

Investment Perspective

CAN WE LEARN FROM THE PAST?

**THE FRENCH LIVRE, THE MISSISSIPPI BUBBLE AND
THE FIRST STOCK MARKET CRASH**

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The First Stock Market Crash, 1720

By understanding previous market bubbles and crashes, we seek to learn what they might have in common with subsequent periods of market stress. The hope is that this will help us better navigate challenges and capitalize upon opportunities in the current day. One take away that is supported by the work of Yale professor William Goetzmann is that market bubbles are usually associated with periods of financial innovation. The following is a summary of the introduction of paper money into the French economy for the first time in 1716 and how this financial innovation was intertwined with the first great stock market crash, known as the Mississippi Bubble. It is the story of how a debt crisis set in motion the events that led to a stock market crash of epic magnitude. It helps one understand why more than 80 years after the crash, the French in 1803 were willing to sell their Louisiana and Gulf Coast Territories to the United States for just \$12 million in cash and \$3 million in gold, a price of fewer than 3 cents an acre. It is a story that informs us the capital markets have been global from the very start, as events begin in France, migrate to Britain, and then jump to the Netherlands. It is a story that tells us burst bubbles can take more than 100 years to recover from, reminding us that Japan, which is 30 years into its recovery, may have a long way to go. Finally, it is a story littered with the same challenges we confront today; excessive debt, financial innovation run amok, tremendous wealth inequality, policy mistakes, world trade, and human nature prone to want, greed, and fear. It leaves one wondering has anything changed and can we learn from the past.

The Granddaddy of Financial Innovators, John Law

Until 1716, the French used coins for their day to day financial transactions. In 1716 John Law introduced the use of paper money to the French economy. Law has been described as a financial genius and swindler supreme. Perhaps, but Law seems better described as a financial genius with weak impulse control. Law was a brilliant and largely self-taught economist. He was also a gambler, heavy drinker, banker, murderer, and trusted royal advisor. Law was born in Scotland in 1671. In his early teens, Law joined the family goldsmith business and studied banking under his father. Around the age of 20, Law went to London to study finance but abandoned his education to gamble and drink. Law was convicted of killing a man in a duel over the affections of Elizabeth Villiers, for which he was sentenced to death. However, in 1694, Law managed to escape to Amsterdam, where he resumed his study of banking and economics. Eventually, his murder conviction was commuted to manslaughter, and he was ordered to pay a fine^{1,2,3}.

Amsterdam was the perfect laboratory for the young John Law. Amsterdam in the 1690s was the center of financial innovation in Europe, then constituting the developed world. To facilitate commerce and to help merchants avoid accepting inferior or worthless coinage, the Dutch had developed one of the world's first central banks. But more importantly, in 1602, the Dutch had invented the first charter company, the United Dutch East India Charter Company, which quickly gained a virtual monopoly on the highly profitable Asian spice trade. In the process, the Dutch, almost inadvertently, created the first stock market when it required investors in the United Dutch East India Charter Company to sell their stakes to other investors if they wanted to get their capital back. The United Dutch East India Charter Company made its investors rich as its share price rose about seven-fold in its first 100 years while at the same time it distributed virtually all of its profits to shareholders in the form of a dividend that averaged 16.5% annually⁴.

Law took it all in and began to develop economic and monetary theories of his own. Law argued the government's primary responsibility was to increase prosperity and believed this could be accomplished by increasing the amount of currency in circulation, an innovation that the Dutch were lacking. Law advocated for the use of paper money and limiting the use of gold and silver to providing security for paper currency so that more money could circulate within the economy. The aim was to increase commerce and thereby increase wealth. In 1705 Law proposed to the Scottish Parliament that a national bank be established, to no avail. Law persisted in trying to interest other governments in his ideas without success until 1715⁵.

In 1715, France was perceived as a rich and powerful country. However, the reality was that France had a severe debt problem. France was struggling to collect enough taxes to make interest payments and was nearly bankrupt. One problem was that the French lacked an effective financial system. The Dutch and English had created central banks to facilitate trade, the collection of taxes, and large-scale government borrowing, whereas France had not. With Louis XIV's government on the brink of insolvency, France was receptive to the establishment of a central bank. However, unlike England and Holland, Law proposed the issuance of large amounts of paper banknotes to be used as currency for everyday transactions. The broad-based usage of paper money was a colossal financial innovation. Until that time, France had always relied upon hard currency, primarily gold, silver and copper.



A major contributor to France's financial woes was the enormous debts it had accumulated fighting wars, the most recent of which was the War of Spanish Succession (1701 to 1713). Another source of financial stress was excessive aristocratic consumption and pleasure seeking. The gap between the rich and poor was staggering and on full display. Law's innovations were seen as tools that could help alleviate this gap. France was heavily in debt, 3 billion Livres, and struggling, so Law was invited by France to present his ideas to Philippe II, the Duke d'Orleans, who was the regent for the child King Louis XV. Philippe was desperate for a solution to the country's debt servicing crisis, so France gave Law the opportunity to put his ideas into action^{6,7}. New Orleans, which is named after the Duke, celebrated the Tri-centennial of its founding last year.

Law's Big Idea

In addition to reducing its debt, France was also interested in developing its Louisiana and Gulf Coast Territory. Law had a solution for both. Law proposed the creation of both a central bank for national finance and a state company for commerce, thereby creating a banking and commerce monopoly run by the state. In essence, Law's idea was to exchange France's debt for stock in the state-chartered company he intended to create⁸. The first step involved the establishment of a private bank, Banque Générale. In 1716 Banque Générale issued paper money redeemable at face value in gold and silver. Banque Générale's role was to finance trade with France's Mississippi Territory and other New World possessions. During its two year reign, the Banque Générale successfully managed its paper currency, and the currency held its value⁹.

The next step was the creation of the state company by royal charter, which was named Company of Louisiana and the West, commonly referred to as the Mississippi Company. The company was given an exclusive, 25-year lease to develop and conduct trade for the vast Louisiana territories. A requirement of the lease was the settlement of 6,000 French citizens and 3,000 slaves¹⁰. A requirement that Law went to great lengths to satisfy, including the spontaneous release of prisoners that agreed to marry destitute French citizens and immediately board ships headed to the Louisiana Territory¹¹. The lease also included a monopoly for the growing and selling of tobacco. After the granting of exclusive trading rights, the Mississippi Company and the bank were united in December 1718. In tandem with the creation of the Mississippi Company, the government ordered all public funds to be deposited into the Banque Générale. After public funds were deposited in the bank, the private stockholders in Banque Générale were bought out, and Banque Générale became Banque Royale, a royal institution. The Banque Royale's notes were legal tender throughout France. The process was completed by early 1719¹².

Then came the issuance of stock and the retirement of debt. For the stock to have value investors needed to believe that controlling the Mississippi and trade in the region was going to be very valuable at some point, because the first settlement of New Orleans, established in 1718, had few settlers and produced no revenues. Despite the lack of visible commerce, buy-in seemed to come easy to the citizens of France. In addition to the knowledge of how profitable the United Dutch East India Charter Company had been, early explorers had described the Mississippi region as an El Dorado rich in emeralds, silver, gold, furs, and as a land that could easily be farmed for a variety of lucrative crops. Artists in Paris that had never seen the territory painted pictures depicting New Orleans as if it were the French Riviera! In reality, life in the territory was harsh. There was no material or obvious access to gold, silver, or emeralds, and farming was extremely difficult. To a naive and overly optimistic French public, John Law sold the notion that realizing the value of the Mississippi Company required a large infusion of capital and slave labor. Wild speculation ensued! The broad use of leverage also added fuel to the bubble. Borrowing was easy, and buyers of shares only needed a ten percent down payment¹³. Shares issued at 150 Livres quickly rose to 10,000. Privileged aristocrats and commoners alike were startled by the number of people who suddenly became rich. To encourage the company's popularity, essential to meaningful debt conversion for the government and to enrich himself, as Law was the largest shareholder, Law printed money as fast as the presses would allow^{14,15}. In January 1720, when the Mississippi Company issued a 40 percent dividend, which it paid not from non-existent profits, but by printing more paper money, the share price exploded to 18,000 Livres. By mid-1720, the issuance of paper Livres had reached nearly 2.7 billion, about twice the amount of money that was in circulation before the introduction of paper currency¹⁶.

Contagion, Jumping the Pond

Britain also had a problem with debt it had accumulated fighting wars, and decided to emulate Law and chartered the South Sea Company to help reduce the size and cost of its national debt. Parliament granted the South Sea Company a monopoly on trade in South America and the Caribbean. It was also granted a monopoly on the African slave trade in the region. Slaves were seen as key to unlocking the region's value as a producer of sugar and other valuable crops. Just as in France, investor expectations were high, and the price of South Sea shares soared as the government expanded its efforts to manage the national debt. The problem was that Britain was in conflict with Spain, which controlled much of South America, so there was never much of a chance the South Sea Company would be successful¹⁷.



More Financial Innovation, IPO's & Insurance

Prior to the development of the initial public offering (IPO), corporations were formed on a charter basis for a specific purpose by royal decree or on an ad hoc basis by a parliament or legislative body. Concurrent with the rise of the South Sea and Mississippi companies was the development of the IPO. At this time, a large portion of the IPO's that came to market were insurers, with most focusing on burgeoning world trade. Prior to the use of the corporate format, insurers, for example, Lloyds of London, were not limited liability entities. Meaning that owners could be individually sued if partnership assets were insufficient to cover insured losses. This format made it very difficult to pool sufficient capital to diversify risk, and insurance had not been able to keep up with the growth in world trade. The advent of the corporate form and the IPO meant public markets could be used to raise sufficient capital and in a form that would limit shareholder liability¹⁸. Just as in France, IPO investors only needed to put down cents on the dollar to purchase shares. The IPO market took off, particularly in the Netherlands, at the Dutch stock exchange. Part of the reason for the migration to the Dutch exchange was that the British parliament was pushing back against the IPO market. This was because the IPO process bypassed parliament's authority to grant specific stock charters and British members of parliament, M.P.s, wanted to both retain their control and their ability to get paid something in the process¹⁹.

Pricking the First Stock Market Bubble

On June 11, 1720, the British Parliament passed the "Royal Exchange and London Assurance Corporation Act of 1719", commonly known as the Bubble Act. In essence, it forbid all stock companies that were not authorized by royal charter. Existing shares were grandfathered, but companies could not issue more shares, and investors could not transfer or sell shares¹⁸. A weakness of global commerce at the time was that the largest companies in the major economies were focused on global trade and the development of colonial properties. The markets were interconnected, and the share prices of both the Mississippi and South Sea companies far exceeded their dim prospects for generating profits. French, Dutch, and British markets did not destabilize until the Bubble Act was enforced with a writ of scire facias in late August of 1720²⁰. Within weeks, British, Dutch, and French markets fell dramatically, and by December of 1720, the share price of the Mississippi Company had lost more than 90% of its value²¹.

The French Experience

The sudden decline in the share price of the Mississippi Company drove investors to sell shares in mass. The panic led the French to redeem their bank and promissory notes for gold and silver coins. The immediate problem was the Banque Royale had printed too much paper money for the amount of gold and silver coins on hand. The Mississippi bubble had burst, and a French national bankruptcy followed. To help explain what happened, John Sandrock cites the quote of Matthieu Marais, a well-regarded French jurist, who upon hearing the news of the complete collapse of Mississippi shares stated: "Thus ends the system of paper money, which has enriched a thousand beggars and impoverished a hundred thousand honest men." With his life in danger, Law fled France. He died in Vienna in 1729 of pneumonia, destitute and penniless. Law's mistake was that he failed to appreciate the limits of fiat money²². As James Grant has noted, when on the Gold standard, and too much paper money is issued, it often leads to runs on currency and market crashes²³. After the run on Law's Banque Royale, Europe entered a lengthy period of economic contraction, and the French returned to using gold and silver coins. It would be another seventy years before France would again introduce paper currency, and as Yale's Goetzmann notes, it would take 100 years to revive the stock markets²⁴. Eighty-three years after the crash, following decades of struggle to revive their economy, France reached out to America and sold the Louisiana Territory for a pittance, about 68 cents an acre in 2019 dollars²⁵.

Lessons

Financial innovation can be either good or bad. Often it's both. In his book *The Ascent of Money*, Niall Ferguson of Stanford's Hoover Institute argues and chronicles how from the very start finance has been central to the development, advancement, and rise of civilization. The critical role that finance plays in our collective well-being means that it is incumbent upon us to be of financially sound thinking and responsible. Three hundred years ago, France was susceptible to ill-founded financial engineering because of the tremendous cash flow pressure exerted by its accumulated debt. Over the last 30 years, global debt markets have grown by 9.1% annually (13.7 X), while the world economy, Gross Domestic Product, has grown by just 5.0% annually in nominal terms (4.3 X)^{26,27}. Today the world has a significant debt burden, so like France 300 years ago, many countries are now vulnerable to the appeal of questionable financial innovation.



The bursting of the mortgage debt bubble in 2008 was at the heart of the Financial Crisis. The extraordinary monetary policy of quantitative easing, Q.E., was the financial innovation adopted by global central banks to combat the destructive deflationary forces unleashed by that event. Q.E. is a technique that involves large scale money creation and injection of the new money into the broader financial system through central bank purchases of government bonds. The U.S. made mostly good use of the Q.E. technique, and the U.S. has been strong enough to reverse a healthy portion of the Q.E. money that it created, draining it from the financial system. However, Q.E. has been less effective in Europe and Japan, and neither has removed any of the money created by their Q.E. efforts.

One unintended consequence of Q.E. bond purchases is that the world now has \$16.4 trillion in negative-yielding bonds, almost all sovereign bonds in Europe and Japan²⁸. Negative yields are a distortion that inserts frailty into the global financial system, punishes savers, and interferes with the efficient allocation of capital. Another unintended consequence is that Q.E. has greatly aggravated present-day wealth inequality by propping-up the prices of financial assets. Today with trade tensions rising, deflationary conditions still prevalent in Europe and Japan and the global economy showing signs of slowing, many are once again advocating printing still more money by resuming Q.E., by recommending the untested hypothesis of Modern Monetary Theory or through proposing some form of universal income. Like John Law's paper Livre and his Mississippi Company, each of these financial innovations are the offspring of financial stress, each is vulnerable to enthusiastic over-promotion and none are grounded in successful practice.

Human nature seems to be most vulnerable to bad ideas during times of stress. Against the current backdrop, it is not surprising that cryptocurrencies now have a greater chance to gain acceptance and challenge traditional currencies. It is also rational that gold, which is a traditional medium of exchange, and store of value is near 6-year highs. Sound financial thinking and policies that promote economic growth, innovation, opportunity, and healthy balance sheets are in need. Cred is the Latin root word for credit. It means to believe; it means to trust. Just as this story communicates the capital markets have been global in nature from the very start; the story also communicates trust has been foundational to the healthy functioning of capital markets since the very beginning and it communicates that when trust is undermined markets can quickly implode. Today this story of the ages, provides a cautionary warning that it is in our best interest to be disciplined and thoughtful as we consider the employment of new untested financial innovations, particularly innovations that will greatly expand current debt levels.



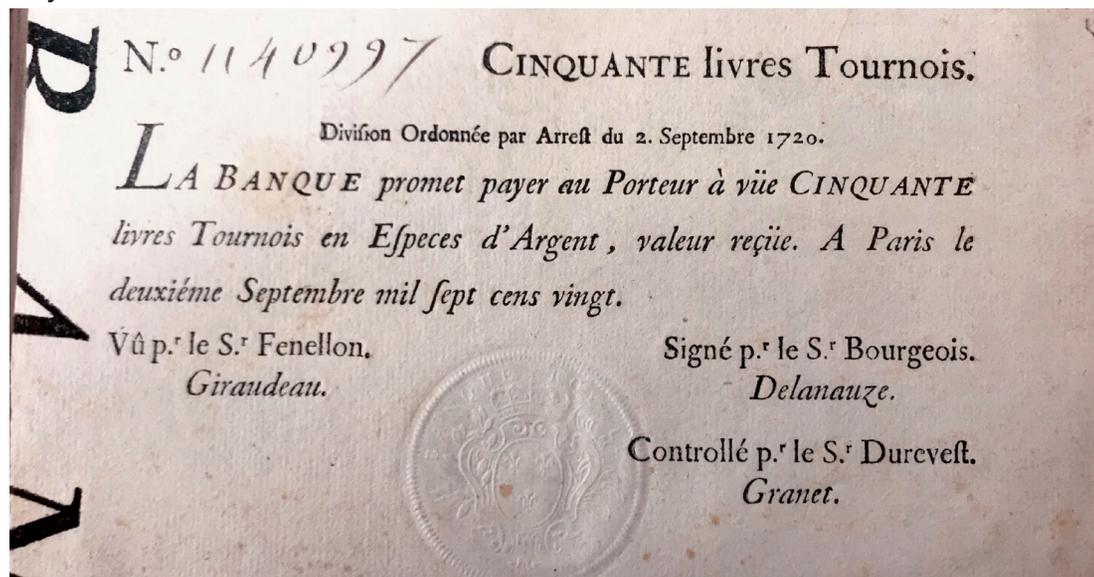
Items of Interest

Appendix A

Livres Tournois: Money printed by the Banque Royale bore the denomination “Livres Tournois.” The term “Livre” is from the Latin word libra, which stands for an ancient Roman unit of weight. In Britain, the Libra became the Pound Sterling. Facebook intends to introduce the Libra as its cryptocurrency. The 50 Livres Tournois pictured below was part of Banque Royale’s attempt to slow the run on Livres in late 1720. Bank officials resorted to all kinds of gimmicks that were doomed to fail. These included slowly counting out funds in small coins, inserting pretend customers into bank lines that would return the money they withdrew, only exchanging small denomination Livre Tournois and the public burning of paper Livres as they came in for redemption. The hope was that a perceived scarcity would support the Livre’s value²⁹.

On September 2, 1720, the Banque Royale issued its fourth and final issue of the Livre Tournois. This final issue was comprised of 2 small denominations. A 10 Livre note and a 50 Livre note. This was the only time that a 50 Livre Tournois was printed. They are very rare. The notes have the printed signatures of clerks Giradueau, Delanauze, and Granet. The issue was authorized by royal decree on August 15, 1720, just days before the Bubble Act was enforced in Britain by a writ of scire facias, an action that sent British, Dutch, and French stock markets crashing. The decree also compelled the conversion of large denominations, 1,000 and 10,000 Livre Tournois, into smaller denominations. The thought was that by removing larger bills from circulation that the bank would be able to make a limited number of conversions for smaller denominations of Livre³⁰.

Fifty Livres Tournois:



Appendix B

Louis d’Or Gold Coin: In the end, the French wanted hard currency. The gold coin in circulation during the period was the Louis d’Or. Prior to 1720, the coin was made of 22-carat gold, weighed 9.76 grams, consisted of 0.316 ounces of pure gold, about \$485 at today’s gold price (8/30/19, \$1,536 an ounce). The coin also had an official exchange value of 10 Livres³¹. By inference, the 50 Livre note pictured above would have had a gold conversion value of 1.58 ounces or about \$2,427 in today’s gold prices. However, as the Mississippi Bubble was bursting in 1720, John Law introduced a new Louis d’Or coin. It was also made of 22-carat gold; it weighed 9.54 grams, consisting of 0.308 ounces of pure gold, about \$473 in today’s gold price. So in terms of gold value, the two coins were almost equivalent. However, around the time the new Louis d’Or was introduced, the official exchange value of the Louis d’Or gold coin became 54 Livres³², which means that by late 1720 the 50 Livre note pictured above would have had a gold conversion value of just 0.29 ounces or about \$438 at today’s gold price. This represents an 82% devaluation of the paper Livre in 1720. Imagine selling your Mississippi stock at a 90% loss, receiving paper Livre Tournois as payment, and then experiencing an 80% plus devaluation of your paper currency. For perspective, consider this is equivalent to turning \$100 into just \$2 in short order. Many investors did just that but also had the misfortune of using leverage, so they ended up not just losing their money, but also with substantial debt. The John Law, Louis d’Or Coin, pictured below, features a crown over two back to back Ls. Three fleurs-de-lys adorn the field. The letter “A” at the bottom of the piece represents the mint. The coin is inscribed with “Christus Regnat Vincit Imperat” which is Latin for Christ reigns, conquers, and commands. This design was recalled and replaced in 1723. In post-Mississippi Bubble France, these “John Law” gold coins saw very limited circulation³³.



Appendix C

Louisiana Territory: Just 40 years after the U.S. purchased the Louisiana Territory from France in 1803, the highest concentration of millionaires in America could be found along a 120-mile stretch running from New Orleans northward towards Baton Rouge. The region’s prodigious wealth came from sugar plantations. Planters generated fortunes growing what they called “white gold.”³⁴ In the 1850s, Louisiana’s sugar plantations are said to have produced an annual crop worth more than \$20 million, an amount 33% greater than the entire \$15 million price paid for the Louisiana territory in 1803.

In contrast to the region’s wealth in the 1850s, early settlers faced daunting challenges. In 1718 Jean-Baptiste Le Moyne, the then governor of Louisiana was commissioned by France to find a new capital. Le Moyne chose a stretch of swamp on the left bank of the Mississippi which was able to accommodate seagoing vessels. The new capital was named La Nouvelle Orléans after the regent for the Child King Louis the XV and was officially founded in May of 1718. Law’s Mississippi Company was able to deliver roughly 9,000 French settlers and African slaves to the territory by 1720. At the time, conditions were harsh, dire, and did not match the opportunity John Law enthusiastically sold to the French public. In the winter of 1720, soldiers, workers, and officers went to live with the local Indian population to avoid starvation. In the spring that followed, Le Moyne declared, “Death and disease are disrupting and suspending all operations, and if the famine does not end, all is lost.”³⁴



Morbihan, a photo by Frank Relle: Perhaps a truer representation of the dot com-like opportunity that John Law’s Mississippi Company provided investors in 1720.

Appendix D

Using today’s gold price to understand the French Livre’s devaluation in 1720

| Coin | Grams per Ounce | 22 Karat Fineness | Coin Weight (grams) | Coin Pure Gold Weight (grams) | Coin Pure Gold Weight (ounces) | Current 8/30/2019 Gold Price (\$/ounce) | Coin Value Today’s Gold Price | Official Lou- is d’Or Livre Exchange Rate | Paper Money Livres Tournois | Implied Gold Conversion (ounces) | Implied Paper 50 Livre Gold Value |
|---------------------|-----------------|-------------------|---------------------|-------------------------------|--------------------------------|---|-------------------------------|---|-----------------------------|----------------------------------|-----------------------------------|
| Pre-1720 Louis d’or | 28.34952 | 0.916667 | 9.76 | 8.95 | 0.316 | \$1,536.00 | \$485.38 | 10 | 50 | 1.58 | \$2,426.88 |
| 1720 Louis d’or | 28.34952 | 0.916667 | 9.54 | 8.74 | 0.308 | \$1,536.00 | \$473.09 | 54 | 50 | 0.2851852 | \$438.04 |

\$ Loss in coin gold value (\$12.29)
 % Loss in coin gold value -2.53%

\$ Loss in paper value (\$1,988.84)
 % Loss in paper value -81.95%

The percentage losses experienced by the French of 1720 are approximated by the above example.



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