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Financial Crisis in Historical Perspective: The Panic of 1907

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Summary

Introduction	7
Part One.....	11
United States before the Panic	13
New York, October 1907	21
USA after the Storm.....	37
Part Two.....	47
Italy before the Panic	49
Genoa, September 1907	55
Italy after the Storm	69
Conclusions	73
Bibliographical References	79

Introduction

“A disruption to financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities. As a result, a financial crisis can drive the economy away from an equilibrium with high output in which financial markets perform well to one in which output declines sharply¹.”

Financial crisis, the term described above, reports strain on banks and other intermediaries belonging to the financial system that may result in failures and a general contraction in the economy.

The perspectives through which a financial crisis may be examined can be divided into “monetarist” and “information asymmetry” view².

The first belong to economists Friedman and Shwartz, who have associated financial crisis with the bank panics, intended as a sudden withdrawal of funds by depositors when they suspect a credit institution to be insolvent. The event is seen as central as it is a source of monetary contraction, which can lead to a recession of the entire economy.

A general recession indeed may be induced by the fact that banks find themselves suddenly unable to perform their credit and intermediation role.

The withdrawal of funds and the desire of banks to protect themselves bring them to increase the reserves, causing a reduction of means available for loans that has as a consequence a decline in economic activity.

Those movements induce a contraction in money supply: the conviction that the liquidity available is the main responsible of the level of prices and of economic activity has led the supporters of this vision to stress the importance of a central bank intervention, in order to prevent monetary instability.

The “asymmetric information” view of crisis starts instead from the assumption that borrowers have information advantages over lenders, since they better know the investment projects.

¹ Mishkin, Frederic S. *“Financial Market and Financial Crises”* (1991), University of Chicago Press.

² The distinction is made by the economist Frederic S. Mishkin in *“Asymmetric Information and Financial Crises: A Historical Perspective”*. From *“Financial Market and Financial Crises”* (1991), University of Chicago Press.

The consequent adverse selection problem may be reduced at least in part by the provision of collaterals as a grant for the loans, but in fact the best suited to solve those obstacles are credit institutions such as banks, since they have the possibility to collect the right information discerning good borrowers from the bad ones.

Information is a source of financial crisis because depositors retire their funds from both solvent and insolvent institutions, without making distinctions and amplifying the effects already described above.

The two views are complementary. The information theory balances the monetary approach that considers as central the intervention on money supply, with the risk to result in excessive money growth that induces inflation; the monetarist view offers instead an additional channel through which authorities may intervene in case of economic crisis.

The panic of 1907 was the first crisis of the century to be perceived worldwide.

Although it has hit heavily different countries, including Japan, Germany and Chile, we will take into exam the events happened in two countries apparently belonging to two different worlds: the United States, in which the economic growth started from the end of the Civil War – with slowdowns and drops due to economic cycles and crisis, and geographical exceptions represented by Southern States – was creating the economic engine that has today, and Italy, a still agricultural and underdeveloped country that was fighting the abyss that divided it from the other European powers.

The presence of information problems before the panic will be an important factor in determining the events and the extension of their consequences, while the decline in money supply will define the severity of the contraction.

The consequences of the panic are still felt today, since the events in USA led to the creation of the Federal Reserve System, and in Italy contributed to reinforce the role of the already existing Bank of Italy as regulator and lender of last resort.

In the first part of the work will be examined the events from the point of view of the United States. In the first chapter a brief description of the economic development that characterized the United States since the mid-nineteenth century introduces the factors that set up the field to the chain of events that led to the bank run in October 1907 in New York; the second chapter describes the triggering event that caused the spread of the panic, the first steps of the crisis and the action organized by JP Morgan to prevent the collapse of the financial system; the third chapter contains the consequences of the crisis on the financial and industrial system, and a brief review on what happened on the rest of the world during the same time.

The second part pertains to crisis in Italy, with the fourth chapter describing the attempts of industrial development after the Independence. The fifth contains the phases of the crisis, which took place between May and December 1907, and a sixth presents a summary of the consequences that the country had to face when waters began to calm down.

Part One

United States in 1907

United States before the Panic

Industrial development in the forty years that followed the end of the Civil War (1865 – 1907)

In the years between the American Civil War (1861-1865) and the end of the nineteenth century the United States has been characterized by a massive expansion of the industrial economy, which shaped the Nation in its modern form³. The natural resources and the stable political system granted a continuing growth, during which industry and agriculture developed, and the settlement to the west of the country continued almost without interruptions. The custom tariffs approved by the Congress raised a protective wall behind which the domestic industry prospered, favored also by the improvements of innovation, in particular the application of electric energy to the production.

Growth and expansion were not always linear, but underwent the influence of economic cycles and crises that had relevant consequences on the economy still in formation.

In 1871, in particular, the decision of Germany to abandon the coinage of silver coins caused a drop in the demand of silver, with a negative effect for the U.S. market, which supplied great quantities of this metal. Two years later, the Congress passed the Coinage Act, which abolished the bimetallism, placing the Nation inside the Gold Standard.

The law was welcomed by large protests, because in fact the extraction of silver brought greater benefits to rural areas than to banks or cities. The silver's price was affected, and miners' interest damaged – especially the ones of the Western Mining Company – as well as the interests of all the investors. The money supply was severely reduced, with a consequent rise of the interest rate, which damaged all the indebted people, especially small owners and farmers.

The perceived instability caused the retreat of many investors, especially from long-term bonds, causing difficulties to the railroad companies, which had used this method as the primary source of funding. Thanks to the favorable laws and the diffusion of their bonds, the railroads had become the second employer of the country. The speculation grown around the railroad stock had caused an abnormal construction of building and factories, and an excessive investment of capitals in a sector that produced no immediate return.

The monetary contraction, accentuated by President Grant's policies, become so severe that many businesses started to struggle a lot to find the money needed for their expansion.

³ Bonk, Mary and Carson, Thomas “*Civil War and Industrial Expansion 1860-1897*” (1999), from Gale Encyclopedia of U.S. Economic History, Thomson Gale Edition.

On 18 September 1873 Jay Cooke and Company, that was the exclusive bond agent of the Northern Pacific Railways, declared bankruptcy founding itself unable to market the securities of the company to investors. The reaction was a chain of bank failures and a temporary closing of the New York Stock Exchange. A period of recession began, reflected firstly in a drop of the prices, which led to a decline in wages. The most severe decline in outputs was experienced by manufacturing, construction and railroad sector, which has been the primary engine for the U.S. economic development. The recovery began only in 1878.

In 1862 the Pacific Railroad Act determined the development of the economy for the following part of the century. The policy authorized a land grant and the issuance of 30 years government bonds at 6 percent to Union Pacific Railroad and Central Pacific Railroad for the construction of a transcontinental railroad. The first to take advantage of this expansion was the iron and steel industry, while the foreign capitals that flowed into the country were invested primarily in the railroad system.

The industrial growth was supported widely by the availability of natural resources. The huge reserves included materials such as iron, coal, petroleum and copper, a metal important due to its capacity to transport electricity.

The more complex technology and the increased size of industries brought to structural changes in the economy.

The first regarded new financial needs, which made the supply of capital more expensive and more complicated. Investment bankers began to play an increasingly important role, and J.P. Morgan was one of the main players in this new game. In 1871, with the Philadelphia banker Antony Drexel, he formed a private banking partnership, the Drexel, Morgan and Co., renamed later J.P. Morgan and Co.

The second change was the creation of company trusts in order to manage the monopolies formed in major industries. In 1863, when the petroleum industry was at the beginning, John D. Rockefeller had established the Standard Oil Company. After having acquired most of its competitors, he moved to secure the control over transportation and distribution channel. In fifteen years, he managed to control the 90 percent of the refining capacity of the country.

In 1901 J.P. Morgan arranged a merger between Federal Steel Company and Carnegie Steel Company and other steel and iron businesses to found the US Steel Corporation, the first billion dollar company in the world, aimed primarily to reduce distribution, transportation and resources costs.

In the ten years ending in 1907, the trust companies have emerged as important financial intermediaries, especially in the New York market, where their assets had grown 244 percent.

Their activities comprised the making of loans for large industrial mergers, deposit activity, the underwriting and distribution of new securities (especially railroad securities), acting as fiscal and transfer agents for corporations, and serving as depositories for bonds, stock and other titles. They had an intermediary role similar to banks, with some differences: while banks deal primarily with merchants, lending on personal credit and taking on the business risk, trust companies deal with all classes, incurring only in the risk of a decline in values of collaterals accepted as security. In fact, banks promoted commerce, while trust companies managed investments.

Since President Andrew Jackson had withdrawn the charter for the Bank of United States in 1837, in the US, unlike most European countries, a central bank has not been present to manage the national money supply, which fluctuated accordingly to the annual agricultural cycle. The function was supplied only in part by the US Treasury, that in period of strain provided liquidity to the system relocating gold to the regions in need, making advanced payments to government bonds, and depositing funds in bank that would relend them to debtors. In any case, the currency was widely inelastic to meet variations and adjust to shocks, and the overall stability of the financial and monetary system was without monitoring.

At the time there were three main types of banks: state, national and private banks. State banks were chartered by the State, and offered all types of banking services. National banks, in addition to ordinary services, were authorized to issue government currency.

Banks belonging to the third group were held by privates and varied widely in size and purposes, taking the form of large international institutions – one of the main was J.P. Morgan and Company - or of the activities placed outside the doors of the saloons. Small and dispersed banks constituted the most of the financial system, offering “classic” bank services such as saving, loan and credit. Immigrant banks in particular were specialized in exchanging money, transferring the funds abroad, translating for non-English speaker and writing letters for them and the illiterate⁴.

In the last years of the nineteenth century the banking industry began to stabilize, but a certain number of bank failures succeeded annually from 1903 to 1905, involving a great number of banks of any type. In those cases, no state law or insurance was in place to guarantee to depositors at least a part of their savings.

⁴ Bruner, Robert F. “The Panic of 1907: Lessons Learned from the Market's Perfect Storm”, Wiley.

Trust companies were able to take many of the functions of both national and commercial banks, attracting deposits away from them. The competition was hard because of the looser regulation of trusts, which was the primary responsible of their growth, since constrained less the investment opportunities. Trusts were not required to hold a minimum reserve, and were allowed to own real estate and stock equity directly. They were freer in the choice of assets, in the concession of credit and in the composition of riskier asset portfolios.

Trusts also paid higher interest rates on deposits. This suggests that they were considered riskier than those at commercial and national banks, primarily due to the lack of access to a lender of last resort whatever needed. They were in fact excluded from the New York Clearing House Association (NYCHA), a private organization that in case of emergency could provide lending to its members. It was constructed by an association of banks, within which every member normally granted the payment in cash of any submitted check by other member banks. This system would have pooled the risk that an individual member wouldn't be able to honor a check, issuing in case "clearing house certificates" in substitution of the currency. Access was allowed to Trusts only through a member bank, and only if was maintained a minimum cash reserve, that was judged too high by many of them.

In 1906, following protests by national and commercial banks, the State of New York established a reserve requirement of 15 percent for trust companies (against the 25 percent of national banks). Only one third of the reserve, however, was required to be in the form of currency, while bonds could compose the rest⁵.

To understand the view of Americans toward the rise of those big businesses, we have to look at the attitude of Theodore Roosevelt, President of the United States since the assassination of William McKinley, in September 1901. Despite his aristocratic provenience, he was able to interpret the nation's though, especially the one of the "progressives", who supported loudly the right of a community to protect itself against the giants that prosecuted economic interest without concern in the common good.

If, on one hand, Roosevelt declared to accept large firms as part of the industrialization, he was firmly in his intention to eliminate the combinations considered dangerous for the public interest. From the beginning of his office, he began a policy of enforcement of the antitrust

⁵ Moen, Jon and Tallman, Ellis W. "The Bank Panic of 1907: The Role of Trust Companies" (1992), *The Journal of Economic History*, Vol. 52, No. 3, pp. 611-630, published by Cambridge University Press on behalf of the Economic History Association.

laws, and by the time of 1907, his administration had sued almost 40 corporations under the Sherman Antitrust Act.

On August 1907 Standard Oil Company of Indiana was fined for \$29,24 millions of dollars, a remarkable decision for the size of the penalty (the book value of the company was only one million of dollars), and that declared once again the commitment of the federal government to enforce corporate regulations. The belief of the President that the wealthy were to be blamed for the financial distress of the nation is made clear by his words in the occasion: *“It may well be that the determination of the Government, in which, gentlemen, it will not waver, to punish certain malefactors of great wealth, has been responsible for something of the troubles, at least to the extent of having caused these men to combine to bring about as much financial stress as they possibly can, in order to discredit the policy of the Government and thereby to secure a reversal of that policy, that they may enjoy the fruits of their own evil doing⁶”*.

At the beginning of the twentieth century, San Francisco was the financial center of the west of the United States. In 18 April 1906 an earthquake unprecedented both for violence and effects destroyed the city. The disruption of water lines prevented the suppression of the flames that spread from the broken gas mains: the fire caused such damage that is considered co-responsible with the earthquake of the destruction of San Francisco.

The news of the quake led to an immediate international effect. In New York and London the price of railway stocks registered a significant drop, and even worst did those of the British insurance companies, which were accounted for about half of the city fire insurance policies.

Some insurers could not pay for the damages; many imposed significant delays in honor their obligations, while some other forced significant discounts, claiming that their policies did not cover damages related to the earthquake. Only six companies meet fully their obligations.

By the time of the disaster, London dominated the global capital market, and the Bank of England was responsible to maintain the liquidity inside the commonwealth.

The “Old Lady” looked with concern many British insurers to sell assets in order to raise fund to front their payments, a liquidation that provoked a great shipment of gold in direction of the US – 14 percent of the Britain stock. To prevent the exhaustion of the country’s supply of gold and calm down the liquidity fears that have already started, the Bank of England raise its rate from 3.5 to 4 percent, and, fearing further gold demands because of the Egyptian cotton

⁶ Bruner, Robert F. “The Panic of 1907: Lessons Learned from the Market's Perfect Storm” (pp.32-33), Wiley.

crop, again from 4 to 6 percent in October 1906. Central banks in Germany and France followed the example.

In New York the golden reserves were tightening too, because of the extraordinary request coming from San Francisco, which unfortunately coincided with a normal period of high demand due to the harvest cycle (credit was needed until the crops reached the buyer). During the winter 1906-1907, the money price grew dear.

The following summer, the Bank of England enforced another provision to save national gold reserves, and imposed a prohibition on US finance bills. Those were bonds issued to profit from the annual exchange-rate fluctuations, which normally followed the agricultural cycle (during the harvest season dollar was stronger for the increased demand for buy crops), and used in fact to finance gold imports into the United States.

The prohibition resulted in a reverse flow of gold to London to settle the payments on finance bills, and a further contraction of US gold reserves of almost 10 percent, despite the high national interest rate⁷.

During the same summer, the financial community concern had to turn also to the condition of the natural resource market, especially copper.

The price of the metal had declined accordingly to the volume of its transactions, arriving at the cost of 18 cent per price in August. It had reached a peak in January 1907, but during the year an abatement of spending in San Francisco and the declining conditions of the economy have caused a drop. The result was a series of failures of banks leveraged to copper industry borrowers, and losses in share values in many sectors of the economy.

⁷ Payne, James E. and Rodgers, Mary Tone “*How the Bank of France Changed U.S. Equity Expectations and Ended the Panic of 1907*” (2014), *The Journal of Economic History*, Vol. 74, No. 2, The Economic History Association.

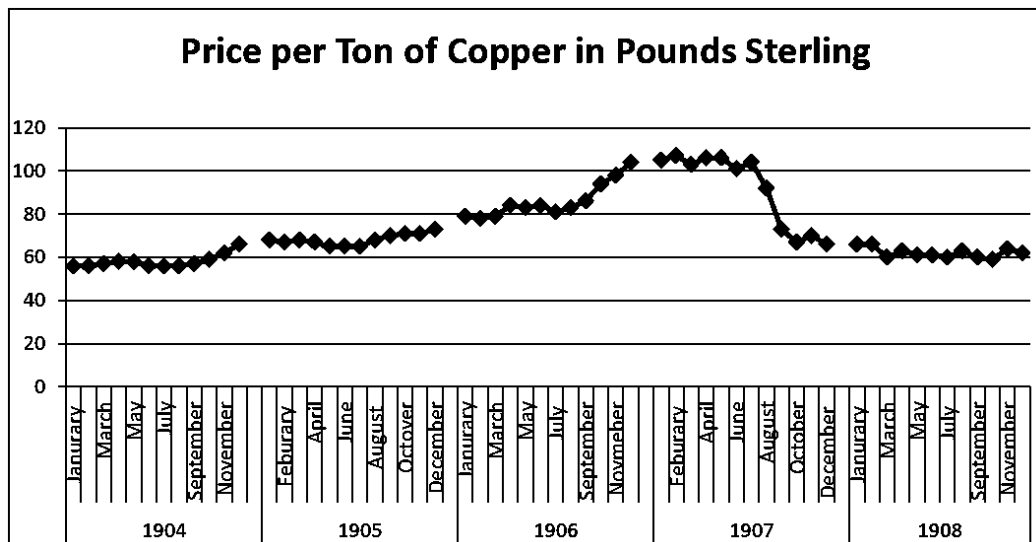


Figure One. The figure shows the copper price trend from January 1904 to November 1908. A peak was reached in January 1907. The major drop was registered between August and October 1907, when the panic spread. Data from the Economist, Commercial Times Weekly Price Current column, editions from 1904 through 1908 (Mary Tone Rodgers, James E. Payne “*Was the panic of 1907 a global crisis? Testing the Noyes Hypothesis*”, May 2015).

The fall in asset prices and the liquidity strain have showed the weaknesses of the US economy.

Regulation and investigations have contributed to reduce investors’ confidence in large corporations, which had accompanied the wide economic expansion since the last crisis, in 1893. October 1907 arrived while US financial market was straining to find capital to finance grow, or even the ordinary course of business.

New York, October 1907

The failed speculative move that started the troubles at the NY Stock Exchange, the spread of Panic and the intervention of JP Morgan⁸.

The threat that risked exploding the already strained financial system started from a Brooklyn-born copper magnate. Fritz Augustus Heinze had made his fortune in Montana, the State which copper had replaced that of Michigan as the main source, thanks to his scientific preparation and even more to his ability to threaten litigations with the adjacent rich copper properties. After having managed to obtain a purchase of most of his mining interest from Amalgamated Copper Company (formed by a group of principal of Standard Oil) he turned the interest on Wall Street, determined to show that he can succeed also in this field.

Here, in association with Charles W. Morse – proprietary of the American Ice Company and controller of National Bank of North America, Mercantile National Bank and controller of New Amsterdam National Bank – appointed a “chain banking” strategy, which consists in buying controlling interests in one bank, and using them as collateral to borrow money, to be used in the purchase of shares in another bank or financial institution. In this manner, he was able to extend his control over several trust companies, national banks, financial and insurance institutions.

The presence in Wall Street was consolidated through the creation, with the brothers Otto and Arthur, of the brokerage house Otto C. Heinze and Company, to monitor the shares of the United Copper Company, which represented their remaining copper interests.

The stock of United Copper was not listed in NY Stock Exchange, but were exchanged “on the curb”, outside the Exchange building in Manhattan, where brokers reunited on the street and in the coffeehouses to trade shares of small or emerging companies⁹.

The first concern of the Heinzes was to maintain the value of the company stock, since the shares have been used to secure the positions of the brothers in many of the operations of the chain banking strategy. Worried by the decline in asset values followed the liquidity strain,

⁸ The story of events occurring between October and November 1907 was mainly derived from the book Robert F. Bruner and Sean D. Carr “The Panic of 1907: Lessons Learned from the Market's Perfect Storm” (2007), Wiley Edition.

⁹ At the time, the trading was disorganized. Only in 1908 an agency was established to organize a first set of rules to regulate the exchanges of the Curb. In 1953, its name was changed in American Stock Exchange.

the brothers become a dangerous game in the attempt to support United Copper's share price, buying on margin company shares through brokerage houses in Philadelphia, Boston and New York.



Figure Two. The figure represents the share price drop from September 1906 to November 1907. The copper and brass share price was one of the most affected. Data from Monthly Index of Stock Prices, Cowles Foundation, Yale University (Robert F. Bruner, “The Panic of 1907: Lessons Learned from the Market's Perfect Storm” p.151, Wiley).

October 1907 has just begun that Otto Heinze started to mature the belief that the company shares traded on market were more than those in existence. This was possible because, buying on margin, the Heinze brothers had to borrow the money from brokers, using as collateral for the loan the shares and a deposit in cash. The certificates remained on the possession of the brokers that loaned the shares to short traders, which in turn sold them in the market waiting to re-buy them at a lower price, pocking the difference.

Convinced that his society was the true owner of the majority of the traded shares, Otto thought that there was the possibility of a “bear squeeze”, a move that, if correctly executed, would allow punishing the short sellers and the brokers that secretly had borrowed them the shares. In order to execute this plan, the Heinzes had first to buy all the remaining shares of United Copper in the market, raising their price. Then they had to issue a call for the shares

placed on margin among the brokerage houses, paying the full amount for their cost. The short sellers would have been obliged to return the shares to brokers, purchasing them at the inflated price or, finding no one available, settling directly with the United Copper. The brokerage houses, found bare of part of the share requested at the moment of the call, would be obliged to pay to the Heinzes the difference between the inflated price at which the stock was carried and the initial purchase price.

In order to carry out the scheme, the brokerage houses needed to be paid for the entire value of the shares immediately. Meanwhile, maybe under the pressure of short sellers' expectations, news of a decline of the stock price arrived, and thus did the margin calls from brokers that urged additional deposit so that to preserve the maintenance margin. Otto began to fear that the cash reserves of the Otto C. Heinze and Company would be dried out, and so begged his brother Augustus to arrange for a loan, providing the money necessary to start the move – that he estimated would cost 1,5 million.

Augustus, who lacked the fund requested, was not so willing to put his position in danger at the moment. During the summer there had been a sort of “silent run” at the desk of the Mercantile National Bank, of which at the time he was both president and director. Eventually, he arranged for his brother a meeting with Charles W. Morse and Charles T. Barney, president of the Knickerbocker Trust Company. They met at Barney's elegant house, in Fifth Avenue. Less than a month later, on a grey November morning, Barney would shoot himself in his bedroom at the second floor.

The three men reproved Otto to have been inaccurate. Morse believed that the squeeze would have required at least 3 millions, and Barney declined to provide them. Notwithstanding that, Otto Heinze was determined to go forward with his project and on the night of October 13, a Sunday, ordered Philip Kleeberg, partner of the Gross & Kleeberg firm, to buy 6000 shares of the United Copper, and then to issue a call for all the shares owned by the Heinzes.

On Monday morning, from the opening of the stock exchange, the share price began to rise vertiginously: from an initial price of 39 it managed to reach the tune of 60 dollars.

In the meantime, thousand of certificates were arriving at 42 Broadway in Manhattan, the offices of Otto C. Heinze and Company, which shared the same building with the United Copper. According to the rule, they had to be paid in cash by 2:15 p.m. of the same day. Again, Otto turned to his brother to find the cash, and Augustus provided a loan at Mercantile National Bank, under the issue of a personal guarantee.

On Tuesday 15 October, as agreed, the call of the shares proceeded. As the hours passed, with growing horror, Otto Heinze had to realize that not only all the twenty brokerage houses were able to produce the called stock, but also that they were doing it in such a quantity that the company was forced to refuse the deliveries. All his considerations had been a tragic mistake. The final break came when the brokerage houses, unable to transfer the shares to the owners, thrown them in the market, causing an uncontrollable drop of the price, that closed at 36. The following day it opened at 30 and closed at 15.

“Never has there been such wild scenes on the Curb, so said the oldest veterans of the outside market” reported the New York Times two days later¹⁰. And it was only the beginning.

Otto Heinze was ruined. On Wednesday afternoon, October 16, Gross and Kleeberg, the brokerage house commissioned to initiate the move, suspended all the trading activities after having found him unable to pay. After a claim was filed against Otto, the attention of the financial environment turn to the better known brother Augustus, who in front of the newspapers insisted that he was in the dark regarding that affair.

Thursday 17 October an announcement of the NY Stock Exchange stated the suspension of Otto Heinze and Company due the impossibility to meet the current obligations. After that, many brokers knocked the firm’s doors for their checks, which would have not been paid.

In the meantime in Montana, the State Saving Bank of Butte, the city that considered Fritz Augustus a hero because of his efforts in favour of miners, announced its insolvency. The institution was the largest bank of the State and has served as correspondent for the Mercantile National Bank. Needless to say, Augustus Heinze owned most of the activity, which held United Copper Company stock as collateral for the loans granted for Heinze interests. Alarmed by the new, the Mercantile National Bank announced the “voluntary” resignation of Augustus Heinze as the president of the bank.

*“The ramifications of the failure and the possible consequences of the utter collapse of United Copper had a disastrous effect on Stock Exchange sentiment”*¹¹ wrote the New York Times.

To understand the vulnerability of the system to a “run on the bank”, a look inside the system of deposits between the financial institutions is needed.

¹⁰ New York Times, October 17, 1907, p. 1, in Bruner, Robert F. “The Panic of 1907: Lessons Learned from the Market's Perfect Storm” (p.48), Wiley.

¹¹ Bruner, Robert F. “The Panic of 1907: Lessons Learned from the Market's Perfect Storm” (p.51), Wiley

In order to enhance returns, many rural banks placed part of the percentage required as reserves on deposits at city banks, where they could earn interests. These banks, in turn, were allowed to place their non-cash reserves on deposits with banks in the major money centres. Those institutions traded in the securities market, especially of railroads.

Perceiving the anxieties to grow around the Mercantile National Bank, Augustus Heinze asked the assistance of the New York Clearing House Association, which declared that they would have supported the Mercantile, conditionally to the soundness of their books.

A committee installed in the Mercantile offices, and, after spending there part of the night, declared the ability of the bank to be solvent.

To calm down the depositors – that were starting a run to the bank desks in the same hours – the Clearing House Association asked the resignation of the directors, but instead to stop the withdrawals continued to such an intensity that in two days it became clear that the amount would have exceeded the bank reserves.

By Saturday (October 19) the awareness that the situation would extend beyond the Mercantile had spread: withdrawals have begun from all the banks connected with Charles W. Morse, the business partner of the Heinzes. Inspections were implemented by the NYCHA on account of these institutions, the National Bank of North America and the New Amsterdam National Bank, and Charles T. Barney turned out to be one of the leading figures of the first.

On Sunday, the New York Clearing Agency ordained the elimination of Heinze and Morse from all the banking interests in New York City.

The interventions of the Clearing agency apparently removed all the material threats that could bring to a bank run. *“The action of the Clearing House on Saturday and Sunday had eliminated practically all elements of danger from the banking situation¹²”* wrote the Wall Street Journal at the beginning of the next week. But the linkages between Charles T. Barney, Morse and Heinze were not passed unobserved by the investors, and fears about possible insolvencies were widely spreading.

¹² Bruner, Robert F. “The Panic of 1907: Lessons Learned from the Market's Perfect Storm” (p.57), Wiley.

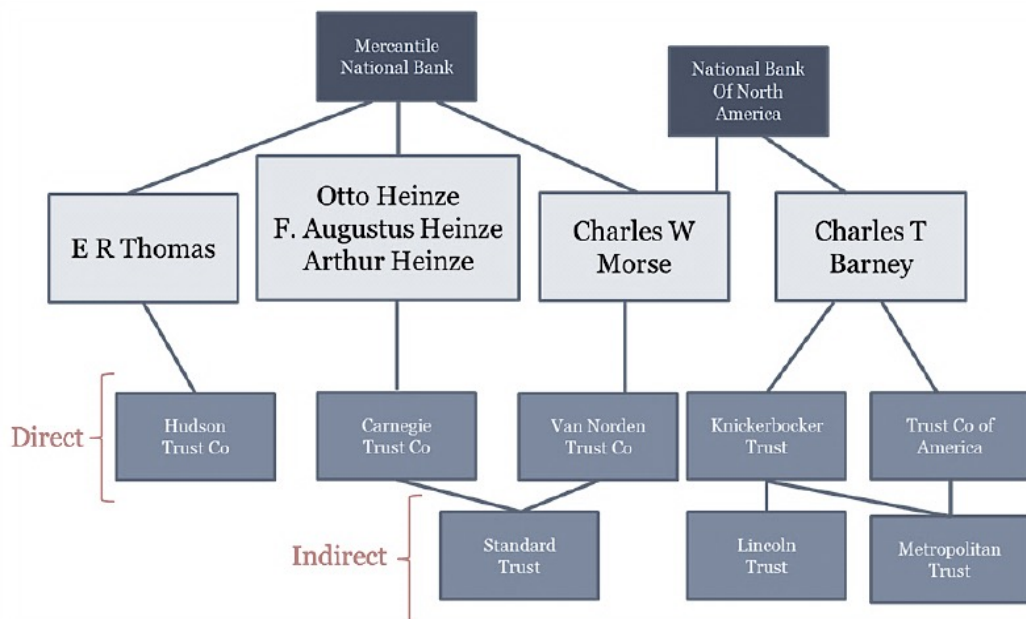


Figure Three. The figures shows (at least part) of the connections existing between the Heinzes, Morse and Charles T. Barney at the moment of the crisis. The trusts reported as having a direct connection with the men are those in which they had a seat as directors; the trusts reported as having an indirect connection are those that have two or more directors in common with the institutions with direct connections. Source: Carola Frydman, Eric Hilt, Lily Y. Zhou “The Panic of 1907: JP Morgan, Trust Companies, and the Impact of the Financial Crisis”.

The Knickerbocker Trust Company, with nearly 18 thousand customers and 65 million of dollars in deposits, was one of the largest trusts in the United States. The Company maintained a magnificent building in Fifth Avenue and, in addition, branches in Bronx and Harlem, an innovation among trust companies.

The president, Charles T. Barney, was a well-known and respected figure in New York financial circles. Thanks to his social success, he had been able to attract large funds to the firm from railroads, brokerage houses and banks.

Under his guide, the Knickerbocker had managed to multiply its capital almost six times the starting amount. The firm’s size, the connections of its president and the apparent solidity of the deposits would never raise the suspect that the company could be drawn in such a storm.

Until Monday 21, the depositors had only withdrawn funds from the institutions controlled by Heinze and Morse, and have deposited them in other financial institutions. The Clearing House intervention has apparently set the order, containing the crisis, when two other shocks hit the Knickerbocker during the afternoon: the National Bank of Commerce, that has acted as clearing agent for the trust, announced that it would no longer clear for the Knickerbocker, and Barney was asked by the colleagues to resign from its position

The connections between Barney and the events of the week before remained unclear.

Barney apparently was not involved in any of the schemes of the United Copper, but he has acted as associate of Morse for many years. He has been director of many of Morse's activities (including the National Bank of North America and the New Amsterdam National Bank), and the connections between the two comprised the Knickerbocker itself. The Trust held interests in many holdings controlled by Morse, who in turn had acquired a significant part of its stock. A representation inside the Knickerbocker was denied him only because of the violent remonstrance of many of the directors.

The announcement launched a message that concerned seriously the depositors about the ability of the trusts to be solvent.

Already from the early hours of Tuesday morning, October 22, a crowd began to align quietly outside the building of the Knickerbocker Trust, most composed by small depositors waiting impatiently to have their savings back. Outside the branch offices, in other parts of the city, the scene was almost the same. As the day proceeded, the number of the people grew and policemen were required to help for the maintenance of the order.

Less than three hours from the opening, the Knickerbocker returned eight million of dollars to its depositors. In the late morning, the arrival of a number of large checks occurred from other banks. Since the denial of the Bank of Commerce to clear for the Knickerbocker, the banks had refused to cash the checks on the behalf of the company, until an entire payment was received from the trust.

The size of the amount to be paid, much higher than the current possibilities, forced the Knickerbocker to announce that the payments were suspended for the moment. Reassuring that in any case "the company was solvent", the employees locked the Knickerbocker's doors, closing out an increasingly agitated crowd.

The Trust needed to find an immediate help to be able to re-open the following morning.

During the failed move of the Heinzes J.P. Morgan was in Richmond, Virginia. The partners have insistently required his presence. Due to his firm's credibility and resources, he was

practically the only person in the city with the power to organize institutional loans, but he was reluctant to return in New York, fearing to create alarmism and the suspect of an imminent crisis.

On Saturday evening, October 19, he finally resolved to take a private train, and by the following morning the news of his return had already spread throughout the city.

Trust company officials and bankers insisted to see him during all the day. He received them in his library, where precious manuscripts and art pieces of his collections were placed, and outside whose doors a line of newspaper reporters were already forming. In the following days, the place would become the headquarter of his rescue mission.

Here, the financial statements of the clearing-house banks were reviewed: they all resulted in good conditions, but the same could not be said for the trust companies.

Charles T. Barney showed up at the library in the afternoon, but Morgan refused to see him.

The following evening, during a dinner at Sherry's, a Fifth Avenue restaurant, it was agreed between Morgan, his partners and the directors of the clearing house banks that the Knickerbocker books would have been examined. Morgan committed himself to find the money to keep the company alive, if the Knickerbocker would have been determined sound.

Benjamin Strong was the person charged to operate the review of the Trust accounts. He was a member of the Banker Trust, a consortium of commercial banks that, in addition to the usual banking services, had the purpose of hold reserves and loan them to the members in case of exceptional withdrawals. Even if the association had numerous stakeholders, the decisional power was in the hands of three Morgan's associates.

Strong undertook the job and reported in the end that the company was not solvent, confirming the Morgan's feeling that a liquidation was the best solution, in order to avoid putting in danger the reserves of other institutions. The response was in neat contrast with the one of the banking regulators, that less than two weeks earlier had concluded that the firm had a full capacity to pay off his debtors. The negative response may have been generated by the unpredictable strain in the company's reserves, but also by the fact that Morgan and his associates had generally more access to critical information, whatever needed.

Exceptional, heavy withdrawals happened meanwhile at the desk of other trust companies in the city. Oakleigh Thorne - the president of one of them, the Trust Company of America - approached J.P. Morgan to express his concerns. One of the board members of that company was obviously Charles T. Barney.

Again, J.P. Morgan contacted Strong, asking him to perform another review, this time on the books of the Trust Company of America. Before taking the responsibility of the saving, he wanted to be sure of the soundness of the Trust.

At the same time, Perkins, Morgan's partner, Stillman, president of the National City Bank, and Baker, president of the First National Bank, met the Treasury Secretary George B. Cortelyou, just arrived from Washington with the afternoon train. The men discussed the necessity to deposit in banks government money to support the reserves, and a possible aid to be offered to the Trust Company of America.

The resolution of J.P. Morgan to help the Trust company of America almost before being sure about his ability to be solvent, just after having abandoned the Knickerbocker to its own destiny, raises questions about his own motivations and real interests in the matter.

Self-interest may have played a part since the Knickerbocker had few ties with Morgan's businesses, while the directors of Trust Company of America were part of the boards of several industrial and railroad firms close to Morgan. J.P. and the partners may have been worried about the negative consequences of being associated with a failed trust, or about the aftermaths of a massive liquidation of the holdings that they certainly have underwritten. But this behaviour maybe can be explained by the words of Perkins:

"It was not because we were particularly in love with these two trust companies [referring to the Trust Company of America and the Lincoln Trust, another institution that would have experienced a run shortly after] that we wanted to keep them open. Indeed, we hadn't any use for their management and knew that they ought to be closed, but we fought to keep them open in order not to have runs on other concerns and have another outburst of panic and alarm¹³."

At the moment to decide whether to save the Knickerbocker or not, Morgan may not have been fully aware of the consequences of a trust failure as he was the following day, Wednesday morning, when Strong, after having worked hard all night with his team, irrupted in the offices at 23 Wall Street, where many presidents of the trusts were already anchored, announcing that the company was solvent.

¹³ Account by Perkins in *Crowther* (1933), unpublished manuscript. Bruner, Robert F. "The Panic of 1907: Lessons Learned from the Market's Perfect Storm" (p.101), Wiley.

Wednesday afternoon Thorne, president of the Trust Company of America, faced hard times. Despite having kept large piles of cash in view to reassure the depositors and only two windows open, the extension and the speed of the withdrawals were exceeding the capacity of the firm to liquidate its assets.

Realizing that the company supply was so reduced that it wasn't able to remain open, unless 3 million of dollars could be provided immediately, he called J.P. in panic. Morgan turned to the Trust presidents to find the money for Thorne, but the only thing he managed to obtain was a confused debate that he dismissed twenty minutes later. He then called Stillman and Baker, and ordered Thorne to come to his office with the most valuable securities of the company, for valuing them in exchange of a loan.

A long line of men carrying suitcases appeared shortly after at the doors. As the securities were valued, the money was carried in sacks to the Trust. Thorne managed to keep the desks opened until the usual hour: the company was saved for that day.

Morgan returned to urge presidents and officials of the trust companies on the necessity to provide help to the weakest institutions among them, and this time at least they agreed to form a committee to monitor the situation, and to act in case as a clearing house.

Meantime, another run had begun at another firm, the Lincoln Trust Company, and rumours about a possible insolvency of the city of New York itself added tension to an already tense situation.

Aware that the trusts were still hesitating to debilitate their cash positions to provide help, Morgan summoned another meeting during the night, and challenged them to provide 10 million to the American Trust Company – the amount that the firm needed to reopen the next day.

On Thursday morning the situation was in the verge to become a drama. Edward King, the unofficial leader of the trust committee, and the chair responsible of the provision of the loan, fifteen minutes before the opening refused to give the money, claiming the need of a further verification of the securities provided as guarantee.

Morgan then ordered to exchange the securities for a temporary loan with the National City Bank. With a pack of gold certificates in hand, Strong ran down to Wall Street, skipping the impatient depositors already trooped outside the doors, and reached Thorne, that was walking in desperation up and down the gallery of the American Trust Company. His activity was saved again, but the troubles were far from the end.

The panic spread further. It was the turn of the New York Stock exchange to experiment a money shortage. The difficulty was created by the anxiety of the trusts to strengthen their cash positions, calling back their loans as much as possible.

Around 1:30 P.M., Ransom H. Thomas, president of the Stock Exchange, comes to Morgan's offices in a state of excitement, announcing that, in order to avoid a great number of failures – at least 50 - he had to close the Exchange, unless a significant money amount was provided within an hour (2:30 P.M. was usually the moment of the day in which the brokers' accounts were compared and adjusted).

Morgan called all the banks' presidents in New York that quickly arranged a "money pool", a new welcomed with jubilation by the brokers gathered in the antechamber.

"If people will keep their money in the banks, everything will be all right"¹⁴ declared the "Old Jupiter" later in the afternoon, in one of his rare approach to the reporters.

Morgan and his partners were aware that it was impossible to continue to provide loans forever. It was necessary, as much as the money, to reassure the public feelings. A committee responsible to disseminate information about the rescues was appointed, and the clergy was asked to make reassurances during the Sunday functions, encouraging people not to withdraw their funds.

It was only a battle won. Notwithstanding the effort, in the afternoon many financial institutions ceased the operations, or failed to open the following day, while the runs to American Trust Company and Lincoln Trust have never ceased.

On Friday, October 25, again securities prices began to collapse. Again, there was shortage of money on the Exchange. Perkins, in agree with Morgan, recommended the trusts to stay open and continue to pay the depositors, slowing the process if necessary.

On prayer of the Stock Exchange president, Morgan asked the bankers another loan.

They agreed, but there were far less enthusiasm than the night before in putting together the funds.

This second money pool allowed the Exchange to stay open until 3 P.M., and no brokerage failures were reported. By the end of the day, however, seven more banks failed.

¹⁴ From *J. Pierpont Morgan: An Intimate Portrait* by Herbert L. Satterlee (1939). Bruner, Robert F. "The Panic of 1907: Lessons Learned from the Market's Perfect Storm" (pp.100-101), Wiley.

At the beginning of the new week the situation was still tense, but the public campaign wanted by J.P. seemed to have obtained some palliative effects.

On Monday morning, even if many depositors were still waiting in front of the two trusts, no news of runs were reported. Several banks that have closed during the past weeks submitted applications to reopen. Call money¹⁵ rates diminished, so it became easier for brokers to borrow the money they needed.

But the calm was only apparent. Few hours after the opening of the trades, Morgan and partners become aware that this time was the city of New York to risk the insolvency.

The difficulty of the city administration to access the money market and raise funds was not a novelty. In September, only the intervention of J.P., that subscribed a considerable amount of city bonds, had avoided a crisis. The recent events made impossible to repay this debt and find new funds, either in American or European market. Now the city was in difficult also to front its payroll obligations.

Without spending much time, Morgan elaborated a proposal: his company would exchange 30 million of clearing house certificate for the city bonds, at the interest rate of six percent, with an option for 20 more millions. The measure would result in more credit and also more liquidity for the city of New York.

The rest of the week brought encouraging news, even if the liquidity stress on the Exchange remained quite high.

An alarming event irrupted to break the apparent calm: the brokerage firm Moore & Schley, at the verge of collapse, required further intervention. The firm had borrowed more than 30 millions from many financial institutions in New York, and used the shares of the TC&I (Tennessee Coal, Iron and Railroad) to secure the loans.

TC&I was an independent steel producer, which properties extended through Tennessee, Alabama and Georgia. Even if its extension was not comparable to the one of U.S. Steel, the company had an important geographical advantage, since its raw materials were located near the furnaces. The company has been surrounded by rumours of mismanagement (not last the accusation to pay dividends from borrowed funds), until in 1906 a group lead by Grant B. Schley, senior partner of Moore & Schley, had taken over the company, with the plan to rehabilitate its structures – a proposition that had dried the cash reserves.

¹⁵ A call loan was the type of loan provided to brokerage firms to finance the margin accounts. It used securities as collateral, and the rate of interest was calculated daily. The grantor had the right to ask the money back at any time.

Following the recent events, the value of the company's stock was seriously in doubt. The banks were likely to call the loans in, but the shares were not easily convertible: the price had been artificially supported in the past months, and only a small group of investors held them. Morgan reunited a meeting of the U.S. Steel Corporation, a company that, despite the market difficulties, was in robust conditions. The proposal to be discussed was the rescue of Moore & Schley through the acquisition of TC&I.

Morgan partner were not enthusiasts. They objected the cost of the acquisition, integration, and the quality of raw materials. The negotiations for that day concluded in a standstill.

The same day of the meeting, Saturday November 4, voices about an imminent failure of Trust Company of America and Lincoln Trust were again set in. Morgan decided that the time has come for a solution, but now he was determined not to provide it.

He called a reunion with the presidents of the Clearing House banks and the representatives of the trust companies, about one hundred men who at 9 P.M. of Saturday conveyed all in Morgan's library to discuss the situation. The bankers were assembled in the East room, the trust presidents in the West room, while Morgan and partners stayed retired in a "neutral ground", a back office.

Morgan declared that he agreed to undertake the difficulties of Moore & Schley, only if the trusts agreed to ensure a money pool to face the needs of the weakest among them. To do so, at least 25 millions of dollars would be necessary, the same amount required by the rescue of Moore & Schley, an effort that risked to be vanished by a banking collapse.

A discussion that lasted long hours took place among the anxious people reunited. At 3 A.M., they heard the report of Benjamin Strong about the companies in danger: the Trust Company of America was solvent enough to pay off its depositors if required, but the Lincoln Trust was in need of at least one million of dollars.

After that Strong, who hasn't been in bed for three days, tried to get out of the library, and discovered that wasn't able to open the door.

The key that locked it and all the other doors of the library was secured in Morgan's pocket. Then J.P., that until the moment avoided involving himself in the discussion, said to the trusts presidents that a loan should be provided, or "*the walls of their own edifices might come crumbling about their ears*¹⁶."

¹⁶ From *Henry P. Davison: The Record of a Useful Life* (p. 81) by Thomas W. Lamont (1975).

Bruner, Robert F. "The Panic of 1907: Lessons Learned from the Market's Perfect Storm" (p. 124), Wiley.

The men were still hesitating. They were reluctant to risk their own assets, and to take such a large commitment without the permission of their directors. Morgan showed comprehension, but the key remained deeply hidden in his coat. In response to their objection, he took off a pen and laid the subscription sheet on the table. Followed by all the presidents of the trusts, their leader Edward King signed with the golden pen.

After the bankers granted the subscription necessary to form the new money pool, Morgan allowed everyone to go home.

Despite this effort, the Moore & Schley delicate situation was still unresolved.

Finally, the finance committee of U.S. Steel Corporation – not without difficulty – formed a plan: U.S. Steel would buy the major part of the company, exchanging its own bonds for the shares of TC&I at par. In this way, Moore & Schley's creditors, that were holding TC&I stocks as collaterals for the loans, were given the attracting opportunity to change those shares with those of U.S. Steel, and all without require a provision of cash from the already stressed market.

The concerns of Gary and Frick, the partners of Morgan, about accusations that could be addressed to them of attempting to create a steel monopoly were not without foundation. To be concluded, the project needed the blessing of an administration that has made the battle against great interest groups one of its war horse.

A special train was arranged for the two, to travel to Washington during Sunday night. To make the rescue work, they needed a positive verdict before the opening of the Stock Exchange the following day.

They arrived on Monday morning, and discovered that the President would not see anyone before 10 o'clock. Fortunately, the Secretary of the Interior passed in the hall just that moment, and agreed to explain to Roosevelt the urgency to see the two immediately.

Even if also in this case the motivations of Morgan and its colleagues may be subject to objections (the deal in fact granted them the control over their only potential competitor), the President understood the importance to give quickly his consent to avoid the risk of another series of "falling dominoes" events.

"While of course I could not advise them to take the action proposed, I felt it no public duty of mine to interpose any objection¹⁷" explained later.

¹⁷ From *The Letters of Theodore Roosevelt* (p. 831) by E. E. Morison (1952). Bruner, Robert F. "The Panic of 1907: Lessons Learned from the Market's Perfect Storm" (p.134), Wiley.

The news made the Wall Street traders euphoric. A great number of trusts, banks and brokerage houses managed to remain open.

“The relief furnished by this transaction was instant and far-reaching¹⁸” wrote the Commercial and Financial Chronicle.

Since the troubles began, it was the best day the Exchange has seen. The final panic was avoided.

¹⁸ Bruner, Robert F. “The Panic of 1907: Lessons Learned from the Market's Perfect Storm” (p.134), Wiley.

USA after the Storm

The consequences on the monetary circulation and industrial growth. The birth of the Federal Reserve and a look on the events outside the United States.

During previous financial crisis, as said, a system had been appointed by NYCHA to grant emergency loans for the members, and artificially expand the national money supply: it consisted in issuing clearing house certificates that can be exchanged for currency in every bank part of the Clearing House Association. Morgan opposed to this measure, convinced that it would be a public signal that a last resort attempt to arrest a systemic crisis was in course, but at the end surrendered to the necessity. An hundred million of certificates were issued to be available on Monday, October 28. Many local clearing house banks imitated the example, and during the crisis period were issued about 250 million of those certificates, equal to 14 percent of the currency in circulation, substituting cash in ordinary transactions.

As promised to Morgan and partners, the Secretary Cortelyou transferred gold from the U.S. Treasury to deposits in several national banks, but in mid-November this possibility was already exhausted.

The news that some banks were slowing or suspending the withdrawals provoked waves of hoarding. People tried to cash the deposits to keep them home, stoking the money in safe deposit boxes (or under the mattress). It is estimated that during the panic about 350 millions of dollars were retired from the financial system¹⁹. Many banks in New York and other big cities were forced to close under the pressure of rural banks that, fearing the impossibility of obtaining their funds back, insisted to withdraw their reserve deposits, making the city banks fall under the reserve requirements.

Clearing house banks increased the number of issued certificates. To offer relief, imports of gold arrived during the month in significant quantity – over 21 millions. From Liverpool, the Lusitania shipped a cargo of more than 12.4 million in gold on a single trip.

For his part, the U.S. Treasury elaborated another system to help relieve the situation. On November 18 Cortelyou announced the issuance of government bonds to finance the construction of the Panama Canal. This would offer to banks the possibility to buy the bonds and then use them as collaterals. The expectations for the facility to bring the hoped relief were however compromised by reported stories about the uncertain legality of the instruments and their adequacy to be used as collaterals. As a consequence, the issue went significantly unsubscribed with only about 30 percent of the issue purchased.

¹⁹ Sprague, O.M.W. “*The American Crisis of 1907*” (1908). *Economic Journal*, p.367.

The intervention of J.P. Morgan was traditionally considered the resolution of the crisis. In any case, also the international effects of the crisis have to be taken into consideration, and on this level a decisive action is attributed to the bank of France, that provided a source of liquidity to the American system²⁰.

At the time, the Franc was depreciated, and importers were motivated to pay in gold instead of an expensive bill of exchange, but in France was not present a free golden market. The currency premium allowed the intermediaries to make profits from the export of gold in direction of the U.S. but, since there weren't large quantities available, outflows of circulating French coins would happen in order to buy the metal on foreign markets.

The money circulating in France at the time of the crisis was declining, and the Franc risked a further depreciation, with a consequent damage for the national commerce. The government was in need of an expedient to direct away the outflows from the French currency.

On November 22, 1907, the solution was suggested by a group of Parisian bankers that approached the Regents of the Central Bank to suggest a facility. It provided the possibility for French bankers to use commercial paper to buy the gold of the French reserves. The gold would have paid for the cotton shipped from the USA, and the entire process would have resulted accelerated, also favouring the shipment of gold that the United States really needed. The Regents granted the approval almost immediately. The proposal had important costs in term of depletion of gold reserves – in fact moved the outflow from the currency to them – but those were outweighed by significant benefits in the form of short-term profits for the Central Bank.

The U.S. gold reserves began to recover a week after this decision was taken, reassuring the market participants. The positive effects affected the equity price expectations, and this was fundamental for the great number of loans that were actually secured by stocks. Until the equity price declined, the risk of bankruptcy remained present among financial intermediaries.

The internal consequence of the panic was a drop in industrial production, more than any other precedent U.S. panic. Production fell by 11 percent and imports by 26 percent, with a subsequent raise of unemployment to 8 percent from a precedent 2.8 percent level.

The firms affiliated with affected trusts, in particular, in the years following the panic saw their profitability and dividends fall relative to other firms. Trusts had concluded alliances with many important firms, placing their directors on their boards. Those interlocks may have

²⁰ The action of the bank of France has been described by James E. Payne and Mary Tone Rodgers in their work for the Journal of Economic History Vol. 74, No. 2 “*How the Bank of France Changed U.S. Equity Expectations and Ended the Panic of 1907*” (2014), The Economic History Association.

reflected lending or underwriting relationships, so the non-financial firms could have experienced a negative shock in term of financing.

Furthermore, the relationship with troubled financial institutions may have made other lenders suspicious about the quality of the firm’s own assets or operations.

The payment system was not fully restored until January 1908. The stock market and industrial production did not reach again the pre-panic levels until late 1909.

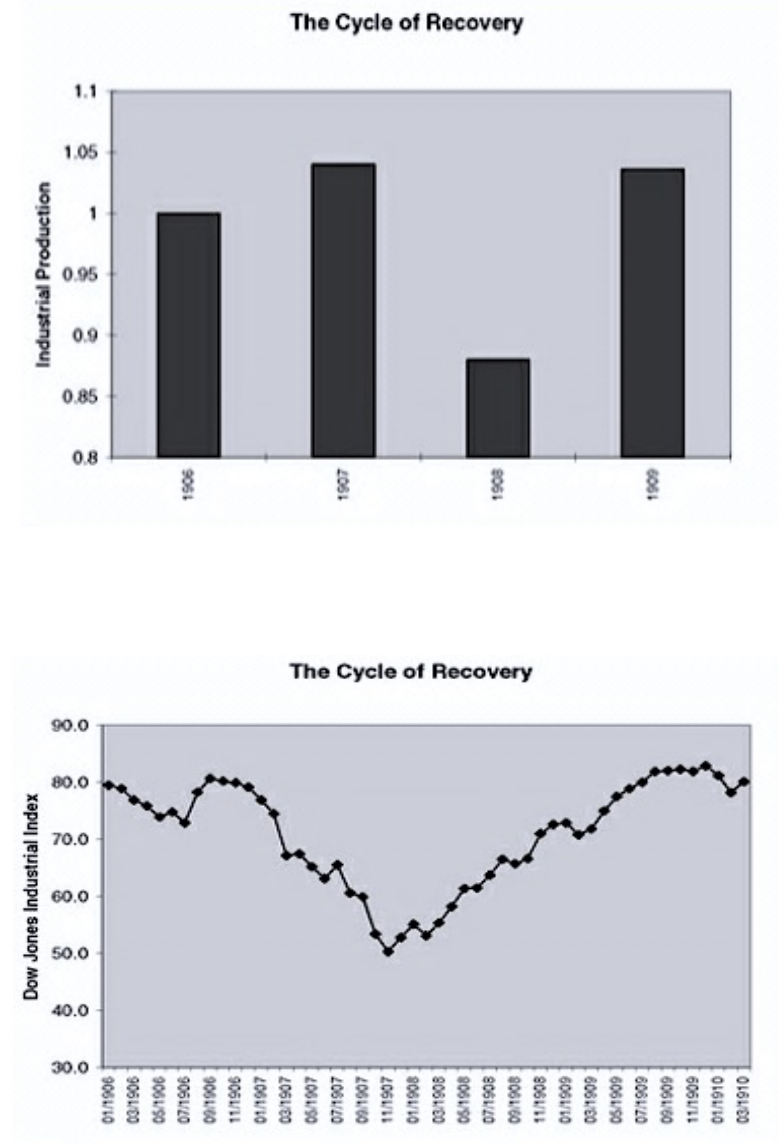


Figure Four and Five. In the figures are represented the Industrial Production Level and the Dow Jones Index during 1906, 1907, 1908 and 1909. By the end of 1909, the industrial production and the stock market recovered to pre-panic levels.

Data from Monthly Index of Stock Prices, Cowles Foundation, Yale University. Source: Robert F. Bruner, “The Panic of 1907: Lessons Learned from the Market's Perfect Storm” p.145, Wiley.

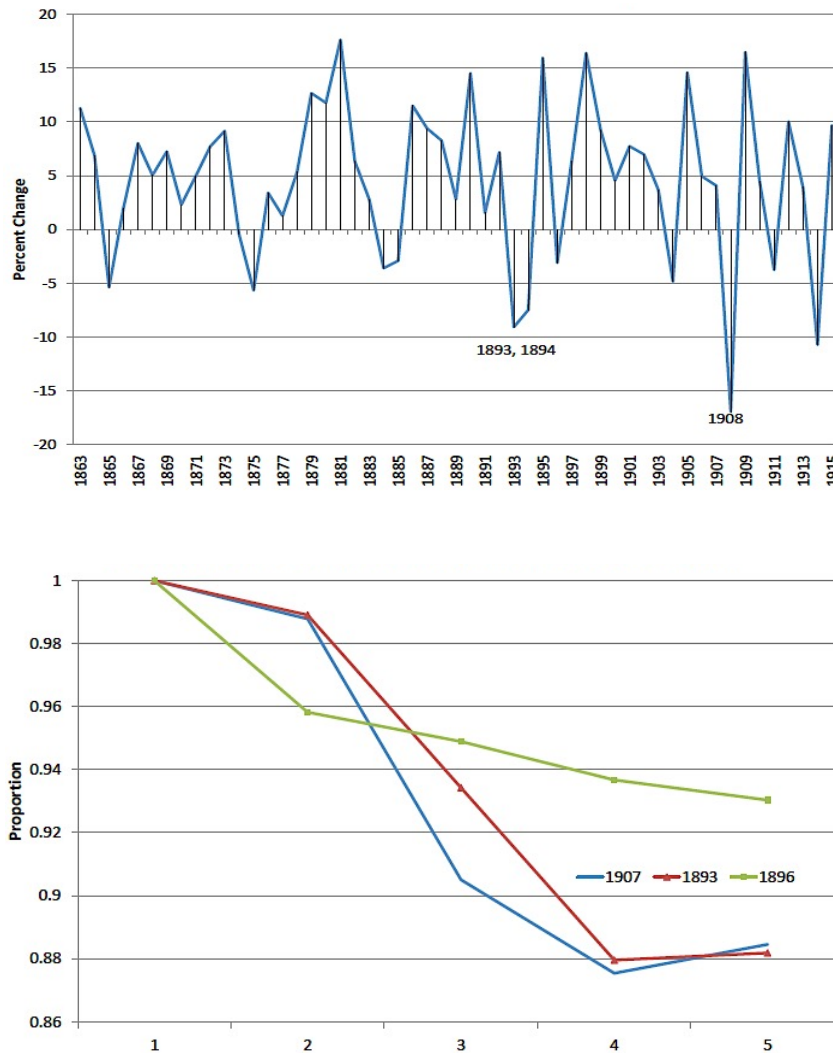


Figure Six and Seven. In the figure above is represented the annual growth rate of industrial production, in the right the real GNP during contractions. It can be noticed that the industrial production was most affected by the consequences of the 1907 panic than of the precedent financial crisis after the end of the civil war. As a consequence, the real GDP registered a drop worse than the two panic episodes here taken as comparisons (1893 and 1896, shown in the below figure). Source: Ellis W. Tallman *“The Panic of 1907”*, (November 2012).

The events have demonstrated that it was possible that the NYCHA faced risks beyond its capacity and memberships. The repercussions contributed to the success of the political effort to establish a central banking institution and to reduce the variability regulations across financial intermediaries.

On May 30, 1908, the Congress passed the Aldrich-Vreeland Act. The legislation created a National Monetary Commission, charged to study the adequacy of the currency and financial system within the country. Nelson Aldrich had investigated the Central Bank European model, especially its efficacy in case of financial crisis.

A secret conference was organized on Jekyll Island, Georgia, on November of two years later. *“Picture a party of the nation's greatest bankers stealing out of New York on a private railroad car under cover of darkness, stealthily riding hundred of miles South, embarking on a mysterious launch, sneaking onto an island deserted by all but a few servants, living there a full week under such rigid secrecy that the names of not one of them was once mentioned, lest the servants learn the identity and disclose to the world this strangest, most secret expedition in the history of American finance²¹”* wrote later Bertie Forbes, founder of the magazine Forbes. Financiers and politicians took part to the convention, whose central theme was the creation of a “National Reserve Bank”.

To assist to the design of what would then become the Federal Reserve, one of the main achievements of the Progressives, there were many representatives of the “money trust era”, such as Benjamin Strong (become in the meantime vice-president of Banker Trust) and the successors of Morgan, Baker and Stillman.

On 22 December 1913 the Federal Reserve Act, *“an act to provide for the for the establishment of Federal Reserve Banks, to furnish elastic currency, to afford means or rediscounting commercial paper, to establish a more effective supervision of banking, and for other”* was passed by the Congress. The new President Woodrow Wilson signed immediately the legislation, that was enacted the same day creating in fact the Federal Reserve System.

In May 2011, during the presidency of William Taft, the Supreme Court decided that the Standard Oil and the American Tobacco Company violated the Sherman Antitrust Act, and ordered the dissolution. In the fall of the same year, the Justice Department began an antitrust suit against U.S. Steel, because of the violation committed in acquiring the Tennessee Coal & Iron, a move that seemed a reproach to Roosevelt who had given the permission. This was a political embarrassment to the former President, and brought to a break between him and his former pupil and friend. Nine years later, by a four to three votes, the Supreme Court decreed that the U.S. Steel was not guilty on any violation of the Antitrust Act.

²¹ Michael Snyder, *“The Federal Reserve Is Holding A Conference On Jekyll Island To Celebrate 100 Years Of Dominating America”* (November 3, 2010).

In the days of the panic and the other immediately sequent, J.P. Morgan was seen as a hero. Then the difficulties and the attitude of some of the Progressives increased unfounded voices that the Panic would have been deliberately provoked by some Wall Street men to pursue their own interests. Morgan had lost millions of dollars in the trouble, but all his activities had survived, while the trusts, that were competitors to his own interests, had almost come out of funds and reputation.

In 1912 the congressman of Louisiana Alfred Pujo commenced an investigation to determine the existence of a “money trust”, a financial monopoly in the hands of few oligarchs that would have controlled the investment capital of the whole country. Many prominent financiers were testimony of the hearings, including Morgan.

The final Pujo report confirmed his convictions about the fact that “*there exists an established and well defined identity and community of interest between a few leaders of finance, created and held together through stock ownership, interlocking directorates, partnerships and joint account transactions, and other forms of domination over banks, trust companies and industrial corporations, which resulted in a great and rapidly growing concentration of the control of money and credit in the hands of a few men*”²², words that enforced the favourable attitude of people toward progressivism, culminated in 1912 with the election of the second Democrat since the end of the Civil War, Woodrow Wilson, who engaged himself in a series of reforms regarding financial sector regulation and taxation.

In a financial system, the difficulty of one intermediary can spread to another, and the more complex is the system, the more difficult is for the market participants to be well informed and to understand the risks and what it may go wrong. This can trigger negative behaviour that can bring to a financial crisis.

The Panic of 1907 had as cause of its rise the failed market corner of Otto Heinze, and as a reason of its spreading the complex bonds tied among finance people in New York, which threw a shadow over the activities of Wall Street and surroundings. However, a number of causes attributable to several factors contributed in preparing the ground for those events.

The growth of the U.S. economy, first, contributed to make the financial system more fragile. The great demand of capital surely stimulated many financial intermediaries to take more risk than prudence suggests, and the prospect of good earnings – combined with the soundness that was believed to be proper of many financial institutions at the time – brought many

²² Final report of Pujo Money Trust Committee (1912), p. 129. Bruner, Robert F. “The Panic of 1907: Lessons Learned from the Market's Perfect Storm” (p.148).

savers to invest their funds without having a clear vision about the consequences of a bad event.

The lack of regulations regarding the collection of capital and the reserves, especially concerning the Trusts, elevated the exposure to a crisis. Also the attitude of progressives toward financial institutions, strengthened by the activism of the government toward the big interest groups – that recalled the vision of President Thomas Jefferson “*I believe that banking institutions are more dangerous to our liberties than standing armies*²³” – may have inadvertently contributed to the crisis of confidence in the solidity of the system during the bank run days.

The way events happened - the formation of queues of people claiming their own deposits in front of the institutes as it turned out that their directors had some connection with the speculators, before even knowing whether there was a real lack of funds - confirms that emotional elements such as fear and its opposite, the confidence, play an important and primary role in financial events. J.P. Morgan and colleagues knew it well when they asked for the help of each priest and rabbi in New York to keep the calm. Morgan's words in his testimony during the Pujo hearings reflect his convictions about the impossibility for a small group of persons to control credit because of the psychological nature of bank activity, based essentially on confidence.

Untermeyer: *Is not commercial credit based primarily upon money or property?*

Morgan: *No, sir. The first thing is character.*

Untermeyer: *Before money or property?*

Morgan: *Before money or anything else. Money cannot buy it.*

Untermeyer: *If that is the rule of business, Mr Morgan, why do the banks demand, the first thing they ask, a statement of what the man has got, before they extend him credit... He does not get it on his face or character?*

Morgan: *Yes, he gets it on his character... Because a man I do not trust could not get money from me on all the bonds in Christendom*²⁴.

“*The strain in the financial world was so severe that it was bound to result in a break in the chain of credit, wherever the link was weakest or wherever the strain was greatest*²⁵” wrote Alexander Noyes in 1909. If the events of 1907 are part of a chain that regards the whole

²³ From Letter of Thomas Jefferson to the secretary of the treasury, Albert Gallatin, 1802.

²⁴ U.S. Government. 1913. Money Trust Investigation: Hearings, I, p. 1084.

²⁵ Noyes, Alexander D. “*A year after the panic of 1907*” (1909), Quarterly Journal of Economics

world, presuming a contagion of the crisis, has not been fully demonstrated by the documentation of the time, but it's a fact that liquidity problems in New York happened in the same period of analogous troubles in Santiago, Hamburg, Fukui and Genoa.

The contagion has its roots in the global state of the credit market that, as we have seen, in 1907 was already in a strained condition. Concerning the vehicle, it has been shown²⁶ that the collaterals used in the failed banks at the time were all related to copper.

As said, during the summer of 1907 the price of copper experienced a sharp drop. The copper trade in general was subject to a high level of price inelasticity. On the supply side, the complexity of the process and the great amount of capital required made the producers unable to respond readily to price changes. On the demand side, the large construction process of electrical infrastructure maintained the request constant for a long time, making the U.S. market the largest in the world for production and demand of that material. The demand reached a peak in 1906, at the arrival of the first relief funds after the earthquake, but dropped the following year when the shipments of gold were restrained by the prohibition of the bank of England on the exchange bills, causing a cut in S. Francisco reconstruction spending.

The troubles faced by the Heinzes to maintain artificially high the price of the United Copper, in the weeks preceding the failed corner, were due to the difficult moment that this part of the market was facing. Otto's anxiety to punish the short sellers who were trying to gain from the falling United Copper share prices gave the initial boost to the chain of events in New York.

One after another, similar shocks hit different regions of the world.

In Japan the problems created by copper were twisted with the affairs of the cotton market, material that was once crucial in exports, together with copper, gold and silver.

The bank failure occurred first in the city of Nagoya, the prefectural seat of Aichi, a cotton-exporting region, following a price and demand drop due to an exceptionally good cotton harvest in Egypt. Then was the turn of the banks situated in copper producing regions, because of riot in Ashio induced by the poor working conditions of miners, which enforced the difficulties due to the already declining demand of the material from the U.S. market.

By the time of November, runs to small Tokyo and Fukui banks forced many suspensions of withdrawals. The government response was an increase in loans to banks, which continued for all the duration of the economic crisis in the country.

²⁶ Mary Tone Rodgers and James E. Payne, *“Was the panic of 1907 a Global Crisis? Testing the Noyes hypothesis”* (2015)

Failed Bank	Defaulting Borrower
Nagoya Bank and Fukui Bank – Japan	Copper and cotton Exporters
Società Bancaria Italiana – Genoa, Italy	Copper Fabricator (Ramifera)
Haller, Soehler & Co – Hamburg, Germany	Copper mining Operator (Teplitz)
Knickerbocker Trust – New York, US	Copper mining Society (United Copper)
Banco Mobiliario – Santiago, Chile	Copper Mining Operator (Compania Gatico and San Bartolo)

Table One. The table shows the bank failures that happened in different countries during the 1907. Source: Mary Tone Rodgers and James E. Payne, “*Was the panic of 1907 a Global Crisis? Testing the Noyes hypothesis*” (2015).

On October 18, just the day in which the run to Knickerbocker Trust began, newspapers reported the failure of Haller, Soehler & Co, a big Hamburg bank. The break was due to the fact that the bank held many stock of Teplitz, a Bohemian mining operator, which was suffering a lot the drop in prices and demand.

Also in Chile, a country in which the copper mining extraction was a fundamental activity, the failure of two large customers, the Compania Gatico and San Bartolo, copper producers, forced the Mobiliario Bank of Santiago, in the verge of a failure, to suspend the payments to depositors in December 7, 1907.

The liquidity conditions of the country have been already negatively impacted by the earthquake occurred in Valparaiso in 1906, four months after the one in S. Francisco. The damages were of minor entity, but enough to strain the currency market, that at the end of 1907 needed the issuance of 30 million from the government to relieve the situation.

In September 1907, in Italy, the insolvency of the society Ramifera highlighted the fragility of the system, and especially the vulnerability of the Società Bancaria Italiana (SBI).

Part Two

Italy in 1907

Italy before the Panic

The years following independence: the attempts of development of a still rural country²⁷.

In the '70s of the nineteenth century, the economic liberalism, which until then had fully met the needs of Italy, an agricultural country dominated by the agrarian class, went into crisis.

Until then, Italian products had been kept free of duties to conquer foreign markets. The same had been done with foreign machineries and articles, as the country still did not have the production capacity needed to manufacture them on its own.

The leadership of the Right Party, which had made the economic liberalism its inspirational principle, went into crisis together. Before the Unification, the party had mostly represented the northern middle and great agrarian class, and now had to deal with the requirements of the southern middle class, much more conservative.

Agriculture was the pillar of the national economy, and contributed to the domestic product by more than fifty percent, but most of the lands were cultivated against any economic consideration. The prevailing farming methods were the extensive ones, typical of the underdeveloped countries. The production was slowly growing, but due to the expansion of cultivated areas, not to investments in equipment. The industry's delay is attributable to the lack of capital for investment, a direct consequence of the backwardness of agriculture.

In this scenery, the only exception was Lombardy, a region where agriculture had undergone a transformation in a capitalist sense, which had allowed the accumulation of savings. Until the end of 1800, however, the savings were largely collected in order to provide the new unitary state of appropriate structures.

The mining industry give a measure of industrial delays of Italy compared to other Western countries: despite the extraction being increased, the minerals were largely exported because there was no industry capable of working them. Among the textile industries, only cotton industry had made some progress. All the activity of the country was concentrated in the triangle Lombardy - Liguria - Piedmont, with some branches in Veneto and only two southern cores, metalwork in Naples and cotton in Salerno.

²⁷ The story of events occurring before the panic was derived from the books of Montanelli, Indro "Storia d'Italia" (1973), Rizzoli Editore, and the work of Conti, Giuseppe and Scatamacchia, Rosanna "Stato di fiducia, crisi finanziarie e crisi politiche nell'Italia liberale prima del 1914" (2009), Dipartimento di Scienze Economiche – Università di Pisa.

Italy was attempting to start its industrial run in the less appropriate period, where competition with the more advanced countries was made difficult - almost impossible – because of the reduction of transport and production costs. The foreign propensity to invest in Italy was slowed by concerns over the State's ability to front the public debt. A stable balance of payments was crucial in order to consolidate confidence, to decrease dependency on foreign countries and at the same time have access to new credit.

The delay in industrial development is also attributable to the lack of a plan that would direct the forces towards precise goals. The few achievements can be considered as a result of the pressures of interest groups, which were favoured in their monopolistic tendencies. In fear of stressing internal divisions, the ruling class had always preferred to compromise when dealing with fundamental decisions in the formation process of the new state.

The first post-unification program provided for an administrative decentralization that would have reduced the cost of ministries, but was abandoned because of the danger represented by numerous anti-Unitarian efforts, and the impossibility of addressing them with the sole use of police forces. The initial intention of a centralized bank, which included the centralization of money supply and of financial operations for the granting of agricultural credit, was exchanged for the strengthening of control powers.

The banking structure was weak, made up of a few private credit institutions. Rivalry among banks was hard, and little or nothing was done at the legislative level to reorganize issuing banks (at the time were six: Banca Nazionale, Banca Nazionale Toscana, Banca Toscana di Credito, Roman Bank, Banco di Napoli e Banco di Sicilia).

On the occasion of the war against Austria, the government suspended the convertibility of the currency with gold. What was supposed to be an emergency measure lasted for seventeen years (from 1866 to 1883). The consequence of the forced currency, the premium on gold, had a negative effect on foreign confidence but alleviated the imbalance in public accounts, enabling an expansion of the spending.

During the Long Depression Italy was hit by a severe crisis. The inadequate banking structure and the imbalance in public accounts made the cyclical movements of the economy more aggressive, and the state of weakness in which agriculture was aggravated particularly the crisis. The United States - facilitated by their own transports, superior for cost and speed - dumped their agricultural production on European markets at very low prices. For Italy, the double consequence was to further deteriorate the faith in liberalism and to allocate to the

industry a part of the investments until then employed for the purchase and improvement of lands.

Emigration and protectionism alleviated the consequences of the crisis. The needs of the new industrialists were often in contrast to those of the agricultural tradition, and they struggled to take on more weight within the political system. To resist foreign competition and to protect emerging industries, for example, demands for customs tariffs were advanced, in contrast to the liberal tradition.

The first victims of the crisis were the societies result of the speculation, which had contributed to expand it without taking care of building stronger projects. The transfer of the capital first to Florence and then to Rome had caused a "building fever" and the prices of the building areas had risen considerably. Constructions had increased as a result of an exaggerated forecast of the city's expansion, and the credits required to banks had increased steadily too.

The political class retarded to adjust the monetary regulation, choosing to focus on fiscal leverage and fiscal reform to get a balance in the public spending as soon as possible.

The consequence was a loosening of the regulatory constraints, since the vigilance on issuing banks passed in the background.

The abolition of the forced currency took place in 1883, during the fourth Depretis mandate, and did not have the feared effects, but brought instead some benefits. There wasn't a run to the desks to change the paper in metal money, and most of the gold reserves made available to face the worst were spared. The premium on gold diminished, the exchange rate of the lira became stable and its listing rose in all the world's stock exchanges. About half a million of foreign capital entered in Italy.

Development efforts, however, were prevented by several factors. Over the years two types of business have taken shape: small and middle-scale crafts, mainly relying on self-financing to expand, and industrial ones, of a larger size, operating in the steel, mechanical and chemical sector, which depended on banks to raise the capital needed to build or complete their own production facilities.

The loans that this type of business required should have had modest rates and very long times. Banks, however, were obstinate to demand high interest rates, and to favor investments that would provide more immediate benefits. Speculation provided much more to meet those ambitions, and the credit that banks had available at the time was used to fuel it.

The prolonged difficulty to put order in the bank issue could not remain without consequences, and not even the speculation. When the building bubble exploded in 1889, an abyss of bankruptcies opened, and the Roman Bank – an institution inherited by the Pontifical State - in particular, was invested by a mudslide of bad debts, as the real estate companies that had claimed the loans were now in ruin.

The duty of inspection on banks was committed to the Ministry of Agriculture, Industry and Commerce. Minister Luigi Miceli ordered an inspection of the whole system, and charged of the task the President of the Court of Auditors Giacomo Giuseppe Alvisi, who revealed the anomalies of which the management of the Roman Bank was guilty.

To cover the shortfalls, its president Bernardo Tanlongo had not only put in circulation 25 millions of lire more than allowed, but had printed nine more millions of false banknotes from a London printing company.

The need to not compromise the efforts towards a greater unity of the country and to not destroy the overall image of bank lending prompted the government to cover the scandal.

The government passed into the hands of Treasury Minister Giovanni Giolitti, who, in the hope of gaining points for the cause of the liberists who wanted the creation of a single centralized credit institution - which had also been one of the Cavour's unfulfilled desires - proposed to appoint Tanlongo as a senator, counting perhaps to remove an influential figure from the large group of politicians, bankers and businessmen who flourished in the unchecked system of issuing institutions.

In 1892, Alvisi, in his deathbed, transmitted the relationship, which had remained secret, to his friend Leone Wollemborg, who in turn passed it to the Parliament member Napoleone Colajanni.

It was 20th December, and the Parliament was scheduled to discuss a decree to extend the right of issue for another six years, which would have been useful to Tanlongo to re-absorb the crack. Colajanni kept his speech, and the next day all the newspapers in the kingdom reported the accusations.

Giolitti was forced to appoint a commission, the royal prosecutor's office opened an investigation, Tanlongo was taken to jail and all preparations were made for a spectacular process.

As a defendant, the president of the Roman Bank called into question the whole political class. It was realized that a negative sentence would have compromised prominent members of the Parliament, and the monarchy itself (two king's lovers were shareholders of institutions previously rescued by the Roman Bank). The vicissitude ended with a clamorous absolution of Tanlongo and all the minor defendants, after a series of hearings lasted less than a year.

Two great institutions, Credito Mobiliare and Banca Generale, were forced to close. To pay the greatest consequences was Giolitti, who had to resign, not before submitting to the Parliament a merger project for four of the six issuing banks in one institute. The Bank of Italy was born.

In the early 1900s the gap between Italy and other countries began - at least in part - to shrink. Different factors contributed to reduce the distance.

Banks represented the first. In the difficult Italian landscape, the Popular Banks had always played a key role, collecting at least two-thirds of the savings. They were the deposits of provincial and country people, who gave absolute priority to security, and were willing to sacrifice the amount of profits in order to avoid the risks. The investments suited to these requirements were few, limited to public service loans, or government debt securities.

To ordinary banks, on the other hand, were destined the savings of the medium-class, which, having more availability, was able to bear a greater risk, claiming in return high profits to reimburse it. This type of bank had fueled the speculation for years.

Industrial investments were not part of the perspective of any of these types of banks. The capital essential for development was blocked by prudence or exhausted by speculation.

The public account, which in 1883 had reached a difficult balance, again recorded a heavy passive. The deficit was worsened by an increase in imports. The commercial war against France had its consequences, hard in particular for the agricultural sector.

To face the increasing difficulties Crispi, supporter of the Triple Entente, had appealed to the German Chancellor Otto Von Bismarck, who had persuaded some financiers to give help and invest funds for the creation of new credit institutions that would take the place of those overwhelmed by the Roman Bank scandal.

In October 1894 the Italian Commercial Bank (COMIT) was born in Milan, with an initial German, Austrian and Swiss capital. The following year, Credito Italiano (CREDIT) was born in Genoa, even this with a majority of German capital.

The men who came to manage the new banks were expert financiers, according to whom a bank should not be limited to ordinary lending, but has to promote the mobilization of capital to be invested in industry.

Those "mixed banks" therefore engaged themselves in collecting deposits, granting short-term credits, and at the same time investing in long-term industrial initiatives. A major difference with respect to the predecessors was the greater care given to the expansion of the desks in the territory, so that to have a wider chance to collect the savings, and then move into the industrial credit sector with a solid activity for the public behind.

The main interventions of banks in the industrial sector were the placement of the shares of the industries - of which they were often able to direct in part the management, reserving a part of the shares and placing their own directors in the boards - the administration of current accounts and the performance of direct financing operations.

The launch of this new type of institution was strongly challenged by the supporters of liberalism, since it contrasted with the principle that a bank could not make investments that were not previously approved by depositors, and engage with longer deadlines than those agreed with them.

The second cause of the industrial launch was electricity, in particular its use in the steel industry, until that moment tied to the importance - and above all to the lack - of coal.

Investments in electricity companies were fueled by COMIT and CREDIT. The operations were conducted to concentrate the funds in a few companies - including Edison – of which banks controlled the management.

Genoa, September 1907

The outbreak of the Panic and the attempts of the Bank of Italy to contain the crisis through a collaboration between credit institutions²⁸.

The crisis that hit Italy between September and December 1907 had roots in the problems that affected the stock market, not in the difficulties of the funded industries. The banking system got infected only later.

The malfunctions within the Italian Stock Exchanges at the time, and in particular within the one situated in Genoa, which served the area of greater industrial concentration and where the reasons for the collapse has to be found, can be attributed to the lack of regulation: there were no rules on the access to brokering, on the entry of new securities, on the necessary transparency regarding the actual performance of the stocks. In 1901, for example, the official exchanges in Genoa were only one third of the total registered operations.

Registered Exchanges on the Genoa Stock Exchange

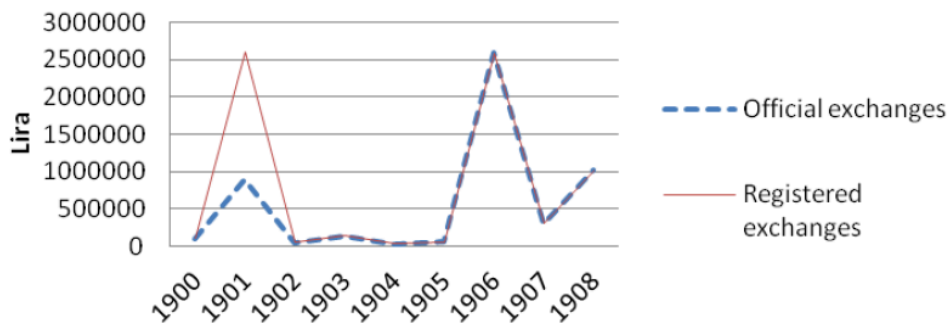


Figure Eight. Registered exchanges (official and non-official) on the Genoa Stock Exchange. Author's elaboration on data from the Stock Exchange registers kept at the Ansaldo Foundation, Genoa. Source: Tusset, Gianfranco "Genoa 1907: a Stock Exchange Crisis" (2011).

²⁸ The story of events occurring between May and December 1907 was mainly derived from the book Bonelli, Franco "La crisi del 1907: una tappa dello sviluppo industriale in Italia", Fondazione Luigi Einaudi.

Speculation was - wrongly - considered a compensation for the low propensity to invest of the Italian middle class. The banks granted credit to the speculators to finance their repurchase agreements, and there were many industries that irresponsibly committed liquidity in similar transactions. Some large corporations formed joint stock companies - often formed by companies belonging to the same area of interest assembled around a bank that financed them – a fact that helped to fictitiously increase social capital. In many cases, the dividend policy was subjected to the requirements of speculation.

In the early years of the century, upward proceedings were ordinary, and responsible for the too high value at which securities were traded.

The period 1900-1907 saw a resolute increase in the number of listed shares, which ranged from 59 to 169 only in Milan²⁹. In 1903 the shares quoted on the Genoa Stock Exchange began to accelerate. Alongside official stocks were traded a number of shares that had not yet made their official entry into the market (for example, of new companies that had not yet submitted their first financial statement).

Number of listed securities on the Genoa Stock Exchange

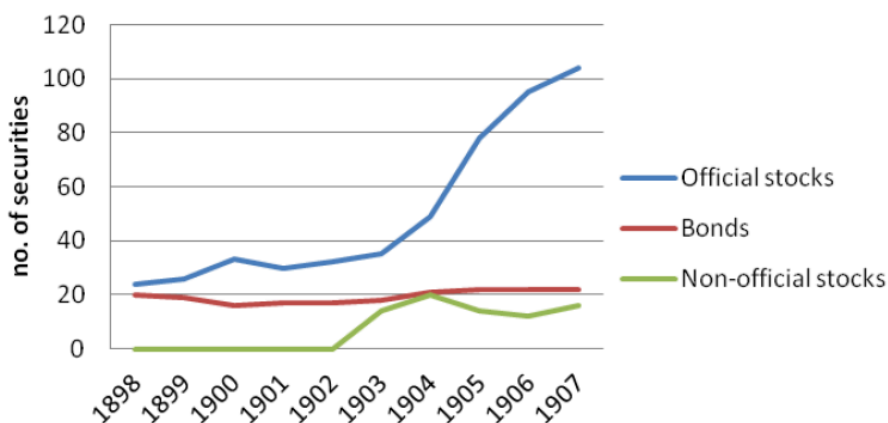


Figure Nine. Number of different securities listed on the Genoa Stock Exchange between 1897 and 1907.

Author’s elaboration on data from the Stock Exchange registers kept at the Ansaldo Foundation, Genoa. Source: Tusset, Gianfranco “Genoa 1907: a Stock Exchange Crisis” (2011).

²⁹ Giovanni Siciliano, “150 years of stock market in Italy: an overview” (pag. 15), from “150 years of Stock Market in Italy” (2011), published by Consob.

Negotiations created earnings expectations that, even if in terms of stock prices did not result in anything similar to the explosion in US railway shares after the end of the Civil War, turned investors to buy securities of recently created companies, which could not guarantee profits immediately.

The volume of security issues, however, grew disproportionately to the capital that the public was willing to employ. The demand for securities did not increase in proportion to the volume of emissions: the "real" investor-savers were still few. The mass of securities waiting for a final placement inflated, and the conditions for a speculative crisis were created.

The expectation of a next resizing of stock prices began to develop between April and May 1907, in response to the global liquidity crisis. In a moment when it was difficult to get credit, many saw downward speculation as a good method to get cash. Groups of operators began to liquidate the securities in which a rival group was engaged, a mechanism that once started was made unstoppable by the solemn decision of banks not to engage in the defense of stock prices.

To kick off this time was again an institute conditioned by the performance of a copper-related title.

The SBI was considered the "third pillar" of Italian credit. The Bank of Italy had supported its birth and development because was the result of Italian interests and capitals, and well suited to balance the role of the two largest banks originated from foreign capital (although in some cases they were partially replaced by Italian ones).

It has been the initiative of a group of Milanese industrialists and bankers to launch it in 1899. The bank had rapidly expanded its range of action not so much for its ability to seek and attract new capitals, but through the acquisition of entire business groups. Weill-Scott & C.'s interests were acquired by the founders, who had joined them in the Milan Banking Company, then called the Società Bancaria Italiana after the acquisition of the Banca di Sconto and Sete in Turin.

Capital increases have been in proportion to the business growth, and despite the fact that the founding members had attempted to maintain the control of the bank by reserving themselves the right of option on some of the new issues, the need to conclude alliances and to take into account the various interests had led to the enlargement of the board of directors. Over the years, in the bank have been accepted people able to connect the institute to the Ligurian steel business, as well as to Genoese and Veneto finance, sugar, real estate and commercial businesses. At the beginning of 1907, the bank's management was in the hands of a group of Genoese financiers, who were also its debtors.

As well as COMIT and CREDIT, SBI engaged itself the development of new industrial companies, financing also speculation on their shares in the market to raise the price.

There are many reasons for its weakness compared to other institutes. First of all, the SBI had started its business only after the other two major banks had already won a large number of customers, and had found a marginal and unselected turnover because it was transmitted by other companies, ending up to support less solid initiatives than other institutes. The acquisition of the Banca di Sconto and Sete, in particular, had weakened the bank, as this institute, in crisis for more than ten years, was disproportionate in size with respect to the SBI. The customers were not sufficiently known or guaranteed. SBI also did not have something that needed: a board at least partially independent of interest groups, and more centralized control to ensure a homogeneous operative style. In fact, the management did not have a full control of the branches, which enjoyed great autonomy, and of the new management fields, since they were constantly widening.

The lack of control was not entirely extraneous to the other banks, but within the SBI it had taken on an extreme character, especially with regard to its subsidiary in Genoa, which was the main responsible for the crisis that hit the institute.

On the eve of the crisis, SBI had employed almost all customer deposits in repurchase transactions and financing to businesses that could not provide immediate profits, and was therefore poorly equipped with readily available securities.

Compared to other banks, especially the COMIT, the repurchase agreements had an exaggerated weight in the composition of the asset, and this is an essential element to explain troubles due to a crisis that started from the stock market. Estimated losses were heavy compared to the total amount of assets (27 million lire versus a total of 165³⁰) confirming how the Società Bancaria Italiana has been exposed in the selection of its customers.

Major losses were not attributable to the financing of industrial companies, but to the credit granted for repurchase transactions and to shareholdings in companies for the placement of the shares - renewing in this case an important mistake in the past by Credito Mobiliare and the Banca Generale. Government bonds made up only a small part of the assets, reducing the possibility of the SBI to be able to credit from the Bank of Italy.

³⁰ Confalonieri, Antonio *“Banca e industria in Italia dalla crisi del 1907 all’agosto 1914. Volume I: Il sistema bancario in una economia di transizione”*, Banca Commerciale Italiana (1982)

But the causes of the crisis have to be searched especially in the composition of the passive. Despite the fact that were kept a large number of savers' deposits, there was also a heavy exposure from passive repurchase transactions. In the face of claims by depositors, the SBI could hardly count on any credit margin.

In response to the global liquidity crisis, in the period between 1906 and 1907, the cost of money had gradually increased, but industrial demand did not fall. Credits available to industries were reduced, and the ones reserved to speculation were restricted too.

The price of the shares, which, as already mentioned, had so far been kept artificially high, was affected by the troubles and began to fall.

The public began to convince that industrial securities were overestimated with respect to business opportunities, and that a reduction in their value was inevitable, if not appropriate.

The mixed banks on their part began to realize that too many large capitals had been invested in long-term investments of not immediate profitability, and, in the impossibility of obtaining a loan repayment, they began to withdraw from stock markets.

Towards the end of May 1907, at the Genoa Stock Exchange, where, at the request of some industrial speculators, the banks had granted capitals to companies that were destined to stock exchange transactions instead of industrial facilities, the concern began to be felt.

It was evident that a prolonged decline in the value of securities would have made impossible to place the mass of floating shares that had formed, aggravating the credit crisis.

Large credit institutions could have remedied the situation, but the unity of intent required for such a move was completely lacking.

A "consortium" was formed under the leadership of the Milan banking society Zaccaria-Pisa, with the blessing of the bank of Italy, with the intent of defending the value of the securities, but without the collaboration of the major banks it was only able to obtain modest results.

COMIT and CREDIT abandoned the stock market, SBI attempted to defend its position and that of its debtors, the Bank of Italy tried some interventions to stem the price drop.

And, for the time, that was all they could get.

The first two weeks of June had passed when the case broke out. Francesco Parodi, one of the most prominent operators of the Genoa Stock Exchange, said he could not pay 15,000 shares belonging to the "Ramifera Company" purchased on order by the De Ferrari brothers.

The company, which operated in the copper industry, had suffered in recent months for the tightening in credit and decline in demand, and from the beginning of the month also due to

the fall in metal prices. Despite this, until May 1907 the stock had remained among the most quoted at the Geneva Stock Exchange, as the object of imprudent upward speculation.

Since May - the month in which the value of the bond had reached a remarkable peak with respect to the market average - the stock price had undergone a net and inevitable decline.

De Ferrari brothers probably had attempted an upward speculation to avoid the reduction of the value, failing miserably.

Obviously in the SBI's assets there were both loans granted to finance repurchase transactions on the securities of Ramifera, and a credit to the operator Francesco Parodi.

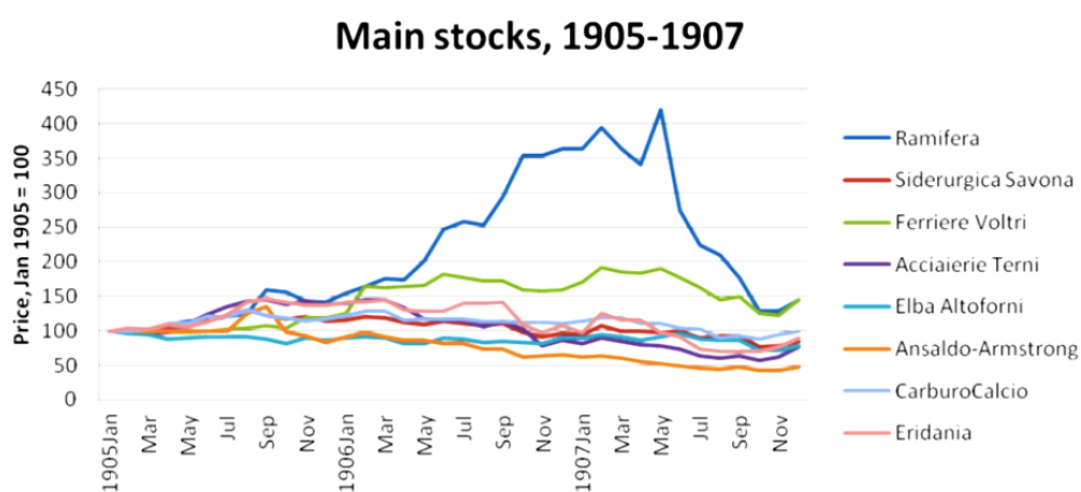


Figure Ten. Performance of the main stocks listed at Genoa SE between January 1905 and December 1907. Author's elaboration on data from the Stock Exchange archive kept at the Ansaldo Foundation, Genoa. Source: Tusset, Gianfranco "Genoa 1907: a Stock Exchange Crisis" (2011).

But that was not all. The bank was also heavily involved in the automotive sector, having granted to FIAT a loan of over three million lire.

Although it did not reach the peaks of Ramifera, the depreciation of the FIAT title had also been dramatic. After a very positive exercise (1906), the company's predictions for 1907 had been more than optimistic. By mid-1907 they had already been denied.

The blame was charged on the credit tightening, but in essence the market forecasts had been wrong, and as a result the entire investment policy was compromised. Behind the exaggerated expectation of a growing demand, capital requirements had been advanced to fund investment and production projects. The development process, however, had some obstacles, in particular increases in the cost of raw materials and labor, and difficulties in attracting new capitals that

were needed. Shareholders had been paid dividends on immobilized earnings. All this was reflected in the stock value, which, in the general downturn of prices, was among the worst.

The suspicions that were already circulating on the management of the SBI strengthened, overwhelming the institute. Depositors began to make claims about the bank's already poor funds.

Meanwhile, an agreement was sought to place Ramifera's actions. De Ferrari brothers were persuaded to take on some amount through a repurchase trade, CREDIT did the same with another stock, but they struggled to reach an agreement on the price of the shares.

The stock market was closed for almost a week, and accusations were made against the government to protect speculators. The same happened with the Bank of Italy, which allowed the closing of the monthly trading on the stock market with a long delay to allow for a settlement.

The danger that was prospected, the one of a general fall in prices, was related to all the banking institutions, but CREDIT and COMIT did not committed themselves to ease the situation, even though they risk their own safety. CREDIT made obstructions through the ambiguous attitude of its directors, and COMIT did not even invest a coin to support the business of a rival bank.

The agreement that was concluded with extreme effort did not bring the calm on the Genoa Stock Exchange. The actions needed a definitive placement: if they had been thrown back on the market, there was the risk of even more serious complications.

The Bank of Italy had strong interests in the Genoa market: not only it had inherited the affairs of the National Bank, very active in that context, but in the past had also favored the development of the SBI by widely granting credit, in the hope of rebalance the Italian interests in finance, a field where the two largest mixed banks, still with foreign majority capital, held most of their interests.

In an attempt to bring relief, Bonaldo Stringher, the Governor of the institution, allowed a liquidity injection at the end of June.

Everywhere pressures were made to the Bank for a further increase in circulation, but he did not agree, as he feared that the money would be used for damaging operations in the share market.

A reduction in the value of quotations - was his thought - would have finally put the speculators out of the question and induced a more prudent behavior to the banks that had financed them. In addition, he did not want to give the idea that the Bank of Italy offered support to the critical situations that had arisen due to incorrect conducts.

Instead, he directed his efforts to take some measures to regulate the admission of securities to listing - it was established that could not be admitted to trade securities of companies that had not yet published their first financial statements - and the access of traders Stock Exchange.

Summer was at the end. Now it was clear that the action of the consortiums only was insufficient to the gravity of the situation. These could not be financed beyond what was allowed by their potential and the guarantees they were able to give, and negotiations for Ramifera's securities clashed against ever new obstacles: the price, then the guarantees, then the price again.

For the agreement reached at last - most of the shares were taken over by a consortium, and no one else, apart from this, had the right to place them on the market - the Bank of Italy had to intervene to provide guarantees, favoring an arrangement that now regarded the stability of the entire financial market.

The prolonged depression of the stock market had done its damages.

Downward speculations and sales dominated the market in September: the lack of credit prompted operators to increasingly seek liquidity, while quotations continued their unstoppable decline.

The protagonists of the worst fall were the automotive titles, especially the FIAT, which influenced and were influenced by the reputation of the SBI.

From the columns of newspapers and from the public come fierce accusations. The main targets were the banks, which were accused of "encouraging industrial development" and subsequently "denying the additional subsidies that industries were right to ask as inevitable³¹." The Bank of Italy itself joined the choir, pointing its finger against "those credit methods applied without a criterion to the damage of the old and healthy banking forces³²."

Even downward speculators were targeted, but by now most of the operators were or behaved as if they were, for fear of further losses.

³¹ "L'Economista", 6 ottobre 1907. From Confalonieri, Antonio "Banca e industria in Italia dalla crisi del 1907 all'agosto 1914. Volume I: Il sistema bancario in una economia di transizione", Banca Commerciale Italiana (1982)

³² Banca d'Italia, "Relazione del 1907". From Confalonieri, Antonio "Banca e industria in Italia dalla crisi del 1907 all'agosto 1914. Volume I: Il sistema bancario in una economia di transizione", Banca Commerciale Italiana (1982)

The crisis came out of the stock exchanges and threatened the industries, with potentially catastrophic consequences for the newborn Italian economy. The credit crisis had impact not only on businesses, but also on smaller banking institutions, which in turn were indebted to large banks to finance local businesses.

The liquidity available to banks quickly decreased, even the one that was usually available through deposits. The claim from mixed bank customers to have their money back increased. Among them, there was a category of depositors made up of companies that invested their means in the bank and now needed to dispose of them freely. The money went to the Populars, banks that by law and tradition used the investments in safer operations.

The distrust toward mixed banks was the result of the nature of their employment, but also of the continuing fall in values of their securities.

Industrials pressed the Bank of Italy to intervene. The institute reassured them about credit claims, and threatened banks to increase the discount rate if the new money issue would have gone to speculation rather than to business.

The Bank of Italy almost alone committed itself to meet the enormous financial needs of the country, securing the functions that were normally reserved to ordinary credit institutions, in particular the provision of substantial monetary resources to the areas belonging to the Turin-Milan-Genoa triangle, enlarging the circulation of 248 million lira. In return, they demanded that credit institutions continued to attend at least their regular customers.

The state favored its action by avoiding the use of savings to raise capitals, and preferring to use part of its cash - fortunately substantial at the time - for already planned investments, postponing the issuing of securities to better times.

The bank that received most of the requests from depositors was the SBI.

The investor's distrust was reflected on the opinion of the depositors, and the negative judgment of both on the value of the stock. This crashed, while requests for withdrawal rained.

At the end of September, the bank's deposits - about 36 million lire at the end of August - had fallen by 4 million.

Capital invested in securities could not be realized, or it could only be at the expense of huge losses. The bank was nearly unable to obtain liquidity from other sources, due to the few government securities available (the only ones that could be submitted to guarantee a loan at that time).

The situation that was created began to scare the other banks - which until then had sabotaged SBI's attempts to rise again - fearing that a rival closure would spread panic among their customers as well.

The Bank of Italy had good reasons to prevent the institution's disruption, even more valid than those for which it had helped its development. The institute had granted to the bank credit for at least 20 million lire, which SBI constantly asked to increase. In addition to a crisis of mistrust in depositors, the closure of the SBI would convince the public that even Bank of Italy's credits were impossible to be cashed.

Furthermore, companies that had received credit from the SBI and still counted on receiving liquidity from the institute would have been orphaned of its support. Such an empty would have created serious imbalances to the industrial world before the other two major banks were able to fill it up.

These fears started the negotiations that filled the first two weeks of October.

It was decided to intervene by a Consortium formed by credit institutions under the guidance of COMIT and CREDIT, Zaccaria-Pisa society, and the issuing institutions (Bank of Italy and the two southern banks). SBI's needs were estimated at about 50 million lire (an amount inferior than the real need: the bank avoided to denounce its insolvencies, fearing to further frighten its depositors, and the same lenders).

Banks immediately demanded that at least thirty millions were guaranteed by the issuing institutions. Stringher declined, but a few days later he softened his position; meanwhile, the SBI had found itself out of liquidity, that asked to the Bank of Italy, which immediately lend 7 million dollars, coming close to overcome the limit of 30 million set previously as impassable.

After Stringher proved himself willing to postpone the measure that would raise the cost of money, an agreement was reached on 11 October. To the SBI 20 million were guaranteed by ordinary credit institutions, another 25 - once the first subsidy would have been exhausted - by the issuing institutions, and a further disbursement by COMIT, CREDIT and other members whatever needed.

The Bank of Italy had to anticipate the twenty millions to the Consortium, so that the aid granted did not entail any reduction in liquidity for the banks involved. On the same day, Stringher met with representatives of the Ligurian industry and gave them reassurances.

The terms of the agreement soon proved inadequate.

The SBI almost immediately dried up its subsidy of 20 million. Soon afterwards the intervention in its favor, which was believed to have demonstrated solidity, stock prices hit new minimums. A number of failures occurred among the stock market operators, and the consortium formed in June to fight the drop of the values collapsed (the company that led him had failed).

A financial action was urgently needed, and only the Bank of Italy had the means to carry on it. It was decided that the Company for the Southern Railways and the Savings Bank of the Lombardy Provinces would make available to a private consortium a stock of railway certificates to secure a loan from the Bank of Italy: in practice, it consisted in providing the means to a group of people to gain possession of a certain amount of Italian stock capital. However, the financial and legal difficulties were remarkable, the two institutes appointed were not convinced, and the consortium formed only in mid-November.

The commission meanwhile charged of examining the accounts of the Società Bancaria Italiana estimated that another loan of 40 million lire was needed.

This time an agreement was reached only providing that the SBI management was placed under the direction of its lenders. SBI's rivals were thus satisfied, and on November 7 it was decided to divide the commitment between ordinary banks and issuing institutions.

Still the obstacles were not entirely flatted: a delay in loan delivery was caused by the severity with which COMIT, CREDIT and other members wanted to examine the SBI's portfolio.

The burden of supporting the institute for the entire month of November fell to the Bank of Italy, which for this strength confirmed its preeminent position in managing the crisis and the rescue of the Società Bancaria Italiana.

Once secured to the SBI the help it needed to survive, Bank of Italy Governor Stringher and Treasury Minister Carcano worked to adjust the cost of money by raising the discount rate and the interest rate on anticipation operations.

The motivations of this initiative were to prevent banks and financial operators from behaving badly with the liquidity that was granted to loosen the tension, lending it to operate on the stock exchange, suggesting that the Bank of Italy and Treasury were willing to take over the cost of speculation.

The measure provoked discontent among those who would have to provide the subsidies to form the consortium for the defense of shareholding values, which were already unconvinced, causing further delays in negotiations.

A group of Genoese industrialists belonging to the steel trust turned directly to the Prime Minister Giolitti, offering to replace the consortium for the intervention in the stock market and requesting the Bank of Italy to fund directly their companies.

The threat of closing down some of the plants, with the risk of causing a "large labor crisis" with its social consequences, in a year that had already been quite turbulent from this point of view, had its effect, and Giolitti called Stringher all in alarm. The Governor stated in no uncertain terms that his bank could not carry out an operation in the required terms, except with the risk of a huge immobilization, and that not pertained to the industrialists to impose the amount and the methods of financing.

Steel industries had troubled themselves by withdrawing capitals from financing the production to use them in stock exchange speculation, inflating their social capital through the exchange of stock packages. When the credit contraction had made it clear that their ambitious investment programs would have dragged them to the bottom, given the limits of market and capitals at their disposal, they had reached a rest between competitors and knocked on Giolitti's door. Stringher was aware of all this, as he was convinced that helping them was inevitable, and laid the base for a future intervention, stating that it was necessary to assess the difficulties of each enterprise and the needs arising from them.

On November 13, another measure was introduced to contrast the speculation, the right of discount, which gave anyone who had purchased securities to request to the seller the delivery with only two days of notice.

Finally provided with adequate means, also the consortium came into action. This was actually when the drive of downward speculation was exhausted, thanks to the increase in the money cost and the introduction of the right of discount. The intervention therefore required less effort and less resources than expected, and was more effective.

Reassured on the financial front, the government, through the Treasury, turned to loosen the money market tension by announcing a one hundred million advance on payments to government debt holders, the people that most contributed to the formation of savings within the country.

The conditions that had led to the restriction of the credit were softening: the stock market crash had been avoided, the consortium watched over the fall of the stock market, new liquidity had been placed on the market and the banking crisis had been avoided.

The Bank of Italy had faced the situation almost alone by using the instruments it was provided: the sale of government bonds, the use of available cash from interest bearing current accounts (which in 1907 had a peak: savers, in the climate of distrust, preferred to

give their savings to its accounts, repaid by safety rather than by the interest rate, which was lower in respect to other institutions).

The Treasury, for its part, had increased the reserves of the Bank of Italy, so that it could greatly increase circulation in full coverage.

The inflow of monetary resources registered in that year and the decisive action of the government give a measure of the impact and importance that the crisis had for the Italian economy.

Italy after the Storm

The consequences of the Panic on the role of banking institutions in Italy, and some reasons why the crisis had different effects than in other countries.

The depression of stock values, which was no longer fueled by wild sales, began to curb in the second half of November. At the beginning of December the trend could be considered exhausted; in January 1908 the stock market was already in recovery.

During this period a solution was sought for the organization of the Società Bancaria Italiana. In opposition to the not too secret expectations of the rivals, who still hoped for a liquidation of the institute, Stringher committed himself to set up a rebuilding of the company so that it could repay the aid provided using as little credit as possible.

On November 21, the supervisory board placed on SBI management completed a serious investigation into the institution's holdings, and based on the conclusions, it could be started a rebuilding plan for the bank through the write-down of the share capital and the supply of new funds.

The devaluation was particularly severe and amounted to 30 million lire: 10 million were absorbed by the reserves, another 20 canceled the share capital, which was reintegrated by new subsidies. At the head of the bank was placed a Stringher's trusted man, who facilitated the resumption of SBI so that it could quickly repay his debts.

Already in June of the following year, the institute was able to repay the last loan and to get back all the securities that had been offered as collateral. The bank resumed its normal activities and deposits began to grow again.

But the turbulent history of the Società Bancaria Italiana had not yet ended. Its administration was prudent until 1914, when it merged with other institutes to form the Italian Discount Bank.

Strengthened by the new dimension and new availability of capitals, the institute opened to a more aggressive and more imprudent management, becoming the center of a new banking-industrial pole able to compete with those organized by COMIT and CREDIT.

After the war, following a series of risky investments, the bank turned out again to be a weak element of the Italian banking system and ended its business with a liquidation.

The events of 1907 was the occasion to rethink the role of mixed and ordinary banks in the management of industrial credit, and of the scope of the issuing institutions, particularly the Bank of Italy.

Italy was a country in which self-financing processes for industries, due to insufficient domestic demand, did not function adequately to the development needs.

In this situation, bank financing played an essential role. The financial market was still incapable of having a central part in directing savings for industrial financing.

The events pushed mixed banks to try to engage the Bank of Italy in financing operations, a role that was refused, since it would have exposed the issuing institution to the risk of great immobilizations.

Stringher was firm also to refuse a similar action to the Ligurian steel industries, which had a significant political influence, and Giolitti had the good sense of not insisting in that direction, although he supported their claims.

The crisis was a lesson for banks about their role and the risks involved in industrial credit. The mixed banks had not been up to their tasks. This was the meaning enclosed in the official claim contained in Stringher's speech when he called these institutions to their "responsibilities."

There were also other factors to consider: it was not admissible for the banks to think only to immediate business interests, as it was not allowable that, by taking advantage of their imprudent behavior, groups of speculators could operate undisturbed; furthermore, it was necessary for the Bank of Italy to have a proper position to control the liquidity of the system. The facts of 1907 were an opportunity to consolidate the role of this entity. The other societies had tried to give some responsibilities regarding credit to businesses to the Bank, but Stringher had been able to maintain the functions proper of the issuing institution.

In agreement with the government, from the beginning of October to the end of December, the Bank implemented a series of initiatives to increase monetary assets by regulating liquidity inflows.

The banking crisis was avoided, and even the industrial crisis that would have been the result, given the problems that would be consequent to credit restrictions, and it was also avoided that resources would fuel speculation.

In the relations of strength with the privates, the State and in particular the Bank of Italy succeeded in affirming their role.

The Bank's position, in particular, was strengthened by a series of measures that gave it greater access to monetary policy.

This was in fact an essential element for the Italian economy in the early twentieth century, where industrial development processes concerned only a limited area of the country and

depended on conditions external to the business process - among which a primary role was for bank lending, another one for monetary policy.

During the crisis, monetary resources were used in parts of the system where the tension was felt more, thus avoiding industrial problems.

On December 31, 1907, a law was passed that allowed larger circulation limits, giving the Bank greater freedom of movement in following market needs.

With the interventions put into effect in 1907, the industrial results achieved until that time were rescued and new possibilities for development emerged.

The events opened a phase of less commitment to fixed investment and more restrained industrial development.

After a first phase of intense industrial growth, leaved principally to the private initiative, it began a second period in which the role of the State was more active in defining an economic policy, such as the one of the Bank of Italy was to determine the monetary issue.

The stock issue slowed down, and the mass of industrial securities waiting for a placement, which had been the ground on which speculation had been planted, was definitely reduced.

The characteristics that the financial market assumed from 1908 were in line with the new phase that appeared on the horizon, and therefore less aligned with the needs of industrial financing.

From the liquidity crisis, any industrialized country that depended on abroad for the import of capital could have come out greatly damaged. Another condition present at the time of the crisis that could have triggered a dangerous mechanism was the disequilibrium in the balance of payments³³.

The industrial expansion of the early 1900s involved not only a great use of debt, but also a substantial surplus of imports on exports, as the country needed raw materials and equipment for the industry without being able to balance exporting industrial and agricultural products.

Towards 1906, this surplus had become worrying.

³³ Bonelli, Franco *“La crisi del 1907: una tappa dello sviluppo industriale in Italia”* (1971), Fondazione Luigi Einaudi.

Anno	Imports	Exports	Balance
1900	1592	1348	- 244
1901	1631	1385	- 246
1902	1633	1467	- 166
1903	1730	1490	- 240
1904	1787	1573	- 214
1905	1938	1704	- 234
1906	2396	1902	- 494
1907	2751	1938	- 813

Table Two. Italian Current Account 1900-1909. Source: *Indagine statistica sullo sviluppo del reddito nazionale dell'Italia dal 1861 al 1956*, "Annali di statistica", Vol. IX, pag. 252. From Bonelli, Franco "La crisi del 1907: una tappa dello sviluppo industriale in Italia", Fondazione Luigi Einaudi.

However, the structure of foreign accounts allowed Italy to be affected by the international crisis without being overwhelmed.

The inflow of capital that in practice financed the imports was no longer constituted (as in the time of the Long Depression) by foreign capital invested in Italy, but by emigrants remittances and cash brought by tourists, which did not involve a counterpart in the liabilities constituted by the payment of interests. Right in 1907 those were reduced to a minimum, while emigrants' remittances reached a high record. Among the main exports of Italy, that of labor force was one of the main ones. Monetary tension did not interrupt the inflow of capital from abroad, and the exchange rate of the lira remained favorable.

The effort to build an industrial equipment had taken place in a situation of payment equilibrium, despite the imbalance in imports, as capital inflows mostly did not have the form of credit. The fact of not having to deal with interest payments or capitals' withdrawal saved in part Italy from the effects of the crisis.

Conclusions

There are two elements proper of systems that can cause a financial crisis inside an economic environment: the shape of the market, which may facilitate to problems the possibility to pass from a member to another, and its complexity, that may make difficult for the system participants to be well informed in any moment about any trouble.

The nature of the crisis that hit United States in 1907 can be conducted to the lack of liquidity and the system architecture.

As said, the year between 1906 and 1907 was difficult for the credit, due to international events such as the San Francisco earthquake and the resolution of the Bank of England to prohibit US finance bills.

Those events caused difficulty for the US financial system to implement a government action to increase the circulation when mostly needed, leaving to the clearing houses the burden to implement a temporary solution in the form of the certificates that substituted the dollars.

The internal contagion was due the presence in the trusts' boards of directors of people that had connections with the Heinze family, and the impossibility to value how much those linkages could be a signal of imbalance in the internal accounts.

The panic spread in the form of withdrawals from an entity to another suspected to have linkages with the institution considered in risk of insolvency.

For this aspect it had been suggested that bank panics are only randomly occurring events³⁴, which happen following suspicions of a group of depositors about the effects of a type of shock on an institution, about whether it could force the bank on liquidation. The attempt to calm down the people through the authority of every clergymen and rabbi in New York was done by a person that was conscious of the importance to fight the run with measures able to address the irrationality that caused part of the problems.

The number of entities effectively insolvent for the failed move of Otto Heinze is limited to its company and some brokerage houses; the difficulties of the trusts derived from the rain of depositors' requests and the difficulty to face them due to the immobilized assets and the low amount of reserves.

³⁴ Diamond, Douglas and Dybvig "*Bank runs, liquidity and deposit insurance*" (1983), Journal of political Economy.

According to the chain of events, it appears coherent the suggestion³⁵ that asymmetry in information plays a major role in the bank runs: the withdrawals of deposits happen following the example of others that have suspects about the solvency of a bank. In USA this problem was central since JP Morgan had to organize private audits on the companies' financial statements to have a vision on what was happening.

It is less simple to determine the nature of the 1907 crisis in Italy, especially whether it could have happened independently from the international events.

As we have said, in USA the crisis had a liquidity and systemic nature, and grew in a field well prepared internally by investment and regulatory factors. The triggering event was in part due to the desire to contrast the effects of the general drop of the copper price on a group of shares, in part to the case (Otto Heinze was wrong in the valuation on the number of shares in possession of his family).

Italy experienced something similar in Genoa Stock exchange regarding a group of shares of the society Ramifera. Those were part of the a stock that was object of an upward speculation, but maybe alone wouldn't be sufficient to cause the ruin of the SBI, in absence of some other factors – suspects about its management, a drop in the value of automotive shares, the lack of collaboration to contrast the difficulties between the major institutes.

The explosion of the crisis in Italy may be reasonably conducted to two aspects, one regarding internal factors and another concerning the liquidity crisis.

About this international cause, its effects in Italy were not comparable to the difficulties provoked in US by the lack of liquidity, since the major danger – the disequilibrium in payments that would happen consequently to the interruption of investments that allowed the country to finance its imports – was prevented by the fact that Italy was funded by emigrants' salaries and tourists, and that the Central Bank (an institution that in US was not yet existent, even if also the Italian one already was not developed in its modern shape) intervened by currency emissions fully covered by gold reserves.

Internally, real factors such as a productive euphoria can be excluded since the economic expansion of the beginning of the century had not pushed the production to such high levels to create an overproduction problem when the demand dropped because of the liquidity strain. Of course the development had consequences in the form of the number of investments directed towards new companies, that was cause of the stock market's exuberance.

The crisis seems to have been originated more by elements concerning the financial and banking system.

³⁵ Economists Charles Calomiris, Gary Gorton and Batta Charya.

As said, the crash at the Genoa stock exchange can be considered the initial event. This in turn is linked to the performance of the whole banking system – in particular the one of mixed banks. The facility in the concession of credit fueled the speculation - that had wide possibility to develop in the lack of regulations - and caused the immobilization of great funds in investments not immediately profitable.

According to the economist Luigi Luzzatti, the cause of the crisis should not be attributed to the weakness of the financial system, but to its absence of caution.

In the Genoa Stock Exchange great and small speculation operated undisturbed for years. Many of the investors did not even have the money to play this game, but the wide use of repurchase agreements allowed them to sell or buy short, granting their actions with deposits that were not sufficient to cover the risks.

The lack of transparency, the financing of repurchase agreements through funds that should have been invested in production, the facility for any operator or share to enter in the Stock Exchange, were some of the factors that prepared the field of the event that initiated the troubles of the Società Bancaria Italiana and the crisis. This happened when the scheme was broken, inducing a great retirement of funds from the Exchange.

The opinion of the time tended to attribute all the faults to upward – and then downward – speculation. The second, which showed its effects when the crisis was in course, was more a consequence of the events that were happening than a cause, and the first, even if present, regarded only a limited number of stocks.

The role of mixed banks does not stop to the irresponsible concession of credit, but can be extended also to a following moment, when it has become clear that the problems of the SBI were a danger for all the Italian financial system. Their rivalry caused delays in recognizing this fact, and put severe obstacles in the action of the Bank of Italy.

Given those conditions, the hypothesis that a crisis would have hit in any case a system in which those elements were present is not without foundation. Factors originating from abroad may have only accelerated a process that had been already triggered by the contemporaneous presence of all those conditions.

“Both the panic and the boom are eminently psychological phenomena. This is not saying that the fundamental conditions do not warrant sharp declines in prices and at other times equally sharp advances. But the panic, properly so-called, represents a decline greater than is warranted by conditions usually because of an excited state of the public mind accompanied

*by exhaustion of resources; while the term “boom” is used to mean an excessive and largely speculative advance*³⁶.”

According to this vision, an episode of “panic” can threaten one of the beliefs that assume the decision makers of an economy to be rational. Even if the market may make mistakes in reflecting fundamental information into prices, it is supposed to be rational on average over long periods of time. The panic destroys this assumption.

Leadership is a fundamental resource in time of panic. The action that can contrast this phenomenon, establishing again the market rationality (or at least the faith on its existence), can only be implemented by an authority.

In US, the intervention of JP Morgan, its comrades and the clearinghouses – that suspended the convertibility of deposits – provided to inject in the system the confidence necessary to recover.

In Italy this role was played by the Bank of Italy, which was supported by the government policy, more than in USA, since there the ability of the Treasury to act was slowed by the shortage of gold reserves on which to base the new currency.

The liquidity of a market is a primary element to determine the length and the severity of a panic³⁷.

As emphasized by economists Anna Schwartz and Milton Friedman, the management of money supply is a mean through which the crisis can be influenced and eventually resolved.

In USA, the effort to sustain the dollar in the years preceding the panic had put liquidity out of the market, at a time when the demand was increasing because of the San Francisco earthquake and the industrial growth.

The action of political leaders may have been the power to induce confidence, but Roosevelt’s attitude toward big economic groups certainly contributed to create suspicion, that prepared a field for a shock.

Statements of appreciation and support for Morgan's action, which came in mass from the political and economic world, contributed little to contain the dangerous mistrust mechanism that had started months before the outbreak that led to the bank run.

³⁶ Selden, G. C. “*The Psychology of the Stock Market.*” (2005) New York: Cosimo Inc., p. 69 (originally published in 1912). From Bruner, Robert F. “*The Panic of 1907: Lessons Learned from the Market's Perfect Storm*” (p.236), Wiley.

³⁷ Glenn Donaldson “*Source of panics: evidence from the weekly data*” (1992), published in the Journal of monetary Economics, pag. 277-305.

In Italy at the moment of the crisis a great amount of gold reserves were present at the Central Bank: the fears about the abandonment of forced course had pushed authorities to this precautionary measure, which proved to be very useful when massive cash injections were needed.

Even if it did not yet play today's role (only think that there were two other authorized issuing institutes), the Bank of Italy was ready to act to contain the crisis, although some delays were caused by the lack of collaboration by other banks.

Despite the obstacles, the Bank had the ability to prevent further runs to banks providing the market with a good amount of liquidity at the right time, while ensuring, through threats and the adoption of new regulations, that resources would have taken the road to business and not to speculation.

Political authority had the smartness to support its action and not interfere, even when large industrial groups - the Ligurian steel trust - urged an action in such a sense. This attitude allowed the Bank of Italy to exit from this period strengthened in its role and in its own authority.

Taking as an assumption that the financial markets are rational at least on average, the shocks that can trigger a financial crisis have some common characteristics. First, they affect the economic fundamentals, and are meaningful enough to change the vision of a great number of investors. Then they have to be impossible or very difficult to anticipate for the common people.

For both Italy and USA, the event that brought to the crisis was a failed speculation move induced by the depressed share values. The credit shortage had already affected the atmosphere of business confidence. This problem was induced in turn by events such as the San Francisco earthquake, the restriction of finance bills by the Bank of England, and the decline in commodity demand that induced the drop in the stocks that had driven the upward speculation in the Genoa Stock Exchange.

The events induced US to consider the importance of a central body to place order in the complicated banking system, to function as "lender of last resort", to regulate circulation and to coordinate any aid needed by the system during the crisis periods.

In Italy, as mentioned, this role was definitively assumed by the Bank of Italy, which in 1926 was granted the exclusive of the currency issue.

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