8

Money and Central Banking

John D. Turner

The study of money and banking, and the prominence of historical enquiry within this study, goes through cycles. The undergraduate and graduate economics programmes in elite universities at the beginning of the twentieth century had courses in both money and banking and on the history of money and banking. However, the growth of general equilibrium theory, and the move away from an institutional approach to economics, precipitated the demise of such courses. This demise was accelerated by the Great Moderation, because money and banking became a technical issue that "we had brought under our control". Studying it was boring and studying its history was perceived as antediluvian at best.

The 2008 global financial crisis, however, has changed this attitude. Students of economics today need to understand the history and evolution of money and banking so that we do not repeat the mistakes of the past and do understand why our modern monetary systems have evolved in the way they have. Furthermore, the study of the history of money and central banking helps illustrate key concepts in monetary economics. Most important of all, monetary and central banking history confronts students with an existential question—why do money and central banks exist? Unless students can address this question, it is difficult for them to grasp the purpose of monetary policy and central banking in the present and into the future.

© The Author(s) 2018

M. Blum, C. L. Colvin (eds.), *An Economist's Guide to Economic History*, Palgrave Studies in Economic History, https://doi.org/10.1007/978-3-319-96568-0_8

The Origin of the Specie

A large part of the discipline of economics is the study of markets. To function, markets need a medium of exchange, that is, money. Economics is also interested in measuring wealth, debts and value. Money helps us do this. In addition, economics has an intertemporal dimension—how can we store wealth from this period and take it into the next period? Once again, money is an asset which easily helps us do this. The history of money is the study of how a particular asset came to possess these three functions. It is important for students to understand this story because it illuminates the purpose and function of money in modern societies. In an era of cryptocurrencies and existential threats to cash, the history of money provides insights not readily available elsewhere.

The best-known description of the evolution of money is that of Menger (1892). The Mengerian theory starts in a barter economy with its double coincidence of wants, which greatly encumbers trade and the division of labour. This situation resulted in individuals, led by their own self-interest, without any agreement or legislative compulsion, to exchange their goods for other more saleable commodities, even if they do not intend to consume those commodities. Over time, some commodity spontaneously emerges as the generally accepted medium of exchange. This commodity then becomes the unit of account and a store of value.

The implications of Menger's theory of the origin of money are at least threefold. First, money was not invented by someone or created by the government—it evolved spontaneously from humans pursuing their own economic self-interest. Second, the commodity that becomes the medium of exchange may not be consumed by many of the individuals who use it for exchange. An interesting natural experiment which illustrates this point, as well as the role of shocks to the money supply, is Radford's (1945) description of a prisoner-of-war camp during World War II, where cigarettes supplied by the Red Cross spontaneously emerged as the medium of exchange among smokers and non-smokers alike.

Third, because money evolved spontaneously, its forms have varied across time and space. For example, in primitive agricultural societies, sheep, cattle, grain, slaves, fur and animal skins, tobacco and rice have been all used at various times (Einzig 1966; Davies 2016). Indeed, the etymology of money illustrates this point—the "buck", a colloquial word for the US dollar, comes from the fact that buck skins operated as a medium of exchange in early colonial times.

Urbanisation and the growth of international trade resulted in the spontaneous evolution of gold, silver and copper as mediums of exchange. Their uniform quality, durability, portability, divisibility and fusibility explain why they emerged as money. In addition, unlike agricultural monies, their supply was fixed, resulting in a relatively stable purchasing power over time. Mints emerged to coin these precious metals and create what was known as specie. Gold and silver dominated monetary systems up until the late nineteenth century, when the gold standard emerged as the dominant monetary regime.

White (1999) provides a helpful extension to the Mengerian theory of the origin of money to explain how banks and paper money evolved. Merchants and individuals who had lots of silver and gold coins deposited them with goldsmith bankers for safekeeping. Over time, these deposits were used as a medium of exchange without leaving the vaults of the goldsmith, or simply being transferred between the vaults of different goldsmiths. Goldsmiths issued certificates for coin deposits and these were used as a medium of exchange. Alternatively, individuals could write cheques on their specie deposits which permits the holder to have the specified amount of specie transferred to their account.

There are, however, difficulties with the Mengerian explanation of the evolution of money. First, it does not always align with the historical evidence produced by numismatists and anthropologists (Goodhart 1998; Graeber 2011). Second, and more fundamentally, it does not explain why governments have played an important role in money across time and space. In particular, it does not explain why fiat money (i.e., inconvertible paper money which has been made legal tender by government decree) emerged. To overcome this deficiency, the Cartalists, or state theory of money school, propose an alternative story for the origin of money (Knapp 1924; Goodhart 1998).

Throughout time and across space, governments have established and operated mints and stamped the sovereign's face on their specie. According to the Cartalists, governments controlled minting because they had a monopoly of violence to protect inventories of precious metal and they could better protect the quality of the coinage from debasement, i.e., diluting the precious metal in a coin with base metal. This control of the coinage by the sovereign helped the development of the fiscal state—taxes were levied in the government-minted coins, and the coinage itself proved a source of emergency revenue (seignorage) during times of war. Henry VIII's infamous debasement of the Tudor coinage occurred because of his need for funds to fight the French. Cartalists argue that coinage and the monetary economy would have not taken off without this government intervention and that the value of money

comes from the sovereign not its intrinsic value. Mengerians, on the other hand, argue that the only reason for the state control of money was to raise revenue (Selgin and White 1999). While this power can be used to finance state survival during a war, it can also be abused by sovereigns. Possibly the principal issue in monetary economics today, and in the past, has been how to prevent the sovereign debauching the currency.

The Evolution of Central Banks

So how did we move from specie-based monetary system to today's fiat money issued by central banks? How did central banks assume such importance in modern economies? What can history tell us about the role of central banks? To answer these questions, economists can do no better than understand the evolution of the prototype central bank—the Bank of England, which was founded in 1694.[1] For the interested reader, a brief history of the leading central banks can be found in Capie et al. (1994) and Goodhart (1988).

The founders of the Bank of England solved a critical issue that was being faced by England's new democratic regime, ushered in by the Glorious Revolution of 1688. Tax raising powers in the new democracy were in the hands of parliament, who were reluctant to supply the finance necessary to the king to fight wars. The Bank of England was established by King William and his financiers with a paper currency redeemable for gold, that is, a gold standard. During military emergencies, the note issue was expanded and convertibility into gold was suspended. This unique feature allowed the currency to expand quickly and flexibly to finance defence emergencies because there was a credible commitment that after the military emergency, notes would be convertible into gold at the original conversion rate. The first formal suspension of gold payments occurred in 1695, and the suspension lasted the two years King William required to defeat Louis XIV of France. One hundred years later, in 1797, the Bank suspended convertibility into gold for over two decades to enable Britain to fight the Napoleonic Wars. This suspension resulted in a cartoonist drawing a cartoon entitled 'Political Ravishment, or the Old Lady of Threadneedle-Street in Danger'. The nickname stuck. According to Thompson and Hickson (2001), the Bank of England was an institution which was vital to the survival of the first national democracy and was therefore emulated by other nations when they became democracies.

[1] Although the Sveriges Riksbank can trace its origins back to 1668, it was not permitted to issue notes until the eighteenth century.

Convertibility was suspended once again on the outbreak of World War I and restored at the pre-war parity in 1925 by Winston Churchill, against the advice of John Maynard Keynes. However, as with previous resumptions of gold, this triggered a harsh recession. This was one of the main costs of the gold standard. In addition, the gold standard generated its own business cycle, with recessions of greater duration and amplitude than under a fiat money regime. By the mid-1930s, the gold standard was abandoned by all but the US. After World War II, the Bretton Woods system re-established a de facto gold standard, when Western democracies agreed that their paper currencies should be convertible into US dollars as long as the dollar maintained a fixed conversion rate into gold. This Bretton Woods system was phased out in the late 1960s and came to an official end in 1971 when the US broke the link between the dollar and gold.[2] As a result, central banks issued inconvertible fiat money, which had value only because governments required future taxes to be paid with it.

The dominant view among economic historians concurs with that of Keynes, who described the gold standard as a "barbarous relic". However, Thompson (2013) raises the question as to whether the cost of abandoning the gold standard has been worth it in that countries no longer have access to emergency finance, and countries with weak institutions and many external threats typically end up creating hyperinflation. As a means to tame inflation and remove the influence of government on monetary policy, central banks were made independent, pegged their currency to a major reserve currency or, in the case of the Eurozone, they handed control of their money supply to unaccountable technocrats schooled in the monetary discipline of the Bundesbank.

Because central banks, such as the Bank of England, evolved to have monopoly or near-monopoly of note issuance, they came to play important roles in banking systems, particularly during credit expansions and subsequent crises. Economic history provides us with multiple case studies of such episodes and the role of the central bank in booms and financial crashes (Bordo et al. 2016; Friedman and Schwartz 1963; Grossman 2010; Reinhart and Rogoff 2009; Turner 2014).

Should central banks prick or lean against booms and bubbles or simply clean up afterwards? The historical examples of pricking suggest that such a policy has many dangers. For example, the Federal Reserve is alleged to have deliberately pricked the bubble after the death of Benjamin Strong in the spring of 1929. The deliberate pricking of the stock market boom in 1927 by the Reichsbank was another policy intervention that did not work

[2] To understand the evolution of the international monetary system, economists should consult Eichengreen (2008).

out well because the intervention hit Germany at a key point in its post-hyperinflation recovery, affected investment and tipped the economy into a severe depression.

Economic history tends to reveal that central bankers prefer to clean up *after* a financial bust than prick a financial boom. The debate about the proper role of central banks during financial crises goes back as far as Thornton (1802) and Bagehot (1873). Should the central bank act as a lender of last resort and, if so, under what conditions should loans be advanced? Should the central bank go further and rescue insolvent banks? What is the moral hazard associated with the lender of last resort and bailouts?

Although the historical evidence largely supports the notion that central banks should act as a lender of last resort, there is debate as to how assistance should be provided. An excellent summary of the lender of last resort from an historical perspective can be found in Bordo (1990). There is also debate about efficacy of historical bank bailouts, with repeated bailouts resulting in a build-up of moral hazard, resulting in an even larger bailout of the system (Turner 2014). This moral hazard explains why central banks began to regulate banks. Recent historical scholarship has highlighted the relative stability of regulatory systems where bankers and bank owners had "skin in the game" in the form of double and unlimited liability (Grossman 2010; Turner 2014).

It's the Politics, Stupid

The most important lesson of the history of money and central banking for economists is that monetary policy and central banking is not a technocratic issue. From the very creation of money and central banks, sovereigns have been involved. There is both a cost and benefit to this interference. On the one hand, government control of money and central banks means that military and other emergencies can be met, ensuring the survival of democratic states. On the other hand, the symbiotic relationship between central bankers and governments has resulted in the fragility of financial systems past and present (Calomiris and Haber 2014; Turner 2014).

Understanding the evolution of this relationship and its manifestation in historical booms and busts will prove fruitful territory for future economists and economic historians. In order to help students understand this relationship, we can have them write research papers or dissertations or blogs, which focus on a particular historical banking crisis, bubble or credit boom.[3] This focus on past monetary disasters is of paramount importance to economics.

[3] Reinhart and Rogoff (2009) provide a helpful list of such crises as a useful starting point.

The discipline was wrong-footed on the 2008 crisis. We therefore have a responsibility to ensure that the next generation of economists has a "lest we forget" mentality towards the carnage that can be afflicted upon an economy as a result of monetary disorder.

Reading List

Bagehot, W. 1999[1873]. *Lombard Street: A Description of the Money Market*, New York: John Wiley & Sons.

Bordo, M. D. 1990. The Lender of Last Resort: Alternative Views and Historical Experience. *Federal Reserve Bank of Richmond Economic Review*, 76 (Jan/Feb), 18–29.

Bordo, M.D., Ø. Eitrheim, M. Flandreau, and J.F. Qvigstad. 2016. *Central Banks at a Crossroads: What Can We Learn from History*. New York: Cambridge University Press.

Calomiris, C.W., and S.H. Haber. 2014. *Fragile by Design: The Political Origins of Banking Crises and Scarce Credit*. Princeton, NJ: Princeton University Press.

Capie, F., C. Goodhart, S. Fischer, and N. Schnadt. 1994. *The Future of Central Banking*. Cambridge: Cambridge University Press.

Davies, G. 2016. *A History of Money*. 4th ed. Cardiff: University of Wales Press.

Eichengreen, B. 2008. *Globalizing Capital: A History of the International Monetary System*. 2nd ed. Princeton, NJ: Princeton University Press.

Einzig, P. 1966. *Primitive Money in Its Ethnological, Historical and Economic Aspects*. 2nd ed. New York: Pergamon.

Friedman, M., and A.J. Schwartz. 1963. *A Monetary History of the United States, 1867–1960*. Princeton, NJ: Princeton University Press.

Goodhart, C.A.E. 1988. *The Evolution of Central Banks*. London: MIT Press.

———. 1998. The Two Concepts of Money: Implications for the Analysis of Optimal Currency Areas. *European Journal of Political Economy* 14: 407–432.

Graeber, D. 2011. *Debt: The First 5000 Years*. New York: Melville House.

Grossman, R.S. 2010. *Unsettled Account: The Evolution of Banking in the Industrialized World since 1800*. Princeton, NJ: Princeton University Press.

Knapp, G. 1924. *The State Theory of Money*. London: Macmillan.

Menger, K. 1892. On the Origin of Money. *Economic Journal* 2: 239–255.

Radford, R.A. 1945. The Economic Organisation of a P.O.W. Camp. *Economica* 12: 189–201.

Reinhart, C.M., and K.S. Rogoff. 2009. *This Time is Different: Eight Centuries of Financial Folly*. Princeton, NJ: Princeton University Press.

Selgin, G.A., and L.H. White. 1999. A Fiscal Theory of Government's Role in Money. *Economic Inquiry* 37: 154–165.

Thompson, E.A. 2013. Gold Standard: Causes and Consequences. In *Business Cycles and Depressions: An Encyclopaedia*, ed. D. Glasner. London: Routledge.

Thompson, E.A., and C.R. Hickson. 2001. *Ideology and the Evolution of Vital Economic Institutions: Guilds, the Gold Standard, and Modern International Cooperation*. Boston: Kluwer.
Thornton, H. 1939[1802]. *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain*. London: George Allen & Unwin.
Turner, J.D. 2014. *Banking in Crisis: The Rise and Fall of British Banking Stability, 1800 to the Present*. Cambridge: Cambridge University Press.
White, L.H. 1999. *The Theory of Monetary Institutions*. Oxford: Blackwell.