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Can “IMFcoin” be Scaruffi's *Moneta Immaginaria*?

Alexander M. Heideman

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CAN “IMFCOIN” BE SCARUFFI’S *MONETA IMMAGINARIA*?

ALEXANDER M. HEIDEMAN*

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ABSTRACT

Cryptocurrencies have taken the world by storm. But these decentralized and unregulated digital fiat currencies have more in common with the currencies of ages past than many believe. These commonalities may result in the incorporation of new cryptocurrencies into older institutions. One such institution is the International Monetary Fund’s Special Drawing Rights (SDRs), which has been relegated to an afterthought in the international monetary system since the Nixon Shock in 1971. The Fund’s Managing Director recently made comments that indicated that the Fund is exploring the incorporation of a cryptocurrency into the framework of the SDR, a change which China and other emerging economies are bound to encourage because it would likely move the international monetary system away from the use of the powerful U.S. dollar as a reserve currency. Because the U.S. dollar remains the most important currency within the international monetary system, this Article first explores the legal status of U.S. currency and the creation of Bretton Woods after World War II and its implosion after the Nixon Shock. It then discusses the basic

* Washington D.C.-based attorney.

functions of SDRs and their past uses. Finally, this Article explores two options that the Fund may have in incorporating cryptocurrencies into SDRs: (1) redefining the SDR as its own unique cryptocurrency; and (2) incorporating a specific cryptocurrency within the SDR's basket of currencies.

INTRODUCTION

*Una fides, pondus, mensura, moneta sit una,
Et status illæsus totius orbis erit.*

– Budelius¹

Great societal unrest—fueled by the declining influence of corrupt and powerful institutions—can lead a disheartened and disillusioned people to look to a new monetary system based strictly on objective principles and removed from corruption and the whims of man. Today, this new monetary system might be a decentralized cryptocurrency, based on blockchain technology.² But during the Protestant Reformation, popular sentiment turned to a different kind of “world money.”³

Gasparo Scaruffi, the Italian economist, proposed a universal money system based on strict, scientific principles, with a silver-to-gold ratio of 12:1.⁴ In his system, money was to be uniform among all nations.⁵ He called this system *moneta imaginaria*, or the imaginary coin, because it was merely a money-of-account.⁶

But Scaruffi's patrons and contemporaries never adopted his idea. The *moneta imaginaria* concept, though, did not fade. Vauban—adviser to the Sun King, Louis XIV—promoted the use of physical world coins, based on a universal monetary system, in 1690.⁷ And it was the Napoleonic desire for world money that resulted in the creation of the Latin Monetary Union, the nineteenth-century attempt to adopt a universal coinage with an agreed-upon gold content.⁸ Immediately after World War II, however, the renowned law professor Arthur Nussbaum of Columbia University noted that “[w]hile international regulation of national monetary systems has long been on its way, the notion of ‘world money’ has proved sterile.”⁹

But World War II also brought the wreckage of the modern international

1. ARTHUR NUSSBAUM, MONEY IN THE LAW NATIONAL AND INTERNATIONAL: A COMPARATIVE STUDY IN THE BORDERLINE OF LAW AND ECONOMICS 547 (1950) (quoting BUDELIIUS, DE MONETIS ET RE NUMARIA (1591)). This phrase is often translated as, “One Faith, one Weight, one Measure, and one Coin / Would all the world in harmony enjoin.” E.g., ROBERT PHILLIPS, AMERICAN GOVERNMENT AND ITS PROBLEMS 720 (1941).

2. E.g., Teddy Wayne, *Grandpa Had a Pension, This Generation Has Cryptocurrency*, N.Y. TIMES (Aug. 3, 2017), <https://www.nytimes.com/2017/08/03/style/what-is-cryptocurrency.html> [<https://perma.cc/3AJP-YCEH>] (“Cryptocurrency has understandable appeal to millennials who came of age during the 2008 financial crisis and are now watching the rise of antiglobalist populism threaten the stability of the international economy.”).

3. See NUSSBAUM, *supra* note 1, at 547.

4. See *id.* at 548.

5. See *id.*

6. See *id.*

7. NUSSBAUM, *supra* note 1, at 550 (citing SEBASTIEN LE PRESTRE DE VAUBAN, VAUBAN: SA FAMILLE ET SES ECRITS (1910)).

8. See generally JOHN F. CHOWN, A HISTORY OF MONEY: FROM AD 800 83–92 (2005).

9. NUSSBAUM, *supra* note 1, at 552.

economic scheme, one especially dominated by European interests. Any budding international monetary system, therefore, would naturally be controlled by the world's most viable economy. This economy was undoubtedly American: The nation's Gross National Product rose from \$88.6 billion in 1939 to \$135 billion in 1944,¹⁰ whereas European economies were decimated. The International Monetary Fund (IMF), therefore, was created and directed by American interests. The American dollar—the backbone of the new international monetary system—became its own kind of world money and has carried unprecedented power ever since. In just 150 years, the U.S. dollar went from a provincial bimetallic currency to an international quasi-gold currency.

The IMF further established the U.S. dollar as world money with the proposal to create Special Drawing Rights (SDRs). The SDR was put forward by John Maynard Keynes in 1944 as a supplementary international reserve asset whose value was initially defined by a gold standard.¹¹ The IMF adopted the system in 1969 to "further advance toward the regulation of the international monetary system by law and by the exercise of reason under law."¹² But after the collapse of the Bretton Woods system in the 1970s—typically attributed to the Nixon Shock—the IMF redefined the SDR as a basket of world currencies focused primarily on the U.S. dollar, and it became somewhat of an afterthought in the global financial system.¹³

Recently, however, the IMF assembled financial experts to assess a broader role for the SDR and its potential contribution "to the smooth functioning of the international monetary system."¹⁴ And causing further excitement, the Managing Director of the IMF noted that the SDR could have a digital future.¹⁵ James Mackintosh of the *Wall Street Journal* dubbed this cryptocurrency version of the SDR the "IMFcoin."¹⁶ And as several powerful nations in the international community—including and, perhaps, especially China—encourage this development to eliminate the U.S. dollar's status and "exorbitant privilege,"¹⁷ the legal structure of this new cryptocurrency remains unexplored.

In Part I of this Article, I briefly discuss the history of the U.S. dollar's legal status—especially because it served as the basis of the Bretton Woods system and

10. ALAN S. MILWARD, *WAR, ECONOMY, AND SOCIETY 1939–1945* 63, 67 (1979).

11. Duncan Cameron, *Special Drawing Rights*, 36 INT'L J. 713, 714 (1981).

12. JOSEPH GOLD, IMF, PAMPHLET SERIES NO. 13, SPECIAL DRAWING RIGHTS (1969).

13. Press Release, International Monetary Fund, IMF Launches New SDR Basket Including Chinese Renminbi, Determines New Currency Amounts (Sept. 30, 2016).

14. Press Release, International Monetary Fund, The IMF Launches Consultations on the Role of the Special Drawing Right with External Advisory Group (Oct. 31, 2016).

15. Christine Lagarde, Managing Dir., IMF, Central Banking and Fintech—A Brave New World?, Address Before the Bank of England Conference (Sept. 29, 2017), <http://www.imf.org/en/News/Articles/2017/09/28/sp092917-central-banking-and-fintech-a-brave-new-world> [https://perma.cc/9A47-Z9YY].

16. James Mackintosh, *Forget Bitcoin, Have You Heard of IMFcoin?*, WALL ST. J. (Oct. 5, 2017), <https://www.wsj.com/articles/forget-bitcoin-have-you-heard-of-imfcoin-1507228382> [https://perma.cc/2DL9-PR2H].

17. See BARRY EICHENGREEN, *EXORBITANT PRIVILEGE: THE RISE AND FALL OF THE DOLLAR AND THE FUTURE OF THE INTERNATIONAL MONETARY SYSTEM* 4 (2011) ("This has long been a sore point for foreigners. . . . Charles de Gaulle made the issue a *cause célèbre* in a series of presidential press conferences in the 1960s. His finance minister, Valéry Giscard d'Estaing, referred to it as America's 'exorbitant privilege.'").

an international monetary order. I also examine the Nixon Shock and the resultant collapse of Bretton Woods.

Part II focuses specifically on the development of the SDR and its basic functions as well as past uses. Finally, in Part III, I explore the implications of two plausible methods of adopting a cryptocurrency version of the SDR: the redefinition of the SDR entirely as a cryptocurrency and the incorporation of a cryptocurrency within the current SDR basket.

I. HISTORY OF THE LEGAL STATUS OF U.S. CURRENCY

To best understand the postwar international monetary order, one must fully comprehend money's position as a central player in the development of the American economy.¹⁸ Frankly, this is because that international order was largely formed and dictated by American policy-makers and continues to be chiefly impacted by American economic policy.

Money has always claimed an important position in American society. John Locke noted that the unique invention of a capitalist monetary system in the West allowed for the accumulation of property without waste.¹⁹ The American Founders considered this accumulation and ownership of property fundamental.²⁰ The development of American monetary policy amply illustrates various legal regimes of bimetallism,²¹ fiat currencies,²² the gold standard,²³ and the quasi-gold standard.²⁴

Ultimately, these American experiences shaped the evolution of the Bretton Woods system.²⁵ And these American economic policies are precisely what would cause the demise of Bretton Woods in the 1970s.²⁶

A. *From bimetallism to the classic gold standard*

1. Bimetallic currency

In 1791, Alexander Hamilton recommended a bimetallic currency at a fixed 15:1 ratio of silver-to-gold,²⁷ despite his personal preference for a gold standard.²⁸ And,

18. See Christine Desan, *Money as a Legal Institution*, in *MONEY IN THE WESTERN LEGAL TRADITION: MIDDLE AGES TO BRETTON WOODS* 18, 18 (David Fox & Wolfgang Ernst eds., 2016).

19. See JOHN LOCKE, *THE SECOND TREATISE OF CIVIL GOVERNMENT AND A LETTER CONCERNING TOLERATION* 47 (J. W. Gough ed., Basil Blackwell & Mott Ltd. 1948) (1689) ("And thus came in the use of money—some lasting thing that men might keep without spoiling, and that, by mutual consent, men would take in exchange for the truly useful but perishable supports of life.").

20. See, e.g., Thomas G. West, *The Economic Principles of America's Founders: Property Rights, Free Markets, and Sound Money* 9 (Heritage Found., First Principles Series No. 32, 2010).

21. See *infra* Part I.A.1.

22. See *infra* Part I.A.2.

23. See *infra* Part I.A.3.

24. See *infra* Part I.A.4.

25. See *infra* Part I.B.

26. See *infra* Part I.C.

27. ALEXANDER HAMILTON, *REPORT ON THE ESTABLISHMENT OF A MINT* (1791), <https://founders.archives.gov/documents/Hamilton/01-07-02-0334-0004#ARHN-01-07-02-0334-0004-fn-0122> [<https://perma.cc/QD6F-ZWYF>].

28. Alexander Hamilton's viewpoint is outlined below:

Although [Hamilton] preferred a monometallic gold standard, he proposed a system of bimetallism, since "to annul the use of either of the metals, as money, is to abridge the

under its newly-enumerated constitutional powers,²⁹ Congress adopted his recommendation after very little debate.³⁰ This was known as the Coinage Act of 1792,³¹ and it fixed the gold dollar at 24.75 grains of pure gold and the silver dollar at 371.25 grains of pure silver.³² But the fixed ratio of 15:1 nearly precisely corresponded to the contemporaneous market silver-to-gold ratio, and, after the massive increase in silver production from Mexican mines during the early 1800s, gold coins disappeared from the U.S., and silver coins suddenly dominated the market.³³

Despite the economic changes, the standard remained until the Coinage Act of 1834,³⁴ which was notably the only Jacksonian reform measure quickly adopted by Congress.³⁵ Best understood in the context of Andrew Jackson's Bank War,³⁶ the Act adjusted the silver-to-gold ratio from 15:1 to 16:1, making gold significantly cheaper. This, in turn, resulted in silver's expulsion from the country, and gold was finally brought back into circulation.³⁷

2. Experimentation with fiat currency

The first form of American fiat currency would soon flourish.³⁸ The U.S. government, under financial pressures from the Civil War, began to issue treasury notes.³⁹ Convertibility of those notes, however, proved to be a concern.⁴⁰ So for the first time, in 1862, the government issued non-convertible legal tender to the amount of \$150 million.⁴¹ The value of this legal tender—known as greenbacks—rose and

quantity of the circulating medium; and is liable to all the objection which arise from a comparison of the benefits of a full, with the evils of a scanty circulation."

See PAUL STUDENSKI & HERMAN EDWARD KROOSS, *FINANCIAL HISTORY OF THE UNITED STATES* 62 (1952).

29. U.S. CONST. art. I, § 8 ("The Congress shall have power to . . . coin money, regulate the value thereof . . .").

30. See ANGELA REDISH, *BIMETALLISM: AN ECONOMIC AND HISTORICAL ANALYSIS* 11 (2000).

31. Coinage Act of 1792, ch. 16, 1 Stat. 246 (1792).

32. *Coinage Legislation*, 9 *BANKING L.J.* 105, 105 (1893).

33. See RON PAUL & LEWIS LEHRMAN, *THE CASE FOR GOLD* 31–32 (2d ed. 2011). This monetary principle is referred to as Gresham's Law, which states that "bad money drives good money out of circulation." See generally SCOTT G. DACKO, *THE ADVANCED DICTIONARY OF MARKETING: PUTTING THEORY TO USE* 243 (2008).

34. Coinage Act of 1834, ch. 95, 4 Stat. 699 (1834).

35. STEPHEN W. STATHIS, *LANDMARK LEGISLATION 1774–2002* 56 (2003).

36. This was the political struggle over the issue of re-chartering the Second Bank of the U.S. during Jackson's presidency. See generally PAUL KAHAN, *THE BANK WAR: ANDREW JACKSON, NICHOLAS BIDDLE, AND THE FIGHT FOR AMERICAN FINANCE* (2016). Proponents of the Coinage Act of 1834 believed that "by promoting the currency of gold they would strike a blow at the currency of bank notes, especially those of the Bank of the United States." Paul M. O'Leary, *The Coinage Legislation of 1834*, 45 *J. POL. ECON.* 80, 80 (1937).

37. JAMES S. OLSEN & ABRAHAM O. MENDOZA, *AMERICAN ECONOMIC HISTORY: A DICTIONARY AND CHRONOLOGY* 124 (2015).

38. Fiat currency is unbacked; therefore, it has no intrinsic value. See N. GREGORY MANKIW, *BRIEF PRINCIPLES OF MACROECONOMICS* 222 (2015). Rather, its value is based merely on government decree. See *id.*

39. CRAIG K. ELWELL, *CONG. RESEARCH SERV.*, R41887, *BRIEF HISTORY OF THE GOLD STANDARD IN THE UNITED STATES* 5 (2011).

40. "The policy of guaranteeing convertibility of currency into real commodities . . ." PATRICK COLLINS, *CURRENCY CONVERTIBILITY: THE RETURN TO SOUND MONEY* 1 (1985).

41. Legal Tender Act of 1862, ch. 33, 12 Stat. 345 (1862) ("That the Secretary of the Treasury is hereby authorized to issue, on the credit of the United States, one hundred and fifty millions of dollars of

fell during the Civil War, often based on Union battle successes and failures.⁴²

After the Civil War, Treasury Secretary Hugh McCulloch—fueled by concerns that fiat currency allowed for the politicization of monetary policy—began to withdraw the greenbacks from circulation.⁴³ The government's momentary experiment with fiat currency finished when the market exchange rate of greenbacks for gold was brought back to the antebellum level.⁴⁴ Withdrawal ended in 1878: frozen at about \$347 million in circulation.⁴⁵

3. The gold standard emerges

Congress officially ended bimetallism with the Coinage Act of 1873,⁴⁶ which decisively planted the nation on the gold standard. Due to a later economic crisis, critics derided the Act as the "Crime of '73,"⁴⁷ but it appears Congress intended not to overhaul the bimetallist system; the intention was merely to reestablish gold convertibility and eliminate fiat currency.⁴⁸ Alas, in defining the value of American currency within the Act, Congress failed to include the silver dollar.⁴⁹ The omission, however, proved economically powerful.

The resultant demonetization of silver by the Act was probably one of the causes of the Panic of 1873, the most severe economic recession in the U.S. until the Great Depression.⁵⁰ And once the American public became aware of these consequences, congressional advocates of silver passed the Bland-Allison Act in 1878,⁵¹ despite a veto by President Hayes.⁵² In an attempt to counteract deflation brought on by the Panic, this Act required the U.S. Treasury to put a specified amount of silver into circulation as silver dollars.⁵³ But American monetary policy has never been isolated from and unaffected by the global economy, so when world-silver prices fell, silver once again flooded the American market, where the price of silver was artificially high.⁵⁴

United States notes, not bearing interest, payable to bearer"); JAMES LAURENCE LAUGHLIN, *THE HISTORY OF BIMETALLISM IN THE U.S.* 87 (1891).

42. H. W. BRANDS, *GREENBACK PLANET: HOW THE DOLLAR CONQUERED THE WORLD AND THREATENED CIVILIZATION AS WE KNOW IT* 13 (2011) ("Along with ordinary happenings, we fellows in Wall Street had the fortunes of the war to speculate about," Daniel Drew, one of the most active speculators, recalled. "That always makes great doings on a stock exchange. It's good fishing in troubled waters.").

43. SAMUEL DECANIO, *DEMOCRACY AND THE ORIGINS OF THE AMERICAN REGULATORY STATE* 60 (2015).

44. ELWELL, *supra* note 39, at 6.

45. *Id.*; see also BENJAMIN J. KLEBANER, *AMERICAN COMMERCIAL BANKING: A HISTORY* 62 (1990) (stating that the \$347 million was left in circulation to appease agricultural interest).

46. Coinage Act of 1873, ch. 131, 17 Stat. 424 (1873).

47. *E.g.*, Peter Porcupine, *The Crime of '73*, N.Y. TIMES, Aug. 20, 1896, at 5.

48. ELWELL, *supra* note 39, at 6.

49. *Id.*

50. See STEVEN P. RETI, *SILVER AND GOLD: THE POLITICAL ECONOMY OF INTERNATIONAL MONETARY CONFERENCES, 1867–1892* 67–68 (1998).

51. Bland-Allison Act, ch. 20, 20 Stat. 25 (1878).

52. President Rutherford B. Hayes, Remarks at the House of Representatives (Feb. 8, 1878) (transcript available at the Miller Center of Public Affairs at the University of Virginia).

53. Bland-Allison Act, ch. 20, 20 Stat. 25 (1878) ("That there shall be coined, at the several mints of the United States, silver dollars . . . [which] shall be legal tender, at their nominal value, for all debts and dues public and private, except where otherwise expressly stipulated in the contract.").

54. See ELWELL, *supra* note 39, at 7.

The political struggle between proponents of the gold standard and proponents of bimetallism was at a high when William Jennings Bryan delivered his famed "Cross of Gold" speech during the presidential election of 1896.⁵⁵ But despite the populist fervor surrounding Bryan, William McKinley was the victorious candidate,⁵⁶ and, with his election, Congress passed the Gold Standard Act.⁵⁷ The Act reaffirmed governmental commitment to the gold standard, and, for the first time, a gold reserve for paper notes was formally established.⁵⁸

4. The quasi-gold standard

The gold standard remained in place during the early 1900s, but President Franklin D. Roosevelt was moved to action by the drastic conditions of the Great Depression and suspended gold convertibility. He signed an executive order requiring gold-coin "hoarders" to deliver their coins to the Federal Reserve, effectively criminalizing civilian possession of gold coins.⁵⁹

Congress then passed the Gold Reserve Act in 1934.⁶⁰ The Act limited gold transactions to official settlements with other countries' central banks and officially outlawed private possession of any gold.⁶¹ Gold coins were withdrawn from circulation and melted into bullion.⁶² So while the value of the dollar continued to be defined in terms of gold, American citizens could no longer convert their dollars into gold, thus creating the quasi-gold standard.⁶³

B. Bretton Woods and an international monetary order

It was under Roosevelt's quasi-gold standard—a gold standard without convertibility—that the Bretton Woods system was established. After three years of drafting by American and British officials, they planned to meet in the summer of 1944 at Bretton Woods, New Hampshire.⁶⁴ It was precisely the three years of thorough planning that caused IMF's official historian, Margaret Garritsen de Vries,

55. William Jennings Bryan, Address to the National Democratic Convention (July 9, 1896).

56. Bryan's supporters were typically those with agricultural interests, whereas McKinley's supporters were those with banking interests. *E.g.*, QUENTIN R. SKRABEC, JR., WILLIAM MCKINLEY: APOSTLE OF PROTECTIONISM 74 (2008) ("Most of the Republican Party stood with the Eastern bankers for the gold standard. The gold standard tightened the money supply and this particularly hurt the farmers. Farmers needed mortgages. The use of silver could help bring down interest rates.").

57. Gold Standard Act, ch. 41, 31 Stat. 45 (1900).

58. ELWELL, *supra* note 39, at 8.

59. Exec. Order No. 6102 (1933). The Executive Order addressed the issue of hoarding: The Executive order issued by the President yesterday amplifies and particularizes his earlier warnings against hoarding. On March 6, taking advantage of a wartime statute which had not been repealed, he forbade the hoarding "of gold or silver coin or bullion or currency," under penalty of \$10,000 fine or ten years' imprisonment or both.

Id.; see also *Hoarding of Gold*, N.Y. TIMES, Apr. 6, 1933, at 16.

60. Gold Reserve Act, Pub. L. No. 73-87, 48 Stat. 337 (1934).

61. Jewelry ownership was still allowed. See KWASI KWARTENG, WAR AND GOLD: A FIVE-HUNDRED-YEAR HISTORY OF EMPIRES, ADVENTURES AND DEBT 131 (2014).

62. *Id.*

63. ELWELL, *supra* note 39, at 11.

64. See Margaret Garritsen de Vries, *The Bretton Woods Conference and the Birth of the International Monetary Fund*, in THE BRETTON WOODS-GATT SYSTEM: RETROSPECT AND PROSPECT AFTER FIFTY YEARS 3, 3 (Orin Kirshner ed., 1996).

to call Bretton Woods "the most successful economic conference ever held."⁶⁵

At Bretton Woods, forty-five participating nations negotiated an agreement to establish a new exchange rate and an international payments policy.⁶⁶ The system was meant to deter some of the economic causes of the Great Depression, forcing participating nations to surrender a degree of their monetary sovereignty.⁶⁷ This willful surrender was likely motivated by a global desire to access IMF resources and U.S. monetary support for reconstruction in a postwar world.⁶⁸

The newly-established exchange rate was a pegged—or fixed—exchange rate.⁶⁹ This meant that the forty-five nations would determine the value of their respective currencies based on an agreed-upon and specified rate.⁷⁰ John Maynard Keynes—who, along with Harry Dexter White,⁷¹ spearheaded the economic policies behind Bretton Woods—proposed the creation of a new international reserve currency, which he called the "bancor."⁷² This was, in a way, another revival of Scaruffi's earlier *moneta imaginaria*: it was similar to a conceptual world money system and existed merely as a money-of-account. But the U.S. delegation avoided further discussion of the "bancor" at Bretton Woods in the hopes that the U.S. dollar would become the new reserve currency,⁷³ thus increasing the stature of the already-powerful dollar and American economy.

Ultimately, the agreed-upon Bretton Woods system imposed some important obligations on its members: Article III required members to pay their quota—25% of which was to be in gold⁷⁴—to the IMF; Article IV required members to keep their exchange rate within a 1% bandwidth around par values; and Article VIII forbade restrictions on current payments without the consent of the IMF.⁷⁵ All these

65. *Id.*

66. Peter Kugler, *The Bretton Woods System: Design and Operation*, in *MONEY IN THE WESTERN LEGAL TRADITION: MIDDLE AGES TO BRETTON WOODS* 611, 611 (David Fox & Wolfgang Ernst eds., 2016); see also Kurt Schuler & Mark Bernkopf, *Who Was at Bretton Woods?*, (Cent. for Fin. Stability, Paper in Financial History, 2014) (providing a complete list of attendees).

67. Kugler, *supra* note 66, at 611–12.

68. *Id.* at 612.

69. L. Randall Wray, *Introduction: The Continuing Legacy of John Maynard Keynes*, in *KEYNES FOR THE TWENTY-FIRST CENTURY: THE CONTINUING RELEVANCE OF THE GENERAL THEORY* 1, 10 (Mathew Forstater & L. Randall Wray eds., 2008).

70. See generally E. F. Schumacher, *Multilateral Clearing*, 10 *ECONOMICA* 150 (1943).

71. White was later accused of being a Soviet spy. See generally R. BRUCE CRAIG, *TREASONABLE DOUBT: THE HARRY DEXTER WHITE SPY CASE* (2004).

72. HENDRIK VAN DEN BERG, *INTERNATIONAL ECONOMICS: A HETERODOX APPROACH* 473 (3d ed. 2017).

73. *Id.* at 434. Others note that the structure of the U.S. federal government implicitly allows ambitious officials to discuss creative ideas in an international forum, but it limits the implementation of those ideas because they are "obliged to run the gauntlet created by an elaborate system of checks and balances inside the U.S. political structure; and in the process, any measures that would seem to tie the hands of the Congress or the courts have usually been cut back or abandoned." Raymond Vernon, *The U.S. Government at Bretton Woods and After*, in *THE BRETTON WOODS-GATT SYSTEM: RETROSPECT AND PROSPECT AFTER FIFTY YEARS* 52, 52–53 (Orin Kirshner ed., 1996). Perhaps the avoidance of discussing the "bancor" further was founded on the understanding that the chances of congressional approval were minimal.

74. This began the IMF's acquisition of gold. In March 2011, it held around 90.5 million ounces of gold (valued at about \$4.4 billion). Catherine R. Schenk, *The Global Gold Market and the International Monetary System*, in *THE GLOBAL GOLD MARKET AND THE INTERNATIONAL MONETARY SYSTEM FROM THE LATE 19TH CENTURY TO THE PRESENT: ACTORS, NETWORK, POWER* 17, 27 (Sandra Bott ed., 2013).

75. Kugler, *supra* note 66, at 618–19.

obligations intended to avoid protectionism, currency wars, and unstable exchange rates—each of which were suspected contributors to the Great Depression.⁷⁶

Most importantly for the U.S., Bretton Woods implicitly fixed the pegged exchange rate to the American dollar. Unfortunately for the American citizen, this allowed foreign central bankers to do what the American citizen could do no longer: the privilege of convertibility was granted to the foreign banker, allowing for the exchange of excess dollars for gold at any time.⁷⁷ This attribute would later serve as one of the primary reasons for the demise of the system under American leadership. But, viewing these attributes as beneficial, Congress passed the Bretton Woods Agreements Act in July 1945,⁷⁸ and the U.S. officially entered the IMF five months later.

C. *The Nixon Shock*

And so, the framework of an international monetary order existed, but due to several obstacles, it took nearly fifteen years for the Bretton Woods system to operate.⁷⁹ Once fully operational in 1958, however, the system prevailed with the U.S. dollar as the world's reserve currency until 1971.⁸⁰ And the system was extremely successful: even today, Bretton Woods is "associated with higher and more stable economic growth than in any other period in the past 150 years with the exception of the Great Moderation from 1983 to 2006."⁸¹

But several factors would lead to Bretton Woods' demise, two of the most important of which were the rise of inflation in the U.S. and the threat of foreign convertibility.⁸² Inflation began in the late 1960s due to the financing of the Vietnam War and the funding of President Johnson's Great Society.⁸³ This extreme inflation—an average of 8.8%—began after a decade of price stability, with only minimal inflation at an annual rate of 1% or 2%.⁸⁴ The threat of convertibility loomed large. If foreign central bankers were determined to liquidate their dollars, U.S. gold sources could be entirely depleted. This would leave nothing to back currency. The U.S. Treasury urged the State Department to attempt to develop diplomatic policies meant to deter this behavior, such as the constant threat to pull out U.S. troops from much-needed areas in Soviet-dominated Europe.⁸⁵

On August 15, 1971, after a meeting with his economic advisers at Camp David,

76. Michael D. Bordo, *The Operation and Demise of the Bretton Woods System* 1 (Hoover Inst., Econ., Working Paper No. 16116, 2017).

77. FRANCIS J. GAVIN, *GOLD, DOLLARS, & POWER: THE POLITICS OF INTERNATIONAL MONETARY RELATIONS, 1958–1971* 23 (2004).

78. Bretton Woods Agreements Act, ch. 339, 59 Stat. 512 (1945).

79. Obstacles to operation included bilateral issues and a shortage of the U.S. dollar. Bordo, *supra* note 76, at 6.

80. *Id.* at 11.

81. *Id.*

82. *Id.* at 21, 23.

83. See RONALD I. MCKINNON, *THE UNLOVED DOLLAR STANDARD: FROM BRETTON WOODS TO THE RISE OF CHINA* 50 (2013). The Federal Reserve's policies were also responsible for this inflation and ineffectively used to combat it. As Milton Friedman said, "[N]o major institution in the United States has so poor a record of performance over so long a period yet so high a public reputation as the Federal Reserve." MILTON FRIEDMAN, *THE ESSENCE OF FRIEDMAN* 405 (Kurt R. Leube ed., 1987).

84. YANEK MIECZKOWSKI, *GERALD FORD AND THE CHALLENGES OF THE 1970S* 99 (2005).

85. Bordo, *supra* note 76, at 18.

President Nixon announced a ninety-day freeze on wages, prices, rents, and dividends; eliminated foreign convertibility; and ultimately removed the U.S. from the gold standard.⁸⁶ This would later be called the "Nixon Shock."⁸⁷ Nixon intended the announcement to be temporary; he meant it to be a negotiation tool to pressure other nations into revaluing their own currencies.⁸⁸ But after several failed negotiations and new economic policies, Congress officially removed the definition of the dollar in terms of gold from the statute.⁸⁹ The U.S. dollar had become, once again, a fiat currency.⁹⁰ And it remains one today.

In removing the gold standard, the U.S. arguably violated the Articles of Agreement of the IMF.⁹¹ Regardless, all attempts to revive a fixed exchange rate failed, and by March 1973, major currencies dangerously floated against each other.⁹² Because of this change in American economic policy, Bretton Woods collapsed.

II. SPECIAL DRAWING RIGHTS

A frequent source of speculation among IMF observers, Special Drawing Rights (SDRs) have been both lauded as potential economic saviors and disregarded as entirely insignificant to individual nations and the international monetary order.⁹³ The truth may be somewhere in between, but any exploration of the future of SDRs—especially in the sphere of the cryptocurrency—requires a discussion of their basic functions,⁹⁴ as well as their principal uses.⁹⁵

A. *The basic functions*

Before the Nixon Shock, but in recognition of the inadequacies of both gold and the U.S. dollar as reserve assets, the international community decided to create a

86. Exec. Order No. 11615, 36 C.F.R. 15727 (1971); THE AMERICAN ECONOMY: A HISTORICAL ENCYCLOPEDIA 303 (Cynthia Clark Northrup ed., 2003); RICHARD H.K. VIETOR, HOW COUNTRIES COMPETE: STRATEGY, STRUCTURE, AND GOVERNMENT IN THE GLOBAL ECONOMY 222 (2007).

87. Exec. Order No. 11615, 36 C.F.R. 15727 (1971); THE AMERICAN ECONOMY: A HISTORICAL ENCYCLOPEDIA, *supra* note 86, at 303; VIETOR, *supra* note 86, at 222.

88. ELWELL, *supra* note 39, at 13.

89. Act of Oct. 19, 1976, Pub. L. No. 94-564, 90 Stat. 2660 (1976).

90. Notably, private gold ownership was allowed once again in the U.S. under President Ford. Act of Aug. 14, 1974, Pub. L. 93-373, 88 Stat. 445 (1974). The price of gold then skyrocketed in the 1970s, surging 2,300% over nine years. SHAYNE MCGUIRE, HARD MONEY: TAKING GOLD TO A HIGHER INVESTMENT LEVEL 74 (2010).

91. Detlev F. Vagts, Editorial Comment, *The Financial Meltdown and Its International Implications*, 103 AM. J. INT'L L. 684, 684 (2009).

92. See Peter M. Garber, *The Collapse of the Bretton Woods Fixed Exchange Rate System*, in A RETROSPECTIVE ON THE BRETTON WOODS SYSTEM: LESSONS FOR INTERNATIONAL MONETARY REFORM 461, 468 (Michael D. Bordo & Barry Eichengreen eds., 1993) ("The realignments under the Smithsonian Agreements did not end the selling attacks—the massive acquisitions of official dollar claims did not cease until generalized floating began in March 1973.")

93. E.g., Ian Talley & David Gauthier-Villars, *Special IMF Money Considered*, WALL ST. J. (Nov. 4, 2011), <https://www.wsj.com/articles/SB10001424052970203804204577016554222191164> [<https://perma.cc/L62U-5LK5>]; e.g., Annie Lowrey, *So, what is a Special Drawing Right, anyway?*, FOREIGN POLICY: PASSPORT (Apr. 2, 2009, 11:02 PM), <http://foreignpolicy.com/2009/04/02/so-what-is-a-special-drawing-right-anyway/> [<https://perma.cc/589V-FXR9>].

94. See *infra* Part II.A.

95. See *infra* Part II.B.

new reserve asset, called Special Drawing Rights (SDRs), under the IMF.⁹⁶ At the 1967 annual meeting in Rio de Janeiro, the IMF conceived SDRs, intending them "to meet the need, as and when it arises, for a supplement to [gold and the U.S. dollar]." ⁹⁷ The creators envisioned SDRs serving as a basic reform to correct Bretton Woods' increasingly-clear "failure to anticipate the enormous increase in capital mobility that . . . occurred."⁹⁸ To accomplish this, SDRs functioned as a reserve asset less dependent on American economic success and policy.⁹⁹ Governed by Article XXI of the Articles of Agreement,¹⁰⁰ the value of one SDR was set to be equivalent to 0.888671 grams of fine gold, which was also the precise contemporaneous value of one U.S. dollar,¹⁰¹ as the quasi-gold standard still held. But again, in the spirit of Scaruffi's *moneta imaginaria* and Keynes' "bancor," SDRs were merely money-of-account.¹⁰²

Called "paper gold" by some,¹⁰³ SDRs were meant to increase global liquidity.¹⁰⁴ Immediately, commentators expected them to take on a prominent role in the international monetary order. Internal CIA documents from 1970 indicate the agency estimated that SDRs would account for about 10% of total global liquidity within two years and could account for nearly 25% of total global liquidity within ten years.¹⁰⁵

But the new asset was not successful. Some attribute the shortcomings to the "restricted usability" of SDRs.¹⁰⁶ Others see their failure as coinciding with a less-favorable shift in international attitudes toward world money.¹⁰⁷ Ultimately, the SDR gold valuation became entirely meaningless because convertibility was not an option.¹⁰⁸

So, in 1974, the IMF changed SDRs' valuation and instead determined their value daily, based upon a basket of currencies.¹⁰⁹ Sixteen different currencies—

96. CHRISTOPHER M.D. WILKIE, SPECIAL DRAWING RIGHTS: THE FIRST INTERNATIONAL MONEY 1 (2012). Much of this concern originated with a popular book that warned of a great reduction in international confidence in the U.S. dollar as a reserve asset. See ROBERT TRIFFIN, GOLD AND THE DOLLAR CRISIS: THE FUTURE OF CONVERTIBILITY 138 (1961).

97. IMF, *Establishment of a Facility Based on Special Drawing Rights in the International Monetary Fund and Modifications in the Rules and Practices of the Fund*, Annual Report 1968 (Apr. 1968).

98. Robert Solomon, *The History of the SDR, in THE FUTURE OF THE SDR IN LIGHT OF CHANGES IN THE INTERNATIONAL FINANCIAL SYSTEM* 25, 25 (Michael Mussa et al. eds., 1996).

99. Andrew Crockett & Morris Goldstein, *Strengthening the International Monetary System* 52 (IMF, Occasional Paper No. 50, 1987).

100. Articles of Agreement of the IMF, Art. XXI, 60 Stat. 1401, 2 U.N.T.S. 39 (adopted July 22, 1944) (amended 2016).

101. JAMES M. BOUGHTON, SILENT REVOLUTION: THE INTERNATIONAL MONETARY FUND, 1979–1989 950 (2001).

102. See *Stability in a Multiple Reserve-Asset System*, in THE FUTURE OF THE SDR IN LIGHT OF CHANGES IN THE INTERNATIONAL FINANCIAL SYSTEM 122, 158 (Michael Mussa et al. eds., 1996).

103. E.g., *I.M.F. Vote Backs 'Paper Gold' Plan*, N.Y. TIMES, June 4, 1968, at 61.

104. WILKIE, *supra* note 96, at 35.

105. Memorandum from Directorate of Intelligence on Special Drawing Rights (Sept. 1970) (declassified Oct. 31, 2011) (on file with the CIA Library).

106. Crockett & Goldstein, *supra* note 99, at 53. Countries are restricted in the use of their SDRs to pay their deficits. SUBRATA GHATAK & JOSÉ R. SÁNCHEZ-FUNG, MONETARY ECONOMICS IN DEVELOPING COUNTRIES 241 (3d ed. 2007).

107. WILKIE, *supra* note 96, at 35.

108. BOUGHTON, *supra* note 101.

109. IMF, *International Financial Statistics* (Jan. 2015).

including the U.S. dollar, Deutsche mark, Swedish krona, Japanese yen, and South African rand—initially composed this basket.¹¹⁰ These currencies were chosen because they accounted for at least 1% of world trade from 1968 until 1972.¹¹¹ The IMF decided to review the method of this valuation every five years.¹¹² The current composition of the SDR is as follows: U.S. dollar (41.73%); Euro (30.93%); Chinese renminbi (10.92%); Japanese yen (8.33%); and Pound sterling (8.09%).¹¹³

B. Past uses

The IMF is authorized to allocate SDRs to its members in proportion to their IMF quotas.¹¹⁴ General allocations are determined by the IMF Board of Governors for periods of up to five years.¹¹⁵ But it is notable that general allocations have happened only three times, and each was related to a crisis of confidence in the U.S. dollar.

1. Early 1970s

The first allocation of SDRs took place shortly after their creation. In 1969, the IMF approved the allocation of SDR 9.5 billion over a three-year period.¹¹⁶ The IMF intended this allocation to curb the excessive international reliance on the very unreliable U.S. dollar—the original purpose of the SDR.¹¹⁷ But almost immediately after the Nixon Shock occurred, the quasi-gold standard was eliminated, and floating exchange rates dominated the international monetary order.¹¹⁸

2. 1979

Still struggling from the economic policies of an earlier decade, the U.S. experienced inflation to the tune of 9.5% in October 1979.¹¹⁹ Domestic interest rates rose steeply.¹²⁰ The IMF—already broken from the gold standard and adopting the

110. IMF, *Activities of the Fund*, Annual Report 1974, at 51 (Sept. 1974).

111. GEORGE D. HOLLIDAY, CONG. RESEARCH SERV., OPEC'S PROPOSAL TO PEG THE PRICE OF OIL EXPORTS TO SPECIAL DRAWING RIGHTS 2 (1977).

112. See IMF, *Making the Global Economy Work for All*, Annual Report 2002 (2002).

113. Press Release, International Monetary Fund, IMF Executive Board Completes the 2015 Review of SDR Valuation (Dec. 1, 2015). The daily value is posted on the IMF's website. *SDR Valuation*, IMF, http://www.imf.org/external/np/fin/data/rms_sdrv.aspx [<https://perma.cc/T7UZ-NF5Z>] (last visited Nov. 17, 2017).

114. Articles of Agreement of the IMF, Art. XV, § 1, 60 Stat. 1401, 2 U.N.T.S. 39 (adopted July 22, 1944) (amended 2016) ("To meet the need, as and when it arises, for a supplement to existing reserve assets, the Fund is authorized to allocate special drawing rights in accordance with the provisions of Article XVIII to members that are participants in the Special Drawing Rights Department."); Articles of Agreement of the IMF, Art. XVIII, 60 Stat. 1401, 2 U.N.T.S. 39 (adopted July 22, 1944) (amended 2016).

115. The last general allocation was made in 2016. IMF, *The Case for a General Allocation of SDRs During the Eleventh Basic Period*, SDR Allocation (May 2016).

116. Montek Singh Ahluwalia, *SDR Allocations and the Present Articles of Agreement*, in *THE FUTURE OF THE SDR IN LIGHT OF CHANGES IN THE INTERNATIONAL FINANCIAL SYSTEM* 88, 90 (Michael Mussa et al. eds., 1996).

117. See *id.* at 91.

118. See *id.*

119. Marvin Goodfriend & Robert G. King, *The Great Inflation Drift*, in *THE GREAT INFLATION: THE REBIRTH OF MODERN CENTRAL BANKING* 181, 200 (Michael D. Bordo & Athanasios Orphanides eds., 2013).

120. *October 6, 1979* (Fed. Res. Bank of San Francisco, Economic Letter No. 2004-35, 2004).

currency basket model—allocated SDR 12 billion over a three-year period.¹²¹ This allocation was significant: The volume of transactions in SDRs rose, and the acceptability of the SDR as a reserve asset grew.¹²² And so, by 1990, 80% of SDRs were held by IMF members.¹²³

3. 2009

But the use and prominence of the SDR decreased as the value and stability of the U.S. dollar increased. In 2009, however, in response to the beginnings of the Great Recession, the IMF again issued another SDR allocation: a special one-time allocation of SDR 21.5 billion,¹²⁴ more than had ever been allocated in the past. The 2009 allocation was even encouraged by the U.S. Treasury.¹²⁵ And with the SDR's apparent reemergence as a valuable world asset, China and other emerging economies pounced, calling for a decreased role in the value of the U.S. dollar.¹²⁶ The IMF eventually seemed to concede, and Chinese currency is now included in the SDR's basket.¹²⁷

III. SPECIAL DRAWING RIGHTS AS A CRYPTOCURRENCY

Christine Lagarde,¹²⁸ Managing Director of the IMF, noted in September of 2017 that the SDR may have a future as a cryptocurrency:

[H]ow will [cryptocurrencies] change central banking over the next generation? That is the focus of my remarks today. . . . [C]itizens may one day prefer virtual currencies, since they potentially offer the same cost and convenience as cash—no settlement risks, no clearing delays, no central registration, no intermediary to check accounts and identities. If privately issued virtual currencies remain risky and unstable, citizens may even call on central banks to provide digital forms of legal tender. . . . The remit of central banks will grow, and with it, perhaps, public scrutiny and political pressures. Independence—at least to set monetary policy—will need further defenses and require even clearer communication. . . . I am convinced that the IMF has a strong role to play in this respect. But the Fund will also have

121. Ahluwalia, *supra* note 116, at 92–93.

122. BOUGHTON, *supra* note 101, at 928. Acceptability of the SDR as a global asset is largely attributed to an amendment to the Articles in the 1980s that allowed transactions of the SDR to occur without prior approval of the IMF. *Id.* at 933.

123. BOUGHTON, *supra* note 101, at 928.

124. Press Release, International Monetary Fund, IMF Governors Formally Approve US\$250 Billion General SDR Allocation (Aug. 13, 2009).

125. Heidi N. Moore, *Geithner: Down With the Dollar; Up With the . . . SDR?*, WALL ST. J. (Mar. 25, 2009), <https://blogs.wsj.com/deals/2009/03/25/geithner-down-with-the-dollar-up-with-the-sdr/> [<https://perma.cc/B76K-KEDH>].

126. Andrew Batson, *China Takes Aim at Dollar*, WALL ST. J. (Mar. 24, 2009), <https://www.wsj.com/articles/SB123780272456212885> [<https://perma.cc/N4H6-X8SH>].

127. Press Release, *supra* note 13.

128 It is worth noting that Lagarde is a controversial figure and has encountered legal troubles in the past. *E.g.*, Tyler Durden, *The DSKing Of Christine Lagarde: Someone Wants to Eliminate the Head of the IMF*, ZEROHEDGE (Dec. 17, 2015, 3:15 PM), <http://www.zerohedge.com/news/2015-12-17/dsking-christine-lagarde-someone-wants-eliminate-head-imf> [<https://perma.cc/PSS4-DACJ>].

to be open to change, from bringing new parties to the table, to considering a role for a digital version of the SDR.¹²⁹

The seemingly-small world of cryptocurrency academics, traders, and enthusiasts all responded excitedly.¹³⁰ And speculation abounded. But through all the excitement, two possibilities for a cryptocurrency-incorporation within the framework of the SDR emerge: (1) the total redefinition of the SDR as its own unique cryptocurrency; and (2) the inclusion of a specific cryptocurrency in the SDR's basket of currencies.

A. Redefining the SDR entirely as a unique cryptocurrency

A unique cryptocurrency would essentially be akin to a fiat currency. This cryptocurrency—which James Mackintosh refers to as "IMFCoin"¹³¹—would be in the spirit of Scaruffi's *moneta immaginaria* and Keynes' "bancor." It would truly be a mere money-of-account because its tracking and establishment would exist only on the blockchain, which is essentially a digital ledger.¹³²

Mackintosh posits that the "IMFCoin" would bring the SDR back into prominence and supplant the U.S. dollar as the primary currency of world trade.¹³³ He asserts that the use of the "IMFCoin" would "speed global growth,"¹³⁴ and that the IMF would have more power as a central bank to issue currency to meet the needs of the international monetary system.¹³⁵

But the "IMFCoin"—at least as it would exist in this scenario—would run counter to the entire concept that has driven the success of modern commercial cryptocurrencies. Where Bitcoin and others seek to flee the control of the central bank and bankers' whisks and whims, "IMFCoin" would be controlled by one of the most nefarious and criticized international organizations.¹³⁶ And relatedly, its value—arbitrarily set by the central bank and bankers—would be backed by public and international trust in the organization that is the IMF. But the IMF's track record on that front is not stellar.¹³⁷

B. Including a specific cryptocurrency in the SDR's basket

A potentially more plausible alternative to a complete redefinition of the SDR as a cryptocurrency is the inclusion of a specific cryptocurrency in the basket of currencies which constitute the SDR. The review of which currencies constitute the

129. Lagarde, *supra* note 15.

130. E.g., Samburaj Das, *IMF's Lagarde Warns Bank: Cryptocurrencies Will Bring "Massive Disruptions"*, CRYPTOCOINSNEWS.COM (Oct. 13, 2017), <https://www.cryptocoinsnews.com/imfs-lagarde-warns-banks-cryptocurrencies-will-bring-massive-disruptions/> [<https://perma.cc/4LWZ-GM4G>].

131. Mackintosh, *supra* note 16.

132. See generally DON TAPSCOTT & ALEX TAPSCOTT, *BLOCKCHAIN REVOLUTION: HOW THE TECHNOLOGY BEHIND BITCOIN IS CHANGING MONEY, BUSINESS, AND THE WORLD* (2016).

133. Mackintosh, *supra* note 16.

134. *Id.*

135. *Id.*

136. See generally EDWIN M. TRUMAN, *A STRATEGY FOR IMF REFORM* (2006).

137. See, e.g., Ana Eiras, *IMF and World Bank Intervention: A Problem, Not a Solution*, HERITAGE FOUND. (Sept. 17, 2003), <http://www.heritage.org/monetary-policy/report/imf-and-world-bank-intervention-problem-not-solution> [<https://perma.cc/6E4V-SXQW>].

basket occurred most recently in 2015,¹³⁸ and the next review will happen in 2021.¹³⁹ If, in 2021, the IMF were to embrace a specific cryptocurrency, then it would expand the basket from the current five currencies to six currencies and redistribute their values accordingly. The question then becomes: which cryptocurrency does the IMF choose?

Historically, the IMF has looked to include currencies that constitute a significant part of world trade.¹⁴⁰ In 2016, world merchandise exports were valued at \$15.46 trillion, and exports of world commercial services were valued at \$4.77 trillion,¹⁴¹ totaling \$20.23 trillion. Perhaps the IMF would naturally be drawn to the most valuable cryptocurrency, which—at the moment—happens to be the popular Bitcoin. Bitcoin reached a market capitalization in December 2017 at nearly \$350 billion,¹⁴² or approximately 2.2% of world trade value.¹⁴³ But for the real insight, the IMF may need to look to Bitcoin's transaction volume, which in December 2017 was approximately \$3.6 billion per day,¹⁴⁴ which, if that daily transaction value held year-round, equals approximately 6.2% of world trade value.¹⁴⁵

These two statistics, however, will undoubtedly change by the IMF's next review in 2021. And if the current trajectory holds, then Bitcoin's position will be favorable. Dennis A. Porto, a Harvard academic, believed in 2017 that Bitcoin's price could be over \$100,000 per coin by then.¹⁴⁶ And more retailers—like Overstock.com—are beginning to accept Bitcoin payments.¹⁴⁷ If this trend continued, then Bitcoin's daily transaction value would greatly increase.

But the trajectory is unlikely to hold. There are several reasons for this. First, Bitcoin is famously volatile. Some have already warned that its volatility makes its actual use as a currency impossible.¹⁴⁸ Second, other cryptocurrencies like Ethereum and Ripple may surpass Bitcoin in value and public trust.¹⁴⁹ Finally,

138. Press Release, *supra* note 113.

139. *Id.*

140. See, e.g., HOLLIDAY, *supra* note 111.

141. WORLD TRADE ORGANIZATION, WORLD TRADE STATISTICAL REVIEW 2017 19 (2017), https://www.wto.org/english/res_e/statis_e/wts2017_e/WTO_Chapter_03_e.pdf [<https://perma.cc/6268-3DCN>].

142. *Bitcoin*, COINMARKETCAP (Dec. 7, 2017), <https://coinmarketcap.com/currencies/bitcoin/> [<https://perma.cc/3J48-5V6N>].

143. This is calculated in terms of 2016 world trade value.

144. *Bitcoin Estimated Transaction Volume USD*, QUANDL (Dec. 7, 2017), <https://www.quandl.com/data/BCHAIN/ETRVU-Bitcoin-Estimated-Transaction-Volume-USD> [<https://perma.cc/2D4C-629P>].

145. Again, this is calculated in terms of 2016 world trade value.

146. Interview by Frank Chaparro with Dennis A. Porto (Aug. 7, 2017), <http://uk.businessinsider.com/bitcoin-price-and-moores-law-2017-8?r=US&IR=T> [<https://perma.cc/5N6W-SSN9>].

147. Cade Metz, *Overstock.com Becomes First Major Retailer to Accept Bitcoin Worldwide*, WIRED (Sept. 11, 2014), <https://www.wired.com/2014/09/overstock-com-becomes-first-major-retailer-accept-bitcoin-worldwide/> [<https://perma.cc/HMD6-MVYG>]; The Bitcoin Foundation, *#Bitcoin2014-Keynote Address, "500 Years of Liberalism" by Dr. Patrick Byrne, CEO of Overstock.com*, YOUTUBE (May 20, 2014), <https://www.youtube.com/watch?v=1--zHVO3Cik> [<https://perma.cc/VW7Z-4H4J>].

148. E.g., Neil Gandal & Hanna Halaburda, *Competition in the Cryptocurrency Market* 10 (Bank of Canada, Working Paper No. 2014-33, 2014).

149. E.g., Laignee Barron, *5 Bitcoin Rivals That Are Rapidly on the Rise*, FORTUNE (Dec. 4, 2017), <http://fortune.com/2017/12/04/bitcoin-ethereum-cryptocurrency-blockchain/> [<https://perma.cc/5568-RM9C>].

governments will likely step-in to organize regulatory frameworks to combat some of the more illicit uses for Bitcoin and benefit from taxation policies. This has already happened in states like New York with its BitLicense.¹⁵⁰ This would greatly decrease the currency's popularity and value and ultimately decrease its use.

All of this leads to the conclusion that any incorporation of a specific cryptocurrency within the SDR framework would require several years of that cryptocurrency's steadiness in value, increased use, and government acceptance. Even Bitcoin, as the most popular cryptocurrency, is years from this status.

CONCLUSION

American monetary policy is not perfect. And clearly, its past is troubled and tumultuous. Within the nation's short life, the U.S. dollar has gone from a bimetallic currency, to a fiat currency, to a gold standard, to a quasi-gold standard, and then back to a fiat currency. And nothing really stops the U.S. from changing its standard once again. In fact, as recently as the 2016 presidential election, Senator Ted Cruz advocated for a return to the gold standard.¹⁵¹

But the international monetary order is inherently tied to American monetary policy. And while this was initially caused by American military dominance during World War II, its continuation is due to American economic dominance in the postwar world.

Cryptocurrencies are a new and exciting way for individuals to invest in a democratized and decentralized currency. But advocating for an IMF adoption of cryptocurrencies within the framework of the SDR—through either a new and unique cryptocurrency or the incorporation of an existing cryptocurrency in the SDR's basket—is, at best, foolish because of cryptocurrencies' volatility and deregulated status, and at worst, an anti-American sentiment encouraged by dangerous and anti-democratic regimes. Scaruffi's *moneta imaginaria* will have to wait.

150. N.Y. COMP. CODES R. & REGS. tit. 23, § 200 (2016), [https://govt.westlaw.com/nycrr/Browse/Home/NewYork/NewYorkCodesRulesandRegulations?guid=I7444ce80169611e594630000845b8d3e&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/nycrr/Browse/Home/NewYork/NewYorkCodesRulesandRegulations?guid=I7444ce80169611e594630000845b8d3e&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)) [https://perma.cc/N888-HN7E].

151. See Matt O'Brien, *This Might Be Ted Cruz's Worst Idea*, WASH. POST (Feb. 23, 2016), https://www.washingtonpost.com/news/wonk/wp/2016/02/23/this-might-be-ted-cruzs-worst-idea/?utm_term=.f6554731fa57 [https://perma.cc/X38T-62C7].