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The Law of National Guaranteed Banks in Argentina, 1887–1890

Free-Banking Failure or Regulatory Failure?

— ◆ —

NICOLÁS CACHANOSKY

Empirical studies of historical cases of free banking have received renewed interest recently. Because financial crises have occurred when central banks have existed, a comparative analysis with free banking promises to be worthwhile. By reference or implication, the Law of National Guaranteed Banks in Argentina between 1887 and 1890 has been advanced as a case of free banking. An expression of this reading of events appears in the work of Gerardo della Paolera and Alan Taylor, who say that the Law of National Guaranteed Banks is “commonly referred to as the ‘free banking law’” (2001, 240); a similar expression appears in the work of Vicente Vázquez-Preedo (1971, 37).¹ Kurt Schuler, in a volume on free banking, states: “Argentina’s currency during its *free banking period* consisted of fiat government notes and bank notes nominally backed by gold government bonds, but in reality unbacked” (1992b, 29, emphasis

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1. “En septiembre de 1887 el nuevo presidente, Juárez Celman, propuso al Congreso la Ley de Bancos Nacionales Garantidos o ‘Ley de Banca Libre’” (Vázquez-Preedo 1971, 37).

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added).² Roberto Cortés Conde says, when discussing the case of the national guaranteed banks, that the idea of “free banks” has antecedents in the United States (1989, 195–204). Lucas Llach maintains that “[l]egislation for a *system of free banking* had been an option since [President Bartolomé] Mitre’s times, favored by orthodox circles in Buenos Aires” (2007, 93, emphasis added). Pablo Gerchunoff, Fernando Rocchi, and Gaston Rossi maintain that President Juárez Celman (1886–90) found an opportunistic moment to embrace the theory of free banking that had been discussed during Mitre’s presidency in the 1860s (2008, 84).³

A few exceptions to this general characterization of the Law of National Guaranteed Banks as free banking, however, can be found. Charles Hickson and John Turner (2004), for example, classify the Argentine case as one of a regulatory environment rather than free banking.⁴ M. C. Gómez, in his article “Free Banking in Argentina” (1994), studies the period between 1810 and 1881 rather than the system of guaranteed banks. This earlier period might be labeled more properly an instance of free banking because it preceded the national government’s heavy involvement in money and banking.

The Law of National Guaranteed Banks in Argentina lasted only four years, from 1887 to 1890. Some studies (Cortés Conde 1989, 212–16; della Paolera and Taylor 2001, 106–13) have related the guaranteed banks’ failure to the Baring Crisis of 1890.⁵ If the guaranteed banks did indeed help to cause the Baring Crisis, then it is even more important to determine whether the system of guaranteed banks was a free-banking system or a regulated-banking system. Was this event a historical case of free-market failure, or did the regulations of the financial reform bear responsibility for the banking crisis?

In this article, I examine the structure and incentives that the Law of National Guaranteed Banks imposed on the market and on policies, and I conclude that the

2. In another chapter of the same volume, Schuller rejects the notion that the U.S. case should be labeled as free banking (1992a, 84). George Selgin takes a similar position (1988, 12–15). The U.S. case inspired the Law of National Guaranteed Banks, as I explain later.

3. “La teoría de los bancos libres, que desde tiempos de Mitre iba y venía por los despachos de la Casa Rosada y del Congreso como contracara del ‘Gran Banco del Estado’ y que despertaba las simpatías de algunos periódicos, le cayó como anillo al dedo a Juárez para exhibir su vocación de cambio y diferenciarse de su concuñado, pero esta teoría no hubiese prendido sin la crisis de 1885” (Gerchunoff, Rocchi, and Rossi 2008, 84). For money and banking in Argentina during this period and the years before 1881 and after 1890, see Terry 1893; Vázquez-Preseido 1971; Duncan 1983; Cortés Conde 1987, 1989, 2008; Gómez 1994; della Paolera and Taylor 2001; Nakamura and Zarazaga 2001; and Llach 2007.

4. Hickson and Turner also characterize the U.S. national and state banks between 1863 and 1914 as consisting of limited-liability banks with regulatory controls, not as a case of free banking. This characterization seems to be consistent given that the U.S. system inspired the Law of Guaranteed Banks in Argentina.

5. The Baring Crisis of 1890 was an international financial crisis that started in Argentina and was first felt in London. According to della Paolera and Taylor, it was the first modern emerging-market crisis (2001, 16). Baring Brothers and Co. (commonly known as “Baring”), at that time the world’s largest merchant bank, was highly exposed to Argentine securities. Although the Baring bank was rescued, the crisis hit hard in Argentina. The Baring Crisis of 1994–95, triggered by an internal “rogue trader” who bet unauthorized resources, drove the bank into a precarious situation, and it was finally bought by ING. See Ford 1956; Crump 1981; and Ferns 1992.

financial crisis that occurred was a consequence of the regulations rather than of free-banking instabilities. I first discuss what we should understand by the term *free banking*. I then describe the historical context preceding the Law of National Guaranteed Banks, the law itself, and the mechanisms and incentives of the underlying banking market. Finally, I discuss the main differences among the various mechanisms of free banking and conclude that the Law of National Guaranteed banks represents a historical case of regulatory failure, not market failure.

What Is Free Banking?

Analysts disagree as to what should be understood as free banking.⁶ Ignacio Briones and Hugh Rockoff (2005), for example, ask whether economists have reached a clear conclusion with regard to free-banking episodes. This ambiguity may exist because it is easier to say what should be absent in free banking than what particular form it should take. Free banking requires not simply the absence of a central bank, but also the absence of regulation. Nevertheless, a free market in money and banking can take different shapes. For example, Friedrich Hayek's 1976 proposal for currency competition (Hayek [1976] 2007) is not the same thing as free banking. What, then, makes a particular instance a case of free banking?

In free (*laissez-faire*) banking, all banks are allowed to issue their own notes, and freedom of entry into the banking industry prevails. There is no regulation of banking practices, such as reserve requirements, limitations of interest rates, and restrictions of branching. In addition, banks are free to choose whom they lend to; the law does not require them to lend to the government. Banks issue notes (inside money) against money proper (outside money) that their customers deposit. The contracts with their customers and other counterparties are enforced by law. In other words, the literature on free banking pertains to how the invisible hand would handle money and banking (Selgin 1988, chap. 1).

The literature usually considers gold as the outside money, with no restrictions on the issuance of money substitutes, such as banknotes, by private banks. A number of competitive banks may issue banknotes, but with money proper, the relation between banknotes is that of a parity, not an exchange rate. All banknotes are denominated in terms of the outside money (for examples, ounces of gold per dollar).

Although gold is the most common example of outside money, any other commodity being used as a medium of exchange can be the base for a free-banking system as long as the banks accept it.⁷ Note-issuing banks may also accept more than

6. A sample of the relevant work in the literature of free banking is Dowd 1988, 1992a, 1994; Selgin 1988, [1996] 2002; White 1989, [1984] 1995; Smith [1936] 1990; Horwitz [2000] 2003, chap. 7; and Sechrest [1993] 2008.

7. Selgin proposes fiat-money-based free banking as a transition stage in going from central banks to competition in banknote issue (1988, 164–72). Because fiat money is itself money, not a money substitute, this system qualifies as case of free banking.

one outside money, for example, gold and silver. However, because there are no regulations regarding the exchange rate between the two commodities, their exchange values float, and so Gresham's law does not hold.

Other proposed unregulated systems, such as Hayek's currency competition and the Greenfield-Yeager cashless system, do not fall into the free-banking category. In Hayek's plan, for example, banks issue their own fiat money with the promise to keep the purchasing power of their currency stable. But Hayekian banks issue outside money rather than inside money. Hayek was concerned about how to go from central banks that issue fiat currencies to a more competitive system wherein the alternative of going back to the gold standard is not feasible. In the Greenfield-Yeager cashless proposal, each issuer adheres to a common bundle as unit of account, but the redemption of liabilities is done in a different and more convenient bundle of goods. With the gold standard, the claims are denominated and redeemable in gold, and there is no separation between the price level of a bundle of commodities and a redeemable bundle.⁸ Neither Hayek's currency competition nor the Greenfield-Yeager cashless system falls in the category of free banking because banks do not issue banknotes against what is used as money in the market.

When studying historical cases, however, hardly a pure case of free banking can be found. Historical cases usually mentioned, such as those of Scotland from 1716 to 1844 and Canada from 1867 to 1914, still have some differences from an ideal free-banking system.⁹ Nonetheless, the incentives in the system may still be the same as those under free banking, where outside money is deposited in a bank that issues inside money or money substitutes. These issuer banks compete with each other to attract customers' savings and to act as intermediaries between suppliers and demanders of credit. If this structure is not present anymore—for example, if banks are forced to issue banknotes against government bonds rather than against outside money—the incentives and dynamics of the monetary institutions may change into something different from those associated with free banking.

The Situation Prior to the Law of National Guaranteed Banks

After Argentina's revolution against Spain in 1810, years were lost in conflicts as the provinces fell into wars and political disputes with each other. A strong rivalry took place between the Province of Buenos Aires (henceforth "Buenos Aires") and the other provinces for political and economic power.¹⁰ The provinces—absent a definite

8. For more details on currency competition and the Greenfield-Yeager proposal, see White 1984, 1999; Selgin 1994; Yeager 1997; and Hayek [1976] 2007.

9. For these and other historical cases, see Dowd 1992a; White [1984] 1995; and Laidler 2005–2006.

10. See Cortés Conde 2008, 34, for changes in military expenditure as a percentage of total government spending.

national government, involved in armed conflicts, lacking domestic and international credit, with no room for further taxation, and without the same access to the resources from the Potosí mines—used their own official banks to print money as a way to finance their ventures. Furthermore, trade taxes tended to decline in the presence of crisis and civil wars, and the provincial governments' inability to get much revenue from this source constituted a major problem for them in those days.

The difference between Buenos Aires and the interior provinces was huge. Llach reports that by 1880 Buenos Aires, with 32 percent of the total population, had a budget that accounted for 58 percent of the combined budget of all fourteen provinces (2007, 12). Buenos Aires's budget was 11.2 pesos per capita; in the other provinces, the budget was 2.5 pesos per capita. Llach offers a few possible grounds for this important difference (2007, 14). The decline of Potosí, on which the interior was dependent, affected the provinces, and they shifted their economic center to Buenos Aires, but poor transportation infrastructure and internal trade taxes slowed their economic growth and development. Also, the civil wars damaged the interior more than they damaged Buenos Aires, and import penetration displaced local producers in the interior.

A firm national government and the end of internal wars finally came with President Bartolomé Mitre (1862–68).¹¹ The Pacto de San José de Flores followed the battle of Cepeda in 1859 between Buenos Aires and the Argentina Confederation (formed by thirteen provinces). Under this agreement, Buenos Aires would join the nation as another province and sign the Constitution of 1853, but the possibility of constitutional reform remained open. In 1860, a constitutional convention was held, and Buenos Aires traded the Customs Office for a delay in the discussion of where the capital city would be located. The Banco de la Provincia de Buenos Aires (henceforth “Banco de la Provincia”) received a special regulatory and tax treatment that isolated the institution from the rest of the banks. These benefits persist today; the central bank, for example, cannot enforce its regulation on the Banco de la Provincia. The governor of Buenos Aires, by far the largest province, can make use of the bank's resources with great discretion. Aside from its being much larger than the other provincial banks, its institutional independence made the bank the country's de facto monetary institution until Julio Roca's presidency in the 1880s.

Each of the biggest provinces had its own currency, issued by its own official bank. The Constitution of 1853, however, expressly stated that the provinces were not allowed to have their own banks of issue without express permission from the national Congress. Without an established national government, monetary unity was impossible if the provinces turned against each other. Table 1 shows estimates of the rate of inflation for different periods prior to 1890. As the table shows, the years before Mitre's presidency were marked by higher rates of inflation during times of internal wars.

11. Mitre's presidency was followed by those of Domingo Sarmiento (1868–74), Nicolás Avellaneda (1874–80), Julio Roca (1880–86), and Juárez Celman (1886–90).

Table 1
Rate of Inflation, Subperiods, Argentina, 1820–1891

Period	Events	Rate of Inflation (% per Annum)
1820–30	war	20–22
1830–38		0
1838–42	war	25–45
1842–45		–11
1845–48	war	14
1848–61		4
1861–64	war	9
1864–67		–15
1867–75	gold standard	0
1875–78		9
1878–84	gold standard	–4
1884–89		8
1889–91		48

Source: Della Paolera and Taylor 2001, 14.

According to della Paolera and Taylor, the deflation of the period 1864–67 was owing to a strong effort to put an end to inflation: an increased demand for money was not accompanied by a corresponding increase in its supply (2001, 14). This strong deflation motivated the adoption of the gold standard as a means of stabilizing the monetary regime. This attempt, however, did not succeed, nor did the second attempt (to be discussed later). Even though the domestic conflicts ceased, banks still printed money to finance the provincial and national government budget deficits.

The civil wars and political instability explain at least in part why private banks had a difficult time staying in business and why the biggest official banks were located in the biggest provinces. Outstanding in its size and relevance was the Banco de la Provincia, which was big enough to affect the entire country's monetary situation.

President Mitre made the first attempts at monetary reform. In 1862, a decree stipulated that only the Banco de la Provincia's notes were to be accepted as legal tender by the Customs Office. Because trade was an important aspect of the economy, this reform sought to create an incentive to use these banknotes as a means of payment and to make them the market's de facto convertible currency. The following year, two new alternatives of monetary reform were presented: (1) transfer the privilege of issuing fiduciary money to the state or (2) build a monetary regime inspired by U.S. experience. Buenos Aires opposed both options because it did not want to lose its monetary dominance. Both projects failed to gain passage by the Congress, and

the Banco de la Provincia retained its permission to issue its own banknotes. In May 1863, however, a modification of the 1862 law established for the entire nation a unit of account, the peso fuerte. The peso fuerte became the unit of account for the national government's revenues and expenditures until 1881, but it was not printed until a monetary reform in 1881. Cortés Conde argues that although the national government's constitutional prerogative undeniably gave it the power to set the national monetary unit of account, past experience taught that the government would monetize its budget deficit, thus depreciating the currency (1989, 45–46).

In 1864, the nation and the Banco de la Provincia agreed on the Conversion Law, which, after a rescheduling, would become effective from 1867. The Banco de la Provincia had expanded the quantity of banknotes by 88 percent to finance the civil wars of 1859 and 1861, especially the battles of Cepeda and Pavón. The bank started to retire banknotes from circulation in 1864 to meet the forthcoming requirements of the new law. By 1867, the amount of loans had declined 51 percent, from 252 million paper pesos to 123 million pesos, and economic domestic activity was expanding (della Paolera and Taylor 2001, 39–40). Table 1 shows that this period had a yearly estimated deflation of 15 percent. In 1867, the Banco de la Provincia was granted permission to issue banknotes up to a maximum of 100 million paper pesos that would be exchanged by the new Office of Exchange established within the bank at 25 paper pesos per peso fuerte.

The Banco Nacional began operation in 1873, during Domingo Sarmiento's presidency (1868–74). Even though the bank was formally a private institution, the national government had a strong influence (for example, it could designate three of the bank's twelve directors). Competition with the Banco de la Provincia, almost a monopoly, started immediately as new clients and shareholders transferred their assets from the Banco de la Provincia to the Banco Nacional. Tension and competition between the banks to become the biggest monetary institution was long lived, manifesting the competition between Buenos Aires and the national government for political and economic supremacy.

Even though economic prosperity and growth were enjoyed during Sarmiento's tenure, the monetary situation was not without trouble. When international conditions changed in 1873, the Banco de la Provincia continued to expand metal-backed banknotes despite the contraction in gold reserves. International drain of reserves was soon accompanied by domestic drain as well (della Paolera and Taylor 2001, 43).

The Banco de la Provincia finally abandoned convertibility in May 1876, and a *curso forzoso* was enacted to enforce acceptance of the inconvertible banknotes during President Nicolás Avellaneda's (1874–80) term. However, even though the *curso forzoso* was endorsed, the nation did not accept the notes from the Banco de la Provincia at face value, but at the market-discounted price. Furthermore, Avellaneda had on his shoulders the largest loan in the country's history, contracted by former president Sarmiento. Despite substantial adjustment in government outlays, revenues

covered only half of the expenditures in 1876 (della Paolera and Taylor 2001, 43; Llach 2007, 26–27).

To avoid default, the national government took a 10 million pesos fuerte credit from the Banco de la Provincia at 4 percent and with a commitment to accept as much as 22 million banknotes at face value rather than at the market discounted price, with the exception that 50 percent of tariffs had to be paid at the market value or in specie. Furthermore, tax-collection agencies in Buenos Aires would not accept notes from the Banco Nacional, and no further emission of its banknotes was to take place in the province.

The debasement of the Banco de la Provincia banknotes that were used to pay taxes to the national government, now possible owing to the acceptance of banknotes at face value, became an urgent matter for President Julio Roca (1880–86), a problem that came to be known as the *cuestión económica*. On November 5, 1881, the Law of Monetary Unity was instituted to bring the country under a bimetallic standard. Money circulated in the form of paper money and metallic coins. The estimated shares in 1880 were: (1) metallic, 28.7 percent; (2) Banco de la Provincia paper, 61.9 percent; (3) Banco Nacional paper, 3.2 percent; and (4) smaller private and official banks' paper, 6.2 percent (Llach 2007, 23). But the monetary reform was not the only issue at hand. Settlement of the nation's debt to the Banco de la Provincia was vigorously debated in the Congress. The result was that the Banco de la Provincia lost the legal tender on its notes; appreciation of the banknote followed, and by 1881 the conversion rate was 25 pesos paper per peso fuerte again.

The Monetary Law imposed a fixed exchange rate between gold and silver that overvalued silver. Gold was more common in Buenos Aires, whereas silver had a greater presence in the other provinces. The fixed exchange rate under the new law put into motion the effects described in Gresham's Law, and the result was a drain of silver from the other provinces. The resulting absence of money in these provinces would later be part of the argument for adopting the Law of National Guaranteed Banks to create an inflow of liquidity.

According to the Monetary Law, only five banks were allowed to issue notes: (1) Banco Nacional, (2) Banco de la Provincia de Buenos Aires, (3) Banco Provincial de Santa Fe, (4) Banco Provincial de Córdoba, and (5) the private bank Otero & Co. No specific regulations were placed on reserve requirements. The new law, however, did not go into effect until July 1883 because most of the silver was in London. Thus, a complementary law was enacted, stipulating that notes would be redeemed in gold only.

President Roca assisted the Banco Nacional with three important measures: (1) in 1882, an increase in the bank's capital; (2) in 1883, permission to issue small-denomination notes; and (3) in 1885, legal-tender laws, with a further increase in circulation, providing that the Banco Nacional's notes would be the ones accepted at face value for tax payments. All three changes required approval by the Congress.

The Monetary Law, however, did not require the withdrawal of the notes from circulation when they were exchanged for gold. This law lasted only seventeen months. In late 1884, the Banco Nacional and the Banco de la Provincia were the first to abandon convertibility. In early 1885, the national government allowed the other banks to do the same. Inconvertibility was permitted for a term of two years, until December 1886. The system became a commodity-exchange standard. Table 2 shows the banknotes (pesos moneda nacional), reserves, and reserve ratios at the time inconvertibility was declared in 1885 and again in December 1886, when promised restoration of convertibility was to occur.

As table 2 shows, the largest banks were more aggressive in their issuance of notes. The Banco Nacional expanded its banknotes 48 percent, and its reserves declined 8.8 percent. The Banco de la Provincia increased its banknotes 26 percent, and its reserves declined 19 percent. For all the banks listed in the table, banknotes increased 45 percent, and reserves increased 25 percent.

For the period 1881–86, during Roca's presidency, the money supply of the Banco de la Provincia and the Banco Nacional grew from 35.3 million pesos moneda nacional to 70.6 million pesos moneda nacional, an increase of 100 percent. For the Banco de la Provincia, the change was a contraction from 33.6 million to 27.3 million, for Banco Nacional an increase from 1.7 million to 43.3 million. The Banco de la Provincia's share fell from 95 percent to 38 percent, preventing its notes

Table 2
Notes Issued and Reserves, Selected Banks, Argentina, 1885 and 1886

Bank	1885			1886		
	January and March Decreases			December		
	Banknotes	Reserves	Ratio (%)	Banknotes	Reserves	Ratio (%)
Banco Nacional	28,000,000	9,876,686	35.27	41,333,333	9,003,256	21.78
Banco Buenos Aires	27,436,280	10,403,000	37.92	34,436,280	12,403,300	36.02
Banco Santa Fe	2,200,000	1,000,000	45.45	5,000,000	2,900,000	58.00
Banco Córdoba	800,000	361,080	45.14	4,000,000	2,811,578	70.29
Banco Salta	125,000	20,000	16.00	125,000	52,162	41.73
Muñoz y Rodríguez*	400,000	130,281	32.57	–	–	–
Mendez Hnos y Cia.‡	–	–	–	400,000	130,281	32.57
Total	58,601,280	21,791,047	37.19	85,294,613	27,300,577	32.01

*Private bank.

‡Formerly Muñoz and Rodríguez Cia.

Source: Gómez and Giuliano 2006, 5–6.

Table 3
Foreign Trade (Thousands of Gold Pesos), Argentina, 1881–1886

	1881	1882	1883	1884	1885	1886
Exports	57,938	60,388	60,207	68,029	83,879	69,384
Imports	55,705	61,246	80,435	94,056	92,221	95,408
Balance	2,233	-858	-20,228	-26,027	-8,342	-26,024

from becoming the national currency (Llach 2007, 58). During this time, important investments were taking place, especially in cultivable lands, infrastructure, and expansion of the railroad, whose overall length grew from 2,384 kilometers in 1880 to 13,693 kilometers in 1892 (Llach 2007, 70). Was the increase in money supply excessive, or did it register an increase in the demand for money driven by the investments and economic growth that were occurring?

Cortés Conde presents data showing that the price level did not increase along with the increase in the money supply. Although economic data are limited for this period, Cortés Conde finds a decrease in money velocity, using three different estimators (1989, 210).¹² However, because decreased money velocity is the other side of the effect of prices growing at a lower rate than the money supply, causal questions remain open. Cortés Conde suggests potential explanations such as growth in the workforce and reduction in the demand for money for transactions owing to improvements in transportation infrastructure and commercial banking, but he concludes that these variables cannot explain the entire increase in the money supply (226–27).

Llach also maintains that it is difficult to say whether the money supply was growing at an unsustainable rate. He points out that imports and public expenditures grew 107 percent and 117 percent, respectively (2007, 60–61). Furthermore, the monetary expansion might have found some room by displacing metallic circulation.

For a small, open economy, where consumption goods are tradable, domestic prices of tradable goods are anchored in international prices. From 1883, the trade balance shows a deficit, which suggests an excess in monetary holdings. Table 3 shows the amount of imports, exports, and the trade balance in thousands of gold pesos.

The provinces did not commonly accept each other's currency. This refusal created a problem for the governors who wanted to monetize their debts at the expense of currency holders in other provinces. The governors argued that a legal-tender law should be imposed on their currencies so that those currencies would be accepted nationwide, arguing that under such a law commerce would flourish.

12. The three variables used as proxies for economic activity are exports, the sum of exports and imports, and net railroad income (Cortés Conde 1987, 10–11; 1989, 232–34).

Three alternatives were considered when the two-year inconvertibility term ended. The first alternative was to follow Britain's example, giving the Banco Nacional the monopoly of issuance. The second option was to take the responsibility for monetary issuance away from the provinces and give it to the national government. The provinces, however, did not want to surrender the benefits of monetizing their debt through monetary issuance. The third alternative was to refloat the Free Banking Law discussed in Congress in 1863 during Mitre's presidency. The end result was enactment of the Law of National Guaranteed Banks in 1887.

The Law of National Guaranteed Banks

The Law of National Guaranteed Banks required banks to buy National Gold Bonds specifically created to be sold to the guaranteed banks. This purchase was not a voluntary investment on part of the guaranteed banks; it was a requirement in order to be allowed to issue their banknotes. The bonds paid a 4.5 percent annual interest rate and a 1 percent amortization. The bonds were to be bought with gold that was to be deposited in the Treasury and in turn deposited at the Banco Nacional for two years before the nation made use of the reserves. For each 100 gold pesos bond, the bank was to deposit 85 gold pesos and would then receive 100 pesos in the form of new banknotes. Banks were allowed to increase their issuance by buying new bonds. To start operations, the banks had to meet a minimum capital requirement of 250,000 pesos. In addition, 10 percent of the received notes had to be kept as reserves, and this percentage was to be incrementally increased by 8 percent of the future earnings. Banks already operating had a transition schedule of up to seven years to comply fully with the new arrangement. The law also contemplated a maximum issuance allowed for all banks of 40 million pesos. Even though the Argentine law was inspired by the U.S. free-banking laws, there were a few important differences:

1. In the United States, banknotes did not have the benefit of legal-tender status; in Argentina, they did.
2. In the United States, banks were required to convert their notes against greenbacks. Under the Law of National Guaranteed Banks, issuers were not required to convert their notes.
3. The Argentine law did not specify the level of reserves that guaranteed banks must hold. Della Paolera and Taylor (2001) characterize this aspect of the arrangement as a lack of proper regulation. Cortés Conde also mentions the lack of a regulation on reserves as a problem (1989, 203).
4. Whereas the U.S. banks were to create a market for an already existing debt, the Argentine guaranteed banks were to buy newly issued bonds from the government; that is, the national government expected to exchange foreign debt against internal debt. Furthermore, the gold bonds were not liquid on the market.

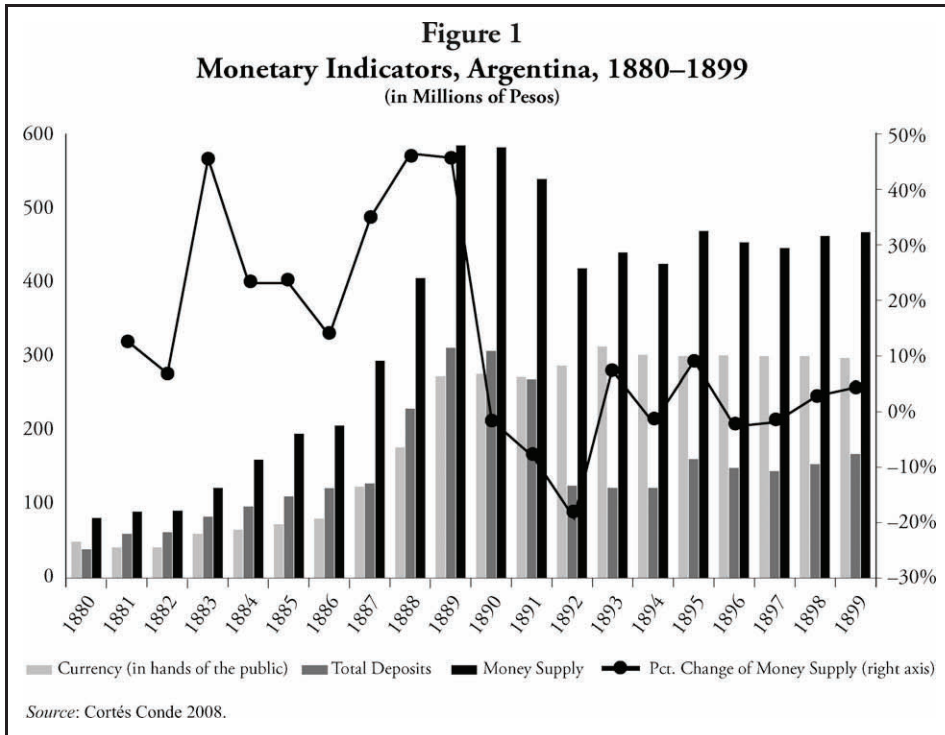
Through the Law of National Guaranteed Banks, the national government and the provincial governments hoped to find a mutually beneficial agreement. The nation was to receive gold that could be used to pay national debts in exchange for long-term bonds. Through this mechanism, the national government could get the gold in its vaults at a below-market price. The nation transferred the cost of acquiring the gold to the provinces. At the same time, the provinces managed to increase the circulation of their banknotes through legal-tender laws backed by the National Gold Bonds. The Banco Nacional was exempted from exchanging gold for the national bonds. President Juárez Celman made political use of the Law of National Guaranteed Banks and softened the requirement to deliver gold to allied governors.

An important aspect in the design was the arbitrage game in which the banks were engaged under this law.¹³ Chartered banks issued debt in London's money market and used the borrowed gold to acquire new national bonds to expand their issuance further. The Bank of London was conveniently keeping interest rates low; thus, the guaranteed banks in Argentina could get cheap gold and use it to issue notes against the National Gold Bonds. Referential interest rates in London for the years 1887, 1888, and 1889 were 3.31 percent, 3.25 percent, and 3.52 percent, respectively (Cortés Conde 1989, 227–28; Gerchunoff, Rocchi, and Rossi 2008, 92). Because the total amount that could be issued was capped, the Law of National Guaranteed Banks created a game in which banks had the incentive to speed up their issuance before other provincial banks consumed the available stock. These incentives contributed to the acceleration of total issuance by the provincial banks. Figure 1 shows the evolution of monetary indicators during the 1880s and 1890s.

As figure 1 indicates, monetary expansion increased the rate of growth during the Law of National Guaranteed Banks. The limit of 40 million pesos for all banks did not last long. Indeed, during 1888 the chartered banks were allowed to make new emissions (Terry 1893, 121–22; Cortés Conde 1989, 203). Furthermore, the Banco Nacional was authorized to use the gold reserves in the market, and it offered credit that individuals used to buy the gold. Table 4 shows the yearly percentage change in money supply from 1881 to 1890. The rate of increase in the money supply starting in 1887 is clear.

Even though the 45.7 percent expansion in 1883 occurred outside the period of the guaranteed banks, it warrants a short explanation. The Banco Nacional had received a new public-debt issue from the national government. The bank traded the public debt in France against gold. This operation implied a 182 percent increase in reserves, from 2.3 million pesos to 6.5 million pesos. The bank used this gold to expand its banknotes 540 percent, to 15.4 million pesos. This effect is captured in the 45.7 percent expansion in 1883.

13. See della Paolera and Taylor 2001, 240–43, for more details.



During the period of guaranteed banks, some banks managed to issue unauthorized notes. Table 5 shows the unauthorized issuance of each bank. In some cases, banks issued unauthorized notes in an important amount relative to the amount they had been allowed. The most important case is the Banco Provincial de Córdoba, which issued more unauthorized than authorized notes. In July 1889, the total unauthorized issuance represented 13.3 percent of the total authorized issuance. In December, that proportion fell to 10 percent. Even though for some banks the issuance of unofficial notes was important, the unauthorized emission was not large enough to explain the major increase in the supply of notes for the entire system. As the table shows, the authorized emission from March 31, 1889, to July 31, 1890, increased by 19.7 percent. By December 1890, it had increased another 32.4 percent. If an overexpansion of banknotes was an issue, then the national government’s new authorization to issue banknotes was more important than the expansion of the

Table 4
Rate of Increase in the Money Supply, Argentina, 1881–1890

1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
11.4%	4.5%	45.7%	22.0%	22.0%	12.1%	33.1%	44.0%	43.0%	-1.1%

Table 5
Authorized and Unauthorized Note Issue, Selected Banks, Argentina, 1889 and 1890

Bank	March 31, 1889		July 31, 1890		December 31, 1890			
	Authorized Issuance		Unauthorized Issuance		Authorized Issuance		Unauthorized Issuance	
	Million pesos	%	Million pesos	%	Million pesos	%	Million pesos	%
Banco Nacional	41.3	26.7	65.0	35.0	125.0	50.9		
Banco Buenos Aires	52.5	33.9	60.4	32.6	60.4	24.6		
Banco Córdoba	14.9	9.6	15.6	8.4	17.4	6.3	17.4	
Banco Santa Fe	15.2	9.8	15.1	8.1	5.2	6.1	5.2	
Banco Entre Ríos	8.5	5.5	7.1	3.8		2.9		
Banco Tucumán	4.0	2.6	4.0	2.2	1.7	1.6	1.7	
Banco Salta	4.9	3.2	4.4	2.4	0.3	1.8	0.3	
Others	13.7	8.8	14.0	7.5		5.7		
Total	155.0	100.0	185.5	100.0	24.6	100.0	245.5	100.0

Source: Gerchunoff, Rocchi, and Rossi 2008, 142.

unauthorized banknotes. Total authorized banknotes for December 31, 1886, amounted to 88.3 million pesos. By the end of 1890, the authorized banknotes had increased by 157.2 million pesos, whereas the total unauthorized emission for the same period was 24.6 million pesos.

A common concern regarding free banking is that concerted expansion might take place.¹⁴ Although the guaranteed banks might seem to have been expanding in concert, they were motivated to expand by different reasons. In the argument of concerted expansion, banks need to agree on a rate of expansion such that adverse clearings between them cancel out. In the case of the guaranteed banks, such agreement was not needed, and such collusion did not need to take place. The regulation the banks had to follow gave them an incentive to incur debt and buy bonds before the other banks did, so it appeared as if they were colluding to expand their banknote issues even though coordinated issue was not the rationale for their behavior. Furthermore, banks may have had an incentive not to expand in concert, but to expand faster than the others so as to claim a higher share of the pool of the allowed total issuance.

Moreover, as della Paolera and Taylor point out, there could also be a moral-hazard effect as long as the banks believed that the government would provide the banks with liquidity if they needed it (2001, 71–72). The banks' advances to the respective treasuries were performed against short-term and medium-term Treasury bills. These bills, however, could not be sold in the market because they were not liquid in the market, as was the case also with the National Gold Bonds. If the banks were to face a run, they would have to resort to the same treasury that issued the debt for financial help. Because the national government was in debt to all of the guaranteed banks and was in possession of gold, it might have been forced to play the role of a lender of last resort.

In fact, when the first run occurred, the government authorized the Banco de la Provincia and the Banco Nacional to issue new pesos to offset the withdrawals. This issuance caused pressure on the foreign-exchange rate, but because the government did not want the exchange rate to depreciate, it used gold to buy the issued banknotes. Figure 2 shows the evolution of the foreign exchange of pesos against gold.

Credit issued by the banks was used to buy gold in the market. The public, however, did not deposit the gold back into their bank accounts and instead hoarded it or sent it abroad. Given the inconvertibility of 1885, the public was unwilling to deposit gold back into the banks. The inconvertibility also entailed that contracts denominated in specie could be cancelled by using banknotes at face value instead of specie. Rumors of the nationalization of gold deposits increased the drain of gold abroad. The guaranteed banks bought national bonds with internationally borrowed gold, which the national government then used to buy issued notes from the public. The government then gave the notes back to the banks. In other words,

14. On this issue, see Selgin 1988, 80–82, and 2001.



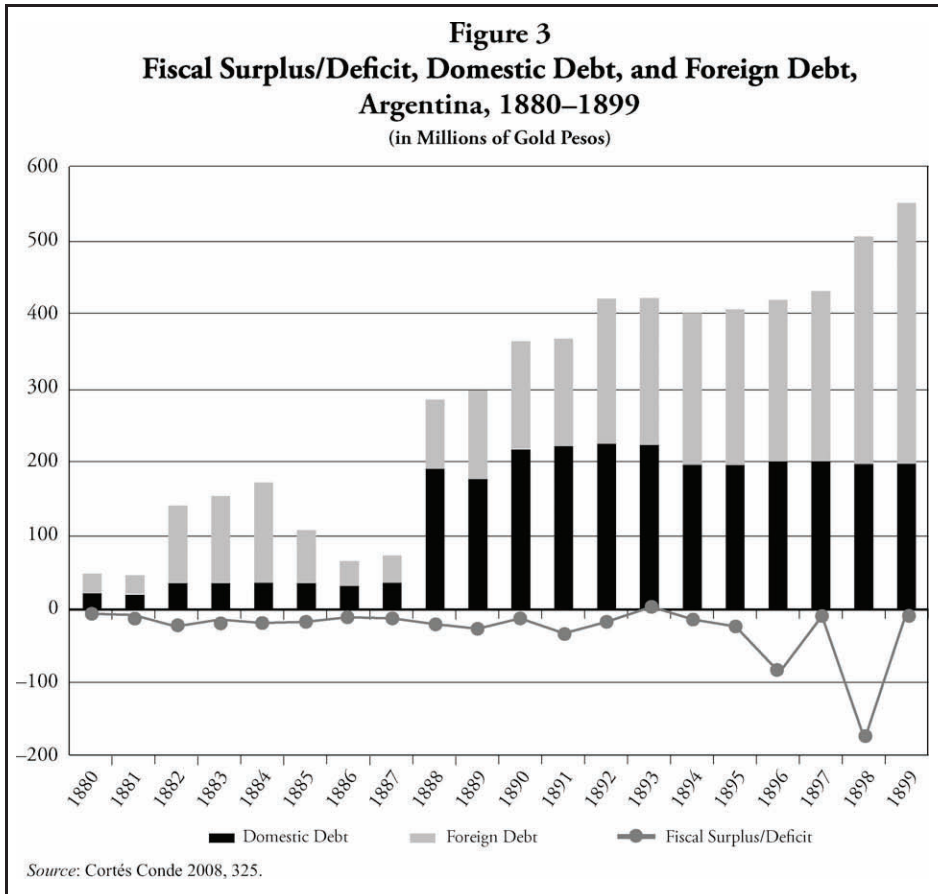
the government kept giving the public the notes required to drain its own gold reserves. Table 6 shows the evolution of the public hoarding of specie.

During this time, because Argentina had a fiscal deficit, the national government could not make use of net gold from a fiscal surplus to counteract the drain of gold from the Treasury by the public. Figure 3 shows the evolution of the fiscal deficit and government debt for the 1880s and 1890s. Note that the domestic debt more than

Table 6
Specie Held by Banks and the Public, Argentina, 1883–1890

Year	Specie Stock	Specie Held by Banks	Specie Held by Public	% Held by Public
1883	22.50	19.50	3.00	13.33
1884	22.90	20.70	2.20	9.61
1885	20.80	17.40	3.40	16.35
1886	33.10	26.50	6.60	19.94
1887	33.00	21.90	11.10	33.64
1888	69.10	52.70	16.40	23.73
1889	52.40	22.00	30.40	58.02
1890	54.30	10.00	44.30	81.58

Source: Della Paolera and Taylor 2001, 53. Specie values in millions of gold pesos.



tripled in only one year, increasing 3.64 times, from 51.21 million pesos in 1887 to 188.65 million pesos in 1888.¹⁵

If the original problem was the inconvertibility of the gold peso, the new monetary scheme seems to have been designed to make things worse. Under the design of the Law of National Guaranteed Banks and the government's monetary policy, the gold that would be required to have convertibility in the first place was disappearing. Such an increase in the money supply had the expected effect of depleting the gold reserves through the excess of notes and through the public's hoarding of gold.¹⁶

In early 1889, the national government decided to pay part of the internal debt denominated in gold with paper currency, thus affecting the portfolio of the

15. Through the Law of National Guaranteed Banks, the Treasury received resources from the guaranteed banks. Because these resources were delivered in connection with issuance of the National Gold Bonds, however, they should be considered as credit, not as revenue. Without this amendment, the result is a small deficit that overstates the Treasury's fiscal position. For more details, see Cortés Conde 1989, 179, 210, and 2008, 367–69.

16. According to della Paolera and Taylor, the rationale of this monetary policy might be based on signaling a potential return to convertibility at par (2001, 60).

Barings Brothers and Co., in which bonds from Argentina had an important weight. This implicit default put pressure on the provincial banks to repay their foreign debts. The foreign market became reluctant to absorb any more Argentine government debt. In the first quarter of 1890, the Banco de la Provincia and the Banco Nacional were hit by a run that finally triggered the crisis. These two banks kept a lower cash-deposit ratio than private commercial banks. For example, in 1889 the Banco de la Provincia had a 5.8 percent cash-deposit ratio, whereas private banks had a 34 percent cash-deposit ratio. This lower ratio is in part explained by the role these banks played in financing their respective treasuries in exchange for illiquid Treasury bills.

As figure 3 suggests, the fiscal deficit was not transitory. The chronic deficit indicates that the national government's structural spending was too high for the revenues received. Had the government committed itself to achieving a fiscal surplus rather than to getting cheaper gold from provincial banks, the dangerous dynamic of the Law of National Guaranteed Banks would not have been set in motion.

After the crisis broke, foreign banks (Bank of England, Banque de France, and the Reichsbank) offered a new loan under strict conditions. The Argentine government found itself in the position of having to choose between liquidating the official banks and avoiding default with the external loan and continuing to depreciate the currency and declare the default. Even though President Celman chose the latter, the Congress opposed him, and he finally resigned on August 6, 1890, leaving Vice President Carlos Pellegrini in office as president for the remainder of his tenure (1890–92). The debt pressure was such that annual interest on the principal amounted to 40 percent of 1890 fiscal revenues (della Paolera and Taylor 2001, 73). In April 1891, the official banks were finally closed.

A Free-Banking Failure or a Regulatory Failure?

It is clear that the system of guaranteed banks did not emerge spontaneously in the market but was instead the outcome of inconsistent regulation by the provinces and the national government. The Law of National Guaranteed Banks was not designed to allow multiple banks to operate; that condition was already established. The motivation was to find new ways to finance the government and the provinces. That the banking situation established under the Law of National Guaranteed Banks is referred to as a case that somehow resembles a short-lived period of free banking in Argentina suggests the continuation of misunderstanding and misuse of the terminology of free banking.

The absence of regulations, not the presence of several note issuers, makes a banking system free. Even in the absence of a monopolist, such as a central bank, strict government regulations may be in place. Because central banks are institutional monopolies, their presence alone implies regulation of the market by doing away with freedom of entry, but the absence of central banks does not imply the absence of

regulation. To describe as free banking a banking situation that was significantly regulated and driven into a dangerous dynamic contributes to overstatement of the risks of a free market in banking.

The guaranteed banks did not issue banknotes against outside money, but against illiquid national bonds issued by a government with a chronic budget deficit. While depositors were hoarding gold or sending it abroad, the guaranteed banks managed to keep expanding their banknotes by arbitraging foreign debt to buy more national bonds. If this case were an instance of free banking, then, given the hoarding of gold, the banks would have had to contract their note issuance. The guaranteed banks, however, were detached from the commodity money and focused on the arbitrage game.

A sports analogy may be helpful here. Basketball rules, for example, may vary in some aspects from country to country, but the game remains the same. However, if the changes in rules affect the players' incentives, we may get a different game—say, for example, baseball. The Law of National Guaranteed Banks did not represent a mere change in degree, but a new game.

Why, then, is the National Law of Guaranteed Banks referred to as a free-banking law? A possible reason is that the law was based on a proposal called “Free Banks” that Mitre presented to Congress in 1863. The reform was not approved at that time, but it became known as the “free-banks law.” This reform was based on the U.S. free-banking laws. It was the idea that the U.S. system was one of free banking that ultimately led Mitre's reform proposal to be called “Free Banks.” However, the U.S. system and free banking differ in important ways (see Selgin 1988, 12–15; Dowd 1992b; Selgin and White 1994). Even if the guaranteed banks were intended to replicate the U.S. system, the Argentine case still would not have been a free-banking reform. Indeed, Senator Felix Frias noted on June 20, 1863, in a discussion of Mitre's proposed reform that the Law of National Guaranteed Banks had little, if anything, to do with free banks. To Frias, free banks and regulations with national guarantees on deposits were incompatible. He also expressed concern that the proposed reform would lead the government to increase its debt, which is exactly what happened after the guaranteed banks were established.¹⁷ This situation was also expressed in the Principles Declaration of the Unión Civica written by Leandro N. Alem in 1891 (reprinted in Alem 1985). In this document, Alem expressed the social feeling of the time and his concern that the official banks would always be at risk of being placed under the pressure of political passions. The official bank, he observes, perturbs the social order, and it would be a wise political move to suppress it. He did not consider the financial crisis to be a result of *laissez-faire* banking.

17. Congreso de la Nación, Cámara de Senadores, Número 20, 15^a, Sesión ordinaria del 20 de Junio de 1863, Buenos Aires, 132.

Conclusions

The Law of National Guaranteed Banks was not a failed free-banking experiment. It was an inconsistent design intended to avoid reduction of the government's chronic fiscal deficit. The law did not establish authentic free banking. If banks were in fact free, no special laws or national guarantees would be needed. The dangerous arbitrage dynamic into which the banks were drawn constituted a crisis waiting to happen.

The difference between free banking and the Law of National Guaranteed Banks is not inconsequential, nor is it a matter of degree. In the former, an essential part of the banks' business consists in attracting outside money from depositors. The Law of National Guaranteed Banks shifted the banks' core business from attracting depositors' savings to borrowing gold in international markets. People did not stop saving, however; they simply changed what and how they saved. Rather than depositing their money in the banks, they hoarded their gold or saved it abroad. In a free-banking system, banks that fail to attract savings from customers cannot expand their business by issuing more banknotes. For the guaranteed banks, it was unnecessary to attract savings because the specie was guaranteed by the National Gold Bonds. Guaranteed banks managed to keep expanding their note issuance at the same time that depositors increased their hoarding of gold. Had regulation been absent, this combination would not have occurred. The Law of National Guaranteed Banks not only regulated the market but also changed the incentives completely. To refer to such a case as one of free banking is unwarranted and only increases the existing confusion about this subject.

References

- Alem, L. N. 1985. Bancos oficiales y emisionismo. *Libertas* 3 (October): 237–40.
- Briones, I., and H. Rockoff. 2005. Do Economists Reach a Conclusion on Free-Banking Episodes? *Econ Journal Watch* 2, no. 2: 279–324.
- Cortés Conde, R. 1987. Nuevos Aspectos en la Crisis de 1890. *Series Documentos de Trabajo* 145. Buenos Aires: Instituto Torcuato di Tella.
- . 1989. *Dinero, deuda y crisis*. Buenos Aires: Editorial Sudamericana.
- . 2008. *The Political Economy of Argentina in the Twentieth Century*. Edited by H. S. Klein. Cambridge, U.K.: Cambridge University Press.
- Crump, A. 1981. The Baring Financial Crisis. *Economic Journal* 1, no. 2: 388–94.
- Della Paolera, G., and A. M. Taylor. 2001. *Straining at the Anchor: The Argentine Currency Board and the Search for Macroeconomic Stability, 1880–1935*. Chicago: University of Chicago Press.
- Dowd, K. 1988. Automatic Stabilizing Mechanisms under Free Banking. *Cato Journal* 7, no. 3: 643–59.
- , ed. 1992a. *The Experience of Free Banking*. London: Routledge.
- . 1992b. U.S. Banking in the “Free Banking” Period. In *The Experience of Free Banking*, edited by K. Dowd, 206–40. London: Routledge.

- . 1994. Competitive Banking, Bankers' Clubs, and Bank Regulation. *Journal of Money, Credit, and Banking* 26, no. 2: 289–308. Doi: 10.2307/2077910.
- Duncan, T. 1983. La política fiscal durante el gobierno de Juárez Celman, 1886–1890: Una audaz estrategia financiera internacional. *Desarrollo Económico* 23, no. 89: 11–34.
- Ferns, H. S. 1992. The Baring Crisis Revisited. *Journal of Latin American Studies* 24, no. 2: 241–73.
- Ford, A. G. 1956. Argentina and the Baring Crisis of 1890. *Oxford Economic Papers* 8, no. 2: 127–50.
- Gerchunoff, P., F. Rocchi, and G. Rossi. 2008. *Desorden y progreso*. Buenos Aires: edhasa.
- Gómez, M. C. 1994. Free Banking en Argentina. *Libertas* 11, no. 21: 39–110.
- Gómez, M., and F. Giuliano. 2006. El Banco Provincial de Córdoba en la Crisis Bancaria de 1890–91. *Anales*. Salta: Asociación Argentina de Economía Política.
- Hayek, F. A. [1976] 2007. *Denationalisation of Money*. London: Institute of Economic Affairs.
- Hickson, C. R., and J. D. Turner. 2004. Free Banking and the Stability of Early Joint-Stock Banking. *Cambridge Journal of Economics* 28, no. 6: 903–919. Doi: 10.1093/cje/beh036.
- Horwitz, S. G. [2000] 2003. *Microfoundations and Macroeconomics: An Austrian Perspective*. London: Routledge.
- Laidler, D. 2005–2006. Free Banking and the Bank of Canada. *Bank of Canada Review* (Winter): 15–24.
- Llach, L. 2007. *The Wealth of the Provinces: The Rise and Fall of the Interior in the Political Economy of Argentina, 1880–1910*. Cambridge, Mass.: Harvard University Press.
- Nakamura, L., and C. E. J. M. Zarazaga. 2001. *Banking and Finance in Argentina in the Period 1900–35*. Federal Reserve Bank of Philadelphia Working Paper no. 01-7. Philadelphia: Federal Reserve Bank of Philadelphia.
- Schuler, K. 1992a. Free Banking in Canada. In *The Experience of Free Banking*, edited by K. Dowd, 79–92. London: Routledge.
- . 1992b. The World History of Free Banking: An Overview. In *The Experience of Free Banking*, edited by K. Dowd, 7–47. London: Routledge.
- Sechrest, L. J. [1993] 2008. *Free Banking. Theory, History, and a Laissez-Faire Model*. Auburn, Ala.: Ludwig von Mises Institute.
- Selgin, G. 1988. *The Theory of Free Banking*. Lanham, Md.: Cato Institute, Rowman and Littlefield.
- . 1994. On Ensuring the Acceptability of a New Fiat Money. *Journal of Money, Credit, and Banking* 26, no. 4: 808–26. Doi: 10.2307/2077948.
- . 2001. In-Concert Overexpansion and the Precautionary Demand for Bank Reserves. *Journal of Money, Credit, and Banking* 33, no. 2: 294–300. Doi: 10.2307/2673887.
- . [1996] 2002. *Bank Deregulation and Monetary Order*. New York: Routledge.
- Selgin, G., and L. H. White. 1994. Monetary Reform and the Redemption of National Bank Notes, 1863–1913. *Business History Review* 68, no. 2: 205–43.

Smith, Vera, C. [1936] 1990. *The Rationale of Central Banking*. Indianapolis, Ind.: Liberty Fund.

Terry, J. A. 1893. *La crisis*. Buenos Aires: Imprenta M. Biedma.

Vázquez-Preledo, V. 1971. *El caso argentino*. Buenos Aires: EUDEBA.

White, L. H. 1984. Competitive Payments Systems and the Unit of Account. *American Economic Review* 74, no. 4: 699–712.

———. 1989. *Competition and Currency*. New York: New York University Press.

———. [1984] 1995. *Free Banking in Britain: Theory, Experience, and Debate, 1800–1845*. London: Institute of Economic Affairs.

———. 1999. *The Theory of Monetary Institutions*. Oxford, U.K.: Basil Blackwell.

Yeager, L. B. 1997. *The Fluttering Veil*. Edited by G. A. Selgin. Indianapolis, Ind.: Liberty Fund.

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