Lessons from early central banking for today

Dr. Ulrich Bindseil, European Central Bank, TU Berlin

Abstract:

Contrary to popular belief, the history of central banking begins much earlier than 1800. Many current issues of central bank policy can be traced back to the public giro banks of the 15th century, and have been discussed in numerous essays at least since the 17th century. Are the same debates merely repeating themselves in new shapes? And, more importantly, what can we learn today from those first four centuries of central bank history and debates? This paper argues that despite the end of convertibility into precious metal of central bank money, relevant lessons can be derived from early central banking for today, and develops this around five concrete themes.

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Geschäftsführerin
IBF - Institut für Bank- und Finanzgeschichte e.V.
Eschersheimer Landstraße 121-123
D-60322 Frankfurt am Main
Germany
Tel.: +49 (0)69 6314167
Fax: +49 (0)69 6311134
E-Mail: floto-degener@ibf-frankfurt.de
Satz: Pauline Lauch

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Dr.Ulrich Bindseil

Ulrich Bindseil holds a PhD in economics and is Director General Market Infrasture and Payments at the European Central Bank. Since 2009 he has been teaching as an honorary professor at the TU Berlin.

Contact: ulrich.bindseil@ecb.europa.eu

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1. Introduction

The sometimes vociferous criticism of the measures taken by central banks over the last 12 years overlook the centuries–old tradition of central banks' actions to not only preserve the value of the currency but also ensure financial stability, provide sufficient central bank money to facilitate the settlement of credit and commercial bank money; and to hold government debt on their balance sheets. Obviously, history does not repeat itself. But it does rhyme, and therefore for today's problems many lessons can be drawn from the early history of central banking.

For a while, it was assumed that the relevant history of central banking goes back only to the 19th century, maybe with the exception of the Bank of England and Sveriges Riksbank (e.g. Capie, Goodhart, Schnadt, 1994). But a number of authors (Roberds and Velde, 2014, Ugolini, 2018, Bindseil, 2019) have recently rehabilitated the existence of early central banking, claiming that central banking dates back to the 15th century. This note will try to demonstrate that there are even concrete lessons from central banking before 1800 for today's challenges.

Of course, in the meantime, central banking has changed fundamentally: direct or indirect convertibility into precious metal is no longer a crucial constraint for macroeconomic and lender of last resort (LOLR) stabilization policies. Convertibility was regarded as obvious for good central banking until the end of the Bretton Woods era in the 1970s. This caveat however applies not only to lessons from pre–1800 central banking, but also for the subsequent 170 years. A related change is the strong focus on price stability as (single) objective specified in the mandates of central banks, to substitute for the previous metal–convertibility anchor. A further pervasive change is the current struggle, unknown before the 21st century, with the zero lower bound to interest rates (implied by the existence of banknotes). Moreover, the legal system, society and above all information technology have all changed substantially. Last but not least, there is a universal risk, in view of (i) the changes through time, (ii) the diversity and multiplicity of past experience, (iii) the mostly patchy documentation, and (iv) the likely political biases already contained in past contemporaneous assessments, that anyone drawing lessons from more remote history will be selective and will often be consciously or unconsciously at risk to seek validation of his or her own prior views.

Fortunately, even when acknowledging all of these caveats, it can still be argued that relevant lessons from early central banking are numerous, objective and strong, and can help central banking today and in the future. The lessons are grouped below into five points.

2. Independence from the government is essential for successful central banking

Independence of central banks to protect them from a possible undue recourse by the government has been a truly universal and permanent topic since the early fifteenth century, having affected the literature about, and design and operations of central banks without exception. It was noted that at the latest when a government is financially stressed (often in times of war), a lack of independence and protection by the law would lead to fiscal dominance and poor monetary performance. Relative independence was either granted within the public sector (essentially through some separate governance, e.g. Venice, 1587, Amsterdam 1609, Hamburg, 1619), or through more pervasive 'commitment devices' for the government not to touch the central bank, namely by assigning the central bank to: (1) several charitable institutions (Naples, 1580s); (2) a powerful private corporation with decentralized ownership amongst the rich and powerful (Genoa, 1407: Bank of England, 1694); (3) assigning an independent public entity in a monarchy to the estates or parliament (Riksens Ständers Bank, 1668). The limits to the credibility of central bank independence in countries without a strong rule of the law (absolute monarchies in the past, dictatorships today) has been noted even by prominent thinkers like Montesquieu (in chapter 10 of De l´ésprit des lois). But central banks with an insufficient independence and/or weak governance have not only failed in monarchies (e.g. Vienna Banco; Copenhagen Bank, Royal Bank in Berlin, Russian Assignation Banks), but also sometimes in republics (the eventual fall of the Bank of Amsterdam in the 1790s, despite having been the leading continental central bank until the mid of the 18th century).

Starting in the 1980s, the topic of central bank independence has found strong academic interest in monetary macroeconomics and in speeches of central bankers, and for some time there has been a tendency of legislators to strengthen independence whenever a central bank law was revisited. Astonishingly, this strengthening of independence was believed to be due to fundamentally new academic insights. For example The Economist claimed on 20 October 2018 that: "Operational independence for central banks is relatively new. The principle grew out of work in the late 1970s and early 1980s by prominent economists working in the 'rational expectations' school of economic thought, among them Finn Kydland and Edward Prescott, who were eventually awarded the Nobel prize." Anyway, preserving the high levels of independence will remain crucial for central banks, even more in a world with high economic vulnerability, strained public finances, and populist governments. The general strengthening of the independence that arose in particular during the 1990s (as also exemplified by the ECB/ESCB Statutes of 1994) must not be reversed over time.

3. Central bank communication and stakeholder engagement are key

While independence of central banks has been a crucial parameter for success, it cannot and should not shield central banks from being subject to public scrutiny. Likewise, it should not question the accountability of the central bank. Critique towards central banks since their beginnings can be grouped into six categories.

(i) Central bank independence would be excessive and would make them too powerful. A number of prominent European eighteenth–century authors criticized the uncontrolled power of private capital based central banks like the Bank of England (George Berkeley and the Comte de Mirabeau) and prominent US politicians like James Madison and Thomas Jefferson named the Bank of the United States a 'monster' and 'deadly enemy'.

(ii) Central banks would not stick to their mandate. As one example, for 180 years, financial experts and depositors wondered if the Bank of Amsterdam acted in accordance with its mandate, which specifically did not foresee lending (today we know that it did lend, long before its fall in the 1790s due to excessive lending). Similarly, after 2008, major central banks were criticized to have overstepped their mandate in their reaction to the Lehman financial crisis.

(iii) Negative effects of central banking on financial industry. The emergence of early central banks triggered fears of parts of the financial system of becoming redundant (as noted e.g. by Bank of England Vice–Governor Godfrey in 1695). More recently, the banking industry and media have for example criticized low interest rate policies of central banks, arguing that it would weaken the banking system (and expropriate savers). Also, banks have expressed worries about how their business models could be affected by the introduction of central bank digital currencies (CBDC).

(iv) Alleged insufficient prudence and stability orientation of central banks. In the centuries of convertible central bank money, this critique has been, beyond verbal statements, typically expressed by depositors or banknote holders by requesting conversion of their claims into precious metal, possibly triggering bank run dynamics. After Bretton Woods, the stability critique no longer related to fears of convertibility suspension or devaluation, but to too high inflation, which was particularly justified in the 1970s. Still 10 years ago, some economists fearfully predicted that central bank were risking high inflation through asset purchase programs. Beyond demonstrating their stability orientation through facts, central banks have persistently advertised their solidity and the quality of their monetary liabilities through communication and symbols. During the eighteenth century, mottos advertised on commemorative coins of the Hamburger Bank ('Lege perpetua stabilitum') and the Caisse d'Escompte ('Sureté dans la confiance') illustrate this endeavor. As recent illustration of the same cause, the Bundesbank, when justifying in 2016 that it would renovate its famous brutalist building of 1972 (instead of building a new one) also explained that "the Bundesbank's main building

radiates a strong sense of objectivity and functionality; for wide sections of the general public it symbolizes a culture of stability in monetary policy".

The opposite criticism, namely that central banks were unnecessarily restrictive and expensive in providing credit, out of fear to have to suspend convertibility or to risk a too high inflation rate, also persisted over the centuries. Often debtors made this point, but since in particular the 1920s also those who worried about the damage of too tight policies on employment and growth. Most recently, such criticism even came from the perspective that too tight policies would risk in addition too low inflation rates. The latter criticism was expressed for example for the last three rate hikes of the ECB in 2008 and 2011, or by US-President Donald Trump towards the Fed.

(v) The central bank would support an immoral capitalist system. Central banks often struggled with perceptions to be part of an immoral financial system, and not really helping society and its weaker members. In view of the religious constraints on lending against interest ('usury'), early public lending banks like the Monte di Pietas, or the lending arm of the Hamburger Bank charter of 1619, (over-)emphasized the moral dimension of their lending operations, which would help in particular the poor. The Bank of the United States and its predecessor, the Bank of North America were criticized that the true motivation behind their foundation was the enrichment of their founders. The ECB has been criticized by some to have supported austerity measures in crisis countries in the euro area debt crisis of 2010-2015, for the benefit of investors, but with bad consequences for the vulnerable parts of societies. Other critical observers (e.g. Hans-Werner Sinn, 2014) argued differently, but ended with similar conclusions: that the ECB was too nice and forthcoming during the financial crisis towards stressed countries, and that the implied reduction of the number of defaults (of private or public entities) allowed private investors to get away without losses. Moreover, central banks have been criticized during the last decade that low interest rate policies serve the rich by inflating asset prices. Finally, central banks have for a long time been criticized that they undermine, instead of improving financial stability, for example as they would encourage 'overtrading'-an argument that already Hamilton (1790) tried to refute. Recently, central banks have been told that their too supportive interest and LOLR policies would have undermined caution in investment decisions and would have fueled speculation. Another very topical debate that can be traced back to 15th century debates on Monte di Pietas and 17th century debates on central bank credit provision is whether central bank asset and credit eligibility criteria should pursue ethical goals, or only conventional financial ones (risk and return).

(vi) The central bank or its policies would go against local interests. For example, the Bank of North America and the Bank of the United States were criticized for allegedly representing centralist or 'New England' interests within the US. There adversaries (including US Presidents Madison, Jefferson, and Jackson) wanted

the US Federation to have as limited power as possible relative to the States, and argued that the first American central banks were unconstitutional as they would not have been explicitly foreseen in the federal constitution, and that any federal centralization not foreseen in this constitution would be an unlawful usurpation of state power. In recent years, some conservative northern European ECB critics argued that the ECB would represent southern European interests (Sinn, 2014). In contrast, in crisis countries the view emerged that the ECB would have represented and imposed on them a German austerity doctrine (Varoufakis, 2017).

What should central banks do about being criticized? Across the centuries, critique has obliged central banks and their projectors to carefully think through the nature of central banking, to justify central banking as serving the common good, and to discuss and try to falsify critique. Outstanding examples of comprehensive pre-1800 defenses of central banking have been the essays of Godfrey (1695), Law (1715a/b), and Hamilton (1790) in the context of establishing the Bank of England, the Banque Générale, and the Bank of the United States, respectively. All three do not only explain the economic benefits of central banks for society, but also each take up and refute long lists of counterarguments. Moreover, central banks always tried to anchor themselves in society and thereby get society's support, also as protection of their independence from the government. As mentioned, the Naples banks pioneered this with their linkage to charitable and religious institutions; the Hamburger Bank emphasized their support to the poor through credit provision, and in 1697 Jansen believed that favorable lending would be a way for the Bank of England to obtain the 'love of the people'. Today's central banks insist that the forceful monetary policy measures of the last 15 years have prevented more dramatic recessions, large-scale defaults and contagion, and a steep rise of unemployment, benefitting in particular workers and employees.

Criticizing central banks is of course legitimate, in particular in view of their independence. And the fact that critique will sometimes be based on misunderstandings or particular interests should provide more, not less incentives to central banks to engage with critics, to communicate, and to be transparent, while avoiding to put oil into the fire of misplaced debates and without adding vulnerabilities towards critics with particular interests. Today's central bankers should remain in constant effort to justify their policies and to discuss them with all types of interested observers, be they citizens, academics, politicians, or the financial industry.

Notwithstanding independence, **accountability to the government or to the parliament** was a universal feature of early central banks in particular in the form of preparing, submitting and explaining the annual accounts to the state sponsor. Also higher reporting frequencies were observed, with the extreme case being the Bank of the United States with a daily reporting of its balance sheet to the Secretary of the Treasury. Today, central banks still have similar reporting duties to the legislative, typically to parliaments, with quarterly or semi-annual appearances of the governor in front of some parliamentarian committee. Moreover, most central

banks publish annual reports summarizing their policy measures, financial accounts and P&L for the previous year, and explain their policies through regular publications.

4. Financial stability functions are key to central banking

Central banks had from the outset the objective to contribute to financial stability, as the availability of efficient and reliable means of payment has an intrinsic financial stability dimension. Somewhat later, but still before 1800, the lender of last resort (LOLR) emerged as second key financial stability function.

Settlement in central bank money and a stable financial architecture. The main purpose of establishing the Banco di Rialto of Venice in 1587 was to overcome the frequent crises associated with private banking by taking over from private banks the Giro function, i.e. by a large scale replacement of commercial bank money through central bank money. More generally, the policy objective of central banks to provide an efficient and stable means of payment, preventing financial instability emanating from private means of payments, has had an almost universal presence in central bank statutes and the surrounding debates. The major essays on central banking written between 1650 (Potter) and 1715 (Law) explain well that central banks would prevent excessive reliance on credit (an IOU–based financial system) and the associated financial stability issues. By making less frequent liquidity crises, related welfare damages resulting from multiple defaults of solid debtors and/or fire sale losses could be reduced. An efficient, universally accepted, sufficiently abundant and robust medium for settlement allowed for the continuous netting of financial claims in the economy, which eliminates redundancies in balance sheets and associated risk exposures. At the same time, central banks sought to integrate central bank money with the rest of the financial system, and to promote the co–existence of central bank money with other means of payments, such as precious metal coins and money surrogates such as bills of exchange. The exact procedures for the conversion of coins into central bank money, and vice versa, were key to an efficient central banking in a world of poor and heterogeneous coin quality that prevailed before the 18th century, and that implied omnipresence of Gresham's law. Bills of exchange were required to be settled in central bank money in Barcelona, Amsterdam, and Hamburg as of the establishment of the respective central banks (only in the 18th century, bills of exchange also became a major central bank asset class). Still today, the layering of private money and clearing and settlement mechanisms, the question who has access to central bank deposits, which market infrastructures have to settle in central bank money, and the rules under which financial assets can be converted into central bank money, remain amongst the most crucial themes debated inside central banks. Central banks must keep the fundamental importance of these issues for financial stability in mind, and devote sufficient attention to them, even if macro–economic policies and the LOLR often predominate in the public debate.

The lender of last resort (LOLR). The central bank collateral framework, the elasticity of central bank credit to private debtors, and the LOLR have been key central banking issues at least since the seventeenth century. According to one school, there should be no, or only very restrictive central bank lending to the private sector (mainly because of financial risks and alleged moral hazard), while according to another view, such lending has various economic and monetary advantages. Ever since, the inconclusiveness of this debate is illustrated by the heterogeneity of central bank approaches. Within one decade (the 1580s), Naples' banks adopted a broad collateral set and varied lending to private borrowers, while the founders of the Banco di Rialto considered essential that their bank would not engage in any lending. In 1999, the Eurosystem adopted a broad collateral set allowing for elastic borrowing of a broad range of banks, while the Federal Reserve collateral set for open market credit operations was very narrow and credit operations were conducted only with few banks (and 95% of the Fed assets consisted in government bonds). Practices and views were as heterogeneous in the centuries in between.

Specific large scale LOLR measures in crisis times (by setting up special temporary lending schemes, or by providing credit against normally ineligible collateral to individual banks) have been undertaken at least since 1763 (Hamburg, Amsterdam, Bank of England). While Walter Bagehot's Lombard Street of 1873 was certainly influential on central banks and even more on academics, there is no doubt about the multiple LOLR episodes during the 110 years preceding it. The debate on the adequate attitude of the central bank towards emergency liquidity support has continued ever since, with for example heated debates about both the Fed's and the ECB's crisis loans during the Lehman crisis.

But overall, six centuries of central banking do not seem to leave any doubt about the merits of prudent and well–collateralized credit to the private sector. In particular, elasticity of such credit in crisis times, including through a temporary or targeted broadening of the collateral set, has been instrumental to limiting the damage from financial crises numerous times. The 100% reserve approach of the Banco di Rialto did not persist for more than a few decades before being given up, while central banks providing elastic, but well–collateralized credit to the private sector could persist for centuries. The Naples banks only failed with the Napoleonic invasions, and the Hamburger Bank operated orderly with minor interruptions from 1619 until being merged into the Prussian Bank in 1875. And the failure of Lehman was a forceful recent reminder of the costs for society of letting a major bank default. The conclusion drawn by the G20 after the Lehman default was correct: strengthen regulation and capital requirements in particular for "too large to fail" financial institutions, while not questioning the LOLR to solvent but temporarily illiquid banks of systemic importance. As also argued by e.g. Charles Goodhart (1999) or Paul Tucker (2014), the LOLR has been and remains an essential part of central banking that maximizes its usefulness for society.

5. Government debt is a normal asset of independent and successful central banks

Like financial exposures to the private sector, holding public sector assets has made central banking more relevant and useful for centuries. First, investing in a diversified manner into different forms of financial assets and obligors (and away from 100% precious metal reserves) improved the risk-return characteristics of central bank assets, and therefore their safety and profitability, the latter allowing for transfers to the government (which can use the profits for the best of society), and/or for strengthening the capital buffers of the central bank. Second, doing so allows increasing the quantity and elasticity of the money supply, which was a crucial theme in early central banking with precious metal convertibility and a payment system otherwise largely based on scarce precious metal coins. Third, taking the government's perspective, eligibility of its liabilities as central bank asset allowed for a more diversified and thus potentially more reliable and cheaper overall government funding, reducing constraints on undertaking activities for the benefit of society. Successful central banks like the Hamburger Bank, the Bank of England and the Bank of the United States had exposures to the government since their inceptions, however with fluctuations of their level across time. On the other side, excessive and forced exposure to governments has often been the reason for convertibility suspensions and even for eventual haircuts: for example, the 18th century central bank foundations in Russia, Austria, and Denmark ended with large haircuts during or right after the Napoleonic period. In the 20th century, this phenomenon repeated itself in many countries after WW1, and for e.g. Germany also after WW2.

The lesson for today's central banking, even though different because of the absence of a convertibility constraint and the present dominance of deflation- over inflation fears, is that Government exposures are not per se problematic, nor are they per se inflationary, nor per se undermining independence. At the same time, any decisions to enter and extend such exposures should of course be taken independently by the central bank on the basis of its objectives and own policy considerations and not because of governments' needs.

6. Central banks should continue improving and adapting the design of their monetary liabilities, but understand all implications

Before the 18th century, central bank money took the form of deposits. While this normally limited the scope of central banking to parties who could come physically to the desk of the central bank, the Naples banking system had successfully innovated on the remote access to deposits through the *Fede di Credito* in the early 17th century. Modern banknotes were the major contribution to central banking in 1661 of Stockholm Banco, which however defaulted only three years later and was liquidated. Also, the 1720 failure of the Banque Royale of John Law, which had also over-issued banknotes, remains legendary. As a consequence of these two, and a number of other failures of early central banks over-issuing banknotes, the belief prevailed until

including the first half of the twentieth century that banknotes would be the more dangerous part of the monetary base for both convertibility and for financial stability in general. Therefore, sometimes constraints on banknote issuance were introduced that however turned out to be counterproductive to stability (e.g. Peel's Act of 1844).

These earlier debates around the merits and risks of specific forms of central bank monetary liabilities have very recently been mirrored in the discussions on 'central bank digital currency' ('CBDC'). Strong hopes, but also fears are associated with this new form of central bank money. Like in the case of banknotes in the 18th century, it seems as important to focus on the technicalities of how to ensure a well–controlled issuance contributing to monetary efficiency and stability. As much as banknotes were a major innovation to central banking that massively boosted its reach and its immediate benefits for all parts of society (i.e. beyond urban merchants), CBDC appears today as a natural evolution of central banking in a digitalized world in which more and more users perceive banknotes and coins as inconvenient, but digital payments as new normal. Introducing CBDC could be seen as preserving the role of central bank money in retail payment, as in its absence private digital payment solutions are very likely to crowd out central bank money over time, undoing the balance of the two forms of money that appears to be an important ingredient of efficiency, financial stability and consumer choice. At the same time, Stockholm Banco and the Banque Royale both serve as important lessons for today that major innovations in central bank liabilities, if not well designed, can become the source of financial disruptions, and that thinking through all aspects, including undesired side effects and potentially controlling their scale and scope, are important.

7. Conclusion

While the post-convertibility central banking of the last five decades is fundamentally different from earlier central banking, studying its often neglected pre-1800 history reveals important lessons for today. The universality of these topics despite the fundamental changes of society and information technology across the centuries in itself allows for a better understanding of the nature of central banking, and thus what defines good central banking and what endangers it. The early history of central banking confirms the crucial importance not only of central bank independence, but also of active stakeholder engagement, transparency and communication. Moreover, central banking has always been about financial stability, and has to continue to accept its crucial role with this regard - not only in terms of the much emphasized LOLR, but also with regards to the universal function of central bank money to serve as efficient medium of settlement for credit and commercial bank money. Likewise, independent and stability-oriented central banks have, since the 15th century, accepted Government debt as one of their asset classes, and do not need to shy away from it in the future if monetary policy and/or investment considerations support it. Last but not least, central banks should continue innovating the form of their monetary liabilities. Like paper banknotes boosted the relevance of central banking as of the 18th century, CBDC could appear as natural modernization of central bank money available to all in a digitalized society. CBDC would be issued as complement to banknotes, like banknotes were introduced and remained for several centuries a complement to deposits with the central bank. At the same time, some pre-1800 experience with banknotes has illustrated the risks of major monetary innovations for financial stability, implying also for today the need to understand all possible side effects of CBDC, and to choose adequate functional specifications to address those.

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