper money.” As Representative Ron Paul put it,

a new system was devised which allowed the U.S. to operate the printing presses for the world reserve currency, with no restraints placed on it U.S. authorities struck an agreement with OPEC to price oil in U.S. dollars exclusively for all worldwide transactions. This gave the dollar a special place among world currencies, in essence backed the dollar with oil. In return, the U.S. promised to protect the various oil-rich kingdoms in the Persian Gulf against threat or invasion or domestic coup.¹⁸⁵

Nixon’s decision to decouple the dollar from gold was the culmination of a “long dark period for macroeconomic policy” which began in the 1960s¹⁸⁶ when the U.S. embarked on a policy of lax budgets and chronic deficit finance.¹⁸⁷ The economist Cristina Romer, former chairperson of the Council of Economic Advisors in the Obama Administration, has warned about the danger of “persistent peacetime deficits.”¹⁸⁸ Even though 1950s policy makers recognized that “slavish adherence to a balanced budget” could be counterproductive, “they also believed that persistent deficits were inappropriate and that policy should aim for balance, ‘if not every individual year, then surely over a term of very few years.’”¹⁸⁹ But, from the 1960s through the present, “[t]he revolution in economic

183. Keep in mind that although “the exchange rates were now different, the system was otherwise the same. Other currencies were still pegged to the dollar, the only difference now being that the U.S. Treasury no longer stood ready to convert dollars into gold for foreign central banks and governments.” EICHENGREEN, *supra* note 4, at 61-63.

184. RICKARDS, CURRENCY WARS, *supra* note 50, at 92.

185. 152 Cong. Rec. H319 (daily ed. Feb. 15, 2006) (statement of Rep. Paul).

186. KWARTENG, *supra* note 22, at 202 (quoting Christina D. Romer, Economics Professor, University of California Berkeley, Macroeconomic Policy in the 1960s: The Causes and Consequences of a Mistaken Revolution, Presented at Plenary Session A of the Economic History Association Annual Meeting, Lyndon B. Johnson Presidential Library (Sept. 7, 2007) (transcript available at <http://eml.berkeley.edu/~cromer/MacroPolicy.pdf>).

187. By contrast, Presidents Truman and Eisenhower were both in principle committed to balanced budgets. *Id.* at 202-04.

188. Christina D. Romer, Economics Professor, University of California Berkeley, Macroeconomic Policy in the 1960s: The Causes and Consequences of a Mistaken Revolution, Presented at Plenary Session A of the Economic History Association Annual Meeting, Lyndon B. Johnson Presidential Library (Sept. 7, 2007) (transcript available at <http://eml.berkeley.edu/~cromer/MacroPolicy.pdf>).

189. *Id.* (quoting 1956 ECON. REP. PRESIDENT 73).

beliefs was strongest among fiscal policymakers¹⁹⁰ who believe essentially that deficits would take care of themselves.¹⁹¹

William McChesney Martin, the ninth and longest-serving Fed chairman, serving from 1951 to 1970 under five presidents, warned that it is not possible to “have stability and sustained growth without some basis of sound currency That is why the U.S. has the Federal Reserve System, and why the Federal Reserve is charged with the duty of doing all it can, within its limited powers, to help maintain the dollar’s value.”¹⁹² As Martin cautioned in 1967, “[w]hen we fall into the habit of perpetual deficit financing the soundness of our currency and the strength of our economy will eventually be undermined,”¹⁹³ in which case, the international system too will lose confidence in the dollar.¹⁹⁴ Indeed, in 1965, when French President De Gaulle called for the dollar’s reserve status to be replaced by gold, it would have meant that the United States would not be able to pay its foreign debt in its own currency but would have to do so in gold.¹⁹⁵

With the demise of the dollar-gold conversion commitment, the international system shifted to a system of flexible exchange rates, referred to by then German Chancellor Helmut Schmidt as “a floating non-system.”¹⁹⁶ Currencies are not pegged to any gold value and freely floated against each other, like any other commodity. The IMF Articles of Agreement were amended to reflect this new reality. Under Article IV of the original Articles of Agreement, each member state had been required to maintain its currency within a narrow band around its stated par value in terms of gold or the U.S. dollar which was at the time tied to gold. Under

190. *Id.* (“The 1950s emphasis on the benefits of fiscal discipline was replaced by a view that deficits, even over several years, could be salutary. Moreover, policymakers expressed confidence that deficits would largely take care of themselves by generating rapid growth and hence increased revenues.”).

191. *Id.* (“Budget deficits would largely take care of themselves by generating faster growth and hence more revenue.”).

192. William McChesney Martin Jr., Chairman of the Fed. Reserve, Remarks Before the Business Counsel in Hot Springs, Virginia (Oct. 17, 1969) (available at https://fraser.stlouisfed.org/scribd/?item_id=7946&filepath=%2Fdocs%2Fhistorical%2Fmartin%2Fmartin69_1017.pdf#scribd-open).

193. William McChesney Martin Jr., Speech Before the Rotary Club of Toledo, Ohio, at 4 (June 26, 1967) (available at https://fraser.stlouisfed.org/scribd/?item_id=7920&filepath=%2Fdocs%2Fhistorical%2Fmartin%2Fmartin67_0626.pdf#scribd-open).

194. *See* William McChesney Martin Jr., Chairman of the Fed. Reserve, Remarks Before the Economic Club of Detroit (Mar. 18, 1968) (available at https://fraser.stlouisfed.org/docs/historical/martin/martin68_0318.pdf).

195. PAUL VIOTTI, *THE DOLLAR AND NATIONAL SECURITY: THE MONETARY COMPONENT OF HARD POWER* 15 (2014). If De Gaulle’s gold standard had been adopted, the United States would not be able to pay its foreign debt in its own currency, but would have to do so in gold. Nor would it be able to maintain persistent and large trade deficits as it would run out of gold. It would also mean U.S. consumers would need to reduce their purchases of foreign goods. *See* KWARTENG, *supra* note 22, at 211.

196. KWARTENG, *supra* note 22, at 219 (citing JOEL KURTZMAN, *THE DEATH OF MONEY: HOW THE ELECTRONIC ECONOMY HAS DESTABILIZED THE WORLD’S MARKETS AND CREATED FINANCIAL CHAOS* 51 (1993)).

the amended Articles, Article IV required only that member states avoid manipulating exchange rates. They were allowed to maintain the value of their currency (i) in terms of another currency or the Fund's own currency, the SDR (but not gold); (ii) in cooperative arrangements with other members; or (iii) using any other exchange arrangements of the member's choice. Most developing countries chose option 1, to link with the US dollar or to the currency of their former colonial power. The developed countries chose option iii.

Although the dollar had been devalued by its severance from gold, devaluation had strategic benefits given growing trade deficits with Germany and Japan.¹⁹⁷ And, despite devaluation, there was still faith in the U.S. dollar. Holding reserves still meant holding dollars. OPEC continued to price oil in dollars, despite talks about pricing oil in a basket of currencies.¹⁹⁸ If there was dollar depreciation, it was because other currencies appreciated, not because central banks sold their dollar holdings.¹⁹⁹

Currency crises did arise, but they were for the most part nondollar crises—the 1991 sterling crisis, the 1994 Mexico peso crisis, the 1997 East Asia-Russia crisis. The nondollar crises strengthened the dollar as it was viewed as a safe haven. The more the dollar survived through crises, the more “[i]t seemed as though it would take either a collapse in growth or the rise of a competing economic power—or both—to threaten the supremacy of the dollar.”²⁰⁰ In 2010, the perfect storm occurred as the factors identified above converged, deepening and widening preexisting cracks.

III. CURRENT CURRENCY WARS

Today's financial crisis is not just one in which one currency is devalued against another or against gold. The risk is, rather, a massive loss of confidence in paper currencies altogether and a flight in the long run towards safe havens such as commodities or other hard assets. Part III connects the dots—it looks at the causes of the financial crisis, the U.S. response, international reaction, and its impact on the dollar-based system. When countries, separately or concertedly, take certain measures to increase their gold or hard commodities, or to repatriate gold holdings stored elsewhere back home, or when they enter into agreements to engage in regional trade using a currency other than the U.S. dollar, these developments constitute a challenge to the U.S. dollar.

Despite U.S. trade deficits and budget deficits throughout the 1980s and onward, the dollar perversely maintained its top dog status. This irony prompted Otmar Emminger, the former President of the Bundesbank, to bemoan in awe and frustration that the “the more the American budget deficit and trade deficit increased, the higher rose the dollar. . . . What

197. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 95-96.

198. EICHENGREEN, *supra* note 4, at 66.

199. *Id.* at 66-67.

200. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 96-97.

would have made all other currencies weak seemed to have strengthened the dollar.”²⁰¹ Even with the closure of the gold link, the dollar did not become a “normal currency like all the others,”²⁰² but rather, retained “its unique role as a world currency.”²⁰³ Nonetheless, Emminger cautioned that the “overpriced dollar will sooner or later have to decline to a more normal level. The crucial question is whether this will become a ‘soft landing’ or a ‘crash landing.’”²⁰⁴

In the 1980s, the dollar had no rival. Not so now.

Despite economic troubles in Greece and the Euro zone and the 2015 economic slowdown in China, things are different today. The U.S. budget deficit, which ballooned because of tax cuts and increased war spending, continues without solution in sight. Even in 2003, Alan Greenspan had warned, “‘Far more urgent than tax cuts . . . was the need to address the threat posed by the soaring new deficits.’”²⁰⁵ At the same time, the combined GDP of the United States, the European Union and China together constitute almost 60 percent of global GDP. Hence it is not surprising that there are currently three major currencies in the world: the dollar, the Euro, and the yuan.²⁰⁶

Part A looks at dollar-yuan rivalry and explores how this dysfunctional relationship has serious implications for the international economic system. Part B looks at challenges to the dollar’s singular reserve status.

A. Dollar-Yuan Rivalry

This section focuses on the currency war between the dollar and the yuan (rather than the euro) for several reasons. First, unlike Western European countries, China is a rival, not an ally of the United States. Second, China is a rising global power with global ambitions, political, economic, and monetary. Third, China has by word and deed taken steps to dethrone the dollar. Moreover, it is not possible to understand fully the 2008 financial crisis and how it deepened the cracks in the system unless one understands the dysfunctional relationship between the yuan and the dollar.

In the early as the 1980s, when export was a relatively small part of Chinese GDP, the yuan was deemed to be overvalued.²⁰⁷ Partly to protect its rule as a response to Tiananmen Square protests, the Communist Party had placed primary importance on political stability,²⁰⁸ and consequently on job creation, which meant the adoption of a robust export sector and

201. Emminger, *supra* note 1, at 18.

202. *Id.*

203. *Id.*; see also KWARTENG, *supra* note 22, at 255 (discussing Emminger, *supra* note 1).

204. Emminger, *supra* note 1, at 22.

205. KWARTENG, *supra* note 22, at 312 (quoting ALAN GREENSPAN, *THE AGE OF TURBULENCE: ADVENTURES IN A NEW WORLD* 238-39 (2008)).

206. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 98-99.

207. *Id.* at 101.

208. *Id.* at 102-03; see KWARTENG, *supra* note 22, at 292 (“The Chinese . . . had always maintained that their policy of pegging the yuan to the dollar was not ‘meant to favour ex-

correspondingly a devalued yuan. China embraced six rounds of devaluations over a ten-year period,²⁰⁹ succumbing to U.S. pressure for an upward revaluation only in the administration of George W. Bush.²¹⁰ As incisively noted, “[f]or the Communist Party of China, the dollar-yuan peg was an economic bulwark against another Tiananmen Square.”²¹¹

In a surprising move on August 11 and 12, 2015, after a long period of pegging the yuan to the dollar at about 6.1-to-1, the Chinese government allowed the yuan to fall steeply, with the Chinese currency dropping 1.8 percent, then an additional 1.6 percent against the dollar.²¹² This move prompted additional angst in the United States as American officials viewed the depreciation as an attempt by China yet again to boost its exports to gain an unfair trade advantage.²¹³ China shrugged off criticism, arguing that it was anticipating IMF inclusion of the yuan in the SDR in late 2015 and was merely allowing the yuan to be freely usable. China’s devaluation this time was done under the convenient cover of market forces.²¹⁴

The devalued yuan has had a significant impact on U.S. monetary policy. In 2002, then Fed Chairman Alan Greenspan began a sustained period of extremely low interest rates, adopting a 4.75 percent cut from July 2000 to July 2002, to accomplish several objectives.²¹⁵ Certainly one of the objectives was to offset the technology bubble collapse in the United States. But another objective was to counteract China’s monetary policy, which critics charged included “exporting its deflation to the world, partly through a steady supply of cheap labor.”²¹⁶ A devalued yuan, resulting in cheap export goods and falling prices, can cause persistent deflation because businesses and consumers tend to wait for prices to fall further and

ports over imports, but instead to foster economic stability by tying its currency to the U.S. dollar at a constant level.’”).

209. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 101.

210. KWARTENG, *supra* note 22, at 296-97.

211. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 102.

212. Neil Irwin, *The More China’s Currency Falls, the More It Looks Like a ‘Currency War’*, N.Y. TIMES, Aug. 12, 2015 [hereinafter Irwin, *The More China’s Currency Falls*]. The yuan selloff prompted the Chinese government to issue assurances that “currently there is no basis for persistent depreciation” of the currency, followed by the central bank stepping in to buy yuan to offset the declines. *Id.*

213. A depreciated yuan would boost Chinese exports and might cause other countries to devalue their currencies. This would weaken U.S. exports and slow the U.S. economic recovery. A yuan depreciation could also hamper any plans the federal government has to raise interest rates. Keith Bradsher, *China’s Currency Move Clouds its Policy Goals*, N.Y. TIMES, Aug. 11, 2015.

214. Neil Irwin, *Why Did China Devalue Its Currency? Two Big Reasons*, N.Y. TIMES, Aug. 11, 2015, <http://www.nytimes.com/2015/08/12/upshot/why-did-china-devalue-its-currency-two-big-reasons.html?action=click&contentCollection=the%20Upshot&module=relatedCoverage®ion=EndOfArticle&pgtype=article> [hereinafter Irwin, *Why Did China Devalue Its Currency?*] (devaluing the yuan “to link the currency’s value a bit more closely to market forces”).

215. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 103-04.

216. *Id.*

hence spending is deferred.²¹⁷ To spur American spending, the Fed kept rates low.

But, Greenspan's low rate policy created conditions that contributed to the 2008 financial crisis and to the subsequent massive printing of U.S. dollars by the Fed. Predictably, a policy of sustained low interest rates meant that even marginal borrowers would be able to finance dubious deals. It also meant that institutional investors would seek higher yield and higher returns (and venture into the realm of the higher risk instruments) than those offered in risk-free government securities,²¹⁸ resulting in an explosion of subprime residential and commercial loan originations and securitizations. These two linked factors, marginal borrowers and the housing market bubble, are two factors that were at the crux of the 2008 financial crisis.²¹⁹

Conversely, low interest rates and the U.S. government's antidote to the 2008 financial crisis—creating new money—also contributed to the financial crisis in China and elsewhere. This is because the yuan's exchange rate has been pegged to the dollar.²²⁰ This means that China does not allow the yuan to trade freely on international exchange markets in the same way that convertible currencies such as the dollar, euro, sterling, or yen do. The PBOC tightly controls the use of the yuan as a means for settling transactions. For example, because the dollar is the world's reserve currency, a Chinese exporter would likely be paid in dollars by purchasers of their export goods or services. The Chinese exporter cannot exchange those dollars for the yuan on its own but must hand over those convertible currencies to the PBOC in exchange for yuan, at a fixed official (pegged) rate. Conversely, when an exporter needs euros or dollars to pay for imports, it can get them via the PBOC, but just what is needed to pay for the imports.

Historically, as Chinese exports grew and China received dollars as payment, the PBOC in turn began buying dollars and dollar assets to achieve several objectives. As widely noted, the Chinese "central bank is a major purchaser of U.S. financial assets, largely because of its exchange rate policy. In order to limit the appreciation of China's currency, the renminbi (RMB), against the dollar, China must purchase U.S. dollars"²²¹ because boosting the dollar makes the yuan weak in comparison. Alterna-

217. Heather Stewart, *China's Currency Devaluation Could Spark "Tidal Wave of Deflation,"* THE GUARDIAN, Aug. 12, 2015.

218. KWARTENG, *supra* note 22, at 319-23.

219. *Id.* at 322-32.

220. In January 2016, Fang Xinghai, a senior economic adviser to the Chinese leadership, said the government would "manage the yuan according to its performance against a basket of global currencies, as opposed to just setting it against the U.S. dollar." Lingling Wei & Jon Hilsenrath, *China Trying to Allay Global Concerns About Its Currency Regime*, WALL ST. J., Jan. 21, 2016, <http://www.wsj.com/articles/china-serious-about-move-to-unpeg-yuan-from-u-s-dollar-says-official-1453372857>.

221. Wayne M. Morrison & Marc Labonte, *China's Holdings of U.S. Securities: Implications for the U.S. Economy*, at 1 (CRS Report for Congress, Jan. 9, 2008). Note that the RMB is also known as the yuan.

tively, intervention to achieve yuan depreciation is important because a low yuan makes Chinese exports competitive, and thus fits into China's policy of export promotion. Third, the government saw the accumulation of dollar reserves as an important cushion against the kind of economic havoc wreaked by the 1997–1998 Asian currency crisis.²²²

For those reasons, the PBOC has embarked on a path of dollar accumulation. However, the picture is more complicated because a strategy of dollar accumulation itself required an ancillary strategy of yuan printing. This is because the PBOC used surplus dollars to buy

newly printed yuan. This meant that as the Fed printed dollars and those dollars ended up in China to purchase goods, the PBOC had to print yuan to soak up the surplus. In effect, China had outsourced its monetary policy to the Fed, and as the Fed printed more, the PBOC also printed more in order to maintain the pegged exchange rate.²²³

PBOC acquisition of dollars resulted in even more dollar exposure for China. Once the PBOC held those newly acquired dollars, it also needed to invest these dollar reserves²²⁴ and given its traditionally conservative orientation, it preferred to invest in highly liquid securities issued by the U.S. Treasury. Consequently, China possessed a massive quantity of U.S. Treasury obligations, which was estimated by some sources as early as 2011 as \$950 billion U.S. dollars.²²⁵

Chinese appetite for dollar assets was a double-edged sword. It was good for the United States, as it ensured that U.S. bond yields could remain low because a highly desirable U.S. debt market meant that the United States could command lower interest rates. As a Congressional Research Service report observed, “[b]ecause of its low savings rate, the United States borrows to finance the federal budget deficit and its private capital needs. . . . It therefore depends on countries with high savings rates, such as China, to invest some of their capital in the United States.”²²⁶ Any sign that China may reduce its purchase of dollar-based assets and diversify into other debt instruments would be worrying because “China could

222. Niall Ferguson & Moritz Schularick, *The End of Chimerica* 5 (Harv. Bus. Sch. Working Paper No. 10-037, 2009), <http://www.hbs.edu/faculty/Publication%20Files/10-037.pdf>. In July 1997, the value of the Thai Baht fell dramatically and would have fallen even more had the Thai government not sharply raised interest rate to defend the currency. This hurt Thai businesses that had dollar debt. The debt became more onerous because the number of baht needed to convert into dollars to repay the dollar debt had skyrocketed. Quan B. Lai, *Currency Crisis in Thailand: The Leading Indicators*, 8 THE PARK PLACE ECONOMIST 66, 66-69 (2008) <https://www.iwu.edu/economics/PPE08/quan.pdf>.

223. RICKARDS, CURRENCY WARS, *supra* note 50, at 106.

224. “Rather than hold dollars (and other foreign currencies), which earn no interest, the Chinese central government has converted some level of its foreign exchange reserve holdings into U.S. financial securities.” Morrison & Labonte, *supra* note 221, at 1.

225. RICKARDS, CURRENCY WARS, *supra* note 50, at 106.

226. Morrison & Labonte, *supra* note 221, at 1; *see also* Alan Greenspan, *U.S. Debt and the Greece Analogy*, WALL ST. J., June 18, 2010.

use [its dollar holdings] of U.S. debt as a bargaining chip in its dealing with the United States.”²²⁷

But, as economists Ferguson and Schularick have described, this has created a dysfunctional this “world economic order that combined Chinese export-led development with US over-consumption.”²²⁸ Ben Bernanke argued that a “‘glut’ of savings from emerging markets was a key factor in the decline of U.S. and global real-long term interest rates”²²⁹ Low interest rates allowed Americans to consume more and “worsened the imbalance between savings and investment.”²³⁰ Others observed that without “Chinese willingness to fund America’s consumption and real estate speculation habit, long-term interest rates in the U.S. would almost certainly have been substantially higher, acting as a circuit breaker for the housing bubble.”²³¹

When the financial crisis hit the United States in 2008, it was clear that urgent action was needed. The traditional approach to strengthening a weak economy in the United States has been to increase consumer spending.²³² U.S. GDP was \$14.9 trillion in 2011, with seventy-one percent coming from consumer consumption, twelve percent from investment, twenty percent from government spending, and minus three percent from net exports, which means that the consumer has always played a vital economic role.²³³ Interestingly, this picture is the mirror image of the GDP composition of China, where consumption was only thirty-eight percent of the Chinese economy, net exports less than four percent and investment forty-eight percent. Consumption remained low in China because its social safety net is weak, forcing individuals to save for their own health care and retirement.²³⁴

For the United States, the usual recipe to invigorate consumer spending has been a “combination of low interest rates, easier mortgage terms, wealth effects from a rising stock market and credit card debt,”²³⁵ but with an overstretched consumer, high unemployment, mortgage default, and business reluctance to invest,²³⁶ the Bush and Obama administrations turned to government spending. However, faced with vociferous Tea Party resistance, the Obama administration looked to export, aiming to double

227. Morrison & Labonte, *supra* note 221, at 7 (CRS Report for Congress, Jan. 9, 2008).

228. Ferguson & Schularick, *supra* note 222, at 2; *see also* KWARTENG, *supra* note 22, at 317.

229. Ferguson & Schularick, *supra* note 222, at 6.

230. *Id.*

231. *Id.*

232. RICKARDS, CURRENCY WARS, *supra* note 50, at 128.

233. *Id.* at 128-29.

234. *Id.* at 129-30.

235. *Id.* at 128-29.

236. *Id.* High U.S. corporate tax rate also meant many corporations kept their earnings offshore so that new investment took place outside the United States and did not count towards U.S. GDP.

U.S. exports in five years to spur growth.²³⁷ Export could be a strategy if China would agree to rebalance and focus more on consumption—by importing from the United States.

The IMF was summoned by the G20 to support the “rebalancing,” agenda which the IMF described as playing “a critical role in promoting global financial stability and rebalancing growth.”²³⁸ But despite persistent IMF and U.S. pressure,²³⁹ China did not allow the yuan to appreciate.

By June 2009, the United States, its patience wearing thin, adopted a different currency strategy some called “a secret weapon”—QE.²⁴⁰ As in 1971, when the United States acted unilaterally to weaken the dollar, starting in 2009 the United States was able to increase the money supply and increase asset prices via QE. The Fed could have lowered the price of money by cutting interest rates but it opted instead to increase the supply of money. It accomplishes this objective “by going into the financial markets to buy assets and . . . [creating] new money to pay for them.”²⁴¹ According to the Fed, “[t]he new money swells the size of bank reserves in the economy by the quantity of assets purchased—hence ‘quantitative’ easing.”²⁴²

As John C. Williams, who became the president of the Federal Reserve Bank at San Francisco in 2011 explained,

if the Fed buys significant quantities of longer-term Treasury securities or mortgage-backed securities, then the supply of those securities available to the public falls. As supply falls, the prices of those securities rise and their yields decline. The effects extend to other longer-term securities. Mortgage rates and corporate bond yields fall as investors who sold securities to the Fed invest that money elsewhere. Hence, LSAPs [large scale asset purchases] drive down a broad range of longer-term borrowing rates. And lower rates get households and businesses to spend more than they otherwise would, boosting economic activity.²⁴³

But, QE in the United States also affected other countries. As John Williams has acknowledged,

237. *Id.* at 129-30.

238. International Monetary Fund, Pittsburg G-20 Summit, G-20 Backs Sustained Crisis Response, Shift in IMF Representation, Sept. 29, 2009, <https://www.imf.org/external/pubs/ft/survey/so/2009/NEW092509A.htm>.

239. *U.S. Treasury Secretary Geithner Says Yuan Is Undervalued*, BBC (Sept. 16, 2010), <http://www.bbc.com/news/business-11328532>.

240. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 131.

241. Andrew Walker, *Has Quantitative Easing Worked in the U.S.?*, BBC (Oct. 30, 2014), <http://www.bbc.com/news/business-29778331>.

242. *What is Quantitative Easing?*, THE ECONOMIST (Mar. 9, 2015), <http://www.economist.com/blogs/economist-explains/2015/03/economist-explains-5>.

243. John C. Williams, *The Federal Reserve's Unconventional Policies*, FRBSF ECONOMIC LETTER (Nov. 13, 2012), <http://www.frbsf.org/economic-research/publications/economic-letter/2012/november/federal-reserve-unconventional-policies>.

although it's not our main intention, these unconventional policies have also had an effect on the dollar versus foreign currencies. When interest rates in the U.S. fall relative to rates in other countries, the dollar tends to decline as money flows to foreign markets with higher returns. One estimate is that a \$600 billion program like QE2 causes the dollar to fall by roughly 3 or 4% That helps stimulate the U.S. economy by making American goods more competitive at home and abroad.²⁴⁴

Again, take China as an example. Much of the money the Fed printed via QE “found its way to China in the form of trade surpluses or hot money inflows looking for higher profits than were available in the United States.”²⁴⁵ QE put more dollars into circulation, hence diluting the value of the dollar. Because the dollar is the world's reserve currency, many products, particularly commodities, are priced in dollars. Therefore, when the dollar depreciates, the price of commodities appreciates. This affects many countries such as China because the Chinese economy is heavily dependent on purchasing raw materials and using them to make products for exports. China's trade minister, Chen Deming, said, “[u]ncontrolled printing of dollars and rising international prices for commodities are causing an imported inflationary ‘shock’ for China and are a key factor behind increasing uncertainty.”²⁴⁶

In the end, the United States got what exactly it wanted: if China refused to revalue the yuan, it would get U.S.-exported inflation instead.²⁴⁷ Both Chinese revaluation of the yuan and U.S.-exported inflation would serve U.S. interests because both increased the costs of Chinese exports, which in turn made U.S. exports more competitive.²⁴⁸ In many ways, for China, inflation induced by QE is worse than revaluation. China could control revaluation, choosing when to revalue. But inflation would be harder to control—it “could have huge behavioral impacts and start to feed on itself in a self-fulfilling cycle as merchants and wholesalers raised prices in anticipation of price increases by others.”²⁴⁹

As proof of QE success for the U.S. economy, Bernanke pointed to the 25% increase in U.S. equity prices, which began from the beginning of QE2 in August 2010, to the end of February 2011.²⁵⁰ For the United States, this was a good development—“the Fed intended for the ‘excess’

244. *Id.*

245. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 135.

246. Ben Baden, *Why China Has a Point About Quantitative Easing*, U.S. NEWS (Oct. 29, 2010), <http://money.usnews.com/money/business-economy/articles/2010/10/29/why-china-has-a-point-about-quantitative-easing>.

247. For the United States, however, inflation is contained because the United States gets cheap imports from trade. RICKARDS, *DEATH OF MONEY*, *supra* note 27, at 75.

248. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 135-36.

249. *Id.* at 136.

250. Robert Barone, *Fed Exports Inflation, Stokes Revolution*, FORBES, Mar. 8, 2011.

liquidity to push up asset prices, probably hoping that the ‘wealth effect’ of higher asset prices would spur economic activity in the U.S.”²⁵¹

But for other countries, “the impact of QE on commodities and the food and energy inflation that it may have inadvertently, or perhaps purposefully, engendered”²⁵² have created havoc. Thus, when the Fed lowered interest rate to zero and pursued QE, its action had cross-border effects not just because more dollars flooding the market devalues the dollars, causing energy and commodities that are often priced in dollars to cost more (because it requires more dollars to buy them). Rather, inflation can also occur when large capital inflow fuels those economies, driving up demand for resources or further spurring speculation in commodities, increasing demand and prices.²⁵³

Moreover, placing the U.S. interest rate at zero means that U.S. investors seek higher returns elsewhere—in emerging markets—and in the process drive up the value of many of the currencies even as QE drives down the value of the dollar. In 2010 the Brazilian Finance Minister, Guido Mantega, called this combustible situation of commodity inflation a “currency war” unleashed by U.S. QE. Indeed, “Brazil was stuck between the rock of currency appreciation and the hard place of inflation.”²⁵⁴

Emerging countries have few options. Like China, they can peg their currency to the dollar, protecting their export markets but suffering inflation in the process. The PBOC’s money printing to maintain the yuan-dollar peg quickly led to increased prices there with China importing inflation from the United States (as opposed to having exported its deflation to the United States previously).²⁵⁵ Inflation can have serious consequences in emerging economies. Indeed, it was one of the catalysts of the 1989 Tiananmen Square protests. Trade surpluses and hot money in search of higher yields meant dollar inflows into many emerging economies, causing disruption in South Korea, Brazil, Indonesia, Thailand, Vietnam and elsewhere.²⁵⁶

Although the Fed has denied that its actions, particularly QE2, are a driver of protests and revolutions abroad and admittedly, commodity prices are influenced by a multiplicity of factors (desertification or drought, for example), commentators have connected the dots between the prices of food and purchase of U.S. Treasuries by the Fed.²⁵⁷ Data showed that “the food price index broadly stabilised through late 2009 and early 2010, then rose again from mid-2010 as quantitative easing was restarted (QE2) . . . with prices rising of about 40% over an eight month

251. *Id.*

252. *Id.*

253. *Id.*

254. RICKARDS, *CURRENCY WARS*, *supra* note 50, at 123.

255. *Id.* at 135.

256. *Id.* at 137.

257. Andrew Lilico, *How the Fed Triggered the Arab Spring Uprisings in Two Easy Graphs*, THE TELEGRAPH (May 4, 2011), <http://www.telegraph.co.uk/finance/economics/8492078/How-the-Fed-triggered-the-Arab-Spring-uprisings-in-two-easy-graphs.html>.

period.”²⁵⁸ As in Tiananmen Square, a rapid rise in food prices also contributed to disturbance and revolution in the Middle East.²⁵⁹ The Middle East and North Africa, more than other regions, heavily depend on imported food; in Egypt, for example, local food prices rose 37 percent.²⁶⁰ In Jordan and Syria, food prices rose 59 percent.²⁶¹ For the poor in the developing world, “rising food prices are the difference between eating and starving, between life and death. The civil unrest, riots and insurrection that erupted in Tunisia in early 2011 and quickly spread to Egypt, Jordan, Yemen, Morocco, Libya and beyond were as much a reaction to rising food and energy prices and lower standards of living as they were to dictatorships and lack of democracy.”²⁶² It is thus not surprising that Mohamad Bouazizi, the Tunisian whose self-immolation triggered the Arab Spring protests, was a food vendor. Hence even as China hangs on to its export model and its purposely devalued yuan, and even as the United States continues to “inflate away China’s export cost advantage,”²⁶³ inflation could not be confined “only” to China.

To put China’s dollar holdings into historical perspective, if the Bretton Woods system were still anchored to gold, one could safely assume that China would have opted to cash in some of its Treasury securities for U.S. gold held in reserves. A redemption of \$100 billion of Treasury notes at the 2008 gold price of \$1000 per ounce would have equaled 35 percent of the entire official gold supply of the United States; and a full redemption of all U.S. government securities held by China would have wiped out all of the U.S. gold supply.²⁶⁴ The question is how China can protect its own dollar holdings and still diversify from its dollar-based assets. When “the U.S. government announced a \$1.5 billion budget deficit and the Federal Reserve decided to buy hundreds of billions of government and agency debt” in 2009, China quickly questioned the continued use of the dollar as an international reserve currency.²⁶⁵

Some have warned about the looming currency wars.²⁶⁶ After the 2008 financial crisis and the “unprecedented explosion of financial

258. *Id.*

259. *Id.*

260. Rami Zurayk, *Use Your Loaf: Why Food Prices Were Crucial in the Arab Spring*, THE GUARDIAN (July 16, 2011), <http://www.theguardian.com/lifeandstyle/2011/jul/17/bread-food-arab-spring>.

261. Radi Khasawnay, *Is the West to Blame for Middle East Unrest*, FIN. NEWS (Feb. 1, 2011), <http://www.efinancialnews.com/story/2011-02-01/qe-blame-unrest?mod=sectionheadlines-AM-IB>.

262. RICKARDS, CURRENCY WARS, *supra* note 50, at 138.

263. *Id.*

264. *Id.* at 107-08.

265. Ferguson & Schularick, *supra* note 222, at 24.

266. See Edith Y. Wu, *Recent Developments in the Currency War: The Euro, the Dollar, the Yen, and the BEMU*, 15 CONN. J. INT’L L. 1 (2000). See generally RICKARDS, CURRENCY WARS, *supra* note 50.

credit,”²⁶⁷ concern about the prevalence of paper money became even more pronounced. History has shown that “paper currencies, not backed by any commodity standard, had facilitated unprecedented credit expansion.”²⁶⁸ And as some have observed, “paradoxically, the paper which had been responsible in large part for the explosive increase in credit was now seen to provide the solution.”²⁶⁹

At present, dangerous fault lines exist beneath the dollar-based international economic system. Part B connects the dots, so to speak, to highlight seemingly disconnected events which demonstrate dissatisfaction with the way the United States handles the dollar. It also examines actions being pursued by China and other countries to chip away at dollar dominance and to create alternatives to the status quo.

B. NEW NON-DOLLAR BASED SYSTEMS

This Part examines three main developments that signal not just global disillusionment with the dollar generally but concrete actions to create alternatives to the dollar-based system particularly. Some are a particular reaction to U.S. initiated currency wars and others reflect a general disillusionment with the dollar: 1) the historic 2014 multi-billion dollar gas deal between Russia and China which should be seen as one of many efforts to diminish the dollar’s role in oil and gas pricing, that is, to eradicate the dollar’s privilege as a currency backed by oil; 2) the establishment of a development bank by BRICS to challenge the Western dominated World Bank and IMF; and 3) the search for commodities of intrinsic value such as gold to challenge fiat money such as the dollar.

First, as noted in the Introduction, the United States itself has unleashed financial warfare against Iran and its currency, the rial. The United States severed Iran from the international banking and payments system, barring Iran from receiving dollars for oil exports and sending dollars out to pay for needed imports. Iranian merchants faced with dollar shortage turned to the black market, exchanging rials for dollars at astronomically depressed rates. Depositors rushed to withdraw their rials to purchase hard assets and dollars or other hard currencies. To prevent a bank run, the government had little choice but to raise interest rates to induce depositors to keep their money in the banks. One of Iran’s largest crude oil buyers, India, capitulated to U.S. pressure and shut down its primary financing facility used to pay for Iranian oil.²⁷⁰

Iran has turned to China for financing help with ambitious projects and for trade when faced with Western sanctions. Iran and China have

267. KWARTENG, *supra* note 22, at 319. Of course, there were other commentators who had warned about “reckless credit expansion” before the 2008 crisis. *See, e.g.*, PETER WARBURTON, *DEBT AND DELUSION: CENTRAL BANK FOLLIES THAT THREATEN ECONOMIC DISASTER* 11 (2000).

268. KWARTENG, *supra* note 22, at 321.

269. *Id.* at 342.

270. Jay Solomon, *U.S. Cuts Iran Cash Pipeline*, WALL ST. J. (Mar. 1, 2012), <http://www.wsj.com/articles/SB10001424052970203833004577251751961073104>.

started on building a new Silk Road and China is now Iran's largest trading partner.²⁷¹ Iran also sells its oil to China, taking care to avoid violating U.S. banking laws by using Russian and Chinese banks and by bartering.²⁷² It entered into an oil-for-gold swap with India, whereby India would buy gold and swap it with Iran for oil. Iran would in turn swap the gold with Russia or China for food and other goods.

Iran is also selling crude oil to China, taking yuan as payment.²⁷³ It has also pursued a gold strategy, expanding its gold trading with Afghanistan, the UAE, and Turkey.²⁷⁴ To keep the United States from freezing its dollar balances, it dumped dollars and bought gold. In July 2013, to deal with Iranian circumvention of U.S. banking sanctions, the United States banned gold sales to Iran; gold traders in other countries who flouted this regulation would risk U.S. penalties, including expulsion from the U.S. precious metals market.²⁷⁵

Any movement away from the oil for dollar system—either by using gold or a non-dollar currency—will be a serious threat to dollar hegemony. Dissatisfaction with dollarization of the international oil market has been bubbling for many years. For example, before the U.S. invasion of Iraq, Saddam Hussein made the switch from the dollar to the euro for oil trading, in a move intended as both retribution for U.S. sanctions and as encouragement of Europeans to challenge such sanctions.²⁷⁶ Representative Ron Paul asserted a controversial and scantily noticed link between the invasion of Iraq and Saddam Hussein's rejection of the dollar: "Hussein demanded Euros for his oil. His arrogance was a threat to the dollar; his lack of any military might was never a threat. . . . I doubt it was the only reason, but it may well have played a significant role in our motivation to wage war."²⁷⁷ Others have asserted a similar link between the ouster of Gaddafi and his plan to refuse the dollar as payment for oil, insisting instead on a new currency, the gold dinar. Gaddafi fell out of favor with the United States when he "suggested establishing a united African continent, with its 200 million people using this single currency. During the past year,

271. Thomas Erdbrink, *China Deepens its Footprint in Iran After Lifting of Sanctions*, N.Y. TIMES (Jan. 24, 2016), http://www.nytimes.com/2016/01/25/world/middleeast/china-deepens-its-footprint-in-iran-after-lifting-of-sanctions.html?_r=0.

272. *Id.* (describing transactions "that avoided traditional banking routes" and ensuring that they do not "violate United States sanctions on banking transactions . . .").

273. *China Buying Oil from Iran with Yuan*, BBC (May 8, 2012), <http://www.bbc.com/news/business-17988142>.

274. RICKARDS, DEATH OF MONEY, *supra* note 27, at 55-56.

275. Rick Gladstone, *New Sanctions Imposed on Iran to Halt Gold Trading*, N.Y. TIMES (July 1, 2013), http://www.nytimes.com/2013/07/02/world/middleeast/new-sanctions-imposed-on-iran-to-halt-gold-trading.html?_r=0.

276. *Iraq: Baghdad Moves to Euro*, RADIO FREE EUROPE (Nov. 1, 2000), <http://rferl.org/content/article/1095057.html>.

277. Bart Gruzalski, *Attempt to Pre-empt the Post-Dollar World*, FOREIGN POL'Y NEWS (June 15, 2015), <http://foreignpolicynews.org/2015/06/15/attempt-to-pre-empt-the-post-dollar-world/>. See generally WILLIAM R. CLARK, PETRODOLLAR WARFARE: OIL, IRAQ AND THE FUTURE OF THE DOLLAR (2005).

the idea was approved by many Arab countries and most African countries.”²⁷⁸

In a little noticed 2002 speech to OPEC, Javad Yarjani, a senior Iranian oil diplomat, floated the possibility that oil could be priced in euros.²⁷⁹ Since then it is establishing an oil bourse that will trade oil in currencies other than the dollar.²⁸⁰ The former U.S. Ambassador to Saudi Arabia, Chas Freeman, testified before a congressional committee that:

One of the major things the Saudis have historically done, in part out of friendship with the United States, is to insist that oil continues to be priced in dollars. Therefore, the US Treasury can print money and buy oil, which is an advantage no other country has. With the emergence of other currencies and with strains in the relationship, I wonder whether there will not again be, as there have been in the past, people in Saudi Arabia who raise the question of why they should be so kind to the United States.²⁸¹

The dollar faces serious threats from rivals. The erosion of dollar hegemony has geopolitical implications because “non-dollar trading—which enables countries to bypass U.S. claims to legal jurisdiction—will transform the prospects facing Iran and Syria, particularly in the field of energy reserves, and deeply affect Iraq which is situated between the two.”²⁸² As Russia faced sanctions over its actions in Crimea and Ukraine, President Putin of Russia announced in August 2014 that Russia will aim to sell its oil and gas for rubles globally to bypass dollar monopoly in energy trade. “We should act carefully. At the moment we are trying to agree with some countries to trade in national currencies,” Putin said during his visit to Crimea, annexed from Ukraine in 2014.²⁸³

Secret meetings have reportedly been held among financial officials of China, Russia, Japan and France to end dollar dealings for oil, moving

278. David Swanson, *Libya: Another Neocon War*, THE GUARDIAN (Apr. 21, 2011), <http://www.theguardian.com/commentisfree/cifamerica/2011/apr/21/libya-muammar-gaddafi>.

279. Faisal Islam, *When Will We Buy Oil in Euros*, THE GUARDIAN (Feb. 22, 2003), <http://www.theguardian.com/business/2003/feb/23/oilandpetrol.theeuro>.

280. Garry White, *Iran Presses Ahead with Dollar Attack*, THE TELEGRAPH (Feb. 12, 2012), <http://www.telegraph.co.uk/finance/commodities/9077600/Iran-presses-ahead-with-dollar-attack.html>.

281. ISRAR HASSAN, *BELIEVERS AND BROTHERS: A HISTORY OF UNEASY RELATIONSHIP* 254 (2009) (statement of Chas Freeman, former U.S. Ambassador to Saudi Arabia). Tension has escalated between the two countries. Mark Mazzetti, *Saudi Arabia Warns of Economic Fallout if Congress Passes 9/11 Bill*, N.Y. TIMES (Apr. 15, 2016), <http://www.nytimes.com/2016/04/16/world/middleeast/saudi-arabia-warns-of-economic-fallout-if-congress-passes-9-11-bill.html> (noting the Saudi government’s warning to the United States that it would dump \$750 billion in treasury securities and other assets if the U.S. Congress passed a bill allowing the Saudi government to be sued in U.S. courts over 9/11).

282. Alastair Crooke, *Non-Dollar Trading Is Killing the Petrodollar—And the Foundation of U.S.-Saudi Policy in the Middle East*, THE WORLD POST (Dec. 2, 2014), http://www.huffingtonpost.com/alastair-crooke/petrodollar-us-saudi-policy_b_6245914.html.

283. *Putin Says Russia Should Aim to Sell Energy in Roubles*, REUTERS (Aug. 14, 2014).

instead to a basket of currencies including the Japanese yen and Chinese yuan, the euro, gold and a new, unified currency planned for nations in the Gulf Co-operation Council, including Saudi Arabia, Abu Dhabi, Kuwait and Qatar.²⁸⁴ The dollar's replacement, according to Chinese banking sources, is, not surprisingly, gold.²⁸⁵

Interestingly, analysts in the oil and gas industry find diversification away from petrodollars to be a natural development given the reality of trade. One reason might simply be that many countries such as China, Russia and those in the Middle East already have large dollar holdings and wish to diversify into other currencies.²⁸⁶ Moreover, as bilateral trade between China and other countries grows, or as China and Russia trade oil, "why would they want to do that solely in dollars?"²⁸⁷ And indeed, movements are underway between China and Russia to carve an alternative natural-resource universe denominated in a non-dollar currency, most likely the yuan. The newest linkage between China and Russia—barely two months after Russia's annexation of Crimea in March 2014, is an historic \$400 billion gas agreement for the construction of a pipeline and the transportation of natural gas from Russia to Western China over the next several decades.²⁸⁸

The cost of construction and processing facilities is estimated at \$70 billion, although it will be partially offset by a multi-billion loan from China in exchange for a discount in the purchase price.²⁸⁹ China is "the largest energy consumer and producer in the world. Rapidly increasing energy demand, especially for petroleum and other liquids, has made China influential in world energy markets."²⁹⁰ The gas deal cements "the two partners as a counterhegemonic bloc to the West."²⁹¹

Analysts "predict that the oil exports would mean Chinese yuan being exchanged directly, into the Russian ruble. Thus, the two countries would bypass the U.S. dollar—the traditional currency used in oil trades and con-

284. Robert Fisk, *Oil Not Priced in Dollars by 2018?*, BLOOMBERG NEWS para. 2 (Oct. 6, 2009), <http://www.bloomberg.com/bw/stories/2009-10-06/oil-not-priced-in-dollars-by-2018-businessweek-business-news-stock-market-and-financial-advice>.

285. *Id.*

286. Graeme Wearden, *US Rivals 'Plotting to End Oil Trading in Dollars'*, THE GUARDIAN (Oct. 6, 2009) (statement of David Hart, oil and gas analyst at investment bank Hanson Westhouse), <http://www.theguardian.com/business/2009/oct/06/oil-us-dollar-threat-to-america>.

287. *Id.*

288. John Biersack & Shannon O'Lear, *The Geopolitics of Russia's Annexation of Crimea: Narratives, Identity, Silences, and Energy*, 55 EURASIAN GEOGRAPHY ECON. 247, 260 (2014).

289. *Id.* at 261-62.

290. U.S. Energy Information Administration, *China International Energy Data and Analysis 1* (May 14, 2015), http://www.eia.gov/beta/international/analysis_includes/countries_long/China/china.pdf.

291. Biersack & O'Lear, *supra* note 288, at 262.

sidered to be the international reserve currency of choice.”²⁹² Russia’s willingness to accept yuan as payment for its oil has made it the number one oil supplier for China.²⁹³ Although, as noted, China’s stock market and currency fluctuated wildly in early 2016, it would be wrong to see the yuan as a weakened currency.²⁹⁴ It has been included in the SDR basket as a global reserve. Thus, the yuan will be more international and its value will appreciate as central banks increase their yuan holdings,²⁹⁵ following signals by the central banks of Korea, Philippines and Indonesia that they plan to increase their own yuan reserves.²⁹⁶ As early as 2010, Nigeria, anticipating greater yuan internationalization, announced that it would put a tenth of its reserves, or \$ 4 billion, into yuan.²⁹⁷ This past December 2015, Zimbabwe announced it would make the yuan the official legal tender of the country.²⁹⁸

Russian willingness to accept the yuan has been further reinforced by Western sanctions against Russia for its conduct in the Ukraine and Crimea. Although Western sanctions explicitly permitted the use of the dollars and euros as payment for Russian oil and gas, “the sanctions triggered alarm among Russian executives, who viewed the measures as a sign that the west was willing to use currency as a weapon.”²⁹⁹ Consequently, Russian officials and executives have begun the shift from the U.S. dollar to

292. Matt Clinch, *Will the U.S. Give the Dutch Their Gold Back?*, CNBC (Nov. 28, 2014) <http://www.cnbc.com/2014/11/28/will-the-us-give-the-dutch-their-gold-back.html> [hereinafter Clinch, *Will the U.S. Give the Dutch Their Gold Back?*].

293. Elena Holodny, *Russia Just One-Upped the Saudis in China*, BUS. INSIDER para. 1 (June 23, 2015), <http://www.businessinsider.com/russia-just-one-upped-the-saudis-in-china-2015-6>.

294. See *supra* notes 29-30.

295. Nandini Rao, *Impacts of the Yuan’s Inclusion in the SDR Currency Basket*, GLOBAL RISK INSIGHTS (Dec. 15, 2015), <http://globalriskinsights.com/2015/12/impacts-of-the-yuan-s-inclusion-in-the-sdr-currency-basket/>; see Sharon Chen, *Asian Central Banks Welcome Yuan’s IMF Reserve-Basket Inclusion*, BLOOMBERG (Nov. 30, 2015, 11:55 PM), <http://www.bloomberg.com/news/articles/2015-12-01/asian-central-banks-welcome-yuan-s-imf-reserve-basket-inclusion>. China had bilateral currency swap agreements with thirty-one central banks for varying sums at the end of 2015. The countries are the United Kingdom, Belarus, Malaysia, South Africa, Australia, Armenia, Surinam, Hong Kong, Pakistan, Thailand, Kazakhstan, South Korea, Canada, Qatar, Russia, the European Union, Sri Lanka, Mongolia, New Zealand, Argentina, Switzerland, Iceland, Albania, Hungary, Brazil, Singapore, Turkey, Ukraine, Indonesia, Uzbekistan, and the United Arab Emirates, totaling RMB3.137 trillion. Obinna Chima, *Emefiele: Why Yuan Currency Swap Will Reduce Pressure on Forex Market*, THISDAY (Apr. 19, 2016), http://www.thisdaylive.com/index.php/2016/04/18/emefiele-why-yuan-currency-swap-will-reduce-pressure-on-forex-market/?utm_source=twitterfeed&utm_medium=twitter.

296. Chen, *supra* note 295.

297. Bradsher, *China’s Renminbi*, *supra* note 75. See also Chima, *supra* note 295.

298. *Zimbabwe To Make Chinese Yuan Legal Currency After Beijing Cancels Debts*, THE GUARDIAN (Dec. 21, 2015), <https://www.theguardian.com/world/2015/dec/22/zimbabwe-to-make-chinese-yuan-legal-currency-after-beijing-cancels-debts>.

299. Jack Farhy, *Gazprom Neft Sells Oil to China in Renminbi Rather than Dollars*, FIN. TIMES (June 1, 2015), <http://www.ft.com/intl/cms/s/0/8e88d464-0870-11e5-85de-00144feabdc0.html?siteedition=intl#axzz3oNRDzztN>.

the yuan as part of the Kremlin's "pivot to Asia."³⁰⁰ Gazprom Neft, Russia's third largest oil producer and the oil arm of the state-owned Russian gas company Gazprom, announced that since the beginning of 2015, it had been selling its oil to China for yuan.³⁰¹

Russian and Chinese monetary linkages have grown in other areas as well. For example, VTB, Russia's second biggest bank, entered into an agreement with the Bank of China to pay each other in their respective domestic currencies.³⁰² The two countries have also announced that in bilateral trades, they will no longer use the U.S. dollar, but will use their respective domestic currencies instead.³⁰³ Trade between Russia and China is already nearly \$90 billion, and it is expected that using more local currencies will speed up trade, which is scheduled to reach \$200 billion in the next six years.³⁰⁴ Cooperation between Russian and Chinese banks is also increasing, as China's state-owned Import Export Bank, has agreed to help Russian banks cut off from Western capital markets as a result of Western sanctions.³⁰⁵

Although there have been other attempts to isolate the dollar—for example, agreements between China and India and China and Brazil³⁰⁶ and China-Russia yuan-ruble swaps,³⁰⁷ the gas deal is in a different league altogether. Because the deal is so huge, involves the world's largest energy importer, China, and the world's largest energy producer, Russia, it "threatens the global petro-currency status of the U.S. dollar. . . . In other words, the growing importance of Russia and China in the global energy

300. *Id.*; see also James Marson & Andrey Ostroukh, *Gazprom Secures \$2.17 Billion Loan from Bank of China*, FORBES (Mar. 3, 2016), <http://www.wsj.com/articles/gazprom-secures-2-17-billion-loan-from-bank-of-china-1457017070> (discussing the expansion of Chinese investment in Russia's oil and gas sector, China's loans to Russia's Gazprom, and Chinese equity stakes in Russian projects "blocked from dollar financing").

301. *Id.*

302. Clinch, *Will the U.S. Give the Dutch Their Gold Back?*, *supra* note 292.

303. Shankar Besta, *China, Russia to Dump US Dollar for Bilateral Trade*, INT'L BUS. TIMES (Nov. 24, 2010, 9:11 AM), <http://www.ibtimes.com/articles/85216/20101124/china-russia-dollar-vladimir-putin-wen-jiabao-ruble-yuan-bilateral-trade.htm>.

304. *Defying the Dollar Russia & China Agree Currency Swap Worth Over \$20bn*, REUTERS (Oct. 13, 2014), <https://www.rt.com/business/195556-russia-china-currency-swap/>.

305. *Id.*

306. Agnieszka Flak & Marina Lopes, *Emerging Powers China, Brazil Make Plans to Bypass U.S. Dollar*, THE GLOBE AND MAIL (Mar. 26, 2013), <http://www.theglobeandmail.com/report-on-business/international-business/african-and-mideast-business/emerging-powers-china-brazil-make-plans-to-bypass-us-dollar/article10368191/>; Halligan, *The Dollar's Dominance*, *supra* note 9. China and Brazil agreed to swap up to \$30 billion in each other's currencies if needed so bilateral trade would not suffer if there is turbulence in the global financial market dominated by the dollar.

307. Ye Xie, *Ruble Swap Shows China Challenging IMF as Emergency Lender*, BLOOMBERG NEWS (Dec. 22, 2014), <http://www.bloomberg.com/news/articles/2014-12-22/yuan-ruble-swap-shows-china-challenging-imf-as-emergency-lender>. In October 2014, China and Russia signed a three-year currency-swap line of 150 billion yuan (\$24 billion), allowing Russia to borrow yuan and lend the ruble, which lost 41% due to plunging oil prices and Western sanctions linked to Russian annexation of Crimea.

picture – and their phasing out of dollar usage for trading energy commodities – would marginalize the status of the dollar”³⁰⁸ and threaten its unique status. The U.S. Treasury market would be weakened, which would in turn make it difficult for the United States to continue financing its chronic dollar-denominated debt of more than \$17.5 trillion.³⁰⁹

Consequently, what we now have is “[a] . . . transformation of the global monetary system . . . driven by a perfect storm: the need for Russia and Iran to escape Western sanctions, the low interest rate policy of the . . . Federal Reserve to keep the American economy afloat and the increasing demand for Middle East oil by China.”³¹⁰ As discussed later,³¹¹ hoarding gold is thus becoming not just an investment strategy but also a financial weapon.³¹²

The China-Russia gas deal should also be viewed in a yet broader context—the establishment of not just different reserve currencies to challenge the dollar but also of an alternative *system* to challenge Bretton Woods. In 2014, exactly seventy years after the Bretton Woods summit, the governments of Brazil, Russia, India and China held a conference in Fortaleza, Brazil to mark the establishment of a development bank that, “whatever diplomatic niceties are put on it, is intent on competing with the IMF and World Bank.”³¹³

There are many reasons why the NDB was erected. BRICS, especially China, have pushed for voting reform at the IMF to no avail, arguing that voting powers are skewed in favor of Western Europe even though economic conditions, as measured by population growth, foreign currency reserves, and economic output, have changed significantly since the founding of the IMF. As Joseph Stiglitz explained,³¹⁴ the NDB fills a need. It provides additional investment in trillions of dollars per year; and second, because it reflects the increasing power of BRICS, it corrects the democratic deficit currently of the IMF and the World Bank.³¹⁵

Regardless, the BRICS NDB was also established to challenge the dollar-based system, or as euphemistically put, to “support the reform and

308. Hao Li, *China-Russia Currency Agreement Further Threatens U.S. Dollar*, INT'L BUS. TIMES (Nov. 24, 2010), <http://www.ibtimes.com/china-russia-currency-agreement-further-threatens-us-dollar-248338>; see Halligan, *The Dollar's Dominance*, *supra* note 9.

309. Halligan, *The Dollar's Dominance*, *supra* note 9.

310. Crooke, *supra* note 282.

311. See *infra* text accompanying notes 325-78.

312. RICKARDS, *DEATH OF MONEY*, *supra* note 27, at 58.

313. Halligan, *The Dollar's Dominance*, *supra* note 9. There is also the newly formed, China-led Asian Infrastructure Investment Bank, which the United States vociferously opposed. Despite intense lobbying against the bank by the United States, important allies such as South Korea and Australia joined the bank nevertheless. Jane Perlez, *U.S. Opposing China's Answer to World Bank*, N.Y. TIMES (Oct. 9, 2014), http://www.nytimes.com/2014/10/10/world/asia/chinas-plan-for-regional-development-bank-runs-into-us-opposition.html?_r=0.

314. Interview with Joseph Stiglitz, *Nobel Economist Joseph Stiglitz Hails New BRICS Bank Challenging U.S.-Dominated World Bank & IMF* (July 17, 2014), http://www.democracynow.org/2014/7/17/nobel_economist_joseph_stiglitz_hails_new.

315. *Id.*

improvement of the international monetary system, with a broad-based international reserve currency system providing stability and certainty. We welcome the discussion about the role of the SDR in the existing international monetary system including the composition of the SDR's basket of currencies."³¹⁶ As Russian Prime Minister Dimitri Medvedev said in 2014, the efficacy of the Bretton Woods system had to be questioned after the 2008 financial crisis.³¹⁷ "This is when we started wondering whether the Bretton Woods system was enough, whether one powerful currency—the US dollar—and several reserve currencies such as the euro, the pound and others can support the entire global financial system."³¹⁸

With China and Russia renouncing the dollar in their bilateral trade,³¹⁹ and leading the charge, the BRICS countries, which collectively hold over 50 percent of global currency, established a \$100 billion development bank as a "first concrete step toward reshaping the Western-dominated international financial system."³²⁰ BRICS leaders also signed another agreement setting up a Contingent Reserve Arrangement (CRA) which is a reserve currency pool with \$100 billion in initial capital.³²¹ The NDB, formally launched in 2015, will start with an initial paid-in-capital of \$50 billion, with each BRICS country contributing \$10 billion. The initial capital contribution of each participant to the CRA will vary depending on its GDP,³²² with reserves denominated not in dollars but in each country's currency.³²³ The NDB will finance infrastructure and sustainable development projects (like the World Bank), and the CRA will provide assistance to members in financial difficulty (like the IMF).³²⁴

Countries can also minimize dependency on the dollar-based system—protecting themselves from sanctions and asset freezes—"by converting its paper wealth to gold,"³²⁵ an option China and a few others have been pursuing aggressively. China and India, Iran and Russia, among others, have used their monetary reserves to increase their gold posi-

316. RICKARDS, *DEATH OF MONEY*, *supra* note 27, at 149.

317. Interview by CNBC with Dmitry Medvedev, Russian Prime Minister (Oct. 15, 2014), <http://www.cnbc.com/2014/10/15/cnbc-exclusive-transcript-russian-prime-minister-dmitry-medvedev-speaks-with-cnbc-geoff-cutmore-today.html>.

318. *Id.*

319. Su Qiang & Li Xiaokun China, *Russia Quit Dollar*, CHINA DAILY (Nov. 24, 2010), http://www.chinadaily.com.cn/china/2010-11/24/content_11599087.htm.

320. Gruzalski, *supra* note 277.

321. *Previous BRICS Summits*, OFFICIAL WEBSITE OF RUSSIA'S PRESIDENCY IN BRICS, http://en.brics2015.ru/russia_and_brics/20150301/19545.html.

322. Jordan Totten, *BRICS New Development Bank Threatens Hegemony of U.S. Dollars*, FORBES (Dec. 22, 2014), <http://www.forbes.com/sites/realspin/2014/12/22/brics-new-development-bank-threatens-hegemony-of-u-s-dollar/>.

323. *Id.*

324. *See Previous BRICS Summits*, *supra* note 321.

325. RICKARDS, *DEATH OF MONEY*, *supra* note 27, at 61.

tions.³²⁶ Gold plays an important role in China's quest to internationalize the yuan and position it as a preeminent reserve currency. One way to accomplish this is to have it included in the IMF's SDR basket, which China achieved in November 2015 when the IMF deemed it a major exporter with a "freely useable" currency increasingly driven by market forces.³²⁷

Another step China has taken to acquire elite status for its currency and to challenge dollar dominance in trade involves the acquisition of gold. Gold still functions as a credible alternative and hence a challenge to the dollar's elite status. Even though gold is no longer used to back paper money, central banks still hold gold as part of their bank reserves, with the IMF alone holding 2,814 tons.³²⁸ Since 2010 when China became the world's second largest economy, the government has "stepped up efforts to make the yuan a viable competitor to the dollar. That has led to speculation the government has stockpiled gold as part of a plan to diversify \$3.7 trillion in foreign-exchange reserves."³²⁹

In July 2015, China reversed years of secrecy and reported that it has purchased 604 tons of gold since 2009, an amount second only to Russia.³³⁰ With this purchase representing an almost 60 percent increase in its reserves since 2009,³³¹ China displaced Russia as the world's fifth-largest holder of gold.³³² "The purchases show how China is seeking to diversify its reserves away from the US dollar at a time when the price of gold has fallen to near its lowest price since 2010."³³³

Unlike other big gold holders such as Germany and Russia, which update gold holdings monthly,³³⁴ China does not regularly disclose data on its gold reserves.³³⁵ The PBOC's report of its addition of slightly more 600

326. Robert Lenzer, *China and India Race to Amass Gold Reserves*, FORBES (Dec. 3, 2010, 11:43 AM), <http://www.forbes.com/sites/robertlenzer/2010/12/03/china-and-india-race-to-amass-gold-reserves/>.

327. Bradsher, *China's Renminbi*, *supra* note 75; see Irwin, *Why Did China Devalue Its Currency?*, *supra* note 214.

328. Jasmine Ng et al., *The Mystery of China's Gold Stash May Soon Be Solved*, BLOOMBERG NEWS (Apr. 20, 2015, 12:01 PM), <http://www.bloomberg.com/news/articles/2015-04-20/mystery-of-china-s-gold-stash-may-soon-be-solved-as-imf-beckons>.

329. *Id.*

330. Eddie van der Walt & Luzi Ann Javier, *China's Been Hoarding Gold and it Isn't Likely to Stop*, BLOOMBERG BUS. (July 19, 2015, 7:00 PM), <http://www.bloomberg.com/news/articles/2015-07-19/china-s-no-longer-secret-hoarding-of-gold-may-not-be-finished>.

331. *China Breaks 6-Year Silence on Gold Reserves*, FIN. TIMES (July 18, 2015, 12:31 AM), <http://www.cnbc.com/2015/07/18/china-breaks-silence-on-gold-reserves.html>.

332. Gordon G. Chang, *Where is China's Missing 1,850 Tons of Gold?*, FORBES (July 19, 2015, 1:33 PM), <http://www.forbes.com/sites/gordonchang/2015/07/19/where-is-chinas-missing-1850-tons-of-gold/>.

333. *China Breaks 6-Year Silence on Gold Reserves*, *supra* note 331.

334. Van der Walt & Javier, *supra* note 330.

335. Henry Sanderson, *China Reveals Increase in Gold Holdings*, FIN. TIMES (Aug. 14, 2015, 10:14 AM), <http://www.ft.com/cms/s/0/942ac8ee-4260-11e5-b98b-87c7270955cf.html#axzz4JrCWyURN> (explaining that, in 2015, China started reporting its reserves under the

tons of gold showed up, surprisingly, (or perhaps not) as one single entry in June 2015.³³⁶ Such a huge purchase is difficult to accomplish in one transaction unless it is prearranged between central banks or the IMF.³³⁷ As there was no record of such arrangement, “[t]he conclusion is inescapable that China is actually accumulating gold in smaller quantities over long periods of time, and reporting the changes in a lump sum on an irregular basis.”³³⁸

The Chinese decision to reveal its gold holdings in 2015 might have been timed to showcase openness and transparency, a gesture meant to impress the IMF as it considered including the yuan in the SDR.³³⁹ In addition, by adding a lot of gold to its reserves and disclosing the latest numbers, China demonstrated that its currency is supported by hard assets³⁴⁰ in amounts sufficiently large for it to be deemed a big player.

However, commentators doubt the accuracy of these numbers because information about the country’s gold holding is considered a state secret in China,³⁴¹ and because of the PBOC’s history of false reporting.³⁴² But, China’s covert accumulation may also make financial sense because any large buyer may wish to disguise its intention to minimize market impact and price hike. Moreover, China may not wish to trigger a loss of confidence in dollars, due to its continuing substantial dollar holdings.³⁴³ Thus, Chinese purchases are done through “secret agents and direct purchases from mines,”³⁴⁴ many located in China and others in southern Africa and western Australia. By 2007, China surpassed South Africa as the world’s largest gold producer,³⁴⁵ mining 437 tons in 2013 alone.³⁴⁶ To cast one-kilo gold bullions, gold ore from Chinese-owned mines, in and outside of China, is transported to refineries in China, Australia, South Africa and Switzerland and then sent to Shanghai for safekeeping, thus bypassing the

IMF’s Special Data Dissemination Standards, a method launched in 1996 and used by more than seventy countries to provide monthly reports of gold holdings).

336. Louis Cammarosano, *The Case of China’s Missing Gold*, SMAULGLD (July 19, 2015), <https://smaulgd.com/the-case-of-chinas-missing-gold/>.

337. RICKARDS, *DEATH OF MONEY*, *supra* note 27, at 227.

338. *Id.*

339. *China Breaks 6-Year Silence on Gold Reserves*, *supra* note 331.

340. *See* Ng et al., *supra* note 328.

341. *See As Beijing Reveals Modest Gold Hoard, Bulls Cry More, More, More*, REUTERS (July 20, 2015, 6:04 AM), <http://mobile.reuters.com/article/BigStory11/idUSKCN0PU0V220150720>.

342. Chang, *supra* note 332.

343. Myra P. Saefong, *China Finally Says How Much Gold It Has, but Nobody Believes It*, MARKETWATCH (July 17, 2015, 2:43 PM), <http://www.marketwatch.com/story/china-finally-says-how-much-gold-it-has-but-nobody-believes-it-2015-07-17>.

344. RICKARDS, *DEATH OF MONEY*, *supra* note 27, at 227.

345. *Id.* at 228.

346. Nat Rudarakanchana, *It’s Official: China Consumed, Mined & Imported the Most Gold Ever in 2013*, INT’L BUS. TIMES (Feb. 18, 2014, 3:51 AM), <http://www.ibtimes.com/its-official-china-consumed-mined-imported-most-gold-ever-2013-1556182>.

London market, “minimizing the market impact and keeping the exact size of China’s gold hoard a state secret.”³⁴⁷

China is also the world’s largest consumer of gold and importer of gold.³⁴⁸ Reports indicate that China has increased gold imports since 2009; from 2010 to May 2015, it conducted its gold imports through Hong Kong, in an amount estimated to be over 3,300 tons.³⁴⁹ Moreover, an undisclosed amount is also imported through Shanghai.³⁵⁰ Investors have noted that “[w]hile gold imports from Hong Kong provide a directional sense of China’s demand, they offer incomplete data because additional shipments come into China through Shanghai and Beijing as well.”³⁵¹ Some caution that government figures are misleadingly low, as China could in fact have as much as 3,510 metric tons, or 1,850 tons more than the official record, suggesting that China could be underreporting its gold holdings by 1,850 tons.³⁵²

If numbers from China’s own gold mining production and imports, whether through Hong Kong or Shanghai, are not reflected in PBOC disclosures, where is the gold? The private sector. China has outpaced India with private sector gold purchases accounting for 26 percent of the world’s total gold purchases in 2013.³⁵³ The World Gold Council, the market development organization for the gold industry, reported that by encouraging “domestic absorption of gold” by the private sector . . . [,] these ‘reserves’ held by the population could always be called upon by the state,”³⁵⁴ and subject to Chinese state control.

Chinese gold can also be held in a myriad of other state-owned banks other than the PBOC, such as the Agricultural Bank of China, Bank of China, the China Investment Corporation, a sovereign wealth fund responsible for managing the country’s foreign exchange reserves,³⁵⁵ and/or the State Administration of Foreign Exchange, and these holdings would

347. RICKARDS, *DEATH OF MONEY*, *supra* note 27, at 228.

348. Shu-Ching Jean Chen, *China’s Secret Vaults: Where is All the Missing Gold?*, *FORBES* (Mar. 18, 2014, 9:50 AM), <http://www.forbes.com/sites/shuchingjeanchen/2014/03/18/chinas-secret-vaults-where-is-all-the-missing-gold/#67611da141c2>.

349. Cammarosano, *supra* note 336.

350. *Id.*

351. Annie Gilroy, *Shanghai Gold Exchange Withdrawals Remain Strong*, *YAHOO NEWS* (June 29, 2015, 12:03 PM), <http://finance.yahoo.com/news/shanghai-gold-exchange-withdrawals-remain-150626866.html>; see Jeff Clark, *The Truth About China’s Massive Gold Hoard*, *CASEY RESEARCH* (July 22, 2014), <http://www.caseyresearch.com/articles/the-truth-about-chinas-massive-gold-hoard>.

352. Chang, *supra* note 332; see Chen, *supra* note 348.

353. Heidi Malhotra, *China’s Private Sector Amasses Gold*, *THE EPOCH TIMES* (Apr. 26, 2014, 5:34 AM), <http://www.theepochtimes.com/n3/642362-china-s-private-sector-amasses-gold/>.

354. *Id.*

355. Cammarosano, *supra* note 336.

not need to be reported as part of official central bank reserves.³⁵⁶ Whenever the government wishes to report a higher figure, it can do so by moving the gold into the PBOC.

The continuing importance of gold in the face of uncertainty is further corroborated by the growing number of countries seeking to repatriate their gold. In May 2015, Austria's central bank announced plans to repatriate £3.5 billion of its gold reserves currently stored in Britain, constituting 80% of its entire stocks after auditors warned against storing gold in a foreign country.³⁵⁷ The Austrian National Bank will spend the next five years flying gold bullions from London to Vienna, a move reminiscent of Germany's plan in 2013 to repatriate 300 tons of its gold stored in New York to ensure at least 50 percent was safe in Germany by 2020.³⁵⁸

In November 2014, the Dutch central bank announced that it had repatriated 122.5 tons of gold from New York to Amsterdam, claiming the move should "have a positive effect on public confidence."³⁵⁹ Belgium too has initiated gold repatriation,³⁶⁰ and a similar call to audit and repatriate French gold back to France is also taking place.³⁶¹ The rush to repatriate is in sharp contrast with the post-World War II and Cold War days when European countries stored their gold as far from the Communist bloc as possible in case of a Soviet invasion. Despite the fall of the Iron Curtain, much of European gold is has been kept in financial centers like New York and London, as "[i]t remains the one currency that is accepted everywhere. In the event of a currency crisis, the gold could be quickly deployed in financial markets to help restore confidence."³⁶² New York especially has been a favorite because the New York Fed stores gold without charge on the assumption that the "presence of foreign gold supports the dollar's status as the global reserve currency."³⁶³

356. Ben Traynor, *The Gold Price Drop Has to Do with China but Not for the Reason You May Think*, BUS. INSIDER (July 22, 2015, 8:38 AM) <http://www.businessinsider.co.id/gold-price-drop-because-of-china-and-fed-2015-7/#.VfYY1J1Viko>.

357. Phillip Inman, *Austria's Central Bank to Repatriate £3.5bn of Gold Reserves from UK*, THE GUARDIAN (May 28, 2015, 7:47 PM), <http://www.theguardian.com/business/2015/may/29/austrias-central-bank-to-repatriate-35bn-of-gold-reserves-in-uk>.

358. *Id.*; Clinch, *Will the U.S. Give the Dutch Their Gold Back?*, *supra* note 292 (discussing Germany's problem getting 300 tons of its gold back from New York).

359. Vernon Silver, *Where is Germany's Gold*, BLOOMBERG BUSINESSWEEK (Feb. 5, 2015), <https://www.bloomberg.com/news/features/2015-02-05/germany-s-gold-repatriation-activist-peter-boehringer-gets-results>.

360. *Germany's Gold Repatriation Program*, TOWNHALL, Apr. 12, 2016, <http://townhall.com/columnists/bgascmetals/2016/04/12/germanys-gold-repatriation-program-n2145453> (the Central Bank of Belgium reporting in 2015 that it had repatriated 125 tons of gold from London and announcing its goal of having half of its gold within Belgian territory).

361. *Swiss, French Call to Bring Home Gold Reserves as Dutch Move 122 Tons Out of US*, RT (Nov. 28, 2014, 5:25 AM), <https://www.rt.com/business/209591-gold-europe-gold-repatriation/>; see also Alan Feuer, *The Golden Age*, N.Y. TIMES (Dec. 6, 2014), <http://mobile.nytimes.com/2014/12/07/sunday-review/the-golden-age.html>.

362. Jack Ewing, *Germany Will Cart Home Some of its Buried Treasure*, N.Y. TIMES, Jan. 17, 2013.

363. *Id.*

Interestingly, the movement to take gold back for safekeeping is led by Northern European countries that form the core of the “haves” within the EU.³⁶⁴ Again, one returns to the trust issue—that is, “building trust with citizens frustrated by years of easy-money policies.”³⁶⁵ Analysts have offered different reasons for this trend. Some explain the repatriation frenzy as “an indication that financial Armageddon, in the guise of runaway inflation, is approaching.”³⁶⁶ Others view it “as a symbolic way for central banks and governments to make a show of strength in nervously uncertain economic times.”³⁶⁷ The continuing financial crisis has heightened anxieties in many countries about fiat money and “the safety of their gold reserves abroad.”³⁶⁸ Moreover, the financial crisis “marks a deeper anxiety amongst tax payers and savers for the monetary system to have a more solid base than QE (quantitative easing) and zero rates . . .”³⁶⁹ Gold remains “a highly liquid asset that is easily exchanged for other currencies.”³⁷⁰ The repatriation “is especially pronounced in Europe, where central banks face public pressure to buy more gold or bring back home what they hold in vaults overseas.”³⁷¹

Additionally, given the financial crisis facing Greece and other European countries, the notion that the EU is splittable is not far-fetched,³⁷² as evidenced by Brexit in June 2016.³⁷³ Southern European countries such as Greece, Spain, Portugal, Italy, and Cyprus are mired in a recession that has required bailouts by the euro area’s northern countries, leading to prediction that the euro system will be dismantled.³⁷⁴ Economic distress has

364. Bill Holter, *Gold Repatriation and the Monetary Crisis: Austria, Belgium, and the Netherlands Want Their Gold Back*, GLOBAL RESEARCH, Dec. 17, 2014, <http://www.globalresearch.ca/gold-repatriation-and-the-monetary-crisis-austria-belgium-and-the-netherlands-want-their-gold-back/5420306> (discussing steps taken by the core EU countries such as Germany, Belgium, the Netherlands and Austria to repatriate their gold). Note also that the EU is located in Brussels and the European Central Bank in Frankfurt.

365. Brian Blackstone & Jon Hilsenrath, *Nostalgia or Gold Pressures Central Banks in Europe*, WALL ST. J. (Nov. 27, 2014), <http://www.wsj.com/articles/central-banks-are-pressed-to-revisit-the-golden-age-1417125213>.

366. Feuer, *supra* note 361.

367. *Id.*

368. *Swiss, French Call to Bring Home Gold Reserves as Dutch Move 122 Tons Out of US*, *supra* note 361.

369. Katrina Bishop, *Austria Wants the UK to Give Its Gold Back*, CNBC (May 29, 2015), <http://www.cnbc.com/2015/05/29/austria-wants-the-uk-to-give-its-gold-back.html>.

370. Feuer, *supra* note 361.

371. Blackstone & Hilsenrath, *supra* note 365.

372. Holter, *supra* note 364; Anatole Kaletsky, *Europe Faces Three Critical Tests*, N.Y. TIMES (Oct. 23, 2014), <http://www.nytimes.com/2014/10/24/business/international/europe-faces-three-critical-tests.html>.

373. See generally Steven Erlanger, *Britain Votes to Leave E.U.; Cameron Plans to Step Down*, N.Y. TIMES (June 23, 2016), <http://www.nytimes.com/2016/06/25/world/europe/britain-brexiteuropean-union-referendum.html>.

374. Brigitte Granville, Hans-Olaf Henkel & Stefan Kawalec, *Save Europe: Split the Euro*, BLOOMBERG VIEW (May 14, 2013), <https://www.bloomberg.com/view/articles/2013-05-14/save-europe-split-the-euro>.

brought into stark contrast the economic disparity and cultural differences between the poorer periphery euro zone countries and the richer core euro zone ones.³⁷⁵ “For the great many Germans who still rue the day they had to trade their marks for euros, there has been at least one consolation. If the common currency did not work out, Germany still had huge reserves of the hardest currency of all: gold.”³⁷⁶

Moreover, the so-called Nordic bloc of countries—Germany, Belgium, Austria, and the Netherlands—have not only the highest rated credits but also a combined gold reserve of 4,000 tons which means “the ability to set up a northern or ‘Nordic euro’ . . . especially if China revalues gold and resets the world’s financial system”³⁷⁷ Thus, the discovery by Germans that their gold was not physically in their own country resulted, as discussed, in calls to repatriate it back to Germany—even as the Bundesbank vociferously denied that repatriation reflected any lack of trust in the New York Fed.³⁷⁸ Nonetheless, the fact remains that “[t]he system, of course, is built upon trust—that the New York Fed won’t suddenly be taken over by people with no respect for [other] nations’ property rights and seize it for their own use, and that the central banks won’t lie about how much gold is in their vaults.”³⁷⁹

Even if some economic experts do not see “pending doom in the repatriation schemes and the shopping sprees by Moscow and Beijing,”³⁸⁰ those actions are still highly significant because they trumpet “a desire to challenge a rival. . . .”³⁸¹ and in the case of the Chinese and the Russians, to broadcast the fact “that they’re unhappy with the dollar or that they want to become a global player”³⁸²

CONCLUSION

The dollar’s exorbitant privilege is being challenged by allies and rivals alike. Like his predecessor Charles De Gaulle, who was resentful of the dollar’s unique status, former French President Nicolas Sarkozy proclaimed in the midst of the 2008 financial crisis that, “We need a new Bretton Woods We can’t have on the one hand a multipolar world and on the

375. See, e.g., Alan Greenspan, *Europe’s Crisis is All About the North-South Split*, FIN. TIMES (Oct. 6, 2011), <http://www.ft.com/cms/s/0/678b163a-ef68-11e0-bc88-00144feab49a.html#axzz4JWuMqXY1>; Derek Scally, *New Party Wants to Split Euro Into Blocs*, IRISH TIMES (Apr. 30, 2014), <http://www.irishtimes.com/news/politics/new-party-wants-to-split-euro-into-blocs-1.1778115>.

376. Ewing, *supra* note 362.

377. Holter, *supra* note 364.

378. See generally Ewing, *supra* note 362.

379. Neil Irwin, *Why Germany Wants Its 674 Tons of Gold Back*, WASH. POST (Jan. 16, 2013), <https://www.washingtonpost.com/news/wonk/wp/2013/01/16/why-germany-wants-its-674-tons-of-gold-back/>.

380. Feuer, *supra* note 361.

381. *Id.*

382. *Id.* (quoting Joshua Aizenman, Professor of Economics and International Relations at the University of Southern California).

other a single reserve currency on a global level.”³⁸³ As noted, China has called for a reserve currency that is not issued by any one country.³⁸⁴ Russia too has denounced the continued use of the dollar as a reserve currency issued, ironically, by a debtor (albeit hegemonic) country: “one center of consumption, which is financed by deficit, and correspondingly, an accumulation of debt, one reserve currency that is powerful as never before, and one predominating system of evaluating risks and assets.”³⁸⁵

A few scholarly commentators have issued warnings about the likely consequences of dollar decline from singular currency to one among many, or from top currency to “negotiated” currency.³⁸⁶ As some scholars have observed,

[t]he relative diminution of the dollar as an international currency to something like first-among-equals status will not only cause the United States to lose privileges it once enjoyed—its coercive power enhanced by greater autonomy and its structural power implicitly shaping the preferences of others—but it will also produce new burdens, which Americans will be singularly unaccustomed to bearing.³⁸⁷

The ripple effect will likely be felt in myriad ways in different areas of U.S. interests, including economic, political and security interests. The following observation accurately reflects what I have described throughout the article:

[A] shift away from the dollar as a reserve currency and pricing standard for oil transactions, could be catastrophic for the United States. In the worst case scenario, a drastic drop in demand for dollar-denominated assets would cause the interest rates on Treasury Securities to skyrocket, sending ripples through the US economy as the value of the dollar plummets. . . . [The] . . . decrease in demand for US debt . . . will constrain the federal government’s ability to spend and the ability of the United States to defend itself. The United States has built its foreign policy around its vast military capability; a sudden budgetary shock and drop in military

383. Katrin Bennhold, *At Davos, Sarkozy Calls for Global Finance Rules*, N.Y. TIMES (Jan. 27, 2010), <http://www.nytimes.com/2010/01/28/business/global/28davos.html>.

384. Andrew Batson, *China Takes Aim at Dollar*, WALL ST. J. (Mar. 24, 2009), <http://online.wsj.com/articles/SB123780272456212885> (“Because other nations continued to park their money in U.S. dollars, the argument goes, the Federal Reserve was able to pursue an irresponsible policy in recent years, keeping interest rates too low for too long and thereby helping to inflate a bubble in the housing market.”).

385. Andrew E. Kramer, *Russian Warns Against Relying on Dollar*, N.Y. TIMES (June 5, 2009), <http://www.nytimes.com/2009/06/06/business/global/06ruble.html>.

386. Jonathan Kirshner, *Dollar Primacy and American Power: What’s at Stake?*, 15 REV. INT’L POL. ECON. 418, 418-38 (2008).

387. JONATHAN KIRSHNER, AMERICAN POWER AFTER THE FINANCIAL CRISIS 144 (2014).

spending would leave the United States vulnerable as it scrambles to regroup in a new security environment.³⁸⁸

This Article has traced the evolution of the dollar and shown how it evolved from its origin in coins of gold and silver to paper “greenbacks” backed by gold to its current state—fiat money unbacked by anything of intrinsic value and issued by a debtor, albeit powerful, country. As late as the 1980s, the United States was “the world’s largest creditor and source of investment money”³⁸⁹ but “[b]y 2000, America’s net foreign liabilities had become larger than those of all other debtor countries combined. . . .”³⁹⁰ In its current incarnation, the dollar is most vulnerable to challenge—internal because of chronic deficits and external because of international rivalries and intense dissatisfaction with how the United States has managed the dollar and the effect this has created on the rest of the world. Indeed, the IMF itself issued a report warning that the staggering increase in U.S. foreign debt is a hazard to the global economy and “could play havoc with the value of the dollar and international exchange rates.”³⁹¹

The dollar may be strong this year or weak last year. That is the nature of a market-based floating system. But, regardless of any momentary snapshot, various indicators show that an alternative, non-dollar system is being slowly but surely created. The Triffin Dilemma,³⁹² combined with the global economic crisis of 2008, has triggered heated debate about the international monetary system, and because the dollar is at the centerpiece of this system, about the dollar itself. Different proposals have been put forth by governments, quasi-governmental bodies, government officials, and others to correct imbalances specifically in the dollar-based international economic system³⁹³ and more generally in the international eco-

388. Josh Zoffer, *Future of Dollar Hegemony: The Dollar’s Role After the Euro Crisis*, 34 HARV. INT’L REV. 26 (July 7, 2012).

389. Robert Z. Aliber, *The Global Savings Tsunami*, WILSON Q., Summer 2009, at 56.

390. *Id.*

391. Elizabeth Becker & Edmund L. Andrews, *I.M.F. Warns That U.S. Debt Is Threatening Global Stability*, N.Y. TIMES at C1 (Jan. 8, 2004), http://www.nytimes.com/2004/01/08/business/imf-warns-that-us-debt-is-threatening-global-stability.html?_r=0.

392. See *supra* notes 169-70 and accompanying text.

393. See, e.g., BEYOND THE DOLLAR: RETHINKING THE INTERNATIONAL MONETARY SYSTEM, A CHATHAM HOUSE REPORT, at ix (Paola Subacchi & John Driffil eds., 2010) (proposing a “multicurrency reserve system . . . alongside a still preeminent dollar”); Bennhold, *supra* note 383 (calling for a single reserve currency untied to any one country); Xiaochuan, *supra* note 39 (favoring first a super-sovereign reserve currency, but proposing as second-best a greater role for the IMF’s SDR because it has “the features and potential to act as a super-sovereign reserve currency”); McKinsey Global Institute, *An Exorbitant Privilege? Implications of Reserve Currencies for Competitiveness* 38 (Discussion Paper, Dec. 2009) (proposing a greater role for SDRs through new rules permitting the private sector to issue its own SDR instruments.); U.N. Conference on the World Financial and Economic Crisis and Its Impact on Development, June 24-26, 2009, *Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System*, at 98, 117 (rejecting a multi-currency reserve system and supporting a

conomic legal framework itself.³⁹⁴ This Article has not focused on the many theoretical or policy proposals that have sprouted post-2008 because its emphasis is on concrete developments³⁹⁵ and concerted actions that have already been undertaken to undermine dollar hegemony.

If Triffin's observations are taken to their logical conclusion, "[t]he endgame to Triffin's paradox is a global, wholesale dumping of the center country's securities. No one knows in advance when the tipping point will be reached, but the damage brought about by higher interest rates and slower economic growth will be readily apparent afterward."³⁹⁶ At the height of the 2008 financial crisis, Luo Ping, a director-general at the China Banking Regulatory Commission, agonized thus: "Except for U.S. Treasuries, what can you hold? Gold? . . . U.S. Treasuries are the safe haven. For everyone, including China, it is the only option . . . We know the dollar is going to depreciate, so we hate you guys, but there is nothing much we can do."³⁹⁷ Undoubtedly, pressure on the dollar is continuing and cracks are increasingly apparent. Possibilities abound—instead of the dollar as the singular hegemonic currency, we could have regional currencies instead.³⁹⁸ Emerging markets, whether BRICS or some other combination, could establish competitive currency zones.³⁹⁹ "[S]udden reserve diversification, or the act of foreign governments abruptly shifting their

"truly global reserve currency" in which countries agree to exchange their own currencies for a new currency called "International Currency Certificates," which cannot be held in excessive quantities to facilitate adjustment between deficit and surplus countries). For a summary of other proposals, see Emily Merki, *Why the Dollar Should No Longer Be the World Reserve Currency: Solving Global Account Imbalances Through Structural Reform*, 46 GEO. J. INT'L L. 1245, 1253-70 (2015) (discussing myriad reforms—international harmonization of bank capital requirements; increasing supervision of international capital movement; minimization of instability caused by massive accumulation of dollars through exchange rate adjustments; multi-currency reserve system; creation of a freestanding reserve currency backed by gold).

394. See, e.g., *Discovering Great Opportunity in the Midst of Great Crisis: Building International Legal Frameworks for a Higher Standard of Living*, 24 EMORY INT'L L. REV. 147 (2010).

395. As an example of rare legal scholarship on the dollar as world reserve currency, see Wu, *supra* note 266, at 14 (ascribing the following as reasons for dollar decline: "the unwillingness of others to hold it as a reserve currency, balance of payment deficits, the drop in American gold holdings in relationship to the growing foreign-held dollars, and the massive transnational movement of capital").

396. Francis E. Warnock, *How Dangerous Is U.S. Government Debt?*, COUNCIL ON FOREIGN REL. at 112 (June 2010), <http://www.cfr.org/financial-crises/dangerous-us-government-debt/p22408>.

397. *Id.* In May 2009 on a visit to China, Brazil's then-president, Luiz Inácio Lula da Silva, echoed Chinese frustration and called the world to "stop denominating trade in dollars." *Id.*

398. Zanny Minton Beddoes, *From Emu to Amu? The Case For Regional Currencies*, FOREIGN AFF., July-Aug. 1999, at 8 (comparing European monetary union and U.S. monetary union).

399. Wu, *supra* note 266, at 29-34 (describing the possibility and viability of Big Emerging Markets ("BEM") consisting of Mexico, Brazil, Argentina, South Africa, Poland, Turkey, India, Indonesia, China, and South Korea forming a monetary union, the BEMU).

funds from dollars to other currencies”⁴⁰⁰ is not farfetched. That disaster did not strike even after the 2008 financial crisis does not mean it will not ever strike. That there is, as of yet, no effective alternative to the dollar⁴⁰¹ does not mean that one will not emerge. Indeed, it is reasonable to note that it is the “Eurozone phase of the global financial crisis . . . [that] . . . has provided the U.S. government with a timely respite from both domestic forces and Triffin’s endgame”⁴⁰² and that what the United States got as a result was merely “a lucky break.”⁴⁰³

As George Soros succinctly described, “in the financial sphere the Bretton Woods institutions—the IMF and the World Bank—have lost their monopoly position. Under Chinese leadership, a parallel set of institutions is emerging.”⁴⁰⁴ Soros noted that against this context of “rival camps” with China and Russia on one side and the United States on the other, “China has begun to build a parallel set of financial institutions, including the Asian Infrastructure Investment Bank (AIIB); the Asian Bond Fund Initiative; the New Development Bank (formerly the BRICS Bank); and the Chiang Mai Initiative, which is an Asian regional multilateral arrangement to swap currencies.”⁴⁰⁵ I have focused on the New Development Bank and on a myriad of other actions, from the various China-Russia bilateral agreements, the historic gas deal, to demonstrate that the hegemony of the dollar is being eroded as more and more countries seek to price oil and gas in a currency other than the dollar, such as the yuan. Since the closure of the gold window, the dollar’s unique status has been maintained partly by its linkage to oil. Breaking the dollar-oil link will be a significant step toward bringing the world closer to a non-dollar-based regime. Hence, it is interesting to note that whereas Saddam Hussein moved to price oil in a currency other than the U.S. dollar,⁴⁰⁶ Iraq post-Saddam Hussein is now committed to selling oil in dollars.⁴⁰⁷

400. Warnock, *supra* note 396, at 1-2.

401. See ESWAR PRASAD, *THE DOLLAR TRAP: HOW THE U.S. DOLLAR TIGHTENED ITS GRIP ON GLOBAL FINANCE* (2014); see also Benjamin J. Cohen & Tabitha M. Benney, *What Does the International Currency System Really Look Like*, 20 *REV. INT’L POL. ECON.*, 1017, 1017-41 (2013) (arguing that despite the rise of a multipolar system, U.S. centrality continues); Doug Stokes, *Achilles’ Deal: Dollar Decline and US Grand Strategy After the Crisis*, 21 *REV. INT’L POL. ECON.*, 1071, 1071-94 (2014).

402. Warnock, *supra* note 396.

403. *Id.*

404. George Soros, *A Partnership with China to Avoid World War*, *THE N.Y. REVIEW* (July 9, 2015), <http://www.nybooks.com/articles/archives/2015/jul/09/partnership-china-avoid-world-war/>.

405. *Id.*

406. See *supra* notes 276-278.

407. The current Iraqi Dinar exchange rate is now pegged to the U.S. dollar. IMF, *Iraq Staff-Monitored Program—Press Release; and Staff Report*, Attachment I Memorandum on Economic and Financial Policies, ¶ 19 (2016) (“The government will maintain the Iraqi Dinar’s peg to the U.S. dollar. The peg provides a key nominal anchor in a highly uncertain environment with policy capacity weakened by the conflict with ISIS.”); see Ministry of Oil, *Mechanisms of Contracting and Executing Crude Oil Export Agreements*, OIL MARKETING COMPANY (2015), <http://somoil.gov.iq/en/> (“As from the B/L date, and after elapsing of the

The search for hard assets such as oil, gas, gold and other natural resources has also intensified. Gold in particular remains relevant to the international economy, despite vociferous claims to the contrary. It remains relevant despite prior efforts to demote it. Take as an example the move by the IMF in January 1976 to convert the SDR “from a gold-backed reserve asset to one referencing a basket of paper currencies.”⁴⁰⁸ Take as another example the deliberate effort by the United States during the Carter administration to lower the price of gold by dumping 300 tons of it onto the international market.⁴⁰⁹ to show that dollars, rather than gold, should be the global reserve currency. China’s quest to internationalize the yuan and its recent inclusion in the IMF’s SDR basket reflect not only Chinese desire “to use financial liberalization as an engine of growth” but also its “ultimate ambition of replacing the US dollar as the dominant currency in the world.”⁴¹⁰ It is not only China but Russia as well that has stepped up efforts to increase its own gold reserves. From 2004 to 2013, Russian reserves increased from 390 tons to over 1,000 tons.⁴¹¹

Through QE, massive printing of dollars has upset the complex relationship between the dollar and other currencies tied to it, such as the yuan. Dollar devaluation has resulted in inflation in other countries, contributing to economic stress and political revolutions in many parts of the world. Moreover, the drive to repatriate gold in the post-2008-financial crisis world must be seen in this context—of growing mistrust in the global financial system, in the same way that mistrust during the Cold War drove Germany and other European countries to keep its gold stored in New York rather than risk confiscation by the Soviets on the other side of the Iron Curtain. “If the United States or the U.K. suddenly deemed it necessary to confiscate foreign gold to defend its paper currency in a crisis, that gold would be conveyed from the original owners to the possession of the United States or the U.K.”⁴¹²

contractually specified period, SOMO calculates and notifies the respective client company of the final unit price of the cargo (i.e. U.S. Dollar per Barrel).”); Emily Glazer, Nour Malas & Jon Hilsenrath, *U.S. Cut Iraq Cash on Iran, ISIS Fears*, WALL ST. J., Nov. 3, 2015, at A1 (“Since the U.S. overthrew Saddam Hussein and helped establish the Central Bank of Iraq in 2004, the U.S. dollar has largely become the country’s chief currency because so much of the economy runs on cash. When Iraq needs more paper currency, the money is drawn from the country’s account at the Fed, funded largely by oil reserves, and flown to Baghdad.”); Carola Hoyos & Kevin Morrison, *Iraq Steps Back into Oil Market with Crude Sale Offer*, FIN. TIMES, June 6, 2003, at 11 (describing the post-Saddam Iraq offering of oil which “switches the transaction back to dollars—the international currency of oil sales—despite the greenback’s recent fall in value. Saddam Hussein in 2000 insisted Iraq’s oil be sold for euros, a political move, but one that improved Iraq’s recent earnings thanks to the rise of the euro against the dollar”).

408. RICKARDS, DEATH OF MONEY, *supra* note 27, at 235.

409. *Id.*

410. SOROS, *supra* note 404.

411. RICKARDS, DEATH OF MONEY, *supra* note 27, at 229.

412. *Id.* at 231.

As there is mistrust in paper money such as the dollar, there is an increasing demand to accumulate gold as a reserve asset. As Mario Draghi, head of the European Central Bank declared in 2013, “I never thought it wise to sell [gold] because for central banks this is a reserve of safety. It’s viewed by the country as such. In the case of non-dollar countries, it gives you a fairly good protection against fluctuations of the dollar.”⁴¹³ This Article has connected seemingly disparate dots in the international economic system to warn about the dangers that lie beneath the dollar’s apparent strength. Before any serious efforts to defend the system can be mustered,⁴¹⁴ the first task is to realize that positive snapshots, a rallying stock market, a strong dollar, a robust economic recovery, or a slowdown in China’s economy⁴¹⁵ may in fact be deceiving because what lies beneath are fault lines that pose fundamental danger to the post-World War II international economic regime.

413. *Id.* at 236.

414. Common sense suggestions have been put forth. *See, e.g.*, Warnock, *supra* note 396 (suggesting that preserving dollar hegemony means bold fiscal adjustments to end “persistent borrowing from abroad. . . [to finance] persistent increases in government and household consumption”). Some have focused on reforming the international financial system through regulatory mechanisms to manage systemic risks. *See generally* Yesha Yadav, *The Specter of Sisyphus: Re-making International Financial Regulation After the Global Financial Crisis*, 24 EMORY INT’L L. REV. 83 (2010). Others have proposed a more coordinated international response, focusing on “comprehensive exchange rate adjustments that would limit the destabilizing effect that accumulation of massive reserves in one currency has produced.” Juscelino F. Colares, *Global Imbalances and Liquidity-Induced Bubbles: Reflections on the Great Recession and the Need for International Monetary Reform*, 60 SYRACUSE L. REV. 603, 605 (2010).

415. Since Russia and China signed the gas pipeline deal in 2014, the Chinese economy has decelerated and gas price has plunged. *See supra* notes 288-290; Edward C. Chow & Michael Lelyveld, *Russia-China Gas Deal and Redeal*, CTR. FOR STRATEGIC & INT’L STUD. (Apr. 10, 2016), <http://csis.org/publication/russia-china-gas-deal-and-redeal>; Jack Farchy, *Gazprom’s China Contract Offers No Protection Against Low Prices*, FIN. TIMES (Apr. 10, 2016), <http://www.ft.com/cms/s/0/4ac1cdd6-3f79-11e5-9abe-5b335da3a90e.html#axzz4JrCWyURN>; Michael Lelyveld, *Russia Presses China for New Gas Deal*, RADIO FREE ASIA (Aug. 31, 2015), http://www.rfa.org/english/commentaries/energy_watch/russia-presses-china-for-new-gas-deal-08312015105116.html.