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The American Bank Panic In New York 1907

(Bakalářská práce)

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Studijní obor: Angličtina se zaměřením na aplikovanou ekonomii

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Olomouc 2013

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List of Abbreviations Used in the Thesis

MOPC – Montana Ore Purchasing Company

TCA – Trust Company of America

JPM&C – J. P. Morgan & Company

NYCH – New York Clearing House

TC&I – Tennessee Coal and Iron (officially Tennessee Coal, Iron & Railroad Company)

M&S – Moore & Schley

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1. Introduction

The aim of this thesis is to provide information about the process of the panic and its causes. This paper does not deal with the financial crisis of 1906 though it is briefly mentioned linking the causes of the panic. Its goal is not to study the establishment of Federal Reserve System, or the golden standard, however, to briefly mention them in linking chapters. There are main affected subjects specified, especially the trust companies and what trouble did the character of these institutions cause. I mention J. P. Morgan a lot though the life and work of J. P. Morgan is not an issue for this paper. However, I could not avoid mentioning his role and his actions because these are inseparable from the panic. I also mention president Theodore Roosevelt because of his attitude to large corporations and especially to Morgan by some authors considered to have contributed to the economic instability in one point but also to the solution of the crisis described in one of the latter chapters. Despite that it is not an aim of this paper either to assess the presidency of Theodore Roosevelt or to deal with his policies directly unrelated to the topic. The aim of this thesis is not to deal in detail with application of any undertaken conclusion, cause or solution. This paper merely names these issues however, does not to apply them to the given situation that would be a goal of a strictly economic paper. Some of the latter chapters are very brief and lack an introduction because their subjects were not among the main aims of this paper and merely complemented the main topics. Main topic of this thesis is not to compare the two crises 1907 to 2007, yet these two phenomena inspire a parallel which I will deal with at the end of this paper and show how different they were.

The bank panic of 1907 however, holds a remarkable position among other bank crises in America due to several facts. Namely due to the involvement of mentioned John Pierpont Morgan who, as I show in this thesis, was the one who made the crisis go away and in the darkest hour took on the role of then nonexistent central bank. Both the crisis and Morgan's radical involvement catalyzed into creation of Federal Reserve System because most of the involved subjects realized that there might not be another Morgan to save the day when the next crisis comes.

2. Character of the bank panic

This initial chapter deals with some terms concerning the main topic in order to specify the subject of its study. On the other hand the goal of this chapter is to show what can happen in case of a panic and what choices do the banks have. In the latter part of the chapter there are symptoms of a panic listed. Within this chapter I mainly use Mishkin, Kindleberger and Aliber, Bruner and Carr and on some level even Theodore Roosevelt.

To define a Banking panic it is necessary to first provide some key definitions of the terms involved in order to be able to understand in thoroughly within the context. Bank panic or bank run "banking panic occurs when bank debt holders at all or many banks in the banking system suddenly demand that banks convert their debt claims into cash (at par) to such an extent that the banks suspend convertibility of their debt into cash or, in the case of the United States, act collective to avoid suspension of convertibility by issuing clearing-house loan certificates" (Calomiris and Gorton 1991, 112).

Crash is usually associated with a rapid downfall in security prices. Charles Kindleberg and Robert Aliber define a crash as "a collapse of the prices of assets or perhaps the failure of an respected firm or bank" (Kindleberg and Aliber 2005, 94). Subsequently there should be a definition of how strong does the collapse have to be in order to meet the criteria for a crash. Frederic Mishkin and Eugene White supply rather Gilbertian explanation: "On the face of it, defining a stock market crash or collapse is simple. When you see it, you know it." (Mishkin and White 2003, 55).

According to Mishkin, "a bank panic also has the feature of decreasing liquidity which will lead to higher interest rates... this rise in interest rates directly increases adverse selection problems in credit markets and also can reduce the value of firms' net worth... bank panics lead to economic contraction through these channels as well" (Mishkin 1990, 7 - 8).

In a run depositors rapidly withdraw their cash from the banks because they do not trust the bank to be able to pay their deposits in cash. In order to do so the bank would hypothetically need to have all the deposited money available in cash at any time. Nonetheless, banks only hold a part of their deposits in cash in order to be able to invest the rest and make a profit. For that reason, there is always a theoretical chance of a bank run in case all the bank's depositors claimed their deposits at the same time. In such case, the bank does not have many options to save itself from bankruptcy.

1) The bank can ask another bank for help by becoming its clearing agent and use its own cash reserves to meet the run. Basically lending its cash to the bank in trouble.

There is a higher risk involved on one hand the bank asked for help has a chance to get rid of its competitor easily. However, the risk is that if the competitor fails, its depositors lose their money the chance is that the clients of the untroubled bank may start to panic. The depositors may fear their money is not safe within their bank, stop trusting the bank and withdraw their funds. That could start to be a run on the whole banking system. Yet realistically not all banks or other agents would still be willing to risk their own money for the sake of their competitor, or willing to participate on a bailout. This particular fact will be a subject of further research of this paper explaining what and who made the banks, and other financial intermediaries start to cooperate on a bailout plan and make them agree on anything.

2) The bank can ask the central bank for help.

The Central Bank or Federal Bank usually possesses enough cash to curb the lack of liquidity on the market. However, in 1907 the US did not have a Federal Bank administering a great volume of funds sending them directly to the subjects in need. There were 16 000 National Banks regulated by state however, not owned by the state. The only state-owned financial subject, were the clearing houses that neither possessed any authority over the banks nor had any executive power. ¹

¹ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), p. 147-148.

3) The bank can sell some of its assets in order to raise cash and save itself.

The bank can easily sell its securities or even its own stocks. This fact however, might raise suspicion among its other clients, shareholders and the public which could eventually drive its stocks down or force more other depositors to withdraw their money. Selling bank's property is a long-term business and time is scarce when facing a run which can make the institution go bankrupt within days.

According to some sources, there was a financial crisis before the bank panic dating back to 1906 since when the stock market started taking some serious hits. I will restrict this topic within this chapter mainly to a general list of symptoms causing market's downturn.

- The San Francisco earthquake and fire
- Bank of England's raise of the money discount rate in order to finance the harvest in Egypt.
- President's interventions and initiatives such as the imposition of a giant fee on Standard Oil Company and even earlier the breaking of the Northern Securities Corporation. These two industry giants were owned by two of the greatest industrial and financial capitalists. Standard Oil the largest oil refiner was owned by John D. Rockefeller, (and others) and the Northern Securities Co. was a property of John Pierpont Morgan (and other magnates). Both men's businesses started facing significant obstacles with the legislation of Theodore Roosevelt pursuing large businesses. ² Roosevelt used the Anti-trust act from 1890 to dissolve the Northern Securities and to penalize and sue Standard Oil. However,

²Roosevelt's attitude is best described in his autobiography at one point stating "the capitalist is an unworthy citizen who pays the efficient man no more than he has been content to pay the average man; and effort should be made by the Government to check and punish him" (Roosevelt 1913, 741).

these actions did not bring any particular assurance to the market on the contrary it aroused suspicion and caution on the market.

- Slowing economy
- Tightness of money market (the last two points are related to the financial crisis)

According to Bruner and Carr, these occurrences resulted in the US Stock Markets' downturn by 37 per cent and loss of confidence on the market leaving investors and the public in uncertainty. For that reason market was left with fewer resources contributing to the general downtrend. ³

³Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 15.

3. Before the panic

Within this chapter I shall introduce the major conditions the economy was going through at the time. All preceded the panic in a different point of time from years before the panic to only days before the panic. The conditions this chapter deals with were ultimately reflected in the process of the panic. First there was the golden standard which to certain extent disabled the state to emit large amount of money not covered by gold. Then there was the San Francisco earthquake that caused massive amount of damage to the state and the insurance companies causing drainage of gold and finally the copper corner. The copper corner was the final blow to the unstable market and caused a domino effect taking many financial institutions down. Within this chapter I mainly use Kroos who provides sufficient and relevant information about the golden standard, Odell and Weidenmier for the San Francisco earthquake and ultimately Bruner and Carr to provide information about the copper corner and its participants.

3. 1. The golden standard

Accroding to Kroos this act caused the U.S. to tie its currency to gold at a long last, thus establishing a system enabling any depositor the withdrawal of his money in gold. By 1900, the ration of pure paper money to coins and money representing precious metals deposited had been cut by more than 90 per cent. The dollar was defined as 25,8 grains of 0,9 pure gold. National banks were authorized to issue notes equal to the par value of deposited bonds. The minimum capital for National banks was reduced to 25, 000 in cities of less than 3000 population. That move by the U.S. government placed nearly the entire commercial world on fixed exchange rates. ⁴

Advantages – centered upon the fixed exchange rates and the discipline it
imposed on banking systems in all countries requiring them to control their bank
money in such a way as to maintain gold convertibility. Governments, for example
could not (as they now do) print money as they pleased to extract real resources

⁴ Herman E. Kroos, *American economic development: the progress of a business civilization*. (Detroit: Prentice-Hall, 1966), 375.

at will from the world economy by inflation. Their two alternatives were to borrow from the public at market rates, or to tax their people to meet financial obligations. ⁵

Disadvantages – losses of gold via the balance of payments required that losing nations to tighten up their financial transaction, usually by curtailing credit, rating central-bank discount rates, and increasing the amount of unemployment and general business distress. This was the harsh "medicine" the gold standard prescribed for nations whose economies expanded too rapidly relative to others. Modern fiscal techniques, based upon unending deficit spending, were not quite possible in such a system. Governments had to remain "honest". 6

According to Kroos, Central Banks were supposed to magnify gold movements with their own lending policies to make the gold standard work. If gold reserves rose, central banks under the "rules" were supposed to lower their discount rates and increase their loans and investments. If gold reserves fell, central banks were supposed to cut their loans, sell securities, and raise their rates of discount accordingly. ⁷

3. 2. The San Francisco earthquake and fire

According to Odell and Weidenmier, "the Great San Francisco earthquake that broke out on 18th April 1906 with the magnitude 8.3 ranks among the greatest earthquakes of all time rupturing the northernmost 296 miles of San Andreas Fault... At almost precisely 5:12 A.M., local time, a foreshock occurred with sufficient force to be widely felt throughout the San Francisco Bay area. The great earthquake broke loose some 20 to 25 seconds later, with an epicenter near San Francisco. Violent shocks punctuated the strong

⁵ Herman E. Kroos, *American economic development: the progress of a business civilization*. (Detroit: Prentice-Hall, 1966), 375.

⁶ Herman E. Kroos, *American economic development: the progress of a business civilization*. (Detroit: Prentice-Hall, 1966), 375.

⁷ Herman E. Kroos, *American economic development: the progress of a business civilization*. (Detroit: Prentice-Hall, 1966), 375.

shaking which lasted some 45 to 60 seconds. The earthquake was felt from southern Oregon to south of Los Angeles and inland as far as central Nevada... The frequently quoted value of 700 deaths caused by the earthquake and fire is now believed to underestimate the total loss of life by a factor of 3 to 4. Most of the fatalities occurred in San Francisco and 289 were reported elsewhere" (Simpson and Richards 1981, 126 – 140).

Odell and Weidenmier quantified the cost of the disaster is believed to be 300 – 500 million, or 1.3 to 1.8 percent of U. S. GNP in 1906. ⁸ "However the San Francisco houses were mostly insured only against fire which broke out after the quake. On top of that San Francisco was dependent on financial help from outside the city because the vaults were overheated and if opened the financial reserves stored inside would be destroyed. The financial help started coming into the city from British insurance companies that underwrote the majority of the city's fire insurance policies – an estimated 23 million (pounds). The massive insurance claims left for the British insurance companies to deal with caused significant outflows of gold from Britain leaving it with lack of money. According to Odell and Weidenmier, this was the cause for Bank of England to "Undertake defensive measures to maintain their desired level of reserves and a fixed sterling/dollar exchange rate. The central bank responded by raising its discount rate two hundred-fifty basis points between September and November 1906 and by pressuring British joint-stock companies to stop discounting American finance bills for the next year" (Odell and Weidenmier 2004, 1005).

However, Moen and Tallman discuss that it was due to "policies to stimulate gold imports into the United States to combat what was perceived to be a shortage of gold... generating a significant inflow of 50 million in a little more than a month... large-scale exports of gold from London nearly spurred a crisis in Great Britain. To defend its domestic financial markets, the Bank of England raised its discount rate in late 1906 and threatened another increase" (Moen and Tallman 1990, 3 - 4).

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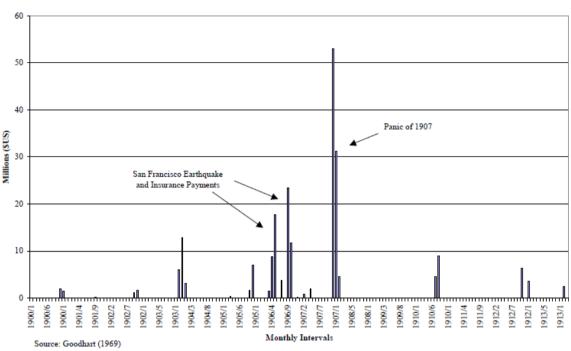
⁸ Kerry A. Odell and March D. Weidenmier, "Real shock, monetary aftershock: The 1906 San Francisco earthquake and the panic of 1907," *The Journal of Economic History* 64 (2004): 1004 – 1008.

Accroding to Odell and Weidenmier the whole issue with gold outflow could have been avoided if the insurance companies had not paid their claims from their head offices but from the branch reserves in the U. S. Still covering such a high volume claims would require selling their assets (and in some companies did) causing a significant decline in their stocks. ⁹ The other option was borrowing money from London banks and exporting it to the U. S. delaying the downtrend for some time. Due to the massive gold outflow from Britain there can be supposed that the insurance companies jointly chose the option number two. Paying the insurance liabilities was reflected in the decrease of banks' money supply equaling to decrease of the money supply in the whole economy. The banks suddenly did not posses enough gold to finance all their business activities. The reduction of economy's total money supply resulted in high domestic price level and high price of labor. With this phenomenon, the domestic goods became more expensive and along these lines less competitive on both the domestic and international market.

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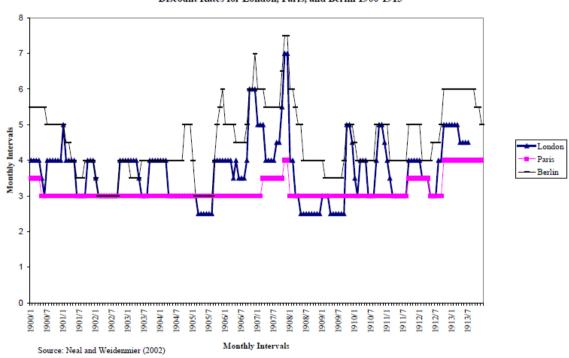
⁹ Kerry A. Odell and March D. Weidenmier, "Real shock, monetary aftershock: The 1906 San Francisco earthquake and the panic of 1907," *The Journal of Economic History* 64 (2004): 1014.

Figure 2 UK Gold Exports to US 1900-1913



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Figure 5
Discount Rates for London, Paris, and Berlin 1900-1913



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¹⁰ Kerry A. Odell and March D. Weidenmier, "Real shock, monetary aftershock: The 1906 San Francisco earthquake and the panic of 1907," *The Journal of Economic History* 64 (2004): figure 2.

3. 3. Corner on stock of United Copper

According to Bruner and Carr and Moen and Tallman, the failed attempt to corner the stock of United Copper is generally regarded as the point resulting into the start of the panic. Two main figures behind the panic were F. Augustus Heinze the "copper king" from Montana and Charles F. Morse investor and shareholder in most New York banks ¹²¹³. I will start with the definition and description of the corner followed up with information about two of its mentioned protagonists.

3. 3. 1. Frederick Augustus Heinze

Heinze was a key player in the copper industry who became prominent due to his victory in a legal dispute against a competing copper company Amalgamated Copper. Heinze claimed that the veins of his mine ranged to the lands of Amalgamated that had their mine nearby. Consistently with the mining act Heinze demanded mining those veins with the case eventually resulting in an out-of-court settlement selling his competitive mine to Amalgamated for 25 million dollars¹⁴.

Heinze's most renowned competitor was J. D. Rockefeller the owner of Standard Oil company one of the largest business enterprises in the world¹⁵. Rockefeller started directly competing with Heinze after Amalgamated's purchase of some claims Heinze had

¹¹ Kerry A. Odell and March D. Weidenmier, "Real shock, monetary aftershock: The 1906 San Francisco earthquake and the panic of 1907," *The Journal of Economic History* 64 (2004): figure 5.

¹² Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 48-49.

¹³ Jon Moen and Ellis Tallman, "Lessons of the Panic of 1907," *Federal Reserve Bank of Atlanta Economic Review* 75 (1990): 6.

¹⁴ Jon Moen and Ellis Tallman, "Lessons of the Panic of 1907," Federal Reserve Bank of Atlanta Economic Review 75 (1990): 6.

¹⁵ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 47.

been leading lawsuits against. Rockefeller was altogether with other magnates a shareholder and founder of Amalgamated with capitalization of 75 million. ¹⁶

Montana Ore Purchasing Company established and presidented by Heinze in early nineties was originally a significant copper producer. ¹⁷ Yet according to Moen and Tallman, its true importance lay in legal suits conducted by its aggressive president. Heinze was usually successful with his suits namely the one with Amalgamated which earned him 25 million, half in cash and the other half in securities. ¹⁸

This particular affair combined with his other qualities earned him the respect in the financial world when he was yet in his thirties. ¹⁹ He was "considered a buccaneer, who sought fortune and fame in the copper mines of Montana" (Bruner and Carr 2007, 45). Heinze was according to Bruner and Carr, also an intelligent, shrewd and educated man, his scientific training gave him the advantage in discovering new possibilities in copper mining and thus gaining a comparative advantage over his competitors. Namely the ability to predict the existence of veins under the claim of his competitors. ²⁰

According to Bruner and Carr, after his buy-out from MOPC Heinze went to New York where he entered the banking business becoming a shareholder in several banks and above all becoming a president of Mercantile National Bank. Heinze's sudden interest in the banking business resulted chiefly from his connection with another speculator Mr. Charles W. Morse. Morse and Heinze practicing a highly speculative transactions targeting on taking control National Banks in New York through the banks they already controlled.

¹⁶ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 47.

¹⁷ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 47.

¹⁸ Jon Moen and Ellis Tallman, "Lessons of the Panic of 1907," *Federal Reserve Bank of Atlanta Economic Review* 75 (1990): 5.

¹⁹ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 45.

²⁰ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 46 - 47.

Two of them altogether with Heinze's brother Otto devised a plan on cornering a stock of United Copper. ²¹

3. 3. 2. Charles Wyman Morse

Was an untrusted speculator "an extreme character, even when judged by American speculative standards. He first became prominent as a promoter of the American Ice Company, an enterprise disastrous to its shareholders, and in recent years had been active engaged in the formation of a combination of shipping companies engaged in the Atlantic coastline trade. For a number of years, he had been one of the largest owners of shares in New York banks, but it is important to observe, only in banks of moderate size. He was a director in seven banks, over three of which he seem to have exercised complete control. ²² In securing this chain of banks the shares of one bank, along with other collateral, were used as a security for loans with which to purchase shares in another bank, and so on in succession, while the various banks were efficient instruments in the furtherance of other enterprises" (Sprague 1908, 357 - 358).

3. 3. 3. The corner

As for the actual corner according to Bruner and Carr, Otto Heinze, F. A. Heinze's brother concluded that more stock of United Copper was traded on the exchange than the total number of shares and was convinced that he and his brothers owned the most shares. Heinze and Morse created a stock pool to buy the shares and used Otto's brokerage house Gross and Kleenberg to buy the stocks raising money from their banks. Otto however, not only underestimated the number of stocks in their possession he also underestimated the size of the pool they would need to corner the market. When Heinzes

²¹ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 48 - 49.

²² According to Bruner and Carr Morse had "a chain of other financial institutions that included at least six national banks, 10 or 12 state banks, five or six trust companies, and four insurance concerns" (Bruner and Carr, 2008, 49).

issued a call to the short sellers thinking no one else but them possessed sufficient amount of shares they could lend to the squeezed short sellers. ²³

According to Moen and Tallman, Heinzes underestimated brokerage firms outside New York. These brokers managed to transfer enough shares to New York to crash the corner scheme. That resulted in a dramatic fall of United Copper stock and suspension of Gross and Kleenberg. However, due to Heinze's involvement in the corner scheme the Mercantile National Bank where he was president experienced a run and Heinze was forced to resign in order for the bank to receive Clearing house's aid. During the process of assessing the Mercantile National Bank it was revealed that Morse was on the board of directors. Morse's position in the bank sent a disturbing signal to the depositors who started running other banks he was associated with, some of those banks were forced to call for aid. Clearing house made arrangements to help the banks in trouble contingent on Heinze and Morse's resignation from all their banks. ²⁴

²³ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 50 – 51.

²⁴ Oliver M. W. Sprague, *History of Crises Under the National Banking system* (Washington DC: Government Printing Office, 1910), 6.

4. Subjects of the panic

In this chapter I am going to deal with the characteristics of New York trust companies and their role in the panic mainly paraphrasing Sprague who provided enough data. It is necessary to describe some of the leading trust companies whose actions and status were of key importance. I shall discuss the conditions under which the trust companies operated and how they were different from national banks. I will take a similar approach depicting the national banks however, in a slightly smaller volume because their role in the panic is not as significant. I shall make use mainly of Bruner and Carr with Moen and Tallman who attribute the trust companies a significant role unlike some other authors who search for explanation of the panic elsewhere.

According to Sprague, there has been since 1893 noted a significant growth of institutions under state laws specifically the trust companies and state banks. "The total resources of state banks and trust companies were reported at 1,981,000 in 1897 and at 7,290,000 in 1907, compared with 3,563,000 and 8,470,000 in the case of national banks" (Sprague 1910, 225). Sprague argues that the growth of state banks was not as dramatic as the growth of the trust companies whose loans have been less than a half of the National banks' loans in the 1897 and went up almost as high as the national banks in 1907.

Despite their growth the trust companies did not increase the proportion of cash reserves to their deposits. They were neither subject of seasonal withdrawals of cash because of their local character²⁵. Sprague's figures provide significantly different picture than the ones of Moen and Tallman probably because he was not quantifying total assets.

According to Moen and Tallman, "trust company assets in New York State had grown 244 percent (from 396,t million to 1,364 billion) in comparison to 97 percent (from 915,2 million to 1,8 billion) for those of national banks, and 82 percent (from 297 million to 541 million) for state banks in New York." (Moen and Tallman 1992, 612).

²⁵ Oliver M. W. Sprague, *History of Crises Under the National Banking system* (Washington DC: Government Printing Office, 1910), 226, 227.

Moen and Tallman assign the growth of trust companies to "freer investment opportunities that resulted from being less subject to regulation than state or national banks. Although trust companies were profitable, their specialization in collateralized loans, perceived as risky loans to firms that could not obtain credit through national or state banks, added to the severity of the panic." (Moen and Tallman 1990, 2). Moreover, they state, that due to uneven regulation of "composition of asset portfolios of banks and trusts. Because trusts took advantage of investment opportunities to which banks had limited access, trusts had relatively undiversified portfolios." (Moen and Tallman 1990, 3). Bruner and Carr support Moen and Tallman's statement, agreeing that "trust companies were generally less well regulated" (Bruner and Carr 2007, 72). They further examine their functions compared to the ones of national banks trusts asset portfolio was less regulated and thus more varied than the portfolios of national banks. Unlike national banks "trust companies could own stock equity directly. Also, unique among large financial institutions, trusts were not required to hold reserves against deposits before 1906; in that year, New York State required that trusts hold 15 percent of deposits as reserves, though only a third of the reserves had to be held in cash" (Bruner and Carr 2007, 72). That ultimately led to investing more assets than the banks and being able to

Vincent Carosso provides his view of trust companies, "Beginning in the 1890s, trust companies took on most of the functions of both commercial and private banks. They accepted deposits; made loans; participated extensively in reorganizing railroads and consolidating industrial corporations; acted as trustees, underwrites, and distributors of new securities; and served as the depositories of stocks, bonds, and titles. Corporations regularly appointed them as registrars or fiscal and transfer agents. Very often they also owned and managed real estate" (Carosso 1970, 98 – 99). Moen and Tallman concluded, that there must above all be a consistent regulation. The inconsistent regulation results in a crisis no matter if the less regulated subjects are members of a clearing house. ²⁷

attract more customers on higher interest rates. ²⁶

²⁶ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 72.

²⁷ Jon Moen and Ellis Tallman, "Lessons of the Panic of 1907," *Federal Reserve Bank of Atlanta Economic Review* 75 (1990): 12.

Sprague explains that trust companies were "originally formed to act as trustees" (Sprague 1908, 359) and until 1880s it was their mission to act accordingly. Then they were given a range of powers allowing them to employ themselves in banking without being restrained by regulation national banks had to face. ²⁸ In his book Sprague claims that trusts were not members of a clearing house association because the rules would require them to adopt a rate of reserves greater than their current reserves though still minor to the reserves of national banks, which nearly all trust companies renounced²⁹. Probably because they wanted to keep their reserves to the minimum in order to be able to invest as much capital as possible and to maintain their independence over the clearing house and not being a subject of its control. However, mainly due to their greed and lack of supervision was ultimately responsible for the outbreak of a panic because the clearing house only had data about its members' assets. Thus could not provide the necessary cash as it did not know how much was needed. ³⁰ Extending this statement, is Sprague's claim that Knickerbocker the first trust company to fall could have been saved had it been a bank and a member of a clearing house. ³¹ Still refuted by Moen and Tallman who think otherwise arguing that it probably would not prevent insolvency with a high rate of risk assets. They add that "although the clearinghouse functioned to some extent as a central bank, lack of explicit legal authority to issue clearinghouse loan certificates kept the clearinghouse from fully exploiting these functions" (Moen and Tallman 1990, 13). However, according to Bruner and Carr, some trust companies made arrangements with particular clearing house member banks that would agree to act as trust's clearing agent "thereby giving the trust companies indirect access to clearing-house protections" (Bruner and Carr 2007, 72).

²⁸ Oliver M. W. Sprague, *History of Crises Under the National Banking system* (Washington DC: Government Printing Office, 1910), 359.

²⁹ Oliver M. W. Sprague, *History of Crises Under the National Banking system* (Washington DC: Government Printing Office, 1910), 253.

³⁰ Jon Moen and Ellis Tallman, "Lessons of the Panic of 1907," *Federal Reserve Bank of Atlanta Economic Review* 75 (1990): 12.

³¹ Oliver M. W. Sprague, *History of Crises Under the National Banking system* (Washington DC: Government Printing Office, 1910), 252.

All examined sources agree on the fact that the panic started with the run on Knickerbocker trust company however, some of them may differ in dates and moments they claim to be the start of the panic. Moen and Tallman claim that the announcement of National Bank of Commerce that it would stop clearing checks for Knickerbocker and thus its "refusal to act as its clearing agent was interpreted as a vote of no confidence that seriously alarmed Knickerbocker depositors" (Moen and Tallman 1990, 7).

I shall concentrate on Knickerbocker because that was where the panic started and I will also explain why. According to Bruner and Carr, Knickerbocker was established in 1884 by Fred Eldridge eventually becoming one of the most significant and profitable trust companies in the U. S. till 1907. Knickerbocker was located across the street from Waldorf-Astoria fronted with 17-ton ancient Greece style Corinthian columns. ³² Knickerbocker with its 65 million in deposits ³³ and 18,000 depositors ³⁴ "enjoyed the privileges of the clearing-house system in this way; the National Bank of Commerce, one of New York's leading banks, cleared checks for the Knickerbocker and served as its sole clearing-house agent." (Bruner and Carr 2007, 73). Knickerbocker had a respected and well-connected president, Charles T. Barney who "was able to draw large accounts to the Knickerbocker from railroads, banks, and brokerage houses. During the decade of his leadership, the Knickerbocker had multiplied its deposits 6 times, its surplus 5 times and its dividends by a factor of 10." (Bruner and Carr 2007, 73-74).

Bruner and Carr however, question Barney's qualities implying that Barney neglected informing the board of directors about his actions not willing to either share his plans or answering board's questions. ³⁵

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³² Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 70.

³³ Oliver M. W. Sprague, *History of Crises Under the National Banking system* (Washington DC: Government Printing Office, 1910), 253.

³⁴ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 73.

³⁵ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 74.

5. The panic

In this chapter, I shall move from the subjects of the panic to panic itself. I am going to work to explain the process of the panic structuring the chapter in three parts. The first part of the chapter will deal with the onset of the panic from the fail of the third biggest trust to the moment when the second biggest trust was about to follow it. The last part will deal with the panic after what could be called Morgan's direct involvement ending with the successful cope with the panic. I divided this chapter into three sections each deals with a specific field of the panic but at the same time all have a common issue in liquidity shortage. The final part of the chapter deals with the ending of the panic. Each section similarly shows the impact of liquidity shortage on a particular section and how was it dealt with. The first section deals with the trust panic, showing where the panic began, how it spread, what volume of money was used to stop the panic and the resolutions taken in order to stop it. The second section deals with liquidity shortage in this case impacting the New York Stock Exchange. The third section deals with the crisis of New York City and its' near insolvency. The last part merely shows the ending of the panic, emphasizing Morgan's role.

5. 1. Trust companies

According to some sources, there was no sign of a panic the week during which the failed corner took place. The sources find a common ground in a statement, that trust companies, namely Knickerbocker were the target. ^{36 37} Most sources agree on the date of the run being Monday 21st October when National Bank of Commerce announced it would stop providing clearing services for Knickerbocker, ³⁸³⁹ and Charles Barney was

³⁶ Sprague, Oliver M. W., "The American Crisis of 1907," *The Economic Journal* 18.71 (1908): 259.

³⁷ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 75.

³⁸ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 75.

³⁹ Jon Moen and Ellis Tallman, "Lessons of the Panic of 1907," *Federal Reserve Bank of Atlanta Economic Review* 75 (1990): 7.

forced to hand in his resignation. ^{40 41} According to Moen and Tallman, the action of National Bank of Commerce was perceived as "a vote of no confidence that seriously alarmed Knickerbocker depositors" (Moen and Tallman 1990, 7). ⁴²

According to Moen and Tallman, the very same day J. P. Morgan called his friends and competitors George Baker president of First National Bank and James Stillman president of National City Bank along with "young financial experts... chief among these investigators was Benjamin Strong... who would later become president of the Federal reserve Bank of New York" (Moen and Tallman 1990, 7) responsible for assessing the assets of troubled institutions in order to find out if they were solvent. Due to the fact that Morgan's men were not able to assess the Knickerbocker's financial state Morgan refused to help the trust. ⁴³ However, Bruner and Carr are more strict and direct with their evaluation of the situation, claiming that Benjamin Strong and his team had been in haste reviewing Knickerbocker's balance sheets at its headquarters and eventually concluded that Knickerbocker was "not solvent" (Bruner and Carr 2007, 86) making Morgan's decision easier to understand. Sprague asserts that on Tuesday October 22nd Knickerbocker "was forced to suspend" (Sprague 1910, 252) after three hours of run paying out 8,000,000. ^{44 45}

There is no exact or rational explanation why did the panic spread to other trust companies. The cause many economists attribute to the panics is the asymmetric information. The issue with asymmetric information is "the depositors rush to make

However, Bruner and Carr introduced Barney's statement denying he was forced to resign and insisting on the good shape of the company (Bruner and Carr 2007, 76).

⁴¹ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 75.

⁴² Jon R. Moen and Ellis W. Tallman, "Lessons of the Panic of 1907," *Federal Reserve Bank of Atlanta Economic Review* 75 (1990): 7.

⁴³ Jon R. Moen and Ellis W. Tallman, "Lessons of the Panic of 1907," *Federal Reserve Bank of Atlanta Economic Review* 75 (1990): 7.

⁴⁴ Oliver M. W. Sprague, *History of Crises Under the National Banking system* (Washington DC: Government Printing Office, 1910), 252.

⁴⁵ Jon Moen and Ellis Tallman, "Lessons of the Panic of 1907," *Federal Reserve Bank of Atlanta Economic Review* 75 (1990): 7.

withdrawals from solvent as well as insolvent banks since they cannot distinguish between them" (Mishkin 1990, 7). Contributing to the panic on the basis of asymmetric information was also the fact that Knickerbocker was one of the biggest trust companies in New York "having deposits of 62,000,000" (Sprague 1992, 360) however, very small rate of it was in cash. ⁴⁶

The panic started spreading mainly into the institutions Barney and Morse were connected with. Barney was connected with several Morse's insignificant businesses, but more importantly he had been a member of a board of directors in Trust Company of America "the second largest trust company in New York City" (Moen and Tallman 1990, 7). Described as "a current sore point in the panic" (Moen and Tallman 1990, 7) such statement was exactly the kind that supports the general panic, chaos and desperation amongst depositors. According to Bruner and Carr, Charles Barney was partially involved in the copper corner scheme, though only as a director of the third biggest trust company whom Morse and Heinzes asked for money when they found out the stock pool they had was insufficient for a corner. Nonetheless, they did not manage to raise any money either from Knickerbocker or from Barney. ⁴⁷ Even irrelevant and asymmetric information of that kind could spark a serious panic only this time Bruner and Carr show where the information came from.

Bruner and Carr state, that Trust Company of America had been sustaining heavy losses of liquidity on Tuesday due to the run it was going through. On Wednesday the board of directors of the Trust Company of America decided they would cease operations. ⁴⁸ On Wednesday it was clear that the TCA did not have enough cash to withstand the run and its president Oakleigh Thorne, had been in contact with J. P. Morgan since Tuesday asking for a bailout. According to Bruner and Carr, the TCA's cash deposits thinned from about 1,2 million at 1 P.M. to 180,000 at 2 P.M. Despite Thorne's efforts to calm the depositors

⁴⁶ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 71.

⁴⁷ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 51 – 52.

⁴⁸ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 89 – 93..

or at least or restrict the scale of the run by placing a pile of moneybags so that the depositors thought the company had enough cash and keeping only two teller windows open. ⁴⁹ Despite Morgan's efforts to raise capital from other trust companies, the presidents could not find a common ground and started arguing when time was of the essence. Bruner and Carr state, that Thorne informed Morgan that he needed 3 million in cash in order to make it through the day. Morgan's plan was that each of the present trust President would send 300,000 to the troubled trust. 50 It was probably one of the darkest hours of the whole panic with no one willing to act. The fall of two of the biggest trust companies in such a short sequence would dramatically undermine the picture of not only trusts but of all financial institutions. If their deposits were not safe with the biggest trust, chances were they were not safe with the national banks either. The fall of TCA would have probably caused a panic throughout the whole financial system in New York including the National banks. The worst possible scenario would mean a crash of the whole financial system ultimately spreading to Europe and throughout the world potentially causing the fall of capitalism and the market economy. Bruner and Carr quote Morgan after hearing from the TCA's representative the company would cease operations: "I don't see anything else to do." (Bruner and Carr 2007, 93).

Morgan knew what had to be done, and he knew there was no time to wait for a common decision, he stopped the meeting and went to meet the run himself. Bruner and Carr show, that Morgan called in his friends, competitors and most powerful bankers in New York George Baker and James Stillman and later on called Oakleigh Thorne to come immediately and bring "the most valuable securities held in his company's vaults" (. The boxes filled with securities started coming minutes after the call and Morgan was valuing them estimating how much collateral would be needed for a sufficient loan. After reaching a satisfactory number, he asked Stillman or Baker every few minutes to send

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⁴⁹ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 92.

⁵⁰ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 92.

cash from their institutions to TCA until 3 million in cash was transferred. 51 The three million enabled TCA to continue in their business and open again the other day. However, it was clear that the Trust Company of America would need additional cash in order to continue the next day, and it was not the only institution that was experiencing a run. Morgan did realize that, and that was why he sent Strong to analyze TCA's books again. Morgan also called again the trust company presidents, suddenly more willing to cooperate and agreeing to form what Bruner and Carr describe as a committee in principle similar to a clearing house among trust companies entitled to request information from trusts at any time. 52 Such committee might seem unnecessary for not possessing any enforceable authority however, this was more case of assessment as there was no institution including the clearing house in New York that would possess sufficient information about the trusts balances. For that reason, this committee had to a certain degree higher competence than the clearing house itself. However, according to Bruner and Carr, Morgan expected the trusts to take action and accept their collective responsibility in the form of raising 10 million for Trust Company of America. For that reason, he called the presidents once again and pressed them to the demanded sum. 53

As on 24th October the Trust Company of America was opening its office again, and the Treasury Secretary George Cortelyou deposited 25 million of Treasury money in New York National banks as he agreed to after a session with Morgan trying to disperse the panic through the media. ^{54 55}

⁵¹ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 94

⁵² Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 94.

⁵³ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 96.

⁵⁴ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 99.

⁵⁵ Courtelyou did so because the banks started withdrawing their resources from New York, which would cause a shortage in desperately needed liquidity.

Paradoxically according to Moen and Tallman, Cortelyou was sent to New York helping Morgan at the order of president Roosevelt, the same president who sued Morgan's Northern Securities corporation with the accusation of monopoly in railroads. ⁵⁶ The power Roosevelt was giving to Morgan was similar to monopoly as well. Roosevelt was giving Morgan the authority of a central bank. In his autobiography Roosevelt only mentions Morgan's name about twice despite dedicating a significant space to the description and justification of his lawsuit against Morgan's railroad corporation. ⁵⁷

During the Day John D. Rockefeller Sr. contacted Morgan depositing 10 million in Union Trust Company that had agreed to provide liquidity to the Trust Company of America.

Rockefeller also promised to supply 40 million if necessary. ⁵⁸

However, of Friday the worst nightmare came true. According to Bruner and Carr, first Morgan and his close associates faced a challenge to save Trust Company of America and the Lincoln Trust once again. ⁵⁹ They decided to aid these two companies not because they had any special connections with them, but because they could not afford a fail of two of the biggest trusts because of further runs on other institutions and spread of the panic again. According to Bruner and Carr, later that day as the trust companies were still undergoing runs and facing cash shortage, they started calling their loans in order to get the necessary liquidity. The call money rates skyrocketed again up to 150 percent forcing Morgan to ask the trusts to extend their loans instead of calling them and thus stop the increases in the call money rates. Above all, Ransom Thomas came after Morgan explaining that the situation was the same as the previous day and that another meeting of bank presidents would be necessary. Morgan called the presidents to the NYCH and challenged them for another 15 million, this time however, the banks were more reluctant and only raised 9.7 million. Morgan secured several conditions on the money

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⁵⁶ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 36, 89.

⁵⁷ Roosevelt Theodore, *An Autobiography* (New York: Macmillan,1913), 680 – 750.

⁵⁸ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 100.

⁵⁹ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 103.

preventing the previous dramatic booms. The presidents however, still demanded guarantees, and with another outflow of liquidity they decided to issue an obligatory two-month long notice for money withdrawal. The secured money was offered at the exchange at 25 to 50 percent rates and the market seemed to calm down. The volume of loaned money relative to Thursday somewhat decreased from and overall trades decreased as well. There were no stock exchange house failures although during the day seven banks suspended operations. ⁶⁰

According to Bruner and Carr, the trust kept up till Monday 28th as the runs did not seem to end even after weekend it was clear there would be another bailout necessary. Nonetheless, Morgan was not willing to rescue them again, he felt that it was a trust problem and trust should solve their own problem. The situation seemed impossible, estimates showed, that there would be 25 million pool needed only for the trusts excluding another estimated 25 million for Moore & Schley. Morgan said that he would not aid Moore & Schley unless the trust companies made money pool to save the trusts facing runs. Morgan knew he had to squeeze the trust company presidents hard to get the necessary resources so he locked them in his library and would not let them out until they reached a decision. The meeting was long, and the presidents were reluctant to subscribe high sums of money till Morgan strode in and told the presidents that they needed to provide 25 million that same day or the whole system would fall on their head. He swept away their arguments about the necessity of consulting with their boards of directors and used his persuasive skills to convince them which he eventually managed in the early morning hours. ⁶¹ Since that measure was adopted major runs on New York trust companies ceased to occur.

Moen and Tallman conclude, that the panic was not initially the same in all the trust companies for having low cash deposits. They state, that the panic was most severe for particular trust companies with the biggest contraction of loans. They prove their statement by showing the institutions with the biggest contractions were the trusts

Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 104

⁶¹ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 119 – 123.

experiencing biggest problems namely Knickerbocker, Trust Company of America and Lincoln Trust. ⁶²

5. 2. Stock exchange

However, that day liquidity problems hit even the stock exchange. According to several sources, the call money rates jumped from 6 to 60 and ultimately to 100 percent making it inaccessible. 63 64 Basically the investors needed money and were keen to collateralize it with their stocks however, there was no one willing to supply the money. Everyone started hoarding money because that was the only commodity in short supply especially with such ridiculous rates. The president of NYSE Ransom H. Thomas found the situation inconclusive and came after Morgan for help. When he came to Morgan's headquarters at the Wall Street 23 also known as the corner, he could have seen a building full of men asking for money for their companies. According to Bruner and Carr, Thomas approached Morgan and told him that the exchange would have to be closed unless there was a large amount of money offered at the exchange immediately. Else many failures would take place. Morgan immediately called all the bank presidents because the banks had more money they could provide than the trust companies especially with 25 million of Treasury deposits in their vaults. There was only about an hour remaining to the closing hour of the exchange when the presidents came, which Morgan was well aware of. He merely announced that if they did not raise 25 million within 10 minutes the whole Stock Exchange would fail. Gentlemen at the board apparently sensed gravity of the situation and provided the requested sum and ran out to spread the news and to offer the money. The money got to the exchange about 30 minutes before the closing, and within the

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⁶² Moen and Ellis W. Tallman, "The Bank Panic of 1907: The Role of Trust Companies," *The Journal of* Economic History, 52, (1992): 617, 620.

⁶³ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 99.

⁶⁴ Moen and Ellis W. Tallman, "Lessons of the Panic of 1907," *Economic Review*, 75, (1990): 8.

remaining time approximately 19 million was loaned at 10 to 60 percent rates. ⁶⁵ The Stock Exchange closed at the sound of collective cheer celebrating Morgan escapade.

Before Morgan left home, he approached a group of reporters despite his resistance to being photographed and said "if people will keep their money in the banks, everything will be all right" (Satterlee 1939, 476). Just like Cortelyou earlier that day Morgan wanted to calm the media and the public because he knew that what happened that day he might not manage next time especially because his victory did not come easy. Bruner and Carr provide information that numerous banks and institutions collapsed that day and the runs on Trust Company of America and Lincoln trust did not cease. ⁶⁶

According to Bruner and Carr, it was clear that there was not enough cash in the city. The last hope for liquidity was the issuance of NYCH loan certificates as a substitute of cash which took place on Monday. ⁶⁷

Morgan with his friends and peers probably knew that the underlying lack of gold could ultimately be something they in certain point could not cope with. The panic was spreading in the public mainly through asymmetric information provided by the media. They first had to convince the general public that their money was safe with the New York financial institutions and that the banks and trusts were in good shape with sufficient gold deposits. These statements might not seem exactly true in the light of depicted events however, it should be stated, that the institutions would probably be more solvent and be able to reach gold more easily had there not been for several phenomena causing the gold shortage. According to Bruner and Carr, that was why the group around Morgan decided to establish a committee for dispersing all information about bailouts to the press with no exclusions. Morgan and his people also appointed another committee

(Hoboken, New Jersey: John Wiley & Sons, 2007), 100, 101.

⁶⁵ Robert Bruner and Sean D. Carr, The Panic of 1907 Lessons Learned from the Market's Perfect Storm

⁶⁶ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 101, 102.

⁶⁷ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 101.

responsible for appealing to all the churches and clergymen in the city to address their members to calm down and stop both withdrawing and panicking. ⁶⁸

The next day Saturday 26th October was luckily not a day of any serious shocks or crises as "the markets would close at noon and money could be neither called nor loaned on Saturdays" (Bruner and Carr 2007, 105). However, according to Bruner and Carr, considering the fact that the banks were closed on Sundays it was a sign of trust towards the market that the depositors were keen to keep their deposits in the banks. Morgan's public relation and church relation commissions also played their role as both the American newspapers and newspaper abroad started publishing statements of several renowned financiers and industrialists praising Morgan and the rescue efforts. ⁶⁹

The situation on Monday did not get any worse despite Morgan and his friends made it clear that there would be no more money pools. The cause of a good mood was besides the issuance of clearing house certificates also gold imports from all over the world accounting for as much as 20 million. Since then, the situation seemed to be stable in terms of cash, the inflow of gold and loan certificates reduced the call money rates down to 20 and at one point to 8 percent. ⁷⁰ The situation in Europe was however, not very different from the situation in 1906 when According to Moen and Tallman, the Bank of England increased its interest rates to prevent a potential liquidity crisis of its own. ⁷¹ This time virtually the same phenomenon took place the Bank of England would start increasing its interest rates from 4.5 up to 7 percent since Monday. ⁷² So Morgan could not count on any more help from abroad.

⁶⁸ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 104.

⁶⁹ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 105.

⁷⁰ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 110, 113.

⁷¹ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 4.

⁷² Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 113.

Bruner and Carr explain why there was still no significant improvement arguing that the demand was still heavy due to end-of-month obligations and mainly installments of loans.

According to Moen and Tallman, the lack of liquidity caused problems at a broker house Moore & Schley due to its highly speculative operations. Moore & Schley had borrowed up to 25 million from New York banks collateralizing it with the stock of Tennessee Coal and Iron. However, the broker house was collateralizing the same stock for other loans given to the company partner Grant B. Schley who was also George Baker's brother in law. The loans were coming due, and M&S was unable to reach the money at the current rates and was nearing the point of bankruptcy where it would have to liquidate the stock of TC&I. That would fill the market with TC&I stock in order to cover their losses thus driving the stock's price down due to high supply and low demand for the stock. Moen and Tallman also state, that such failure would have a catastrophic impact on the money market possibly ruining all undertaken rescue efforts. ⁷⁴ According to Bruner and Carr, despite TC&I was with its "800 million tons of iron ore and 2 billion tons of coal... potentially powerful competitor to U.S. Steel" (2007, 117) its potential segment on the stock market was relatively small. ⁷⁵

According to Bruner and Carr, Morgan contacted his associates from U.S. Steel Elbert H. Gary and Henry C. Frick and proposed a purchase of their potential competitor for 25 million using the company cash to get more lidquidity to the system. As the U.S. Steel had 76 million in cash and controlled 60 percent of the steel industry, the three men were not united in their view on the transaction. Gary saw the opportunity mainly to make a positive impression on the public especially with the threat of being sued for violating the anti-trust act. Gary proposed the company to only pay 20 percent of salaries in cash to pump more liquidity into the system. However, both Frick and Gary thought that TC&I

⁷³ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 113.

⁷⁴ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 10.

⁷⁵ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 114 – 117.

was ineffective and surplus and were dramatically against the purchase. That was why Morgan was not willing to bail Moore and Schley until the trust panic was resolved with trust companies creating a 25 million money pool to save the trusts in trouble for good. The purchase was ultimately made after the trust company presidents locked in Morgan's library capitulated and president Roosevelt gave his approval of the purchase. Still the TC&I purchase was not made in cash after numerous negotiations were its stocks exchanged for U.S. Steel bonds instead. The announcement of a plan to buy TC&I and president's approval brought new hope and joy to the market indicating to the public that there was still enough purchase power despite the panic. ^{76 77} Since that moment no dramatic panic seemed to break out on the market and when president Roosevelt said the crisis was over the balance was established once again. ⁷⁸

5. 3. New York City

Meanwhile, New York City was facing a crisis of its own. Bruner and Carr state, that on January the city tried to raise 29 million in bonds at 4 percent rate however, the issuance turned up to be a disaster with only 2.1 million subscribed. The NYC was nearing a bankruptcy as they could not make another emission due to the situation on the market. Bruner and Carr state, that the city would go insolvent by 1st November if not aided. ⁷⁹ According to Moen and Tallman, the city tried to cover the long-term shortage of money by taking on short-term loans. However, the city had no money to repay the loans and needed 30 million to continue operations. Morgan knew that nobody would buy the bonds at 6 percent rates with the call money rates at up to 50 percent, so he came up with a plan that would fit both parties. Morgan's plan was to buy the city bonds and

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⁷⁶ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 115 – 117, 126, 127, 130.

⁷⁷ According to Bruner and Carr the final acquisition had cost 35.6 million in U.S. Steel bonds exchanged for TC&I bonds (2008, 134).

⁷⁸ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 135.

⁷⁹ Jon Moen and Ellis W. Tallman, "Lessons of the Panic of 1907," *Economic Review*, 75, (1990): 2 – 13.

exchange them with national banks for clearing house loan certificates. The banks would deposit them at the clearing house which would issue the loan certificates in corresponding amount. ⁸⁰

5. 4. The ending of the panic

President Roosevelt later wrote "thanks largely to the actions of the government, the panic was stopped before... it became a frightful and Nation-wide calamity" (Roosevelt 1913, 697) instead of giving Morgan credit for his actions and efforts Roosevelt emphasized the role of the government which did neither have a central bank nor a clear plan on resolving the panic. As shown, the panic was resolved thanks to the cooperation of financial subjects throughout the economy. The Treasury Secretary provided liquidity for the banks, the private institutions from members on the New York clearing house to large corporations provided cash, collaterals and contracts in order to keep the trusts and other companies going and Mr. Morgan used his immense authority to alleviate the panic, dealing with both financiers and the government, devised a bailout plan and controlled the destination of provided resources.

Morgan's authority was immense Bruner and Carr describe it saying that the newspapers called him the city's savior after they found out he was in town. The people were shouting with respect when they saw him in the cab and the crowd that gathered on Wall Street ran to get a glimpse of him. Morgan also took a stand towards the stock exchange claiming that if anyone tried to use the panic to sell short in order to profit from the downfall they would be "properly attended to after the crisis was over" (Bruner and Carr 2008, 94) in order to intimidate any bigger speculators from worsening the crisis. 81

⁸⁰ Jon Moen and Ellis W. Tallman, "Lessons of the Panic of 1907," Economic Review, 75, (1990): 10.

⁸¹ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 94, 98.

6. Aftermath of the panic

Bruner and Carr show, that despite J. P. Morgan lead and organized the bailouts and money pools after the panic he was accused of creating a money trust becoming very unpopular with the public including being a subject of numerous caricatures. Morgan had always been a supporter of central banking system and is said to have influenced the initiatives resulting in the establishment of a Federal reserve system. However, he had to testify in 1912 under the Pujo committee that was supposed to investigate whether there was any sort of money trust misusing its authority on the market. ⁸² The committee ultimately concluded that "there exist[ed] 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". ⁸³ Nonetheless that did not concern Morgan anymore, who died in Rome 31st March 1913. ⁸⁴

According to Robert Wiebe, "the panic of 1907 acted as a catalyst in the (political) ferment. Most obviously, it convinced almost everyone, including the bankers that financial reform was imperative." (Wiebe 1967, 201).

That change was according to Bruner and Carr, the creation of a central bank that initiated from Aldrich-Vreeland Act from 1908. This act introduced the National Monetary Commission. The Commission originated the plan of "National Reserve Bank" declared to be a creation of Senator Nelson Alrich though many researchers imply that the original idea was not his own crediting it to J. P. Morgan or others around him. In 1913 the

⁸² Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 142-143.

⁸³ Committee appointed pursuant to house resolutions 429 and 504 to investigate the concentration of control of money and credit (Washington: Governemnt printing office, 1912), 129.

⁸⁴Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 172.

Federal Reserve Act based on the Aldrich plan was passed, and the Federal Reserve System was created. ⁸⁵

Charles Morse was sentenced to 15 year imprisonment, yet was released in 1912 because of a serious illness thought to be fatal and left for Europe. Later after Morse's miraculous restoration it was revealed that he fabricated the illness by eating soap. ⁸⁶

Augustus Heinze lost everything apart from his final trial which found him not guilty of banking law breaches. He died in 1913 of cirrhosis of the liver. ⁸⁷

Charles Barney the former president of Knickerbocker linked with Morse committed suicide in his house on 14th November. ⁸⁸

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⁸⁵ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 138-141.

⁸⁶ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 172 - 173.

⁸⁷ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 169.

⁸⁸ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 10.

7. Comparison of the panic of 1907 to the crisis of 2007

This final chapter of my paper deals with the comparison of 1907 bank panic and crisis and the subprime crisis of 2007. Within this chapter, I make use of Bordo, Bruner and Bruner and Carr. I use Bordo to provide relevant information about the subprime crisis and Bruner and Carr with Bruner to show the lessons and similarities and to compare the two crises. Bruner in his paper he wrote after the subprime crisis compares the two crises and also shows, that their structures are identical.

Bruner and Carr however, could not compare the crises because their book has a strictly defined topic and moreover the book was written before the crisis. Nonetheless, Bruner and Carr try to warn from a similar crisis by listing lessons from 1907 panic as they initially imply in the book by using quote attributed to Mark Twain "History may not repeat itself but it rhymes". ⁸⁹ Most other sources appeared to be irrelevant because they were only recycling information provided by Bruner and Carr.

Let us first review some general information about the 2007 crisis. Professor of Economics Michael Bordo states, that the crisis came on top of two years lasting policy of increasing interest rates in 2007 with a major crash of a real estate and subprime mortgage bubble. ⁹⁰ Bordo shows, that low regulation, excessive lending to inconvenient clients and unstable collateral have expanded to the whole banking system and further to the whole economy causing crashes among the banks, companies and on stock and money markets. ⁹¹

According to Poole, the failure of collective action has repeated in 2007 despite the presence of Federal Reserve System. Its initial failure to save one of the biggest banks in America stirred up the crisis. With the failure of numerous banks, companies and other institution FED had to undertake a massive bailout to the whole system in order to save

 90 Michael D. Bordo, "An historical perspective on the crisis of 2007-2008," NBER (2008): 2 - 3.

⁸⁹ Attributed to Mark Twain without any specific citation.

⁹¹ Michael D. Bordo, "An historical perspective on the crisis of 2007-2008," NBER (2008): 2 - 3.

the economy. Failure of collective action resulted from the loss of trust among the banks that stopped reciprocally giving loans. ⁹²

Bruner and Carr correctly estimated the future development in one of their last points called "undue fear, greed, and other behavioral aberrations" (Bruner and Carr 2007, 167) using the example of the internet bubble and especially the real estate bubble. ⁹³ They specifically warn from the boom in the "adjustable-rate mortgages and the waiver of down payments" (Bruner and Carr 2007, 165). ⁹⁴

Robert Bruner wrote a paper analyzing both crises and identifying the similar structure and similar problems. Bruner points out several crisis-driving features: "rapid growth, insufficient information, real shock and lack of collective action" (Bruner 2009, 46). Bruner shows, that both crises share these features and even displays that the dynamics were identical both start with a formation of a system, the system goes unstable, system gets a shock and an intervention takes place. ⁹⁵ Bruner shows, that the problem with both crises was in the established system.

Most interestingly Bruner and Carr wrote their book about the bank panic of 1907 before the crisis of 2007 for that reason their view on the lessons from 1907 is most notable as they ask themselves the question whether it can happen again. They pitch several drivers of crises: system-like architecture and its interconnectedness, insufficient regulation, failure of collective action, economic downturn and the behavior of the investors. ⁹⁶ As I will show both 1907 and 2007 shared these features.

⁹² Poole, William, Causes and Consequences of the financial crisis of 2007-2009, Harvard Journal of Law and Public Polity, spring 2010, p. 421-423.

⁹³ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 167.

⁹⁴ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 165

⁹⁵ Robert Bruner, *The Dynamics of a Financial Dislocation: The Panic of 1907 and the Subprime Crisis* (2009), 46 – 47.

⁹⁶ Robert Bruner and Sean D. Carr, *The Panic of 1907 Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 164 – 167.

In terms of regulation it is possible to say that regulation in case of both crises was insufficient. In the earlier chapters I use Sprague to show the dramatic growth of trust companies without being significantly regulated. In this chapter I use Bordo to show, that insufficient regulation was one of the causes of the subprime crisis of 2007 as well.

Poole shows a massive failure of collective action in 2007 when the banks ceased providing each other with loans and the crisis had to be dealt with by a massive bailout from FED. As I show in the course of the thesis the failure of collective action took place even in 1907 when the presidents of trust companies were not able to agree on a plan to save the troubled trust companies and similarly to 1907 the situation was dealt with by a bailout from someone with financial authority close to the one of FED.

Economic downturn preceded the panic of 1907 by a financial crisis in 1906 and also the San Francisco earthquake and ultimately the copper corner. The downturn preceding the subprime crisis of 2007 was as Bordo shows in this chapter a long term high rate of interest rates followed by a crash of real estate and mortgage bubble.

Ultimately by the behavior of investors we can see the clients of New York trust companies in 1907 withdrawing the cash and losing trust towards financial institutions. As for the crisis of 2007, Bordo shows earlier in this chapter the banks giving loans to inconvenient clients spread the instability by selling these unstable loans to other banks.

What most of these crisis and panic scenarios have in common in a nutshell is all subjects' denial of their responsibility and a high effort to transfer their liabilities on other subjects in order to resolve the situation in the short term. Thus creating a bigger problem in the long term. Not only for themselves but also for other involved subjects all refusing to agree on their losses still trying to transmit them further to the whole economy. It all starts with the responsibility to the stockholders demanding the company to grow and to pay dividends. The shareholders would rather see a debt burden on the company than fluctuation of stocks. However, the investors are not dependent on one company's stocks so once they stop seeing it as a profitable investment they may start selling the stocks. For that reason, it is more profitable for stockholders to vote in the board of directors for arranging a loan from a bank as it is a way of accumulating more short-term assets boosting the price of their shares. Once the loan is due, and the company has to start

rendering its debt followed up with diminishing stocks all the stockholders usually do is sell their shares not interested in further situation.

8. Conclusion

The banking panic of 1907 has shown, that especially in times of crisis there has to be a subject possessing substantial amount of cash and an authority to be able to help other subjects in trouble or to help the whole industry. The panic has also shown the cause of insufficient regulation and unsatisfactory cash deposit rates. In 1907, the United States did not have any central institution with sufficient authority. There were only clearing houses that had inadequate tools and authorities to resolve a crisis. The situation was aggravated with the currency being tied with the gold. This reality restricted the government authority to issue money, making it dependent on imports of gold. This aspect was most dramatic and most apparent in case of the San Francisco earthquake. The panic was preceded by the failed copper corner that served as a catalyst of fear and suspicion among depositors ultimately resulting into a series of runs. J. P. Morgan appeared to be the self-proclaimed central bank in times of its greatest need. However, he did not have enough resources on his own so he and his friends and competitors formed a money pool to aid the system. Morgan did not ask if others agreed with him he just used all his power in doing what he thought was right. The other subjects could only follow as there appeared to be nobody else with a clear plan for such situation. Morgan did not seek a compromise he made clear what had to be done and used all his skills to reach the desired solution. Even at the cost of locking the city top bankers in his library till they gave him what he wanted. All financial institutions and trust companies of New York in particular ultimately felt the disadvantages of uneven regulation especially when Morgan made them responsible for the situation leaving them with no choice but to create a money pool. Even president Roosevelt was forced to act against his own conviction and sign Morgan's plan for a corporate merger in order to save the economy. The panic of 1907 showed there was a need for a centralized clearing house – like institution responsible for monetary policy and functioning as a lender of last resort at the same time. The difference of 100 years between crises shows, that in terms of a beginning and causes the 1907 panic and 2007 crisis still have the same structure. This shows, that despite the time people are not wiser and do not learn from the past.

Summary

Tato bakalářská práce popisuje vznik a průběh tzv. Bankovní paniky, známé také jako run na banky, který proběhl na sklonku roku 1907 v USA, tedy v době kdy spojené státy již přijaly zlatý standard, nicméně stále nedisponovaly centrální bankou. Hlavní důraz je kladen na průběh paniky a její vznik.

První kapitola se zabývá především charakteristikou bankovní paniky. Je zde zejména znázorněno, co panika znamená nejen sama o sobě, ale především pro hlavní účastníky – banky a jakým způsobem se v takových případech mohou chovat.

Druhá kapitola se zabývá situací a podmínkami před panikou, věnuje se zejména podmínkám předcházejícím vzniku paniky a zároveň I jejím symptomům a ekonomickým dispozicím. Zvláště zlatému standardu, který podstatně určil podmínky, za kterých se panika odehrávala, a zároveň značně omezoval nástroje vlády na řešení paniky. Dále zemětřesení v San Franciscu, které finančně vyčerpalo nejen USA a neúspěch tzv. měděného stisku – zahnání trhu s mědí do úzkých, který působil jako katalyzátor paniky. Veřejnost zachvátila nedůvěra vůči bankám, jež přešla v hysterii a projevila se runem na banky. Vkladatelé hromadně vybírali hotovost z bank, což v případě některých trustových společností vedlo až k zastavení operací.

Třetí kapitola se zabývá především charakteristikou New Yorských trustových společností a jejich role v rámci paniky. Kapitola popisuje podmínky podnikání těchto subjektů v porovnání s podmínkami podnikání národních bank. Díky nestejné regulaci finančních institucí, měly národní banky a trustové společnosti rozdílnou míru povinných depozit. Tento nedostatek v regulaci původně zapříčinil dramatický desetiletý růst trustových společností před panikou. Nicméně trustové společnosti, které měly výrazně nižší depozita než banky, nebyly členy asociace clearingového centra. Toto členství zajišťovalo členům především krizovou pomoc ve formě likvidity a od členských trustových společností byla vyžadována vyšší míra depozit než u nečlenských trustů.

Čtvrtá kapitola pojednává o průběhu paniky a především třech hlavních oblastech dopadu, které mají společného jmenovatele – nedostatek likvidity. Jedná se o trustové společnosti, burzu a město New York. Kapitolu uzavírá část zabývající se koncem paniky. Každá ze tří hlavních oblastí kapitoly pojednává o problémech své oblasti a opatřeních

provedených k jejich řešení. Kromě nedostatku likvidity mají tyto tři oblasti dalšího společného jmenovatele – J. P. Morgana, jehož role se prolíná všemi oblastmi paniky především proto, že boj s panikou byl bezmála v jeho rukou. Morgan vytvořil a řídil spolu se svými přáteli a konkurenty peněžní zásobu určenou na pomoc institucím v nesnázích, poté co selhal pokus donutit prezidenty trustových společností k vyčlenění kapitálu na záchranu. Morgan poskytnul několik záchranných balíčků trustovým společnostem, burze, New Yorku a v neposlední řadě i konkurenci. Morgan donutil prezidenty trustových společností k přijetí společné zodpovědnosti za ohrožené trusty a k dosažení kýženého výsledku je neváhal přes noc zamknout ve své knihovně. Morgan zachránil New York City, který čelil bankrotu, nákupem nepříliš výhodně úročených městských dluhopisů. Kvůli nedostatku likvidity se vymkla kontrole cena půjček, což znemožnilo nákup likvidity a brokerské firmy na burze začaly krachovat. Morgan musel dvakrát poskytovat značné množství likvidity, aby udržel burzu při životě. Mimo jiné však také vytvořil několik komisí pro styk s médii a církvemi v New Yorku, aby zmírnil paniku a posílil důvěru u vkladatelů. Morgan provedl akvizici konkurenční firmy, která ovšem podle jeho společníků nebyla výhodná, aby zachránil spekulativní brokerskou firmu, jejíž pád by znamenal nenapravitelné důsledky pro celý trh. Morgan a jeho společníci si však zvláště vyžádali podpis akvizice od prezidenta Roosevelta, bojovníka proti monopolům a korporacím. Poté co roznesla zpráva o prezidentově souhlasu, z trhů zmizel strach a negativní jevy se přestaly objevovat.

Pátá kapitola pojednává mimo jiné o osudu J. P. Morgana ve spojení s Pujovou komisí, jež měla zjistit, zdali došlo v rámci paniky z roku 1907 ke tvorbě peněžního trustu a zneužití pravomocí na trhu. Komise došla závěru, že k tomuto došlo, nicméně tato zpráva již Morgana příliš neovlivnila, protože zemřel na konci března v Římě. Dále je řeč o plánu a krocích vedoucích ke tvorbě systému federálních rezerv, jehož oficiálním autorem byl senátor Aldrich. V závěru je řeč o osudech tria zapleteného do měděného stisku, Charlese Barneyho, Charlese Morse a Augusta Heinze.

Poslední kapitola se zabývá srovnáním paniky z roku 1907 a hypoteční krizí z roku 2007. Přestože se jedná o události, které od sebe odděluje sto let, mají v rámci nástupu a příčin identickou strukturu.

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Annotation

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Department: Department of English and American Studies, Philosophical Faculty

Title: The American Bank Panic In New York 1907

Final paper supervizor: Mgr. David Livingstone, Ph.D.

Number of pages: 38

Number of characters: 78 793

Keywords: panic, bank panic, New York, 1907, process, causes

The main aim of this paper is to capture the development of the 1907 bank panic in New York, mainly its process and parties involved. It will supply a view of the bank panic and the position the banks were in. The paper will deal with the description of the main conditions and facts that influenced the existence and the development of the panic. Other goal of this thesis is to depict the subjects especially linked with the panic, the trust companies in particular. Above all this thesis will deal with the actions taken to solve the panic with the emphasis on the role of J. P. Morgan. Furthermore this paper will contain chapters dealing with the after-panic development and with the comparison of 1907 panic and 2007 crisis.

Anotace

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Název bakalářské práce: Panika amerických bank v New Yorku v roce 1907

Vedoucí bakalářské práce: Mgr. David Livingstone, Ph.D.

Počet stran: 38

Počet znaků: 78 793

Klíčová slova: panika, bankovní panika, New York, 1907, průběh, příčiny

Cílem této práce je zachytit vývoj bankovní paniky v New Yorku z roku 1907, především její průběh a příčiny. Tato bakalářská práce nabídne pohled na bankovní paniku a pozici, ve které se banky a systém v rámci paniky, nacházejí. V rámci této práce se bude mimo jiné jednat o popis hlavních podmínek a skutečností, které ovlivnily existenci a vývoj paniky. Práce se bude dále zabývat charakteristikou s panikou nejvíce spojených subjektů, především trustových společností. Tato práce především popíše kroky přijaté za účelem řešení paniky s důrazem na roli J. P. Morgana. Dále také bude obsahovat kapitoly zabývajícími se vývojem po panice a srovnáním paniky z roku 1907 a hypoteční krize z roku 2007.