Law's System

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I. Outline

John Law, the son of a Scots goldsmith, had a dissipated youth culminating in a death sentence for killing a man in a duel in London. He managed to escape under mysterious circumstances and spent twenty years living in various parts of Europe, making a living at the card-table, dabbling in lotteries, and publishing a ground-breaking book on economics in 1705. He was also a man with a project: he wanted to create a bank, and unsuccessfully sought a charter from different governments. His stated goal was not just to create a private banking concern, but to establish a new and better sort of currency, one that had better properties than the gold or silver-based currencies of the time. Basing his proposal on his monetary theories, he promised governments prosperity and growth stimulated by a well-managed currency.

When he arrived in Paris in 1714, he found receptive ears. The state of French finances was dismal, as a consequence of the long and expensive War of Spanish Succession which had just ended. The French authorities realized that their methods of war-financing were inadequate and they were open to new ideas. The death of Louis XIV and the beginning of a Regency under the duke of Orléans opened opportunities for reform. Law's first proposal for a state bank was rejected in October 1715 because it was felt that credit conditions were not auspicious, and other, more traditional means were used to bring the fiscal situation under control. A combination of tax increases, partial default and monetary devaluation was used by the new government slowly to bring expenditures in line with revenues, and to consolidate the floating debt into 4% bonds with no redemption date. However, the Regent was sympathetic to Law's ideas and allowed him to start a private bank, the *Banque générale* in May 1716. From this modest starting point Law was able to build piece by piece a complex array of institutions that came to be known as Law's System.

The System had two components, one involving an operation in public finance, the other involving fiat money. The operation involved the floating of shares in a private company, the issue of paper money, and the conversion of government debt into a sort of *government equity*. The System ultimately unravelled with a coincident, and dramatic, fall in the market value of both the money and the equity.

The System unfolded from the founding of Law's first company in May 1716 to Law's departure from France in December 1720, in three (not necessarily consecutive) stages.

A. The bank

The bank was designed to discount merchant bills and bills of exchange, and to issue notes. The notes were denominated in a peculiar fashion, due to the nature of the monetary system of the time. Currency took the form of gold and silver coins, which bore no indication of value; the government set by decree the relation of coins to the unit of account (the franc or livre) in which nominal contracts were denominated. The bank's notes, issued in large denominations, promised to the bearer on demand a specific number of coins of a given weight and fineness, rather than a specific number of francs.

The bank was set up as a joint-stock company, and bearer shares were offered to the public in exchange for newly created 4% bonds. Law, naturally, was the director of the bank. General assemblies took place every six months, during which dividends were announced. To help overcome initial resistance to the bank and support the circulation of the notes, the Regent made the notes receivable in payment of taxes, and obligated the State's receivers to redeem them on demand in coin. Thus, although they were not legal tender, they gained wide acceptance, and it proved efficient in fostering circulation and dealing in foreign exchange markets. After two years, Law was ready to transform it. At his request, the bank was nationalized in December 1718: the king bought out the shareholders, and the Bank became *Banque Royale*, answerable only to the government for note issues.

Law used it to replace the existing commodity money with fiat money, at first on a voluntary basis, later relying on legal restrictions, in what was the first full-scale attempt at replacing the metallic medium of exchange with paper in Europe.

B. The company

The second stage was the creation of another joint-stock company, though with a much larger capitalization. This company's purpose was to develop the hitherto unprofitable Louisiana territory, representing 40% of the Continental United States but devoid of European settlers. The Company of the West was also created through an initial public offering, begun in August 1717, in which shares were issued against the State's 4% bonds. The interest on the bonds was to provide working capital. To replace the rather unsecure payment of the interest, the company in August 1718 proposed taking over the tobacco monopoly. This profitable addition to the company's activities boosted the price of the shares, and was the first in a series of mergers and acquisitions financed in part through further issues of equity at rising prices. By July 1719, Law had acquired monopoly rights on virtually all overseas trade, and renamed his enterprise the Indies Company.

C. The system

In the third stage, the Indies Company morphed into a very different entity, as tax collection became its principal activity. In August and September 1719, it acquired the lease to run the General Farms, through which most indirect taxes were collected, and it bought out the officers in charge of collecting direct taxes. Simultaneously, it launched an ambitious program to refinance the whole of the national debt, lending to the State at 3% enough funds to repurchase at par all its outstanding obligations. To finance the loan, the Company doubled its equity: the new shares were sold in exchange for government bonds.

At its apex, in January 1720, the System was headed by Law as director of the Company and the Bank, but also as newly appointed minister of finance enjoying the full confidence of the Regent. At the same time, the bank's notes were taking the place of specie. Now denominated in units of account rather than in specific coins, the notes were issued in smaller denominations and made legal tender, while gold and silver were progressively demonetized except for the smallest denominations. The unofficial street market for shares had reached extraordinary heights, with prices going from 500 in May 1719 to 10,000 in late December 1719.

The government's fiscal problems seemed solved: a war with Spain in 1718 and 1719 was financed without difficulty. The whole fiscal structure of France had been radically altered. The company collected all taxes and paid a fixed sum to the government for its expenditures. At the same time, the State's creditors had now been transformed into holders of a stock whose backing was the tax revenues.

D. Collapse and aftermath

The downfall soon followed. The John Law was led to boost the price of shares, and ultimately peg it at a fixed price above its market level in bank notes, leading to a massive issue of notes in exchange for shares. To control the inflation that was bound to follow (and foreshadowed by a collapsing exchange rate on the franc), he tried to change the relation between notes and unit of account. This broke the trust in his System, both in the public and in government (May 1720). The price of shares collapsed, the notes became depreciated. Law spent six months trying to rescue his company by unwinding the debt conversion scheme and repurchasing bank notes through various means, until the company's impending bankruptcy forced him to throw in the towel and leave France in December 1720.

From January 1721 to September 1723, a massive cleanup operation dealt with the paper wreck of the System and with the massive wealth redistribution that had ensued as debtors took advantage of the depreciating note's legal tender status. The Company was salvaged as a purely commercial enterprise. As for the rest of the Company's liabilities (including the demonetized bank notes), the government converted them back into bonds, at varying rates depending on the manner in which they had been acquired and how well the holders could document their claims. Gold and silver were restored as currency, and in 1724 an abrupt deflationary policy revalued the debt, returning France's debt burden to roughly the level where it stood before Law. With these policies, the French government did not merely pass up a chance to default on its debt, but in fact purposefully carried out the opposite of a default.

II. Why did John Law fail?

A. Bad theory

For all his merits as a pioneering thinker, Law did not have a coherent monetary theory. In his view, the increased demand for monetary balances due to stimulated economic activity would match the increased supply that lay at the heart of his proposals and avoid inflation. He also subscribed to the common view that a larger money stock implied lower interest rates, and the prosperity of low-interest economies like the Netherlands led him to think that this was an important goal. One of his plans was to have the Bank offer loans at 2%, at a time when commercial rates were typically 5 to 6%.

B. The bubble trap

Law's scheme relied on a voluntary debt-for-equity swap: for bondholders to (literally) buy into the scheme, the expected returns had to be adequate. This conflicted with the goal of lowering interest rates, and Law used the expectation of substantial capital gains, to resolve the conflict. The instruments issued to convert debt were in fact warrants: in exchange for a down-payment, purchasers acquired a subscription certificate with successive payments scheduled into the future. Only upon meeting all the payments did the purchaser acquire a share: otherwise, the certificate was void. This option feature meant that the debt conversion would take place only if purchasers were induced to exercise their option. Law was led to push up, and then sustain the price of shares by all available means, including money creation. This might not have mattered if the target price had been reasonable. A crude price-earnings calculation suggests that the target was overvalued by a factor of two or three, although in fairness to Law it does not take into account either the liquidity premium that stock readily used as medium of exchange should receive, nor the improvements in productivity of the French economy that his innovations might have produced.

III. Power and commitment

Law's writings display a strong belief in what would later be called "laisser faire," and he repeatedly asserted that credit cannot prosper under coercion. But when he first proposal was discussed in 1715, royal advisers raised an objection. A bank would never work under an absolute monarchy, because the king would always be tempted to raid the bank or force it to monetize deficits. Law's response was that an enlightened prince would understand that the long-term gains from the bank outweighed any short-term gains. Law and his critics also debated the empirical evidence: to those who gave Britain and the Netherlands as proof that banks prospered only under divided government, he alleged Naples, Vienna and Rome. In the event, however, Law succumbed to the temptation of power. Arguing that sometimes sick people have to be healed against their judgement, he used the vast powers of a French finance minister to enforce the success of his fiat money, going as far as making possession of gold illegal and banning jewelry.

IV. The innovations

Why is this episode of interest today, beyond the allure of its fascinating drama?

A. Fiat money

Law's System is an important point in the history of money. It represents the first full-scale implementation of a fiat currency in Europe. It was also different from the other instances of paper money of the time, such as the belligerents of the French and Napoleonic Wars. Law's currency came about by design, not accident. Moreover, its primary purpose was not deficit financing (the fiscal innovations would take care of that), but stimulating the economy by the provision of credit. This radical innovation stood in ill repute for much of subsequent time, until Irving Fisher and Keynes popularized the idea that a well-managed fiat currency could stabilize prices and increase output.

B. Government equity

Law's fiscal innovation combined in one reform disparate elements that had existed before. The existing practice in debt management was to earmark specific taxes to back perpetual annuities, and oftentimes allow creditors to claim the interest directly from the tax collectors. Law's insight was to recognize that all government liabilities, of whatever nature, are backed by the same stream of revenues, and that this stream is inherently stochastic. Rather than attempt to deliver a fixed income, which in some states of the world requires default, it was better to be explicit about the random nature of the income stream. Profit-maximizing tax collection was common since medieval times, and French governments had already been working toward consolidation. But Law's System went further by making the creditors into tax collectors. Law went much further, of course, by making this government equity readily convertible into money on demand.

Why did Law get involved in tax collection? After the fact, he alleged his belief that his bank would never be safe from the government until he solved the government's fiscal problems. This intuition appears in line with the fiscal theory of the price level: if the government's debt is made explicitly contingent, there is no need for the price level to adjust in response to fiscal shocks Sims (2001). Law could thus hope to put an end to the French practice of devaluations and revaluations of the currency and remove some of the risk premium imbedded in nominal interest rates in France.

Bibliography

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