1-1-2010

The Changing Face of Money

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Repository Citation
THE CHANGING FACE OF MONEY

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I. Introduction

It is a truism that each generation views money differently. Parents of baby boomers, having lived through the Great Depression, are understandably said to be savers. Boomers themselves, on the other hand, while “arguably the most prosperous generation in American history,” have tended to short-change saving for retirement—though often to assist their adult children, “from paying their college loans and allowing them to move home and live rent free, to paying off their credit card debt and making mortgage payments for them.”¹ Tellingly, the U.S. personal savings rate plummeted from 10.1 percent in 1970 to 0.8 percent in 2005, while the household financial obligations ratio rose from 13.4 percent in 1980 to 17.6 percent in 2007.² Consumer spending, meanwhile, “has become the largest component of U.S. gross domestic product,” representing over two-thirds of U.S. economic activity.³

² See Harold James, The Enduring International Preeminence of the Dollar, in THE FUTURE OF THE DOLLAR 24, 36 (Eric Helleiner & Jonathan Kirshner eds., 2009); Federal Reserve Board, Household Debt Service and Financial Obligations Ratios, http://www.federalreserve.gov/Releases/housedebt/. The household financial obligations ratio represents the ratio of various estimated payments (i.e. mortgages, consumer debt, automobile leases, rental payments on tenant-occupied property, homeowners’ insurance, and property taxes) to disposable personal income. Id.
In this light, perhaps there is some justice in the refrain that kids these days don’t know the value of a dollar. To be fair, however, the dollar itself is a moving target. For example, silver certificates from my grandfather’s collection suggest that the value of the U.S. dollar may have been a more straightforward matter back in the day. One such certificate, series 1957A, forthrightly states: “This certifies that there is on deposit in the Treasury of the United States of America one dollar in silver payable to the bearer on demand.” A dollar bill plucked from my billfold, though aesthetically similar, provides no such certification. Cryptically labeled “Federal Reserve Note,” my series 2006 dollar offers no explanation of its value, simply declaring its adequacy as “legal tender for all debts, public and private.”

As I write this essay, the dollar’s adequacy is a matter of considerable debate. In the wake of a catastrophic financial and economic crisis, there is strong visceral appeal to the notion that one could hand in paper currency and demand a tangible lump of precious metal in return. Amidst reports of a potential downgrade of U.S. sovereign debt; volatility in credit default swaps on U.S. Treasury securities (a form of quasi-insurance against default);

4 Cf. Colin Barr, Dollar takes another drubbing, CNNMONEY.COM, Oct. 6, 2010, http://finance.fortune.cnn.com/2010/10/06/dollar-takes-another-drubbing/ (linking the rising price of gold to the expectation of increases in the money supply); Carolyn Cui, Gold Vaults to New High, WALL ST. J., Sept. 29, 2010, at A1-A2 (linking gold’s rise to concern that “if the Federal Reserve pumps more money into the system, its efforts might hurt the value of the U.S. dollar and possibly stoke inflation”); Liam Hallingan, Policy makers must do more than print money and hope for the best, THE TELEGRAPH, Sept. 25, 2010, http://www.telegraph.co.uk/finance/comment/liamhalligan/8025121/Policy-makers-must-do-more-than-print-money-and-hope-for-the-best.html (“[I]t’s no surprise that many investors are now taking refuge in tangible assets, anything that Western governments can’t debase by printing more of.”).


clamoring by dollar-saturated foreign governments to reduce global reliance on the greenback in international trade and finance; and concerns regarding the efficacy and consequences of the Federal Reserve’s expansion of the money supply following the crisis, there is growing anxiety at home and abroad that our monetary foundation may be eroding.

Such headlines raise important questions about how we finance our lives—both individually and collectively. What would it mean to reduce global reliance on the dollar? What alternatives exist, and how might they affect the United States? What is the value of a dollar in the first place? How might the dollar’s value change in the wake of the crisis?

In this essay I argue that widespread failure to comprehend the intrinsic nature of modern money loomed large in the recent crisis, and that broader comprehension of its meaning is a precondition for effective post-crisis reforms. First, I provide a brief history of money, emphasizing its gradual divergence from inherent value. I then consider the value of today’s dollar in economic, legal and psychological terms, arguing that each perspective conveys a single over-arching lesson—that better comprehending our money requires better comprehending ourselves. The introspection that this exercise demands reveals with unique clarity some of the critical lessons of the crisis and its aftermath.

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7 See, e.g., Andrew Batson, China Takes Aim at Dollar, WALL ST. J., Mar. 24, 2009, at A1 (“China called for the creation of a new currency to eventually replace the dollar as the world’s standard, proposing a sweeping overhaul of global finance that reflects developing nations’ growing unhappiness with the U.S. role in the world economy.”); Robert Fisk, The demise of the dollar, THE INDEPENDENT, Oct. 6, 2009, http://www.independent.co.uk/news/business/news/the-demise-of-the-dollar-1798175.html (reporting that “Gulf Arabs are planning—along with China, Russia, Japan and France—to end dollar dealings for oil”); John Ydstie, Dollar Loses Its Luster As Reserve Currency, NPR, Oct. 9, 2009, http://www.npr.org/templates/story/story.php?storyID=113650226 (reporting that “there’s been renewed talk in some quarters of finding an alternative for the dollar as the world’s major reserve currency—and, also, pricing oil in something other than dollars”).

8 See supra note 4.
II. A Brief History of Money

Money evolved as a means of facilitating transactions in goods and services. Adam Smith, having outlined the benefits of a division of labor in Book I of The Wealth of Nations, speculates that exchanging one’s surplus for that of another in earlier times “must frequently have been very much clogged and embarrassed in its operations”—because in a barter economy, value-enhancing exchanges occur only when each party requires precisely what the other offers.9 This, concludes Smith, must have led “every prudent man in every period of society” to seek to have on hand “a certain quantity of some one commodity or other, such as he imagined few people would be likely to refuse in exchange for the produce of their industry.”10

A widely valued commodity, as Smith suggests, can perform the core functions that economists ascribe to money. Niall Ferguson explains that in addition to providing “a medium of exchange” avoiding the “inefficiencies of barter,” money serves as “a unit of account, which facilitates valuation and calculation,” as well as “a store of value, which allows economic transactions to be conducted over long periods as well as geographical distances.”11 While any number of resources might serve as a medium of exchange, a unit of account and a store of value, there has long been a strong attraction to metals. Ferguson observes that the ideal commodity must be “available, affordable, durable, fungible, portable and reliable,” and that metals like gold and silver “were for millennia regarded as the ideal monetary raw material” precisely because they possess this suite of practical attributes.12

Due to the widespread use of gold and silver coins through the ages, and their resulting popular association with wealth, there has long been a colloquial tendency to speak of money and such

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10 Id.
metals as if they possessed some fixed, intrinsic worth. That money itself is subject to the same law of supply and demand as any commodity, however, is a lesson that nations have learned the hard way. Smith, for example, recounts that Spain’s “discovery of the abundant mines of America reduced, in the sixteenth century, the value of gold and silver in Europe to about a third of what it had been before”—the straightforward consequence being that “when they were brought thither they could purchase or command less labour.”

Quantifying value at a point in time is of course critical to money’s economic utility, rendering it, in Smith’s words, “the great wheel of circulation.” As Smith rightly observes, however, value “does not so properly consist in the piece of gold, as in what [one] can get for it”—that is, its purchasing power, which inevitably varies over time.

Money, then, has always been at most a proxy for real value. Over the course of centuries, however, creative financial innovations have progressively taken the concept to further heights of abstraction, gradually substituting for metals the paper bills we take for granted today. While gold reigned supreme as the “traditional standard of value” from the earliest use of coins (about 700 B.C.), paper money evolved alongside it, eventually displacing it over the last century.

Thought to have originated in third-century B.C. China, accounts of paper money first reached Europe through Marco Polo’s account of Kublai Khan’s money in the late-thirteenth century A.D. Explaining that “the Great Khan” had “mastered the art of alchemy,” Polo describes the production of paper money from the bark of mulberry trees—appropriately enough, the food source for that engine of ancient commerce, the silk worm. Kublai Khan’s paper money exemplifies what economists today call “fiat money”—money not linked to any commodity, but simply declared by a sovereign to constitute legal currency. While the value of modern fiat money is substantially a function of market perception (explored

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13 Smith, supra note 9, ¶ 1.5.7.
14 Id. ¶ I.2.23.
15 Id. ¶ I.2.19.
19 See Snodgrass, supra note 16, at 163.
below), Kublai Khan took a far more direct approach, simply decreeing that anyone within his kingdom refusing to accept this money would be executed (as would forgers). Polo assures the reader that “all peoples and populations who are subject to this rule are perfectly willing to accept these papers in payment.”

While Europeans would ultimately adopt paper money as well, it would emerge first in the marketplace, and its rise would accompany that of modern banking systems and debt markets. Negotiable “bills of exchange” arose during the Middle Ages to facilitate trade among merchants, permitting those selling on credit to “either use the bill as a means of payment in its own right or obtain cash for it at a discount from a banker willing to act as broker”—the core business of the Medici in fifteenth-century Florence. Northern European commercial centers built on their model, developing systems permitting direct debit-based payments (the Amsterdam Wisselbank); “fractional reserve banking,” allowing depositors’ money to be lent to borrowers, with only some small fraction retained to satisfy withdrawals (the Stockholms Banco); and finally banknotes, the issuance of which was eventually monopolized by a single state-recognized entity (the Bank of England).

In Europe the value of this new form of currency long remained linked to metals. As Smith describes it, eighteenth-century paper money effectively represented an efficiency-enhancing stand-in for metals, deriving value from the public’s faith in its exchangeability for gold and silver. “When the people of any particular country have such confidence in the fortune, probity and prudence” of the issuing bank, “those notes come to have the same currency as gold and silver money.” Smith accordingly suggests that “judicious operations of banking, by substituting paper in the room of a great part of this gold and silver,” permit more of a nation’s capital to be put to productive use at any given time, because the gold and silver itself need not be bound up in the form of

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20 See POLO, supra note 18, at 147-48.
21 FERGUSON, supra note 11, at 43-45.
22 Id. at 49-50. Fractional reserve banking, in particular, creates a multiplier effect, increasing the money supply as successive banks effectively lend and re-lend the same money, in each case retaining only a small portion as reserves. Id. at 51-52.
23 SMITH, supra note 9, ¶ II.2.28.
circulating money—just as a “waggon-way through the air” would permit a greater portion of the nation’s land to be tilled.\textsuperscript{24}  

Notes of the Bank of England were made legal tender in 1718 when the institution became a “Royal Bank,”\textsuperscript{25} but imbuing paper money with the status of legal tender was long approached with great suspicion in the United States.\textsuperscript{26} Indeed, the gradual shift toward paper money in the United States over the late nineteenth and early twentieth centuries was largely crisis-driven and, at each step, legally controversial. While the U.S. Constitution gives Congress express authority “[t]o coin Money, regulate the Value thereof, . . . and fix the Standard of Weights and Measures,”\textsuperscript{27} its authority to create paper money was left entirely unclear by the framers.\textsuperscript{28} The efficiency benefits of banknotes were well understood, and in fact bearer notes convertible into gold or silver issued by state-chartered banks became “the functional money of the United States” in the early nineteenth century, constituting “the bulk of the money supply” by the 1860s.\textsuperscript{29} The federal government itself, however, would turn to paper money only episodically, to finance war efforts in the face of dwindling gold and silver reserves—notably in the War of 1812, and then more concertedly in the Civil War.\textsuperscript{30}

United States notes were initially issued in 1862,\textsuperscript{31} and the constitutionality of making them legal tender for private debts—particularly in peacetime—was a hotly contested matter that would not be definitively resolved by the U.S. Supreme Court until 1884.\textsuperscript{32} Notwithstanding the lack of express constitutional authority for Congress to create a national paper currency, the Court nevertheless

\textsuperscript{24} Id. ¶ II.2.86.  
\textsuperscript{25} See Khan, supra note 12, at 412-13, n.95.  
\textsuperscript{26} See, e.g., Gerard N. Magliocca, A New Approach to Congressional Power: Revisiting the Legal Tender Cases, 95 GEO. L.J. 119, 134 (2006) (“Paper money was greeted with great hostility by constitutional lawyers until the 1860s.”).  
\textsuperscript{27} U.S. CONST. art. I, § 8, cl. 5.  
\textsuperscript{28} See, e.g., Khan, supra note 12, at 404-407.  
\textsuperscript{29} See id. at 408-17, 430.  
\textsuperscript{30} See id. at 421-26; Magliocca, supra note 26, at 134-37.  
\textsuperscript{31} See U.S. Dep’t of Treas., Legal Tender Status, https://ustreas.gov/education/faq/currency/legal-tender.shtml. United States Notes remain legal tender, but because they “serve no function that is not already adequately served by Federal Reserve Notes, their issuance was discontinued, and none have been placed in to [sic] circulation since January 21, 1971.” Id.  
\textsuperscript{32} See Magliocca, supra note 26, at 120-24.
concluded in *Juilliard v. Greenman* that Congress possesses such power “as incident to the power of borrowing money, and issuing bills or notes of the government for money borrowed”—a conclusion “fortified” by Congress’ express authority to coin money and to regulate foreign and interstate commerce.\(^{33}\)

In a strongly worded dissent, Justice Field argued that the power to coin money included nothing beyond “mould[ing] metallic substances” into coins suitable for circulation, while the power to borrow money included nothing more than authority for the government itself “to contract for a loan of money.”\(^{34}\) This latter power, he emphasized, “is a very different one from a power to deal between parties to private contracts in which the government is not interested, and to compel the receipt of these promises to pay in place of the money for which the contracts stipulated.”\(^{35}\) Field went further, however, arguing that paper could not conceivably replace metals as a “standard of value” because it lacks the practical intrinsic attributes of metals, which “are not dependent upon legislation” and “cannot be manufactured or decreed into existence.”\(^{36}\) He ominously concluded that “only evil [was] likely to follow” from the Court’s holding, in matters of fiscal and monetary policy, given the “inborn infirmity” of paper money.\(^{37}\) “If Congress has the power to make the notes a legal tender and to pass as money or its equivalent,” he asked, then “why should not a sufficient amount be issued to pay the bonds of the United States as they mature?”\(^{38}\) Likewise, “why should there be any restraint upon unlimited appropriations . . . if the printing press can furnish the money that is needed for them?”\(^{39}\)

Cases challenging the legitimacy of paper money would long continue to arise. The Supreme Court’s opinion in *Juilliard v. Greenman*, however, effectively ended the legal debate regarding its constitutionality.\(^{40}\) As the Ninth Circuit, facing one such challenge in


\(^{34}\) *Juilliard*, 110 U.S. at 459-463 (Field, J., dissenting).

\(^{35}\) Id. at 461-62.

\(^{36}\) Id. at 462-63.

\(^{37}\) Id. at 470.

\(^{38}\) Id.

\(^{39}\) Id.

\(^{40}\) For additional background on the impact of *Juilliard v. Greenman* and related cases on the Supreme Court’s analysis of Congress’ constitutional powers, see generally Magliocca, supra note 26. See also Khan, supra note 12, at 426-29.
1974, wistfully reflected, “[w]hile we agree that golden eagles, double eagles and silver dollars were lovely to look at and delightful to hold, we must at the same time recognize that time marches on.”

The controversy over United States notes demonstrated that imbuing slips of green paper with legal tender status was difficult enough to comprehend, but further challenges lay ahead as the exchangeability of paper money for gold and silver eroded. Federal Reserve notes were essentially banknotes at the time of their creation in 1913—negotiable, redeemable for gold on demand and not a form of legal tender for private debts. However, following the enormous wave of bank failures in the 1930s, accompanied by substantial withdrawals of gold from the banking system, Congress acted to halt redemption and force acceptance of Federal Reserve notes as legal tender for all public and private debts.42 The President was authorized to prohibit export of gold; the U.S. Treasury was authorized to demand delivery of all gold coins, bullion and gold certificates in exchange for U.S. currency; and so-called “gold clauses,” creating obligations requiring payment in gold coin at a stated standard of weight and fineness, were declared dischargeable by payment in any legal tender.43 In a series of decisions that came to be known as the “gold clause cases,” the U.S. Supreme Court upheld repayment of the face value of various obligations in depreciated

41 Milam v. United States, 524 F.2d 629, 630 (9th Cir. 1974, as amended 1975) (rejecting Milam’s demand that a $50 Federal Reserve note be redeemed in gold or silver, citing Juilliard v. Greenman). See also United States v. Gardiner, 531 F.2d 953 (9th Cir. 1976) (rejecting the argument that no tax was owed because Federal Reserve notes received did not constitute lawful money, citing Milam); Leitch v. Dep’t of Revenue, 1982 Ore. Tax LEXIS 26 (Or. T.C. 1982) (rejecting argument that Federal Reserve notes must be converted to gold and silver before tax could be assessed, citing Juilliard v. Greenman); Leitch v. Dep’t of Revenue, 1994 Ore. Tax LEXIS 32 (Or. T.C. 1994) (rejecting argument that assessed value of property should be reduced based on theory that paper money is unconstitutional, citing Juilliard v. Greenman); Radue v. Zanaty, 308 So. 2d 242 (Ala. 1975) (declaring “null and void” statements written on checks “to the effect that they were to be paid only in gold or silver coin,” citing Juilliard v. Greenman).

42 See Khan, supra note 12, at 436-37. See also 31 U.S.C. §§ 5103 (rendering Federal Reserve notes “legal tender for all debts”), 5118(b) (“The United States Government may not pay out any gold coin.”).

currency, including railroad bonds, U.S. gold bonds, and U.S. gold certificates. In a strongly worded dissent reminiscent of Field’s dissent in *Juilliard v. Greenman*, Justice McReynolds charged that, “under the guise of pursuing a monetary policy, Congress really has inaugurated a plan primarily designed to destroy obligations, repudiate national debts and drive into the Treasury all gold within the country, in exchange for inconvertible promises to pay, of much less value.” Observing that the government itself had realized billions in “counterfeit profits” through a “legislative fiat” based on “debasement of the dollar,” McReynolds—in a similarly ominous conclusion—warned that a “[l]oss of reputation for honorable dealing” would bring “unending humiliation.”

No longer exchangeable for gold or silver, the supply of “money” would effectively become synonymous with the liabilities of the financial system, giving its definition “a somewhat arbitrary quality.” Today, economists define the money supply in various ways, including not only currency and bank deposits, but differing forms of “near money” as well—highly liquid “cash equivalents” such as money market fund shares and even government securities. Meanwhile, the tangibility of money has greatly attenuated in an era of electronic transfers—to the point that physical money “accounts for just 11 per cent of the monetary measure known as M2,” the broader of the two measures used in the United States. Modern money—essentially a representation of the creditor-debtor relationship—is fundamentally an expression of faith in the complex of mediating institutions that constitute the financial system.

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44 See generally id.
47 See Perry, 294 U.S. at 369 (McReynolds issuing a single dissent in response to all of the “gold clause cases”).
48 See id. at 381.
49 See *Ferguson*, supra note 11, at 52.
51 *Ferguson*, supra note 11, at 30-31, 52-53, 343. See also Federal Reserve Bank of New York, The Money Supply, [http://www.newyorkfed.org/aboutthefed/fedpoint/fed49.html](http://www.newyorkfed.org/aboutthefed/fedpoint/fed49.html); *Downes & Goodman*, supra note 50, at 426-27; B. Khan, supra note 12, at 442. The Federal Reserve uses two measures of the money supply—M1 and M2. The former “is restricted to the most liquid forms of money; it consists of currency in the hands of the public; travelers checks; demand deposits, and other deposits against which
Notwithstanding the United States’ effective abandonment of the gold standard in 1933,52 the status of the U.S. dollar would be bolstered—and its intrinsic nature would grow even more complex and abstract—due to the increasingly central position of the United States in a globalizing world. Just as individuals and firms use money to exchange, measure, and store value, so do nations. In the nineteenth century, the British pound sterling became what economists today call an “international currency”—a stable currency considered particularly attractive for international transactions, investment of government reserves and anchoring of less stable currencies (accomplished through currency pegs).53 The British pound’s position as an international currency was underwritten by gold convertibility, as well as the “hegemonic role of Victorian Britain as an enforcer of Pax Britannica and the position of the City of London . . . as the world’s clearing house.”54 By the 1940s, the economically and militarily dominant United States and the U.S. dollar had assumed this role through the post-war Bretton Woods system, which—following the dislocation of the interwar period—prioritized price stability through fixed exchange rates based on dollars (nominally convertible into gold), and freedom to pursue expansionary fiscal and monetary policies aimed at promoting domestic social stability.55 Given the system of fixed exchange rates,
controls on the flow of money across borders were required to permit the pursuit of expansionary policies without “suffering the outflow of capital in search of a higher rate of interest or a lower rate of inflation.”

The Bretton Woods system “was extremely successful in promoting stability and economic growth in the aftermath of [World War II],” but by the 1970s the increasing impracticability of controlling cross-border capital movements, coupled with a growing U.S. trade deficit, rendered it unsustainable. On August 15, 1971, the United States abandoned gold convertibility entirely, allowing its currency to float freely against other currencies. “From that day onward,” as Ferguson observes, “the centuries-old link between money and precious metal was broken.”

As it turns out, severing that link did not diminish the dollar’s long-term global centrality, as a practical matter (explored below). It has arguably rendered the value of today’s dollar more difficult to comprehend, however, as a conceptual matter.

### III. The Value of a Dollar

The foregoing history, though cursory, permits refinement of the core question: What is the value of a dollar? Recall my grandfather’s silver certificates, with their express assurance that the holder could convert them into silver—literally true until June 24,
1968. As we have seen, the value of paper money convertible into metal is abstract enough. But contrast with this today’s dollar, offering no explanation of its value beyond the label “Federal Reserve Note” and the assertion of its adequacy as legal tender.

Is this the Great Khan’s money all over again? Yes and no. Federal Reserve notes are decidedly fiat money—by statute they most assuredly constitute “legal tender for all debts, public charges, taxes and dues.” As the Treasury explains, however, this merely renders it “a valid and legal offer of payment for debts when tendered to a creditor.” There being no federal law mandating their acceptance, “[p]rivate businesses are free to develop their own policies on whether or not to accept cash unless there is a State law which says otherwise.”

The label “Federal Reserve Note” refers to the fact that our paper money is a creation of the Federal Reserve System—since 1913, our central bank. Curiously, while federal law provides that Federal Reserve notes “shall be redeemed in lawful money on demand,” it is unclear what this “lawful money” could consist of (in the absence of gold or silver convertibility) aside from more Federal Reserve notes. Indeed, the U.S. Treasury confirms that “Federal Reserve notes are not redeemable in gold, silver, or any

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62 See U.S. Dep’t of Treas., supra note 31. “For example, a bus line may prohibit payment of fares in pennies or dollar bills. In addition, movie theaters, convenience stores and gas stations may refuse to accept large denomination currency (usually notes above $20) as a matter of policy.” See supra note 61. Legal tender status effectively amounts to the same thing in England and Wales. See Bank of England, Banknote Frequently Asked Questions, http://www.bankofengland.co.uk/banknotes/about/faqs.htm (“Whether or not notes have legal tender status, their acceptability as a means of payment is essentially a matter for agreement between the parties involved.”).
65 See, e.g., Khan, supra note 12, at 439-41 (concluding that “lawful money for the redemption of Federal Reserve notes is non-existent”). The same is true of Bank of England notes, which—withstanding an express promise on the face of the note “to pay the bearer on demand” the given sum in pounds—“can only be exchanged for other Bank of England notes of the same face value.” See Bank of England, supra note 62.
other commodity, and receive no backing by anything.”66 The statute further provides, however, that these notes are “obligations of the United States.”67 To get them, a Federal Reserve Bank must set aside “collateral in amount equal to the sum of the Federal Reserve notes” requested,68 and, once issued, the notes “become a first and paramount lien on all the assets of such bank.”69 The point, according to the U.S. Treasury, is that “if the Congress dissolved the Federal Reserve System, the United States would take over the notes”—that is, assume the obligations they represent—but “would also take over the assets, which would be of equal value.” Federal Reserve Banks may acceptably set aside various forms of collateral, but according to the Treasury, most collateral in fact takes the form of “U.S. Government securities.”70

In the first instance, then, today’s dollar would seem to derive its value, as a legal matter, from its status as a liability of the Federal Reserve, which in turn derives value from a federal government guarantee. But whence the value of the federal government guarantee? To be sure, there would be collateral on hand, per federal law, if Congress ever saw fit to dissolve the Federal Reserve System—which it expressly reserved the right to do in the Federal Reserve Act.71 But the collateral backing these obligations of the United States would themselves, according to the Treasury, predominantly consist of obligations of the United States. In the government’s own hands, the collateral supporting the value of Federal Reserve notes would represent IOUs to itself—an accounting fiction.72

66 See U.S. Dep’t of Treas., supra note 31.
68 See id. § 412.
69 See id. § 414.
70 U.S. Dep’t of Treas., supra note 31; U.S. Dep’t of Treas., Distribution of Currency and Coins, https://ustreas.gov/education/fact-sheets/currency/distribution.shtml. See also 12 U.S.C. § 412 (providing that collateral may include, among other things, “any obligations which are direct obligations of, or are fully guaranteed as to principal and interest by, the United States or any agency thereof”).
71 See Federal Reserve Act § 31 (omitted from U.S. Code) (“The right to amend, alter, or repeal this Act is hereby expressly reserved.”).
Though perhaps difficult to imagine, this thought experiment does tend to suggest that the value of the U.S. government’s guarantee must ultimately derive from some source other than the “collateral” nominally supporting the issuance of Federal Reserve notes. Presumably its value must be underwritten by Congress’ fundamental constitutional power to “lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts . . . of the United States.”\textsuperscript{73} To be sure, laying and collecting taxes in the form of Federal Reserve notes to support the value of Federal Reserve notes would seem pointlessly circular,\textsuperscript{74} though the U.S. Supreme Court has suggested that Congress possesses constitutional authority to tax in-kind\textsuperscript{75}—say, in the form of some valuable commodity.

To be clear, I do not mean to suggest that there is any realistic possibility of events actually unfolding in this manner in the foreseeable future. I trace the legal value of today’s dollar back to its apparent source to emphasize a reality that many will find uncomfortable: The dollar in your billfold essentially derives its value from you—more specifically, your productive capacity.\textsuperscript{76}

Few Americans could be expected to explain the metaphysics of modern money.\textsuperscript{77} But the notion that our currency is exchange for government securities—“nothing more than a promise to pay back the money”).

\textsuperscript{73} U.S. CONST. art. I, § 8, cl. 1.
\textsuperscript{74} See 12 U.S.C. § 411 (rendering Federal Reserve notes “receivable . . . for all taxes”).
\textsuperscript{75} See Lane County v. Oregon, 74 U.S. 71, 77-78 (1869) (upholding a state tax requiring payment “in gold and silver coin,” observing that the power to tax “is as complete in the States as the like power, within the limits of the Constitution, is complete in Congress”); Leonard & Leonard v. Earle, 279 U.S. 392, 396-97 (1929) (upholding a state “privilege tax equal to 10% of the market value of the empty [oyster] shells resulting from [oyster packer’s] operations,” citing Lane County v. Oregon). See also Eduardo Moises Penalver, Regulatory Taxings, 104 COLUM. L. REV. 2182, 2208-11 (2004). For general discussion of the constitutional tension between taxation and takings doctrine, see generally Penalver, supra.
\textsuperscript{76} Cf. U.S. Dep’t of Treas., supra note 31 (suggesting that “Federal Reserve notes are ‘backed’ by all the goods and services in the economy”).
intrinsically a reflection of our own worth may nevertheless account for the great symbolic value of money. While commonly associated with material wealth and power in narrow instrumental terms, a moment’s glance at any currency demonstrates its simultaneous potency as a vehicle for national self-representation.

Consider the resonance of banknotes featuring great UK writers and thinkers—including Adam Smith, who appears on the £20 note with an illustration of the “division of labour in pin manufacturing” and “the great increase in the quantity of work that results.” The €20 note, interestingly, couples a map of Europe with an imaginary bridge—Benedict Anderson’s “imagined community” at work, symbolizing the bridging of disparate cultures and economies, to which the common currency itself is expected to contribute. The Canadian $5 bill, appropriately enough, depicts outdoor hockey—itself a unifying symbol of national culture in a diverse and geographically far-flung country.

Contrast with these our own drab Federal Reserve notes, which depict (in the words of the U.S. Treasury Bureau of Engraving and Printing) “portraits of famous, deceased American statesmen.” This may tend to suggest a preoccupation with leadership and strength—though the inscription “In God We Trust” perhaps conveys simultaneous misgivings about our ability to pull it off alone.

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78 See, e.g., FERGUSON, supra note 11, at 1 (observing this tendency).
81 See Bank of Canada, Bank note series, 1935 to present: $5 (upgraded), http://www.bankofcanada.ca/en/banknotes/general/character/2001-04_05b.html. The inscription, a quote from Canadian novelist Roch Carrier (presented both in English and in French), reads: “The winters of my childhood were long, long seasons. We lived in three places—the school, the church and the skating rink—but our real life was on the skating rink.”
82 See Bureau of Engraving and Printing, U.S. Currency Small Denominations, http://www.moneyfactory.com/uscurrency/smalldenominations.html. The inscription was proposed in 1863 by Salmon P. Chase, Secretary of the Treasury, as a reflection of “increased religious sentiment existing during the Civil War.” Since 1938, all U.S. coins have included this inscription, which in 1956 was declared the national motto. It first appeared on paper money on the reverse of 1957 one-dollar silver certificates (including my grandfather’s). See U.S. Dep’t of Treas., History of “In God
IV. The Mirror of Money

Given the apparent circularity of the dollar’s legal value, we might characterize the matter another way. Perhaps the dollar’s practical value is a function of public faith in the quality of U.S. policy—reflected most directly in the ability to sell the U.S. government securities serving as nominal “collateral.” After all, the bond market “passes a daily judgment on the credibility of every government’s fiscal and monetary policies” through “its ability to punish a government with higher borrowing costs.”

Indeed, the role of market perception becomes clearest in times of crisis, which reveal the deeper psychology of the public’s relationship with its money. Perhaps it is the very potency of money as a vehicle for symbols of national pride that renders a currency’s decline so viscerally painful, even shameful. Sociologist Elias Canetti famously characterized hyperinflation—a steep fall in the purchasing power of money—as a reflection of collective psychology, a “crowd phenomenon,” in which a currency “suddenly loses its identity.” He remarks of his own experience of hyperinflation that

[w]hat used to be one Mark is first called 10,000, then 100,000, then a million. . . . It is no longer like a person; it has no continuity and it has less and less value. A man who has been accustomed to rely on it cannot help feeling its degradation as his own. He has identified himself with it for too long and his

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confidence in it has been like his confidence in himself.85

Though worlds away from such extremes, similar undercurrents are detectable in post-crisis American popular culture. The satirical newspaper *The Onion* describes an “existential” breakdown by Federal Reserve Chairman Ben Bernanke who, while reporting to the Senate Finance Committee, comes to the sudden recognition that “money is, in fact, just a meaningless and intangible social construct.” News of the revelation that “money is nothing more than an elaborate head game” spreads across the country, leaving citizens marveling at “the little green drawings of buildings and dead white men they once used to measure their adequacy and importance as human beings.”86

Like all good satire, this magnifies something real—the growing sense of unreality associated with our financial system and our money. While the intricacies of the recent crisis lie beyond the scope of this essay, the upshot is that our banking system’s flair for expanding credit defeated itself soundly. Securitization—which involves pooling debt (e.g. residential mortgages) and then selling it to investors, freeing up money for new loans—spun well out of control due to the proliferation of investment structures of unmanageable complexity, obscuring the risks and encouraging weak lending standards to sustain the process.87 The resulting growth in personal indebtedness and build-up of risk in the financial system were matched and reinforced by growth of public indebtedness, as East Asian exporters and oil-rich nations continued to lend their substantial trade surpluses back to us by buying U.S. Treasury securities—a “recycling” process thought to have reduced interest

rates on long-term Treasuries, fueling investor demand for higher-yield mortgage-backed securities.88

Adam Smith, while recognizing that “judicious” banking could expand the nation’s productive capital, also warned that “commerce and industry . . . cannot be altogether so secure, when . . . suspended upon the Daedalian wings of paper money.”89 The same might be said of our further expansion of credit, suspended upon the Daedalian wings of securitized debt. Our use of securitization has been anything but “judicious,” and the heights to which it carried us only left us further to fall.

Our enormous public debt, however, reflects a longer-term and more fundamental problem.90 Over the last few decades the United States has moved from net creditor to net debtor, accounting for about three-quarters of global capital imports by 2000.91 Our global trade deficit grew from $329 billion in 1999 to $816 billion in 2008, and as of March 2010, the total U.S. public debt stood at $12.5 trillion—$8 trillion of which was held by the public, including $1.9 trillion held by China, Japan and various oil exporters.92 Continuing bailouts, stabilization efforts and rising Social Security and Medicare obligations will make matters considerably worse, creating enormous

89 SMITH, supra note 9, ¶ II.2.86.
challenges for U.S. policymakers. We could gamble that surplus-generating governments will continue to finance our deficits, and hope that U.S. households sobered by the crisis might save more, but neither can be taken for granted.

The dollar’s future depends critically on how attractive global market actors and governments find the dollar moving forward. The core U.S. advantage is a high degree of security and stability, underwritten by a predictable, functional legal system and deep, liquid markets. Our regulatory and market institutions have clearly taken a battering, yet the dollar remains relatively stable (at this writing) for two reasons. First, China and other exporters are locked in because they already hold so much. They may advocate re-denominating dollar-based markets (notably oil) and seek alternative reserve currencies, but their enormous dollar holdings strongly disincentive rocking the boat too vigorously. Second, while concerns regarding U.S. deficits may eventually undermine the dollar’s status—undercutting our ability to fund deficit spending through overseas borrowing—this assumes the existence of some better alternative. Given the euro’s woes following the Greek debt debacle—revealing the inability of European institutions to deal effectively with crises—the U.S. dollar retains its relative luster for the time being.

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94 See FERGUSON, supra note 11, at 362; POZEN, supra note 87, at 327-30.


96 See, e.g., Bradsher, supra note 95; Benjamin J. Cohen, Toward a Leaderless Currency System, in THE FUTURE OF THE DOLLAR, supra note 2, at 142, 147-52; James, supra note 2, at 28-29; Kirshner, supra note 59, at 194-95; Ronald McKinnon, U.S. Current Account Deficits and the Dollar Standard’s Sustainability: A Monetary Approach, in THE FUTURE OF THE
The critical point, however, is that failure to address our deficits will leave the dollar’s future entirely in the hands of others. As noted above, there have been bad signs in the market, including reported threats of sovereign downgrade and volatility in credit default swaps on U.S. Treasuries. Outright default is not the issue, of course, given our extraordinary ability to borrow in our own currency. The real risk lies in turning on the printing presses, leading to inflation. As Robert Pozen observes, “due to its involvement in the bailout program, the Federal Reserve has increased the size of its balance sheet from $850 billion in mid-2007 to over $2 trillion in mid-2009, and has decreased its holdings of U.S. Treasuries from 90 percent to 30 percent of its portfolio.” This deterioration, Pozen suggests, could undermine the Federal Reserve’s independence and capacity to take politically unpopular actions to fight inflation (i.e. raising interest rates). Treasury Secretary Timothy Geithner insists that the United States is “deeply serious” about tackling deficits, touting a new bipartisan “fiscal responsibility” commission, but the prospects remain bleak.


POZEN, supra note 87, at 332-34. See also Tobias Adrian & Hyun Song Shin, The Changing Nature of Financial Intermediation and the Financial Crisis of 2007-09 22-27 (FRB Staff Report no. 439, Apr. 2010); McKinnon, supra note 96, at 48-50.

Meanwhile, doubts regarding the Federal Reserve’s capacity to combat weaknesses in the economy by printing more money—coupled with fears that its efforts to do so may further hinder its ability to fight inflation in the long-run—have fueled a flight back to gold and silver, while threatening to undermine the credibility of the Federal Reserve System and the U.S. dollar alike.\(^9\) \textit{Onion}-esque references to further infusions of “funny money”\(^{100}\) and “cyber-cash”\(^{101}\) into the financial system (through sustained low interest rates and purchases of Treasury securities and mortgage-related “assets”—so-called “quantitative easing”) reflect a growing sense that our monetary system is eroding as the Federal Reserve flounders in search of a response to problems that are in fact far more fundamental than the availability of further credit. These include, among other things, our massive existing debt, our “bloated consumer economy,” and lower costs of production elsewhere.\(^{102}\)


\(^{101}\) See Hallingan, \textit{supra} note 4.

While I have suggested here that our debt presents enormous long-term challenges, it bears emphasizing that one could quite rationally favor fiscal stimulus, on the one hand, without favoring monetary stimulus, on the other. As Nobel Prize-winning economist Paul Krugman has observed, “fiscal expansion [is] relatively certain in its effect: if the government goes and buys a trillion dollars’ worth of stuff, that will create a lot of jobs. On the other hand, if the Fed goes out and buys a trillion[] dollars’ worth of long-term bonds”—increasing the money supply through quantitative easing—“the effect is quite uncertain, with many possible slips between the cup and the lip.”

He elaborates, “[t]he truth is that it’s very hard for central banks to get traction in a zero-rate world,” as “nobody is sure how much effect quantitative easing will have on long-term rates.” In the meantime, as another observer adds, while the ultimate consequences of quantitative easing remain “difficult to predict,” it is “no surprise that many investors are now taking refuge in tangible assets”—notably gold and silver, which, as markets have long understood, “governments can’t debase by printing more.”

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Here’s Why Quantitative Easing 2 Will Fail Spectacularly, BUS. INSIDER, Oct. 11, 2010, http://www.businessinsider.com/quantitative-easing-fail-spectacularly-2010-10 (“[T]he ’problem’ in the U.S. economy is not a lack of credit or high costs of credit: the problem is too much debt and the fact that there is no market demand which requires expanding business.”).

An inflation rate below the Federal Reserve’s implicit two-percent target has led some at the Fed to fear deflation, a “spiral of declining wages and prices.” See Chan, Federal Reserve Official Sees Chance of a New Boom-and-Bust Cycle, supra note 99. When short-term interest rates are effectively zero, the Federal Reserve’s remaining mechanism by which to attempt to spur economic activity is to increase the money supply. See, e.g., Paul Krugman, Monetary Versus Fiscal, CONSCIENCE OF A LIBERAL BLOG (N.Y. TIMES), Oct. 6, 2010, http://krugman.blogs.nytimes.com/2010/10/06/monetary-versus-fiscal/.

103 See Krugman, supra note 102.

104 See id. See also Quantitative Easing, FIN. TIMES LEXICON, http://lexicon.ft.com/term.asp?q=quantitative-easing (observing that there are substantial risks, including that "a central bank can lose money on its purchases," and that if taken too far, quantitative easing can "destroy the value of the currency" as well as "confidence in an economy").

105 See Hallingan, supra note 4. Compare with Juilliard v. Greenman, 110 U.S. 421, 463 (1884) (Field, dissenting, observing that gold and silver “are not dependent upon legislation or the caprices of the multitude,” and “cannot be manufactured or decreed into existence”).
V. Conclusion

The dynamics explored above reveal the dollar’s value to be a function of our own merits. Ferguson aptly characterizes money as “the mirror of mankind,” reflecting “the way we value ourselves and the resources of the world around us.” But our own mirror has been fogged by the dollar’s role as reserve currency and our unflagging capacity to obscure financial risks—a tendency reflected not only in the securitization structures precipitating the crisis, but also in the abuse of the Federal Reserve’s balance sheet that has followed. Our key challenge, then, will be mustering the self-awareness and discipline to discern our own warts in an imperfect mirror.

A dollar bill ought to prompt the question, “how good a credit are we?” Perhaps the way forward is to harness the great symbolic value of the dollar itself—say, by issuing a new series of bills with a mirror on the front and the National Debt Clock on the back. Given other pressing matters, I suspect this will not make the congressional agenda anytime soon. In the meantime, only the mind’s eye will allow us to see the dollar and ourselves for what we truly are.

106 FERGUSON, supra note 11, at 363.