

## **Too Much Ado about Morgan's Men: The U.S. Securities Markets, 1908-1914**

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In their quest to understand the logic of financial capitalism, economists and other social scientists have taken a keen interest in the structure of U.S. securities markets prior to World War 1 (WW1). What they find there, as Bradford De Long put it, is a “Morgan-dominated ‘money trust’ ”.<sup>1</sup> Different contributors debate whether the money trust promoted or restricted the development of U.S. securities markets.<sup>2</sup> Still they agree that access to these markets was controlled by a handful of “financial oligarchs” in the years prior to World War 1, suggesting similarities with German securities markets at the time.<sup>3</sup>

In characterising pre-WW1 securities markets in the United States in this way, scholars draw direct inspiration from the Pujo investigation into the control of credit in the United States, undertaken more than a century ago. Its majority report was unequivocal in concluding that there was “a vast and growing concentration of control of money and credit in the hands of a comparatively few men”. These men, prominent New York bankers including J. P. Morgan, George Baker, and James Stillman, were deemed to constitute a “money trust”.

Recent contributions, not just by leading economists but also by political scientists and legal scholars, reveal an almost unreserved acceptance of the Pujo report's findings. Among historians, the reaction to the Pujo report has been more mixed; although some are inclined to accept Pujo's description as broadly accurate for the years leading up to World War 1,<sup>4</sup> a number of prominent financial historians have been dismissive of it.<sup>5</sup> Still, even the most disparaging

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<sup>1</sup> Bradford De Long, 1991, “Did J. P. Morgan's Men Add Value? An Economist's Perspective on Financial Capitalism”, in Temin, Peter, ed., *Inside the Business Enterprise: Historical Perspectives on the Use of Information*, Chicago, pp. 205-249, cited at pp. 210-211 & p. 205.

<sup>2</sup> For contrasts with De Long's view of Morgan's role, see Raghuram Rajan and Luigi Zingales, *Saving Capitalism from the Capitalists, Unleashing the Power of Financial Markets to Create Wealth and Spread Opportunity*, Crown Business, New York, 2003, pp. 35-6); Leslie Hannah, “J. P. Morgan in London and New York before 1914”, *Business History Review*, 85 (2011), pp. 113-150.

<sup>3</sup> Peter Gourevitch & James Shinn, *Political Power & Corporate Control: The New Global Politics of Corporate Governance*, Princeton University Press, 2005, p. 243; Jeffrey Fear and Christopher Kobrak, 2010, “Banks on Board: German and American Corporate Governance, 1870-1914”, *Business History Review*, 84, pp. 703-736.

<sup>4</sup> See, for example, Herman Krooss and Martin Blyn, *A History of Financial Intermediaries*, 1971, New York, p. 131; Hugh Rockoff, 2008. “Banking and Finance, 1789-1914,” *Cambridge Economic History of the United States, 19<sup>th</sup> Century*, pp. 682-3; Fear and Kobrak, 2010.

<sup>5</sup> A good example is Vincent Carosso, historian of U.S. investment banking, whose tone leaves little doubt that he shared U.S. bankers' disdain for the Pujo investigation (see, in particular, Vincent

critics have failed to provide a systematic critique of the claims made in the Pujo report or to present an alternative to them.<sup>6</sup> As a result, it is now impossible to think about the U.S. securities markets prior to World War 1 without reference to the Pujo report or the arguments of scholars who are inspired by it.<sup>7</sup>

It seems high time, therefore, to take a careful look at the report's three principal claims and the evidence to support them. First, there is the report's most widely-discussed assertion that a money trust dominated the business of underwriting and distributing corporate securities in the United States in the years following the panic of 1907. Second, the report claimed that the money trust's dominance of the primary market was based on its command of "other people's money" and, in particular, its use of that money to dominate New York's call loan market. Third, the Pujo report contended that the money trust's control of credit was a serious threat to competition in the railroad and industrial sectors of the U.S. economy. In this chapter, I assess these claims based on a critical consideration of the statistics and testimony generated in the course of the Pujo investigation as well as new evidence compiled from other sources.

My analysis leads me to suggest that there has been too much ado about the money trust for understanding the operation of the U.S. securities markets prior to World War 1. The general problem, as I shall show, is that the evidence on which the Pujo report based its claims about the extent, the origin and the impact of the money trust's control was extremely partial. Its main purpose was to show the extent to which the money trust banks were active in the underwriting and distribution of corporate securities, the call loan market, and as directors of U.S. corporations and it was largely successful in this effort. However, by failing to present the various activities of the money trust banks in their broader context, the Pujo evidence exaggerated the importance and distinctiveness of their behaviour and questionable in the intent it sought to attribute to it.

Yet, to focus only on the shortcomings of the investigative work that the Pujo committee conducted would be to ignore its undeniable accomplishments. The investigation pioneered in the analysis of features of the U.S. financial system that had been subject to almost no systematic scrutiny until then. Moreover, its achievements were made in the face of implacable opposition from private and public actors. Its shortcomings can be seen, therefore, as just as much the fault of the circumstances surrounding the investigation as the investigation itself. Much less defensible, I shall argue, is the complacency of historians and social scientists who continue to rely on the Pujo investigation for their understanding of how securities markets operated in the United States prior to World War 1.

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Carosso, 1973, "The Wall Street Money Trust from Pujo through Medina", *Business History Review*, 47, pp. 421-437).

<sup>6</sup> Carosso claims that the Pujo's statistics on "banking concentration, interlocking directorates, and syndicate alliances" were "essentially correct but highly selective" but never identified the ways in which they were selective (Carosso, 1973, p. 424).

<sup>7</sup> See, for example, Sybille Lehmann's discussion of the U.S. case in her recent article, "Taking firms to the stock market : IPOs and the importance of large banks in imperial Germany, 1896-1913", *Economic History Review*, 67 (2014) 92-122.

In Section 1, I discuss the origins, scope and claims of the Pujo investigation. In Section 2, I assess the report's claim that a small number of elite banks jointly controlled the business of underwriting and distributing corporate securities in the years after the panic of 1907. In Section 3 I evaluate the arguments made in the Pujo report about the command of other people's money as the basis of the money trust's influence. In Section 4, I consider the Pujo report's claims about the impact of the money trust's control through directorships of railroad, industrial and utility corporations. In the final section, I reflect on the contribution and legacy of the Pujo report in light of my central argument that it exaggerated the importance of the money trust.

## 1. THE PUJO INVESTIGATION

Concern that a small coterie of powerful financiers acted in concert to exert undue influence over the nation's savings and investments was expressed in the United States from the last decade of the 19<sup>th</sup> century. It was reinforced by revelations in the early 20<sup>th</sup> century of the manipulation of the nation's leading securities markets by small cliques of powerful insiders.<sup>8</sup> The Armstrong investigation added fuel to the fire by exposing the thorough integration of New York's life insurance companies into syndicates for the underwriting and distribution of corporate securities. Further opprobrium for Wall Street came with the panic of 1907; ironically, the concerted efforts of prominent bankers<sup>9</sup> to stem the crisis only reinforced anxiety that they controlled the fate of the U.S. financial system. Little wonder then if the dangers of a "money trust" were explicitly evoked in the debates on banking and monetary reform that followed the panic.

Appointed by Congress in 1908, the National Monetary Commission conducted its extensive research under the chairmanship of Nelson Aldrich, the leader of the Republican party in the U.S. Senate. Aldrich's eponymous plan, made public in January 1911, proposed the establishment of a central bank – the National Monetary Association – to be run by a board of governors dominated by bankers. It later emerged that the "Aldrich plan" was drafted in a secret meeting of prominent New York bankers on Jekyll Island in late 1910. Yet, even in the earliest public discussions of the plan, the influence of a "money trust" was suspected given Aldrich's well-known associations with prominent monied men.<sup>10</sup>

For this reason, prominent members of the Democratic party opposed the Aldrich plan but there were also powerful elements in the Republican party who expressed concern about the existence of a money trust. Indeed, it was Republican Congressman Charles A. Lindbergh of Minnesota who introduced a resolution in December 1911 calling for a congressional investigation into the

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<sup>8</sup> Thomas Lawson, *Frenzied Finance*, 1905.

<sup>9</sup> Notably J. P. Morgan, George Baker and James Stillman of J. P. Morgan & Co., First National Bank of New York and National City Bank respectively.

<sup>10</sup> See, for example, "The Money Trust", *New York Times*, April 1, 1911, p. 12.

“Bankers’ Trust”.<sup>11</sup> He underlined the bipartisan support for such an investigation based on a letter of support from Samuel Untermyer, the prominent corporate lawyer and Democrat.<sup>12</sup>

However, the path to the Pujo investigation was not a straight one since there was also bipartisan opposition to a money trust inquiry. Nevertheless, an initial resolution, adopted on February 24, 1912, authorised the Committee on Banking and Currency of the House of Representatives “to investigate banking and currency conditions in the United States as a basis for remedial legislation”.<sup>13</sup> It was amended by a further resolution, adopted in April 1912<sup>14</sup>, which went into more detail about the various issues to be investigated and created two committees to grapple with them.<sup>15</sup> Arsène Pujo headed the sub-committee to inquire into “the concentration of money and credit”<sup>16</sup> and Carter Glass<sup>17</sup> was chairman of the sub-committee that investigated “plans of banking and currency reform and reporting constructive legislation thereon”.<sup>18</sup>

Notwithstanding its appellation, the Pujo committee was dominated by Samuel Untermyer, who became its lead counsel. Largely as a result of his relentless questioning, the investigation generated a voluminous amount of testimony and evidence. Untermyer proved a formidable opponent for Wall Street due to his legal acumen and his experience as a financial insider. Moreover, he had made it very clear, even before he accepted the role of counsel, that he believed a money trust to exist in the United States. Little wonder then if many bankers resented him; indeed, Susie Pak notes that “The Morgan partners hated Untermyer with an undying passion” and fulminated at his methods.<sup>19</sup> Republican members of the Pujo committee also objected to Untermyer’s handling of the investigation and, in the end, the Pujo committee split on partisan lines with two minority reports issued alongside the majority one.<sup>20</sup>

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<sup>11</sup> He was prompted to action in July 1911 not only because of his concerns about the Aldrich plan but also in response to the announcement by National City Bank, the country’s largest bank, of its decision to establish the National City Company as a vehicle to control its stakes in other banks and trust companies (“The ‘Money Trust’”, *New York Times*, July 24, 1911. p. 6).

<sup>12</sup> Lindbergh forwarded Untermyer’s letter to Robert Henry, the Democratic chairman of the House Committee on Rules, which was considering his resolution. In it, Untermyer expressed regret given his understanding that Lindbergh’s resolution for a “so-called money trust investigation” might be defeated or postponed (source).

<sup>13</sup> H. R. Res. 429; U.S. House, 62d Cong., 3d Sess. *Report of the Committee Appointed Pursuant to House Resolutions 429 and 504 to Investigate the Concentration of Control of Money and Credit*, Washington, 1913, (hereafter Pujo Report), p. 13.

<sup>14</sup> H. R. Res. 504.

<sup>15</sup> Henry Parker Willis, 1923, *The Federal Reserve System: Legislation, Organization & Operation*, New York, Ronald Press, p. 106.

<sup>16</sup> Pujo Report, p. 13.

<sup>17</sup> Glass was a representative from Virginia and successor to Pujo as chairman of the House Committee on Banking and Currency from March 1913.

<sup>18</sup> It was the principal source of the Owens-Glass Federal Reserve Act of 1913.

<sup>19</sup> Susie Pak, 2013, *Gentlemen Bankers: The World of J. P. Morgan*, Harvard University Press, p. 29.

<sup>20</sup> One minority report was signed by Everis A. Hayes, Frank E. Guernsey, and William H. Heald and the other one by Henry McMorran (Pujo Report, p. 247, p. 250).

When we speak of the "Pujo report", therefore, we are referring to the majority report<sup>21</sup> and it had "no hesitation" in asserting the existence of a "money trust" in the United States in the sense of:

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, partnership and joint account transactions, and other forms of domination over banks, trust companies, railroads, and public-service and industrial corporations, which has resulted in great and rapidly growing concentration of the control of money and credit.<sup>22</sup>

The report was primarily concerned with establishing the extent of the money trust's control of the credit system in the United States. It named "the most active agents in forwarding and bringing about the concentration of control of money and credit" as J. P. Morgan & Co., First National Bank of New York, National City Bank of New York, Lee, Higginson & Co., Kidder, Peabody & Co., and Kuhn, Loeb & Co.<sup>23</sup> The Morgan bank, the First and the City were identified as the "inner group" of the money trust, Kidder, Peabody and Lee, Higginson as close allies of that group, and Kuhn, Loeb as "only qualifiedly allied with the inner group, and only in isolated transactions" but having "many interests in common, conducting large joint-account transactions with them".<sup>24</sup>

It identified the locus of concentrated control in the country's securities markets and, specifically, in the underwriting and distribution of corporate securities. The alleged extent of the money trust's control of the primary market for corporate securities was staggering. The report claimed that "the inner group and its allies have drawn to themselves the bulk of the business of marketing the issues of the greater railroad, producing and trading, and public-utility corporations, which, in consequence, have no open market to which to appeal".<sup>25</sup>

The Pujo report was not content with documenting the extent of the money trust's dominance of the primary market for corporate issues. It also sought to identify the basis of its dominance, locating it in the command of "other people's money" by the money trust:

[u]nder our system of issuing and distributing corporate securities the investing public does not buy directly from the corporation. The securities travel from the issuing house through middlemen to the investor. It is only the great banks or bankers with access to the mainsprings of the concentrated resources made up of other people's money in the banks, trust companies, and life insurance companies, and with control of the machinery for creating markets and distributing securities, who have had the power to underwrite or guarantee the sale of large-scale security issues".<sup>26</sup>

The report contended that the money trust had secured access to "the mainsprings" of "other people's money" through their growing stakes and

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<sup>21</sup> The majority report was sent to the House of Representatives on February 28, 1913, Pujo Report, p. 130.

<sup>22</sup> Pujo Report, p. 129.

<sup>23</sup> Ibid., p. 56.

<sup>24</sup> Ibid., p. 131.

<sup>25</sup> Ibid., p. 133.

<sup>26</sup> Ibid., p. 130.

directorships in leading New York financial institutions.<sup>27</sup> In part, this was because “as buyers, underwriters, distributors, or investors”, these financial institutions were the “the principal first outlets for security issues”.<sup>28</sup> Even more important, the report claimed, was the grip that the money trust had on the securities markets through its control over the nation's call loan market:

The evidence demonstrates that the inner group and the banks and trust companies with which they are affiliated, through stock ownership, representation in directorates, and otherwise, dominate the money market for loans on the stock exchange and on stock-exchange securities. They lend not only their own money and the money of their depositors, including the deposits of the out-of-town banks, but that of their correspondents, on terms and security satisfactory to them (the New York banks).<sup>29</sup>

The money trust's pervasive influence in the call loan market, the report alleged, allowed it to favour the securities that it promoted as collateral for the money it lent there.

Besides these claims about the extent and basis of the money trust's control, the Pujo report made a third claim about the impact of its control on the U.S. economy. It pointed to the prominent role of members of the money trust on the boards of the country's leading transportation, industrial and utility enterprises and suggested the money trust used their influence there to stifle competition. First, leading bankers' privileged positions as directors of major corporations meant that they could “levy a tribute upon every large enterprise” by extracting large commissions for their services.<sup>30</sup> Second, and of even greater importance, their directorships of these companies motivated them “to strike at the very vitals of potential competition in every industry that is under their protection”<sup>31</sup> by starving all putative rivals of credit.<sup>32</sup>

The implications that the Pujo report drew from its analysis of the impact of the money trust's control were chilling. The money trust had “reversed the processes under which the country had grown and prospered by combining to throttle the competition upon which they had thrived”. And it was because the money trust threatened “the economic forces of competition” that it was “to be dreaded and guarded against”<sup>33</sup> as a “menace” to the country.<sup>34</sup>

## **2. THE MONEY TRUST'S CONTROL OF THE PRIMARY MARKET**

The Pujo report's principal claims were forceful and controversial. It seems crucial, therefore, to determine what evidence there is to support them. That requires, in the first instance, looking at the evidence presented in the Pujo investigation itself. I begin with the Pujo report's claims about the extent of the money trust's control since, as the Pujo committee noted, “the bulk of the oral

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<sup>27</sup> Ibid., p. 56.

<sup>28</sup> Ibid., p. 133.

<sup>29</sup> Ibid., p. 139.

<sup>30</sup> Ibid. p. 159.

<sup>31</sup> Ibid., p. 161.

<sup>32</sup> Ibid., p. 159-160.

<sup>33</sup> Ibid., p. 160.

<sup>34</sup> Ibid., p. 161.

and documentary evidence taken ... was directed toward ascertaining whether, in current phrase, there is a 'money trust' ".<sup>35</sup>

The main evidence adduced for the report's key finding of the money trust's domination of the business of underwriting and distributing securities issues is summarised in a table presented in the body of the report "showing joint purchases and underwritings of corporate securities by certain-named banking houses".<sup>36</sup> The table covered the six institutions the Pujo report identified as the "the most active agents" of financial concentration, as well as three Chicago banks<sup>37</sup> and a New York brokerage house, Kissel, Kinnicutt & Co.<sup>38</sup> It was prepared based on data supplied by these banking houses in response to a questionnaire sent to them by the Pujo committee.

The banks were asked to disclose the number of their joint purchases and underwritings of corporate securities since 1907. Their responses generated data on joint purchases and underwritings of nearly 300 issues undertaken between 1903 and 1913 which raised total proceeds of \$3.6 billion (see Table 1). However, there were substantial variations in how responding banks completed the questionnaire<sup>39</sup> so, at best, they can be considered comprehensive only for the four years from 1908 to 1911 and, even for those years, there are gaps in what was provided.

Table 1 Corporate Securities Issues by the Money Trust shown in the "Pujo table"

More problematic than any incompleteness in the table's coverage on its own terms was the Pujo committee's decision to focus only on the activities of "certain-named banking houses". Since the primary objective was to show that a small number of institutions dominated the primary market for corporate securities in the United States, it would seem necessary to illustrate the importance of their joint underwriting and distribution activities relative to the

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<sup>35</sup> Ibid., p. 129.

<sup>36</sup> Ibid., pp. 92-100.

<sup>37</sup> The first two of these banks -- the Illinois Trust & Savings Bank and the First National Bank -- seem to have been included on the grounds that, in Chicago, the inner group "associates with and makes issues of securities in joint account or through underwriting participations" primarily with them. No explanation is provided for the inclusion of the First Trust & Savings Bank of Chicago.

<sup>38</sup> The report considered Kissel, Kinnicutt to be dependent on the money trust since it received "large and lucrative patronage from the dominating groups" being "used by the latter as jobbers or distributors of securities the issues of which they control, but which for reasons of their own they prefer not to have issued or distributed under their own names". However, if this was indeed the reasoning that justified its inclusion in the table, it is unclear why the two other New York brokerage firms -- White, Weld & Co. and Harvey Fisk & Sons -- which were accorded a similar dependent status by the report were excluded from it (Pujo Report, pp. 131-132). It should also be noted that no evidence was presented during the investigation that proved such dependence and that Jacob Schiff, at least, objected strongly to this characterisation of Kissel, Kinnicutt & Co. (U.S. House, 62d Cong., 3d Sess. *Investigation of Financial and Monetary Conditions in the United States under House Resolutions Nos. 429 and 504 before Subcommittee of the Committee on Banking and Currency*, Washington, 1913, (hereafter Pujo Investigation), p. 1667.

<sup>39</sup> There was considerable variation in how the banks in question responded to the Pujo committee's questionnaire with some providing earlier data and others furnishing lists of their transactions only from 1908 (Pujo Report, p. 92). Moreover, the data were supplied during the course of the investigation and so are not complete for 1912 and 1913.

overall size of the primary market. However, the Pujo investigation failed to undertake that task even for the very largest issues where it claimed the money trust was completely dominant.

## 2.1 Warning Signals in Bankers' Testimony

In the testimony given in the Pujo hearings, there were clear hints that the evidence summarised in Table 1 above was partial. The words of George F. Baker, the chairman and former president of the First National Bank of New York, are often cited as evidence of the money trust's dominance of the market for the largest corporate issues. De Long, for example, claims that Baker admitted he could not name a single transaction of more than \$10m in the last 10 years that had been undertaken without the participation of the members of the money trust.<sup>40</sup> However, closer inspection of Baker's testimony shows his response to have been much less definitive than De Long's statement suggests.

In the first place, it is worth looking at the way Untermeyer phrased the question that he addressed to Baker:

Will you be good enough to name a single transaction in the last 10 years of over \$10,000,000 in amount which has been financed without the participation of Messrs. Morgan & Co., or the First National Bank, or the City Bank, or Kuhn, Loeb & Co., or Speyer & Co., or Lee, Higginson & Co., or Kidder, Peabody & Co., of Boston, and the First National Bank and the Illinois Trust & Savings Bank, of Chicago? Take the whole range of transactions and point to a single one that has been financed without the cooperation of some one of these institutions.<sup>41</sup>

Untermeyer's wording is important since it included the name of an important financial institution, Speyer & Co., which was not designated as a member of the money trust in the Pujo report. Speyer & Co.'s network and reputation made it a potentially important competitor for the likes of J. P. Morgan & Co. and Kuhn, Loeb. Indeed, in his testimony, Jacob Schiff of Kuhn, Loeb was explicit that there was "a sort of rivalry" between Kuhn, Loeb and Speyer & Co: "Speyer & Co. have often made an issue of securities which came within our range, and we have made issues of securities which came into their range".<sup>42</sup> Had Untermeyer confined his question to the money trust banks, therefore, Speyer & Co.'s transactions would have represented plausible answers.

Furthermore, Untermeyer asked Baker about the participation of "some one of these institutions" even though the Pujo inquiry focussed on their "joint" participation; its primary interest, after all, was to investigate whether the members of the money trust acted together as a group to control the supply of credit in the United States. Once again, the framing of Untermeyer's question limited the possible responses that Baker might give. Lee, Higginson, for example, often conducted joint underwritings without the involvement of other members of the money trust, as did National City Bank and Kuhn, Loeb. To the extent that such banks were deemed to have access to networks that were

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<sup>40</sup> De Long, footnote 2, p. 206.

<sup>41</sup> Pujo Investigation, p. 1540.

<sup>42</sup> Pujo Investigation, p. 1668.



independent of the money trust, it would have been harder to argue that they could be expected to act in concert with the inner group of the money trust.<sup>43</sup>

Untermeyer's phrasing of his question may explain some of Baker's hesitancy in answering it. His initial response was that he was "not sufficiently familiar with it to tell you". When pushed by Untermeyer, he made the tentative suggestion of White, Weld & Co.<sup>44</sup> but Untermeyer dismissed it on the grounds that the house marketed "largely J. P. Morgan & Co.'s bonds". Asked again, Baker repeated three times that he was "not sufficiently familiar" with the situation to know. The discussion of the matter concluded with Baker agreeing to investigate the subject further when he had finished his testimony.<sup>45</sup>

Less than one week later, on January 14, 1913, George F. Baker sent a letter to Samuel Untermeyer in which he noted that "a search of the files of the First National Bank, which are not in any way complete, disclose some 16 such transactions". Baker did not provide details of these transactions, stating merely that "to answer your question specifically in regard to one instance, there was issued \$13,500,000 Studebaker Corporation 7 per cent preferred in February, 1911. The First National Bank had no interest in this issue, and from what information we have none of the other houses mentioned had an interest".<sup>46</sup>

The Pujo report did refer to Baker's letter<sup>47</sup> but in the following, somewhat misleading, terms:

Mr. Baker, when upon the witness stand, was unable to name a single issue of as much as \$10,000,000 of any security, either in the railroad or industrial world, that had been made within 10 years without the participation or cooperation of one of the members of this small group. He subsequently wrote naming only the case of a single issue of \$13,500,000. It was proved as to this instance by the notice issued to stockholders that Morgan & Co. were in fact largely interested and received a part of the profits from the issue.<sup>48</sup>

Strictly speaking, it is true that Baker "named" only one issue but he also referred to 15 other giant transactions which the Pujo report omitted to mention. We might also ask whether the report was reasonable in its characterisation of the issue that the banker did name? Baker was correct in his statement that the lead underwriters for the Studebaker preferred issue -- Goldman, Sachs, Lehman Brothers and Kleinwort & Sons -- were not designated as members of the money trust. In referring to J. P. Morgan & Co.'s interest in the issue, the Pujo report was alluding to Studebaker's agreement to pay the bank \$1

<sup>43</sup> The Pujo report indirectly recognised such a potential objection to its conclusions in the following statement: "Of course we do not suggest that banking houses may not on particular occasions join in purchasing or underwriting an issue of securities and yet remain entirely independent and free to compete with each other generally in the purchase of security issues. But where a group of such banking houses, pursuant to a settled policy, regularly purchase these issues in concert competition amongst them in this vastly important commercial function is effectually suppressed" (Pujo Report, pp. 101-102).

<sup>44</sup> Baker also referred, even more tentatively, to Rollins or Rollins & Co. (Pujo Investigation, p. 1540).

<sup>45</sup> Pujo Investigation, pp. 1540-1.

<sup>46</sup> *Ibid.*, p. 2205.

<sup>47</sup> Baker's letter was one of the last items included in the written record of the investigation although, for some reason, it was not referenced in the index to his written testimony.

<sup>48</sup> Pujo Report, p. 160.

million in common stock in payment for services rendered the year before in arranging an acquisition.<sup>49</sup> In fact, if anything, the example could have been turned the other way, to argue for, rather than against, the existence of competition with the money trust.

It seems fair to say, therefore, that the evidence that Baker gave to the Pujo investigation leaves us with as many questions as answers. The testimony of Morgan partner, Henry Davison, contributes to this sense of ambiguity. Davison was even more adamant than Baker that the money trust faced competition for large issues from other banks and proved considerably more irritable with Untermeyer's efforts to assert otherwise.

Probing the details of one issue that Davison had mentioned as being handled by competitors,<sup>50</sup> Untermeyer told him: "I am trying to find out if you know what you are talking about". Davison snapped back that

I know what I am talking about as much as you do, from the information you have there. There is a public list of securities, a list containing three hundred and thirty-two millions of securities, which have been recently issued by houses which are not in your list, and have no connection, so far as the evidence shows.

At this point, the written record shows, Davison handed a list to Untermeyer, compiled by a man in his office, which purported to contain large transactions that had been handled by houses with which J. P. Morgan was in no way connected.<sup>51</sup> Davison insisted that there were houses that "can handle issues without the help of any other house" citing as examples "Blair & Co., William Salomon & Co., Lehman Brothers, Golden & Sachs [sic], and Heidelbach, Ickelheimer & Co."

Untermeyer was clearly sceptical, and pushed Davison for specific details, but the banker retorted that he had given him the list and asserted that

it is my belief, because I know and you know that there are a great many houses in New York doing a very large volume of business that have no relation or connection with those houses you have named there. You know it just as well as I do, and it can be proved.<sup>52</sup>

Untermeyer dismissed his claim since he did not think "any of them can exist against your ill will". Davison retorted that Untermeyer's remark was "an absurd statement that ought not to be made".<sup>53</sup>

Untermeyer then turned his attention to Davison's list, wondering aloud how the total proceeds represented in the list compared with the issues "you all" had undertaken. Davison said he did not know and emphasised that he wanted it understood that "I do not offer that [the list] as the amount of securities that

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<sup>49</sup> Pujo Investigation, p. 2204. In facilitating Studebaker's acquisition of the Everitt-Metzger-Flanders Company in 1910.

<sup>50</sup> *Ibid.*, p. 1860.

<sup>51</sup> *Ibid.*, p. 1861.

<sup>52</sup> *Ibid.*, p. 1862.

<sup>53</sup> *Ibid.*, p. 1862.

have been issued by other houses since the time stated". At this point, Untermyer asked him whether he wanted to offer the list at all and, when Davison curtly declined, Untermyer said that "Then you may take it back, because if you do not want it we will not examine it".<sup>54</sup>

It is hard to know what to believe based on these testy exchanges between Untermyer and Davison. Was it possible, as Davison contended, that a substantial number of large issues fell outside the purview of the money trust? Untermyer seemed to wonder himself but clearly chose to let the matter drop once Davison did. Stepping back a bit, the fact that such questions even arose is proof of a major problem with the evidence adduced in the Pujo investigation. In failing to present information on the broader population of corporate securities issues, the Pujo report cannot show the dominance of the money trust that is its central claim.

The Pujo report often seems to imply that the money trust's control was most significant for the very largest transactions.<sup>55</sup> That seems plausible, even likely, since 74 per cent of the proceeds of money trust transactions were generated by issues of \$10m or more.<sup>56</sup> Yet, the Pujo investigation did not generate evidence on the overall number of giant corporate issues in the United States so we do not know the extent to which the money trust was dominant, even for this category of transaction. And, even if we did, the question would still arise as to the relative importance of giant corporate issues in the U.S. primary market at the time.<sup>57</sup> In short, to evaluate the Pujo report's claims about the extent of the money trust banks' control of the underwriting and distribution of corporate securities, it is crucial to place their activities in the context of the overall primary market for corporate securities in the United States. Since the Pujo investigation did not undertake that task, it is left to others to complete it.

## 2.2 An Overview of the U.S. Primary Market

Finding comprehensive data on the U.S. primary market for corporate securities for the years following the panic of 1907 is not a straightforward task. Indeed, it is for this reason that financial historians continue to use the Pujo data, even as they lament their limitations. In their history of National City Bank, for example, Harold Cleveland and Thomas van Huertas justify their reliance on Pujo data on the grounds that: "Poor as the data are, they are all that are available on any sort

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<sup>54</sup> Ibid., p. 1864.

<sup>55</sup> See the reference to "the issues of the greater railroad, producing and trading, and public-utility corporations" and the lack of effective competition with, or among, the members of the money trust "for these large security issues" (Pujo Report, p. 133). An even more direct statement in this regard can be found on p. 160.

<sup>56</sup> Pujo Report, pp. 92-100.

<sup>57</sup> Other than to note that the six members of the money trust were also actively engaged in underwriting and distributing smaller issues yet, as for the giant issues, without giving any sense of their relative importance in the primary market for these issues: "Of the issues since 1907 shown on that table as having been purchased or underwritten by two or more of the banking houses there named acting together, about 90 were for \$5,000,000 and less, while an additional 60 were for amounts between \$5,000,000 and \$10,000,000" (Pujo Report, p. 101).

of comparable basis for the period".<sup>58</sup> In fact, data on the U.S. primary market are available for the years covered by the Pujo investigation but they need to be compiled from monthly lists of securities issues published in the *Journal of Commerce*.<sup>59</sup> An analysis of these data, as shown in Table 2, allows us to identify the main characteristics of the U.S. primary market for corporate securities for the period that was the focus of the Pujo investigation.

Table 2 Corporate Securities Issues in the United States, 1905-1913

As Table 2 shows, the U.S. primary market for corporate securities reached an annual scale of about \$1.6 billion prior to the panic of 1907. The panic of 1907 brought a reduction in total issuance activity but there was a subsequent recovery to levels of issuance activity similar to those recorded before the panic. It was only in 1912 that we see any great change in these levels and, even then, the boom proved to be a temporary one.

Beneath the relative stability in overall levels of corporate issues, we observe important changes in the types of securities issues that, we shall see, are relevant in considering the extent of the money trust's influence in the primary market. First, we observe a shift in the relative importance of different sectors, especially from 1909, with railroads ceding ground to utilities and, especially, industrials.<sup>60</sup> Second, and partly related to the sectoral shift, there was a steady decline in the average and median size of corporate issues after the panic.<sup>61</sup> Even for railroad issues, the average size of issues declined and, for industrials and utilities, where the average size of issues had always been smaller, there were also signs of a fall in average issue size.<sup>62</sup>

An awareness of these trends is reason to suspect that the money trust may not have been quite as dominant in the primary market as the Pujo report suggested. Sure enough, the analysis in Table 3 shows that the securities issues designated by the Pujo report as joint issues of the money trust represented a minority of all U.S. corporate issues. That is true even if we estimate the money trust's share based on the proceeds of corporate issues and even more so if calculate it based on numbers of issues. Indeed, if we treat these measures as concentration ratios, they suggest a lower level of market control than would be required to constitute an oligopoly.<sup>63</sup>

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<sup>58</sup> Harold van B. Cleveland and Thomas F. Huertas, 1985, *Citibank, 1812-1970*, Cambridge, pp. 355-356.

<sup>59</sup> These data include the name of the issuer, the type of security issued, and the amount of the issue. The journal sought to identify all issues of stocks, bonds and notes undertaken by U.S. corporations. In the case of stock issues, its lists include both initial public offerings and seasoned issues, issues for cash as well as in exchange for other securities or assets.

<sup>60</sup> The share represented by utilities, which had accounted for 12 per cent of securities issues in 1906, showed no consistent signs of a change role until 1912 when its share increased to 16 per cent.

<sup>61</sup> In 1911, moreover, the average and median industrial issues in 1911 were \$2 million and \$1 million respectively.

<sup>62</sup> Add numbers (author's analysis based on data from the *Journal of Commerce*)

<sup>63</sup> The CR (concentration ratio) is a standard and intuitive way to measure the control of the market exercised by the leading firms in it. It measures the percentage of the total output of an industry which is produced by the leading firms in that industry and is thus used as an indicator of the extent to which an industry is oligopolistic. Thus, the Six-Firm Concentration Ratio (CR6) measures the percentage of

Where the money trust was very powerful was for railroad issues where its average share of total proceeds was just over 40 per cent. However, as we have just seen, the importance of railroad issues was declining in the U.S. primary market during these years, ceding ground to other classes of securities where the money trust's influence was weaker. A similar point can be made with respect to size trends in corporate issues. The money trust exercised its greatest influence for the largest issues but these issues were declining in relative importance. The money trust was active in underwriting and distributing smaller issues but its relative dominance was much less marked than for giant issues.

Table 3 Money Trust Issues as Shares of U.S. Corporate Securities Issues

### 2.3 Taking A Closer Look

In light of these findings, it seems worthwhile to take a closer look at the money trust's role in the primary market. For the purposes of this more detailed inquiry, I focus on 1911 because, as Table 2 shows, it was a year in which the primary market had fully recovered from the panic of 1907 but was not booming.<sup>64</sup> Focussing on 1911, I match the data obtained for individual securities issues from the *Journal of Commerce* with details of the financial houses that underwrote them, obtained from the *Commercial and Financial Chronicle*.

I begin by identifying all corporate securities issues of \$10 million or more because it is at the top end of the market that we would expect the money trust to dominate. In total, as Table 4 shows, a total of 41 of these giant issues were undertaken by railroads, utilities and industrials in 1911. Of these transactions, 24 were designated by the Pujo report as money trust issues. Thus, it is already possible to identify 17 extremely large issues that fell beyond the reach of the money trust.

Table 4 Underwriters for Corporate Securities Issues of \$10m or More, 1911

Railroad issues accounted for the majority of the giant transactions and it was here that the money trust's influence was greatest. Yet, even for these issues, there were competitors. Just as Schiff's testimony suggested, Speyer & Co. featured as an important competitor, being the lead underwriter on four large railroad issues.<sup>65</sup> Nor was it the money trust's only competitor for giant railroad issues; in another transaction, Blair & Co., Ladenburg, Thalmann & Co. and Middendorf, Williams & Co. formed a "best efforts" syndicate to underwrite an

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the total output of an industry produced by its 6 largest producers. CRs are usually calculated for four or five firms with ratios of 50 per cent and higher considered necessary for oligopoly (or monopoly). For CR6, the bar should be even higher to denote an oligopolistic structure.

<sup>64</sup> Since we would expect entry to occur during boom years, focussing on 1912 would potentially skew my analysis in favour of competition.

<sup>65</sup> A \$20m bond issue and a \$12.5m note issue underwritten for the Mo. Kansas & Texas RR, a \$20m note issue for Missouri Pacific and a \$10m bond issue for Chic., R. I. & Pac.

issue of \$19m bonds for the Seaboard Air Line, subsequently exercising an option to take up an additional \$4m for a total issue of \$23 million.<sup>66</sup>

Moreover, once we begin to scrutinise railroad issues, the looseness of some Pujo classifications becomes clear.<sup>67</sup> An interesting example is a \$20 million note issue for the Missouri Pacific Railway on which Speyer & Co. was designated as the lead underwriter.<sup>68</sup> It obtained the business in competition with Kuhn, Loeb; indeed, its success prompted Paul Warburg of Kuhn, Loeb, who had been appointed to Missouri Pacific's board "when his firm was expecting to take an active part in financing the company", to resign as director.<sup>69</sup> Nevertheless, the Pujo report designated the issue as a money trust one on the grounds that Kidder, Peabody and Illinois Trust took up some of the issue.<sup>70</sup> Yet, what was the meaning of a money trust if some of its members were willing to act against the interests of a fellow member, Kuhn, Loeb, in concert with an outsider, Speyer & Co?<sup>71</sup>

The Missouri Pacific case was not an isolated one since there were problems with the Pujo classification of other large transactions. All six of the issues in which Kuhn, Loeb served as a lead underwriter are classified as money trust issues. However, only in two cases, those in which National City Bank was a joint underwriter, does such a classification seem reasonable. In another huge issue of \$50 million for the Central Pacific, Kuhn, Loeb acted with a syndicate of French banks and sold most of the issue abroad. In two other issues, Kuhn, Loeb partnered with one of two banks – Baring Bros. & Co. of London or Speyer & Co. – that were not designated as money trust members. In a fourth transaction, it acted on its own as the lead underwriter. Nevertheless, all four of these latter transactions were classified as money trust issues because at least one other member of the money trust bought some of the issue. Yet, just how minimal that standard might be is suggested by the Central Pacific transaction in which Kidder, Peabody's purchase of only 500,000 francs<sup>72</sup> of a total issue of

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<sup>66</sup> *Chronicle*, Jan 21, 1911, p. 189, vol. LXXXXII.

<sup>67</sup> Of course, this concern about classification applies not just to the very largest issues but also to much smaller ones. Thus, St. Louis & San Francisco RR, bonds were offered by Speyer & Co., New York, in a highly successful underwriting conducted on an international scale. No members of the money trust were mentioned in the *Chronicle* entry. Instead it noted that "Subscriptions will also be received (a) in London by Speyer Brothers (b) in Frankfurt-on-Main, by Lazard Speyer-Ellissen; (c) in Berlin by Deutsche Bank, (d) in Amsterdam by Teixeira de Mattos Brothers" (*Chronicle*, Jan 14, 1911, vol. LXXXXII, p. 119-120).

<sup>68</sup> *Chronicle*, vol. LXXXXII, May 20, 1911, p. 1375; *ibid.*, May 27, 1911, p. 1436.

<sup>69</sup> *Chronicle*, vol. LXXXXII, April 22, 1911, p. 1109. Essentially a battle between the Vanderbilt (allied with Kuhn, Loeb) and Gould (with Speyer) interests for control of the Missouri Pacific. Cornelius Vanderbilt announced his resignation as a director at the same time as Warburg.

<sup>70</sup> Kidder, Peabody bought \$1.5m of the issue (Pujo Investigation, p. 2059). The "Pujo table" also lists Illinois Trust as purchasing some of the issue (Pujo Report, P. 97) but that financial house did not include the Missouri Pacific issue among the list of issues in which it took participations (*ibid.*, p. 2101). Strictly speaking, therefore, the issue should not have been included in the table since it does not seem to have been a joint transaction involving two or more members of the money trust.

<sup>71</sup> Similar questions can also be raised about the Pujo report's classification as a money trust issue of the bond issue of \$10 million on behalf of Chicago Railways underwritten by Speyer & Co (*Chronicle*, p. 260).

<sup>72</sup> Pujo Investigation, p. 2057.

250,000,000 francs qualified the entire issue as a money trust transaction.<sup>73</sup> Taking such a close look at all 22 of the giant railroad issues classified as money trust by the Pujo report, we find that there is ambiguity with respect to as many as 10 of them.

Turning to sectors other than railroads, evidence of the money trust's dominance is even less compelling. In 1911, there were only two issues by utilities of \$10 million or more and neither of them was designated a money trust issue (see Table 4). In both cases, Kidder, Peabody & Co. was a lead underwriter but none of the other members of the money trust was involved, either as underwriter or purchaser. For industrial issues too, the money trust's influence was much more limited than for railroads. Of the seven issues of \$10 million or more in which some financial house was involved, money trust firms were jointly involved in only two instances and, in one of these, the money trust classification is ambiguous (Table 4).

Even for the very largest issues, therefore, evidence to support the Pujo report's claim of the dominance of a money trust is less compelling than we would expect given the confidence with which it was asserted. Even for the underwriting and distribution of giant issues, it seems to have faced some competition, an impression that is reinforced when we look critically at the classification of specific transactions in the Pujo report. There is, moreover, a further question that can be raised about the Pujo report's claims which is to what extent we can be confident that the members of the money trust really acted in concert. Given the diversity of Kuhn, Loeb's financial connections, for example, it seems reasonable to ask if it was sufficiently integrated into a money trust to systematically act in accordance with the interests of its other members? Similar questions can be raised for other houses like Lee, Higginson,<sup>74</sup> National City Bank<sup>75</sup> and Guaranty Trust Co. since they sometimes acted alone or with other houses that were not members of the money trust.<sup>76</sup>

When we turn to corporate issues of less than \$10 million, the money trust's influence was much more limited. Focussing on industrial issues in the range between \$1 and \$10 million, it is possible to identify a total of 120 issues for 1911 based on the *Journal of Commerce* lists. Only nine of these issues were designated in the Pujo report as money trust issues. However, even for this small minority of industrial issues, the Pujo classification was ambiguous in 8 out of 9 cases!

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<sup>73</sup> *Chronicle*, vol. LXXXII, March 4, 1911, p. 593.

<sup>74</sup> Lee, Higginson on its own 22m note issue for NY, NH & Hartford.

<sup>75</sup> Chicago Railways, bonds offered, \$15m, sale to Harris, Forbes & Co. (successors of N. W. Harris & Co.) and the National City Bank, both of New York (*Chronicle*, vol. LXXXII, Jan 28, 1911, p. 260).

<sup>76</sup> Data compiled by Pak on the differences across these banks in the extent of the participation they offered J. P. Morgan & Co. in their syndicates for the period from 1894-1914 can be seen as hinting at their varying dependence on a Morgan-dominated money trust. For example, Kuhn, Loeb offered Morgan only 4 per cent participation in the value of its syndicates compared with 21 per cent for First National Bank. Ideally, however, we would have such data for all of the money trust banks and for the more limited time period that was the focus of the Pujo investigation (Pak, Table 9, p. 100).

The example of United States Smelting is illustrative of the type of ambiguity involved. The lead underwriters were Lee, Higginson & Co., a member of the money trust, and its London branch, Higginson & Co. The reason the issue was classified as a money trust transaction is that the Illinois Trust & Savings Bank (ITSB) and the First Trust & Savings Bank of Chicago (FTSB) both appeared on the list of the seventeen other financial institutions involved in the underwriting and distribution of the \$4m bond issue. However, the ITSB took up only \$50,000<sup>77</sup>, a mere 1.25 per cent of the offering, and no information was reported in the Pujo investigation on FTSB's participation. Certainly the participation by ITSB seems too trivial to imply that it should be treated as a partner with Lee, Higginson on this issue.<sup>78</sup>

With respect to the 111 industrial issues that were not designated as money trust issues, what is striking is the diversity of the underwriters involved (see Table 5). The one member of the money trust that was prominent in these transactions is Lee, Higginson but it tended to act without the assistance of other members of the money trust. Moreover, there were other financial houses, notably William Salomon & Co. but also Hallgarten & Co., Harvey Fisk & Co, and White, Weld & Co., which were also significant players.<sup>79</sup> Still, even if we take the five leading players together, there is little evidence of any substantial concentration of control.

Table 5 Underwriters for Industrial Securities Issues of between \$1m and \$10m in 1911

Overall, it seems fair to conclude that the money trust did not dominate the underwriting and distribution of corporate securities to the extent that the Pujo report claimed. Its influence was greatest among giant railroad issues but even there it was not as overwhelming as the Pujo report claimed. Moreover, the structural changes underway in the primary market – the shift from railroads to industrials and from larger to smaller issues -- meant that it was shifting in ways that tended to diminish the money trust's dominance. In particular, the underwriting and distribution of industrial issues was conducted by a large and heterogeneous population of bankers and brokers. For these reasons, contemporary scholars, who assume the existence of a money trust, overstate the dominance of Morgan's men in the U.S. primary market for corporate securities.

### **3. THE USE AND ABUSE OF OTHER PEOPLE'S MONEY**

Notwithstanding the attention that the Pujo investigation devoted to the money trust's control of the underwriting and distribution of corporate securities, it was not what captured the imagination of the U.S. public. The phrase in the Pujo

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<sup>77</sup> Pujo Investigation, p. 2101.

<sup>78</sup> I was unable to find any information on FTSB's participations in money trust issues, either the United States Smelting issue or any other issue, in the evidence compiled by the Pujo investigation.

<sup>79</sup> As Carosso's work would lead us to expect, Goldman, Sachs and Lehman Brothers were represented too but, being involved in only one transaction (a \$4.3m bond issue on behalf of Knickerbocker Ice), they were not as prominent as the other financial houses listed in Table 6.



report that resonated more than any other in the public sphere was “other people’s money”. It was the idea, as Louis Brandeis later wrote, that “the fetters which bind the people are forged from the people’s own gold”<sup>80</sup> which proved truly unpalatable to many Americans.

To show how such fetters had been forged, the Pujo report emphasised the growing concentration of New York financial institutions since the beginning of the century.<sup>81</sup> Then it showed that the most powerful national banks and trust companies that had emerged from this process had, over the last five years, come under the influence of George Baker, James Stillman and J. P. Morgan.<sup>82</sup> As Table 6 shows, the inventory of banks and trusts that the Pujo report described as controlled by this powerful trio, and the inner group of the money trust they represented, was a breathtaking one. It included the country’s five largest national banks<sup>83</sup> and its three largest trust companies. Altogether, as Table 6 shows, the inner group of the money trust had known resources at its disposal of almost \$1.6 billion.<sup>84</sup>

#### Table 6 Estimates of the Control of Other People’s Money by the Money Trust

The Pujo report claimed that the inner group was using its command of these financial resources to support its dominance of the primary market for U.S. securities. In part, it achieved this objective by using its influence to support investment demand for the corporate stocks and bonds it underwrote and distributed. Since banks and trust companies were among the largest institutional investors in U.S. corporate securities at the time, the money trust’s control of these institutions, as well as of leading life insurance companies, allowed the money trust “to control the disposition of new security issues through control of the main outlets therefor [sic]”.<sup>85</sup>

This particular point was hardly original to the Pujo report since, in 1906, the Armstrong investigation had blown the whistle on the manipulation of the investment policies of captive financial institutions to support banks’ underwriting and distribution activities. Instead, where the Pujo investigation distinguished itself, was in its emphasis on the importance of the money trust’s

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<sup>80</sup> Louis Brandeis, *Other People’s Money*, 1914, p. 12-13.

<sup>81</sup> “As appears from the statistics compiled by accountants for the committee, in 1911, of the total resources of the banks and trust companies in New York City, the 20 largest held 42.97 per cent; in 1906, the 20 largest held 38.24 per cent of the total; in 1901, 34.97 per cent” (p. 55). Carosso suggests that the Pujo report claimed that there was a growing concentration of financial resources in New York, which was not true, but the report shows a clear awareness of the distinction and, indeed, cites the statistics that Carosso himself uses to show a decrease in New York’s relative share of U.S. banking resources.

<sup>82</sup> If the resources of the Equitable Life Assurance Society, which was controlled by J. P. Morgan were added, the total came to \$2.1 billion. P. 87.

<sup>83</sup> p. 359

<sup>84</sup> In particular, it highlighted the fact that George Baker controlled First National Bank, which also controlled Chase. James Stillman controlled National City Bank which exercised considerable influence over Hanover Bank as well as Farmer’s Loan & Trust Company. J. P. Morgan & Co. controlled Guaranty Trust and Bankers Trust Company. And Baker, Stillman and Morgan held shares in the National Bank of Commerce which, taken together, amounted to a large minority stake.

<sup>85</sup> P. 134.

influence in New York's vast call loan market to gain control over the primary market for corporate securities.

Call loans were used to finance temporary or speculative demand for corporate securities on all of the world's leading securities markets but they were especially important in the United States given structural peculiarities of its financial system. The NYSE's system of daily settlements, in contrast to the European practice of fortnightly settlements, created a large demand for loans collateralised by securities. That there was a supply of loans ready to meet that demand reflected the concentration of U.S. banking reserves in New York and the lack of liquid and profitable alternatives to the call loan market for placing them. The result was a highly developed call loan market which created a direct and significant connection between the country's securities markets and its deposit-taking institutions.<sup>86</sup>

By the time of the Pujo investigation, the tight link that the call loan market created between the U.S. banking system and its securities markets was the topic of considerable discussion. The main concern was with the implications of this link for financial stability given the central role the call market had played in the panic of 1907.<sup>87</sup> The Pujo report's preoccupations were somewhat different, being focussed primarily on the dominance of a small number of banks and trust companies, associated with the money trust, as lenders on call in New York. It argued that "It is in their power by cooperation primarily to fix the call rate from day to day and to determine what constitutes satisfactory collateral".<sup>88</sup> Specifically, the report accused these powerful lenders of using their influence in lending money on stock exchange collateral for the purpose of boosting speculative demand for the securities they issued and distributed.<sup>89</sup>

Stating such claims was one thing; proving them was quite another. There was hardly any evidence available on the scale or operation of the New York call loan market. Thus, in his report on the subject for the National Monetary Commission, Jacob Hollander pointed out that his inquiry was "impeded by the paucity of statistical data and by the intimate or informal quality of many of the operations involved".<sup>90</sup> Undaunted by the void he confronted, Samuel Untermyer displayed considerable resourcefulness in seeking to fill it but he was stymied at every turn in his efforts to do so.

He had a detailed questionnaire on the subject sent out to all of the country's national banks, state banks and trust companies – approximately 30,000 financial institutions in all – but many of them refused to complete it. In response

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<sup>86</sup> Margaret Myers, 1931, *The New York Money Market: Origins and Development*, New York, p. 131.

<sup>87</sup> Even before the panic, Paul Warburg had emphasised the importance of weakening this link in his proposals for banking reform. Such ideas gained much more influence in its aftermath and their influence was already clear in the Aldrich Plan that emerged from the work of the National Monetary Commission. Their influence is also clear in the work of Pujo's sister sub-committee and in the eventual results of its efforts which became the Federal Reserve Act of 1913.

<sup>88</sup> Pujo Report, p. 139.

<sup>89</sup> Pujo Report, p. 139.

<sup>90</sup> Jacob Hollander, 1911, "Bank Loans and Stock Exchange Speculation", United States Senate, Document No. 589, 61<sup>st</sup> Congress, 2d session, National Monetary Commission, Washington.

Arsène Pujo filed a bill to require these institutions to release the information but, having passed a House vote, the bill became bogged down in the Senate in July 1912. Untermeyer then wrote to the U.S. Comptroller of the Currency in September 1912 to seek his help but the comptroller saw fit to refer the matter to President Taft who did not give his decision until December 17, 1912. When it came, the president acknowledged his right to request that the comptroller provide information to the committee but he stated an unwillingness to impose too heavy an investigative burden on him. The committee wrote to the comptroller on December 26, 1912, giving a clear sense of the evidence on the call loan market that it sought:

The data we require at the moment relate to the loans made by the principal national banks in the reserve cities and involves a disclosure to the committee of the names of the borrowers and the securities for such loans, from 1905 to the present time. The committee is not however interested in any of such loans except those for \$1,000,000 and over. The information is desired for the specific purpose of enabling the committee to examine witnesses in connection with such loans for the purpose of ascertaining whether, and, if so, in what way and to what extent, these banks are used by the great financial interests.<sup>91</sup>

These data were never furnished and the Pujo report deemed their absence to have “seriously embarrassed” the investigation into the way other people’s money was used to advance the interests of the money trust.<sup>92</sup>

In an effort to work around the problem, the Pujo committee appealed directly to more than thirty of New York’s leading national banks and trust companies, asking them to supply some data on their collateral lending. Untermeyer asked J. B. Niven, the accountant who compiled these data<sup>93</sup> to read them out during his testimony, encouraging him, through his questions, to focus on the largest institutions. The fruits of this exercise are shown in Table 7 which lists the ten financial institutions with the largest collateral loans outstanding at the end of 1912. Strikingly, most of them were financial institutions designated by the Pujo report as being controlled by the money trust.

#### Table 7 Correspondents, Correspondent Deposits and Collateral Loans of Leading Financial Institutions in New York, 1911

These data clearly suggest that the banks deemed to constitute a money trust commanded a great deal of influence on the call loan market as lenders in their own right and on behalf of interior banks. What proved impossible for the Pujo committee to get, however, were “detailed statements of the actual collateral in loans” at various dates since “that was found to be absolutely impracticable owing to the way in which the books of practically every institution are kept”.<sup>94</sup> That meant that Pujo’s claim that the money trust sought to use its influence in the call loan market to support the markets for securities it underwrote and distributed lacked any evidence to support it. Moreover, a careful reading of the

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<sup>91</sup> Pujo Report, p. 16.

<sup>92</sup> Pujo Report, pp. 16-17.

<sup>93</sup> J. B. Niven of Touche, Niven & Co., New York was a certified public accountant. His firm was affiliated with the London-based chartered accountancy, Messrs. Touche & Co. of London.

<sup>94</sup> Pujo Investigation, p. 955.

Pujo evidence compiled on the leading lenders on call raises some doubts about the claim.

Data generated by the Pujo investigation for the National City Bank, the largest lender in the New York call loan market, are shown in Table 8. They reveal a clear reduction in the bank's commitment to the call loan market between 1908 and 1912. During this period, there was a sharp fall in call loans as a share of the bank's total deposits and resources and a 35 per cent decline in the dollar amount of City's call loans. Clearly the trend is hard to reconcile with the Pujo report's claims that the money trust, of which City was considered one of the leading members, was seeking to control the nation's securities markets through its influence in the call loan market.

#### Table 8 National City Bank's Position as a Lender in the Call Loan Market

The second largest lender on call in 1908, the National Bank of Commerce, also reduced its collateral lending. In fact, the contraction of its call loans on stock exchange collateral during the period was, at 53 per cent, even sharper than for City.<sup>95</sup> For the other New York banks that were major lenders on the call loan market – the Chase, the First and the Park – their own lending on collateral was flat or declining over the period. The only impetus for any increase in their call loans, notably in the case of Chase, came from lending on behalf of their out-of-town correspondents. Yet, even taking into account the increase in loans on behalf of correspondents, we observe a decrease of 16 per cent in the funds committed by the leading New York banks to the call loan market between 1908 and 1912.<sup>96</sup> Data from the U.S. Comptroller of the Currency shows the downward trend to be a more general one for New York's national banks.<sup>97</sup>

Besides the New York national banks, the other major lenders in the call loan market were the city's trust companies. Historical trends in the call loans of individual trust companies are difficult to discern for this period from the Pujo evidence given the extent of consolidation activity. However, an understanding of the general trend for New York's trust companies can be gleaned from an analysis of their balance sheets compiled by the banking superintendent of state of New York. As Figure 1 shows, these data show a striking decrease in the share of their aggregate resources that trust companies committed to the call loan market. Whereas 60 per cent or more of their deposits had been loaned out on collateral prior to the panic, that share had fallen to 40 per cent by the end of 1913.<sup>98</sup> This change in behaviour, coupled with the flattening out of trust

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<sup>95</sup>Pujo Investigation, p. 1208.

<sup>96</sup>Pujo Investigation, p. 963. Untermeyer drew attention to an increase in total lending on stock exchange collateral between 1908 and 1912 but the data are misleading.

<sup>97</sup>Their demand and time loans secured by stocks, bonds and other personal securities, which can be taken as a proxy for their call loans (Myers, p. 272) decreased from \$619.9 million to \$550.3 million between 1908 and 1912 (Annual Report of the U.S. Comptroller of the Currency, various years).

<sup>98</sup>“Condition of the Trust Companies of New York State”, *Chronicle*, vol. XCVI, Jan, 1913, p. 19-20; “The Trust Companies in New York & Elsewhere”, *Chronicle*, v. XCVIII, 560-561, Feb 21, 1914 (the *Chronicle's* data were compiled from the Annual Report of the Superintendent of the Bank Department of the State of New York, various years).

companies' deposits, resulted in a sharp decline in the amount of funds they made available to support demand on the U.S. securities markets.

The fact that there was such a noticeable withdrawal from the New York call loan market by some of its most important lenders raises serious doubts about the Pujo report's claims. It suggests that, instead of pursuing a strategy to use the call loan market to tighten their control over the securities markets, leading financial institutions were trying to reduce their dependence on it. And, in fact, in the wake of the panic of 1907, some of them made no secret of the fact that they considered the dependence of U.S. deposit-taking institutions on the call loan market to be a major problem.

In the panic of 1907, the implosion of the call loan market and the disastrous consequences it might have entailed for the U.S. financial system were narrowly averted by the injection of emergency funding.<sup>99</sup> Perhaps nobody was more aware of what a narrow miss it had been than Frank Vanderlip since the National City Bank, as the largest lender on the call loan market, had been at the eye of the 1907 storm. For Vanderlip, the U.S. banking system's dependence on collateral loans was a cage, something he made crystal clear in his testimony on banking and monetary reform in October 1913:

Senator Reed: Do you regard that system of loaning large amounts of money upon that class of security (stock exchange collateral) as an element of safety or danger in the banking system?

Mr. Vanderlip: An element of danger and unsound banking, but the soundest banking we can do under our present system.

Senator Reed: If it is unsound, it ought to be stopped.

Mr. Vanderlip: It ought to be, and no one is more anxious than the great banks of New York to aid in that situation.

Senator Reed: Why do they not voluntarily stop it?

Mr. Vanderlip: Because they have nothing to take its place. We have got to have a large amount of loans that we can certainly get when we want the money.<sup>100</sup>

Encouraged to be more explicit about the dangers that the current system created, Vanderlip spoke of the potential of the call loan market to create financial panic or, as Senator Reed put it, to become "a center of disturbance which may develop into a financial cyclone". When asked to what extent that factor contributed to the panic of 1907, Vanderlip said "It was undoubtedly a considerable factor".<sup>101</sup>

Vanderlip considered the high dependence of U.S., especially New York, banks on the call loan market as a structural problem of the U.S. banking system. Thus, he became an ardent advocate of banking reform in the years following the panic and he considered that "one of the great things for legislation to accomplish is to make it unnecessary for us to have to go into the call-loan market".<sup>102</sup>

<sup>99</sup> The motivation for the Morgan-Stillman-Baker trio to participate in this bailout is easy to understand and their identity as a trio was rooted in that collective experience. Pak, p. 41.

<sup>100</sup> U.S. Congress, 62d Cong., 1st Sess, Hearings Before the Committee on Banking and Currency, United States Senate, on H.R. 7837 (S. 2639), 3 vols., p. 1946.

<sup>101</sup> *Ibid.*, p. 1947.

<sup>102</sup> *Ibid.*, p. 1945.

If we have a central bank, at which we can rediscount commercial paper, making commercial paper a liquid asset, then we will have no necessity for devoting a large amount of our funds to call loans on stock exchange collateral, and can divert the funds now used for that purpose to commercial loans.<sup>103</sup>

If Frank Vanderlip understood banking reform to be vital for allowing the U.S. banking system to escape from the cage of its dependence on the call loan market, he was not prepared to sit around and wait for it to happen. As we have seen, even in the absence of a discount market, National City Bank had already begun to reduce its commitments to the call loan market by the time of the Pujo investigation. Frank Vanderlip could hardly have been any closer to the heart of the money trust, as the Pujo report construed it, but his behaviour in political and business terms is difficult to reconcile with the claims of the Pujo report. Moreover, Vanderlip was not alone among powerful bankers in his views about the perils of the call loan market.

Paul Warburg of Kuhn, Loeb was an even more vocal critic of the U.S. banking system's tight link to the securities markets. He was an untiring advocate of reform of the U.S. banking system to reduce the amounts of money it placed in call loans.<sup>104</sup> In testimony to Pujo's sister sub-committee in early 1913, Warburg repeated the claims he had made so often that the "evils of our present system" could be seen in "the many millions that now flood and overflow Wall Street".<sup>105</sup> Moreover, the chairman of the board of Chase National Bank, A. Barton Hepburn, who preceded Warburg in giving testimony, pointed to the heavy dependence on call loans as one of the most serious defects of the U.S. banking system.<sup>106</sup>

These prominent bankers took the view that J. P. Morgan & Co. expressed in a letter to the Pujo committee that "such ills – and they are neither few nor trifling – as are existent in this country's financial affairs are the outcome of a clumsy and outworn banking system rather than of the schemes of men".<sup>107</sup> The solution to these "ills", as the bankers saw it, was banking reform. The Pujo report took a different view of the matter in its commitment to the claim that it was the "schemes of men" that were at fault. It contended that it was within the power of the money trust "by cooperation primarily to fix the call rate from day to day and to determine what constitutes satisfactory collateral" even if it acknowledged that it had little proof of that power. However, it noted that "the power and the opportunity are there and could be exercised without leaving proof or trace

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<sup>103</sup> Ibid., p. 1941.

<sup>104</sup> See, for example, the report prepared for the National Monetary Commission: Jacob Hollander. 1911, *Bank Loans and Stock Exchange Speculation*, National Monetary Commission, especially p. 18, pp. 24-27.

<sup>105</sup> Hearings Before the Subcommittee of the Committee on Banking and Currency, United States House of Representatives, charged with investigating plans of banking and currency reform and reporting constructive legislation thereon, 1913, p. 62, p. 63.

<sup>106</sup> Ibid., pp. 6-7.

<sup>107</sup> Letter from Messrs. J. P. Morgan & Co., in response to the invitation of the Sub-Committee (Hon. A. P. Pujo, Chairman) of the Committee on Banking and Currency of the House of Representatives, February 25, 1913. The letter was a response to the committee's refusal to admit a statement by Henry Davison to this effect at the end of his testimony before the Pujo investigation (Pujo investigation, p. 1987).

behind" and concluded, on a philosophical note, that "[w]henver the incentive is at hand the proof is ready".<sup>108</sup>

#### 4. The Impact of the Money Trust's Control

The final preoccupation of the Pujo investigation was with the impact of the money trust's control on the U.S. economy beyond the boundaries of the financial system. The committee identified the directorships held by bankers in the country's largest corporations as the key instrument of the money trust's influence on the country's railroad, industrial and utility sectors. It commissioned a pioneering statistical study that showed that the money trust held an extremely large number of seats on the boards of directors of the country's most prominent transportation, producing and trading and utility corporations.<sup>109</sup>

Substantive discussion of the meaning of these results was confined to only a few pages of testimony.<sup>110</sup> It seemed to be taken for granted that the number of board seats held by Morgan's men was proof enough of their overwhelming dominance of the country's leading corporations. That assumption is shared by scholars who have been inspired by the Pujo report, both those who have castigated the money trust like Louis Brandeis, and those who have celebrated it in the style of Bradford De Long. Yet, once again we find that the statistics that the Pujo investigation generated are substantially incomplete as a basis for assessing the impact of the money trust.

First, in characterising the practice of putting banks on boards as a defining feature of the money trust's *modus operandi*, the Pujo investigation gave the impression that it was distinctive to "Morgan's men". In fact, as J. P. Morgan & Co. observed in an open letter to the Pujo committee, bank representation on boards "has been in vogue abroad, ever since the creation of limited companies". It was adopted in the United States for railroad corporations from the mid-19<sup>th</sup> century<sup>111</sup> as bankers involved in the underwriting and distribution of their securities joined their boards. Already, by 1873, substantial numbers of bankers were represented on the boards of large and small U.S. railroad enterprises.<sup>112</sup> The practice extended further into the railroad sector in the 1870s and 1880s and, especially, as a result of the railroad reorganisations of the 1890s.

Bankers took their place on the boards of U.S. industrial companies from the late 1880s and early 1890s, following much the same logic as in the railroad sector. The securities issues associated with the turn-of-the century merger movement

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<sup>108</sup> Pujo Report, p. 139.

<sup>109</sup> It identified 341 directorships in 112 corporations having aggregate resources or capitalisation of more than \$22 billion. If exclude the financial corporations, then 105 in 32 transportation systems (\$11.8bn), 63 in 25 producing and trading (3.3 bn) and 25 in 12 (2.2bn).

<sup>110</sup> The data on directorships, the manner of its compilation and a summary of the highlights was presented to the Pujo committee by Philip J. Scudder, the statistician who compiled them, pp. 979-1003.

<sup>111</sup> See Chandler, Henry Varnum Poor.

<sup>112</sup> Dolores Greenberg, 1980, "Railroad-Banker Affiliations, 1873 », *Financiers and Railroads , 1869-1889 : A Study of Morton, Bliss & Company*, Newark, pp. 219-221.

brought larger numbers of bankers onto the boards of industrial corporations. By the time of the Pujo investigation, therefore, the practice had become widespread among the U.S. industrials whose securities traded on the nation's securities markets.

When Harvey, Fisk & Company underwrote a \$4 million bond issue for the General Baking Company in 1911, Pliny Fisk, one of the bank's principals, was represented on the company's board. Similarly, Charles Hayden had seats on the boards of both Ray Consolidated Copper and Chino Copper, both companies for which his house, Hayden, Stone, had conducted securities issues in the early teens.<sup>113</sup> The board of May Department Stores, whose stock issue of 1912 was underwritten by Goldman, Sachs and Lehman Brothers, counted Philip Lehman and Henry Goldman among its members and both men sat on the boards of Underwood Typewriter, Studebaker, Sears, Roebuck and F. W. Woolworth.

None of these examples involved representatives of J.P. Morgan & Co. or, indeed, any of the money trust banks. Thus, they suggest that there was nothing distinctive in their practice of taking a seat on the boards of the companies whose securities it issued. As Dolores Greenberg suggests in *Financiers and Railroads*, claims of the distinctiveness of Morgan's behaviour say as much about the neglect of other bankers' activities as anything else.<sup>114</sup>

It is true that the money trust banks could boast some extreme cases of board representation, notably George Perkins, but most of its representatives were more restrained. As Table 9 shows, that put them in the same league as other financiers who were not designated as members of the money trust. In short, the practice of financiers' taking seats on the boards of U.S. railroad and industrial enterprises was widespread to the point of being banal in the United States.

#### Table 9 Prominent Financiers on Corporate Boards

Second, in discussing the representation of money trust bankers on corporate boards, the Pujo report assumed they dominated them. However, even the limited testimony bankers gave on this issue reveal that assumption to be contestable. J. P. Morgan denied that any one director, even himself, could have his way against the views of the other directors.<sup>115</sup> And he pointed out that, even if you put three men on a board, they would be 3 out of 25 or 20 or 10 and "[t]hat there is no question of control unless you have got a majority of the directors".<sup>116</sup> Jacob Schiff, less self-interested since he served on so few boards,<sup>117</sup> echoed Morgan's observations in the following exchange with Untermyer:

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<sup>113</sup> A stock and bond issue in 1910 and a further stock issue in 1912 for Ray Consolidated Copper and a bond issue for Chino Copper in 1911.

<sup>114</sup> Greenberg, fn 1, p. 247.

<sup>115</sup> P. 1049.

<sup>116</sup> P. 1049. Morgan was speaking specifically of the boards of banks here but his comments seem to have a more general relevance.

<sup>117</sup> Representatives of Kuhn, Loeb resigned from all of their directorships of railroad corporations in 1906 (see below). Although they subsequently accumulated new directorships, they were relatively few in number.



Mr. Schiff. I do not think that any interest should have a dominant representation in too many institutions.

Mr. Untermeyer. I would like to know where you are going to draw the line.

Mr. Schiff. Dominant. If there are 10 directors and 2 of these directors are directors in three or four institutions, that is not dominant, but when there [sic] four or five it is dominant.<sup>118</sup>

Untermeyer challenged him on the grounds that some directors might be more dominant than others. Schiff agreed, up to a point, wryly observing that if Untermeyer was on the board he would probably be more dominant than the other directors. Still, the banker suggested there were limits to that logic since the self-respecting men on the board "will not permit things to be done by a few directors or many directors, no matter what their control or interest is, if it is not right to be done".<sup>119</sup>

To the extent that the proportion of board seats that financiers occupied is a useful measure of their influence, the Pujo investigation did not seek to measure it. Statistics were presented on the number of board seats held by leading financial institutions in railroad, industrial and utility enterprises<sup>120</sup> but no attempt was made to compare them with the total number of directorships in these corporations. If we do that, as Table 10 shows, we observe major differences across enterprises in the relative importance of the money trust's board members.

#### Table 10 Money Trust Representation on Corporate Boards

For all of the companies studied in the Pujo investigation, the money trust bankers held an average of 22 per cent (and a median of 19 per cent) of board seats. There were three companies in which close to, or more than, half of their directors were powerful bankers. A further fifteen or so had banker representation of between 25 and 50 per cent of their board seats. For the majority of companies, however, bankers accounted for fewer than 25 per cent of their board members. These data were never produced in the course of the Pujo investigation but the patterns they reveal were familiar to informed observers and Untermeyer's questioning certainly suggests that he was aware of them.

Thus, on the one occasion when he asked detailed questions about bankers' presence on boards, Untermeyer focussed on the companies in which they occupied the largest share of directorships. His questions were directed at George Baker of the First National Bank of New York and referred to his directorships in companies such as the Erie, the Reading, the Lehigh Valley Railroad and the Delaware, Lackawanna & Western, which stood out for the importance of banker representation on their boards.<sup>121</sup> He succeeded in

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<sup>118</sup> P. 1685.

<sup>119</sup> P. 1685.

<sup>120</sup> See Exhibit 134a and b.

<sup>121</sup> Pp. 1475-1477; money trust bankers accounted for 31 per cent, 38 per cent, 45 per cent and 64 per cent respectively of their directorships.

highlighting the dominance of bankers on these boards<sup>122</sup> but, as we have seen, these railroads were not necessarily representative of the U.S. corporate sector.

Yet, even if Untermeyer had presented a more representative view of the relative importance of bankers on different corporate boards, it still would not have constituted evidence of bankers' influence there. Measures such as the proportion of board seats filled by bankers, as well as more sophisticated measures used in recent scholarly analyses of interlocking directorates, are heuristics for estimating banker control. To really know if bankers dominated boards, we would need to know what they did on them. Certainly it is plausible, as Untermeyer suggested, that bankers were active, even dominant, board members. Yet, it was just as plausible, as Jacob Schiff of Kuhn, Loeb had contended a few years earlier, that the corporate director was of "very little practical use" since he had "practically no power":

He is considered in many instances, and I may say in most instances, as a negligible quantity by the executive officers of the society. He is asked for advice when it suits the executive officers, and if under the prevailing system an executive officer wishes to do wrong or wishes to conceal anything from his Directors or to commit irregularities such as has (sic) been disclosed here, the Director is entirely powerless; he can only act in an advisory capacity and he can only judge of such things as are submitted to him.<sup>123</sup>

Schiff made this statement to the Armstrong investigation and it surely had a self-serving purpose in that context. Still, he believed sufficiently in the logic he expressed to direct the partners of Kuhn, Loeb to renounce all of their board seats in railroad corporations the following year. Had money trust bankers derived the kind of influence that the Pujo report attributed to them as corporate directors, Schiff's initiative is difficult to explain. Perhaps even more important is the fact that the Pujo investigation generated no evidence that contradicts Schiff's image of the "dummy director" since it did not explore the question of what directors, bankers or otherwise, did on corporate boards. And, for that very same reason, the Pujo report could offer no direct evidence in support of its claims that money trust bankers' used their board representation to throttle competition. Instead, the plausibility of this claim relies on indirect evidence that, as I show below, is far from convincing.

#### **4.1 The Levying of Bankers' Tribute**

The Pujo report was very clear in its contention that the money trust used its seats on corporate boards to insist on excessive commissions for its investment banking services.<sup>124</sup> Yet, the Pujo investigation produced almost no evidence of the "tribute" that the money trust levied on its clients. That was not for want of trying since Untermeyer pushed hard to get bankers and brokers to reveal what they charged for their services. However, the obstacles he encountered are clearly revealed in his exchange with Frederick Lewisohn of brokerage house, Lewisohn & Co.

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<sup>122</sup> "Many Baker Directorships", *New York Times*, January 11, 1913, p. 2.

<sup>123</sup> "I Did My Duty Schiff Declares", *New York Times*, September 30, 1905, p. 1.

<sup>124</sup> Pujo Report, p. 133.

Noting that Lewisohn had hesitated to disclose the profits earned by his firm and other underwriters in the 1912 offering of California Petroleum Company stock, Untermyer wondered if he considered that information to be “private business”. Lewisohn said he did. Untermyer then asked whether, in the case of a stock listed on the exchange, Lewisohn thought the public had a right to know how much had been issued for profits and commissions of bankers and brokers. Lewisohn said he saw no reason why not. Indeed, when Untermyer pushed him to go further, asking whether he thought such disclosure might be “a wholesome thing to require in this country”, Lewisohn agreed. He even considered that Untermyer was right in thinking that such disclosure “would have a tendency to keep down exorbitant commissions”.

All that said, as Lewisohn noted, “it has never been done before in this country”<sup>125</sup>. Untermyer agreed and elaborated on the point: “this is the only civilized country on the face of the earth in which a stock can be listed on an open exchange, for distribution all over the country, without disclosing openly and publicly all the profits and commissions that the bankers and brokers and intermediaries in the transaction received”. Lewisohn said he was aware that England had rules for such disclosure and he saw no reason why such a law could not be passed in the United States if the people wanted it. However, as long as disclosure of commissions was not required at U.S. law, he considered that commissions would remain the private business of bankers and brokers.<sup>126</sup>

Untermyer eventually extracted the information he sought on the commission charged in the California Petroleum underwriting when William Henry of William Salomon & Co. told him it was 9.8 per cent.<sup>127</sup> Untermyer expressed surprise at such a high commission, asking whether the members of the underwriting syndicate had been required to put up any money to earn it. Henry said that all of the stock had been sold so quickly that there had been no need for them to commit any money but he pointed out that “they did not know whether they had to make the commitment or not. They did not know we were going to sell the stock so quickly”.<sup>128</sup> Untermyer was not convinced by that logic, emphasizing that “[t]hey did not put up a cent”.<sup>129</sup>

Other than the California Petroleum example, however, the Pujo investigation generated little evidence on underwriting commissions. In the end, therefore, although the signatories of the majority report suspected that the money trust could exact its own terms, they had to admit that: “Your committee has no evidence that this power is being used oppressively and no means of ascertaining the facts as long as their profits are undisclosed”.<sup>130</sup> Thus the report had to content itself with the assertion of the “possible exaction of excessive profits through absence of competition”.<sup>131</sup>

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<sup>125</sup> Pujo Investigation, P. 938.

<sup>126</sup> Ibid., pp. 937-8.

<sup>127</sup> Ibid., p. 1278.

<sup>128</sup> Ibid., p.1278.

<sup>129</sup> Ibid., p. 1279.

<sup>130</sup> Pujo Report, p. 133.

<sup>131</sup> Ibid., p. 133. Emphasis added.

The lack of evidence adduced on this point in the Pujo investigation, and the obstacles to acquiring it, beg the question of whether there is any basis for more recent claims of the excessive profits of the money trust.<sup>132</sup> The question can be fairly posed of Bradford De Long since the central motivation for his paper is to explain why “[t]he investment banking oligarchs profited immensely from their middleman role”. He suggests that “[t]ypical fees on mergers and restructurings ranged between 4 and 10 percent of the capital value of the businesses involved” but this range is based on only two examples: the U.S. Steel deal for the upper bound and “the very straightforward International Harvester merger for the lower bound.”<sup>133</sup> The U.S. Steel deal was clearly atypical in its vast size and it occurred when industrial securities were rather new to the market. Evidently, it would be more useful to have a larger sample of deals that showed what U.S. bankers and brokers were charging in the early teens when the money trust was supposed to be at the height of its influence.

Unfortunately, precisely because of the absence of any obligation on U.S. bankers and brokers to disclose them, these data are not available. It is for this reason that there is hardly any mention of commission rates in Carosso’s history of investment banking or in other likely places.<sup>134</sup> Of course, it remains possible, just as the Pujo report claimed and Louis Brandeis alleged in *Other People’s Money*, that bankers and brokers were able to exact “monster commissions” for underwriting corporate issues in the United States prior to World War 1. Yet, if that was the case, these commissions may have been available to William Salomon and Hallgarten & Co. and Lewisohn & Co. just as much as to members of the money trust. To the extent that excessive profits were being made, therefore, it was not necessarily the power of the money trust that explains them.

#### **4.2 Starving Potential Competitors of Credit**

The second claim that the Pujo report made about the impact of the money trust was that its representatives, as directors of railroad, industrial and utility corporations, were motivated to stifle their potential competitors. No direct evidence for this claim was presented and, in the limited discussion that took place of the matter between Untermeyer and J. P. Morgan, the banker stoutly denied that Untermeyer’s logic operated in practice.<sup>135</sup> If we look beyond the evidence presented in the investigation, to the companies that raised funds on the U.S. securities markets around the time of the investigation, the claim seems dubious.

Taking steel as a particularly good example, given the inner circle’s close association with United States Steel, it is possible to identify a substantial list of

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<sup>132</sup> Such claims are widespread in the existing literature. See, for example, Jeffrey Fear and Christopher Kobrak, 2010,

<sup>133</sup> *Ibid.*, p. 207.

<sup>134</sup> Charles Calomiris and Daniel Raff., *The Evolution of Market Structure, Information and Spreads in American Investment Banking*, p. 115. Referring to the 1920s, the authors note that “[v]ery little is known about underwriting costs” (p. 115) but the same can clearly be said about earlier periods and for much the same reason.

<sup>135</sup> Pujo Investigation, p. 1051.

steel companies that raised funds in the primary market during the 5-year period between 1908 and 1912. As Table 11 shows, that list included large companies such as Lackawanna Steel, Republic Iron & Steel, Jones & Laughlin and Bethlehem Steel, which were in competition with United States Steel. Clearly, their access to funding through the securities markets would seem to defy the Pujo report's claim that competitors could not get access to funds.

Table 11 List of Largest U.S. Securities Issues for Steel Companies, 1908-1912

There was, in fact, reference to some of these securities issues during the investigation and the discussions about them reinforces concern about the credibility of the Pujo report's claims. Untermyer asked George Baker if he knew "whether Messrs. Morgan & Co. have also engaged, directly or indirectly, in financing competitors in the steel business?"<sup>136</sup> The example of Bethlehem Steel, was invoked. Untermyer suggested that its financing had been handled by Harvey Fisk & Sons. Baker did not think so<sup>137</sup> but Untermyer ignored him and observed that Harvey Fisk & Sons had "a very close alliance" with Morgan & Co. Then Untermyer asked Baker to "suppose" that Bethlehem Steel had been financed by Morgan & Co. and to consider whether "it would be quite as independent, as a competitor of the United States Steel Corporation, as if it had been financed from England, by some independent company".

In fact, Bethlehem Steel was a bad example for Untermyer to choose. The company completed two major financing operations at the time. One \$5 million issue of notes in 1909 was underwritten by Hallgarten & Co., Mercantile Trust Co., and Equitable Trust Co. A bond issue for \$15 million in 1912 was underwritten by William Salomon & Co., Harvey Fisk & Co., and Hallgarten & Co., Salomon & Co. in London and Hope & Co. in Amsterdam although most of the issue was sold in New York.<sup>138</sup> It was hard to argue, therefore, that Bethlehem Steel was being shut out of the market by the money trust. Yet there was no doubting that it was an increasingly formidable competitor for U.S. Steel since the ambitions of its president, Charles Schwab, were widely known.<sup>139</sup>

Untermyer also mentioned the example of the Republic Iron and Steel Company and again suggested that Morgan's involvement raised questions about whether Republic could hope to be in "as strong and independent a position to compete as though he had not been so financed".<sup>140</sup> Yet, when the Republic Iron & Steel example was presented to Henry Davison, he denied any involvement by J. P. Morgan & Co. in the financing of the Republic, saying instead that it was handled

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<sup>136</sup> Pujo Investigation, p. 1562.

<sup>137</sup> See below for full details of Bethlehem Steel's financing.

<sup>138</sup> London listing application.

<sup>139</sup> After all, he had been the first president of U.S. Steel until his resignation in 1903, and had then proceeded to rapidly build up Bethlehem Steel from the wreckage of the United States Shipbuilding Company. Untermyer had a good sense of Schwab's capacities, since he had represented the United States Shipbuilding Company's bondholders protective committee in legal action against him. Indeed it was largely as a result of the grave accusations levelled by Untermyer against Schwab that led him to resign as president of U.S. Steel (Robert Hessen, 1975, *Steel Titan: The Life of Charles M. Schwab*, Pittsburgh Press, p. 153).

<sup>140</sup> Pujo Investigation, p. 1563.

by Blair & Co., as indeed was the case.<sup>141</sup> In implicit acknowledgement of Davison's claims, neither of Republic's fundraising operations was included in the Pujo table that summarised the money trust transactions.

Overall, there is little evidence to support the Pujo report's claim that the money trust's numerous directorships both enabled it, and motivated it, to "throttle" competition. The investigation did not establish that the practice of putting bankers on boards was distinctive to the money trust and, therefore, a vehicle for its own particular purposes. Nor did it succeed in showing that, as a general rule, bankers dominated the boards where they were represented. And, on the specific claims made about the way the money trust directors exercised control - that they extracted exorbitant rents for the services they provided and starved potential competitors by depriving them of credit -- the first one is unproven, and perhaps unverifiable, and the second seems implausible given the firms that managed to secure funds on the U.S. securities markets.

## 5. Conclusion

My analysis of the evidence for the Pujo report's principal claims, the evidence generated in the course of the investigation and that which I have compiled from other sources, leads to a clear conclusion. The report made too much ado about the extent, the foundation and the impact of the money trust's control of the credit system in the United States. The main problem, as I have shown, is that the evidence on which the Pujo report relied to substantiate its claims was extremely partial.

Yet, to focus only on what there is to criticise in the Pujo investigation is to overlook its undeniable accomplishments. As we have seen, in carrying out its investigation, the Pujo committee faced an unenviable task. There was no body of systematic evidence on which to build its understanding of the role of powerful bankers in the U.S. economy. Furthermore, the committee encountered substantial resistance, both in the public and private spheres, to its efforts to change that situation. Nevertheless, it managed to generate an enormous amount of original evidence on topics that had eluded systematic analysis until then. A testament to its value is its ongoing use until this day, sometimes as the only source of evidence, for understanding the securities markets, the call loan market and the role of financiers on corporate boards in the United States prior to World War 1.

It is the combination of shortcomings and accomplishments that characterised the Pujo investigation that explain the polarised reaction to its final report. The bankers who were the target of the investigation were infuriated by the partiality of the evidence that it generated, and Untermeyer's wiliness in using it, although criticisms of the Pujo counsel also gave expression to an ugly anti-Semitism.<sup>142</sup> Criticism also came from the Republican members of the Pujo

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<sup>141</sup> Ibid., p. 1834-5. Blair & Co. had underwritten a stock issue for \$4.6 million for Republic in 1909 and a bond issue of \$10m for the company in 1910 had been underwritten by Hallgarten & Co. and J. & W. Seligman & Co. (*Chronicle*, v. 89, p. 290: v. 90, p. 451).

<sup>142</sup> Pak, pp. 27-36, see especially Edward Tuck's comment to George F. Baker on p. 33.

committee, with one of them lamenting that: “much of the evidence in regard to the concentration and control of money and credit submitted to the subcommittee, both statistical evidence and the testimony adduced through the questioning of witnesses, has been seriously incomplete and misleading”.<sup>143</sup>

There is, as we have seen, more than a kernel of truth in this criticism but reasonable people disagreed about who was to blame for the shortcomings the Pujo investigation. It revealed the implacable opposition to transparency not only within the U.S. financial community but also in the highest echelons of public service. To many observers, that opposition meant only one thing: that there was something to hide. And, from this perspective, the partiality of the Pujo evidence was proof not of the investigation’s shortcomings but of the importance of continuing the fight that Untermeyer had begun. Indeed, that was precisely the conclusion that the Pujo report itself reached, noting that: “your committee has been unable to complete its investigations and has deemed it best to present this intermediate report, accompanied by the urgent recommendation that the incoming Congress continue the inquiry into the important subjects set forth in the resolutions”.<sup>144</sup>

If the contradictions of the Pujo investigation account for the way its findings were interpreted by contemporaries, how do we explain the way academics have used its findings in subsequent research? Indeed, for the study of topics that were the main focus of the investigation, as I noted, statistical evidence from the the Pujo investigation continues to constitute a central pillar of ongoing research. The initial scepticism about the merits of the Pujo evidence, expressed by historians like Vincent Carosso, has given way to its general use so that it is invoked today by those who defend and attack the money trust.

Yet, as I have shown, there are some serious problems with using Pujo evidence, at least as the primary source, for understanding the operation of securities markets, the functioning of the call loan market and the role of bankers on boards. I have showed how new evidence changes the image that the Pujo investigation conveyed but, on certain topics, there is much more to be done. Perhaps nowhere is new research more important than when it comes to understanding the role of bankers on boards. The fact is that the Pujo evidence offers no more support for Bradford De Long’s argument that Morgan’s men added value for investors than it did for Samuel Untermeyer’s claims of their nefarious purpose or for Jacob Schiff’s claim that they were irrelevant. Therefore, it is only by collecting new evidence on what bankers did on the boards of U.S. corporations prior to World War 1 that we can hope to learn who might be right on this matter.<sup>145</sup>

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<sup>143</sup> Minority report signed by Mr McMorran, Republican Congressman. He also asserted that “the method of argument or inference used in connection with the elaborate charts and tables presented to the committee is wholly mistaken” (Pujo Report, p. 250).

<sup>144</sup> Pujo Report, p. 17.

<sup>145</sup> For recent research that generates such new evidence, see Eric Hilt and Carola Frydman, 2014, Investment Banks as Corporate Monitors in the Early 20<sup>th</sup> Century United States, NBER Working Paper 20544.

Table 1 Corporate Securities Issues by the Money Trust shown in the “Pujo table”

Year	Proceeds \$m	No.	Average Issue \$m
1903	40.0	1	40.0
1904	0.0	0	0.0
1905	326.1	15	21.7
1906	238.9	12	19.9
1907	184.6	11	16.8
1908	382.8	39	9.8
1909	629.4	51	12.3
1910	414.1	42	9.9
1911	621.4	54	11.5
1912	533.1	51	10.5
1913	237.0	2	118.5
<b>Total</b>	<b>3,607.4</b>	<b>278</b>	<b>13.0</b>

Source: author’s analysis based on Pujo "table showing joint purchases and underwritings of corporate securities by certain-named banking houses"<sup>146</sup>.

Table 2 Corporate Securities Issues in the United States, 1905-1913

Year	Railroads & Traction		Industrials		Utilities		Total	
	No.	Value	No.	Value	No.	Value	No.	Value
1905	77	869.5	40	337.5	7	32.0	124	1239.0
1906	87	1159.5	49	280.7	23	196.8	159	1637.0
1907	163	954.8	87	235.1	53	202.4	303	1392.3
1908	152	999.1	84	250.7	39	198.4	275	1428.2
1909	205	1014.7	170	440.3	90	213.7	465	1681.1
1910	220	876.6	186	457.4	105	182.1	511	1518.3
1911	281	1099.2	231	470.6	119	168.4	631	1739.5
1912	160	1096.1	250	798.2	136	355.6	546	2253.6
1913	207	953.9	187	403.0	122	299.5	516	1645.7

Source: author’s calculations based on data compiled from *Journal of Commerce*. These are the data that Raymond Goldsmith used to construct his time series of corporate securities issues for the United States which is reproduced in the *Historical Statistics of the United States*. For 1905, 1906 and 1907, it should be noted that the *Journal of Commerce* recorded only issues equal to or larger than \$1m. From 1908 on, it aimed to cover all securities issues undertaken in the United States.

Table 3 Money Trust Issues as Shares of U.S. Corporate Securities Issues

Year	Total		Railroads & Traction		Industrials		Utilities	
	Proceeds	No.	Proceeds	No.	Proceeds	No.	Proceeds	No.
1908	382.8 (26.8%)	39 (14.2%)	292.5 <sup>1</sup> (29.2%)	33 (21.7%)	35.3 (14.1%)	4 (4.8%)	55.0 (27.7%)	2 (5.1%)
1909	629.4 (37.4%)	51 (11.0%)	507.3 (50.0%)	39 (19.0%)	70.6 (16.0%)	9 (5.3%)	51.5 (24.1%)	3 (3.3%)
1910	414.1 (27.3%)	42 (8.2%)	290.1 (33.1%)	30 (13.6%)	84.0 (18.4%)	8 (4.3%)	40.0 (22.0%)	4 (3.8%)
1911	621.4 (35.7%)	54 (8.9%)	524.4 (47.7%)	37 (13.2%)	63.7 (13.5%)	11 (4.8%)	33.4 (19.8%)	6 (5.0%)
1912	533.1 (23.7%)	51 (9.3%)	357.7 (32.6%)	33 (20.6%)	117.1 (14.7%)	12 (4.8%)	58.3 (16.4%)	6 (4.4%)
<b>Total<sup>2</sup></b>	<b>2047.7 (32.2%)</b>	<b>186 (9.9%)</b>	<b>1614.3 (40.5%)</b>	<b>139 (16.2%)</b>	<b>253.6 (15.7%)</b>	<b>32 (4.8%)</b>	<b>179.9 (23.6%)</b>	<b>15 (4.2%)</b>

<sup>1</sup>Included \$25m and \$10m issues by Interborough Rapid Transit Co. in 1908 and 1909, identified as money trust issues, in railroads and traction, and removed them from utilities, to make Pujo data comparable with Journal of Commerce data.

<sup>2</sup>Totals are for the years from 1908 to 1911, the years for which the Pujo Report’s data can be considered to be most comprehensive.

<sup>146</sup> Pujo Report, pp. 92-100.



Table 4 Underwriters for Corporate Securities Issues of \$10m or More, 1911

Issuer	Proceeds (\$m)	Security	Lead Underwriters			Money Trust Classification <sup>1</sup>
<b>Railroad Issues</b>						
1. Central Pacific	50.0	Bonds	Kuhn, Loeb	Syndicate of French banks		MTA
2. Chicago Elevated Railways	30.0	Notes	National City Bank			MTA
3. New York Central	30.0	Notes	J. P. Morgan	First National Bank NY	National City Bank	MT
4. Chic. Mil & Puget S	25.0	Bonds	Kuhn, Loeb	National City Bank		MT
5. Oregon Wash (U. P.)	25.0	Bonds	Kuhn, Loeb	Baring Bros. & Co., Ltd		MTA
6. Seaboard Air Line	23.0	Bonds	Blair & Co.	Ladenburg		NO
7. N. Y., N. H. & Hartford	22.0	Notes	Lee, Higginson & Co.			MTA
8. Louisville & Nashville	20.0	Bonds	J. P. Morgan	First National Bank NY	National City Bank	MT
9. Great Northern	20.0	Bonds	J. P. Morgan	National City Bank	First National Bank NY	MT
10. Reading Co.	20.0	Bonds	J. P. Morgan	Drexel & Co.		MT?
11. Mo., Kansas & Texas	20.0	Bonds	Speyer & Co.	Syndicate of French banks		NO
12. Oregon Wash. (U. P.)	20.0	Bonds	Kuhn, Loeb	Baring Bros. & Co., Ltd		MTA
13. Missouri Pacific	20.0	Notes	Speyer & Co.			MTA
14. Public Service Corp of NJ	18.9	Bonds	J. P. Morgan	Drexel & Co.		MT?
15. Detroit River Tunnel	16.0	Bonds	J. P. Morgan	First National Bank NY	National City Bank	MT
16. Chesapeake & Ohio	16.0	Notes	Kuhn, Loeb	National City Bank		MT
17. Chicago Railways	15.0	Bonds	Harris, Forbes	National City Bank		MTA
18. New York Central	15.0	Notes?	J. P. Morgan	First National Bank NY	National City Bank	MT
19. National Rys of Mexico	13.0	Notes	Kuhn, Loeb	Speyer & Co.	Ladenburg, Thalmann	MTA
20. Central New England	12.8	Bonds	J. P. Morgan	First National Bank NY	National City Bank	MT
21. Erie	12.5	Notes	J. P. Morgan	First National Bank NY	National City Bank	MT
22. Mo., Kansas & Texas	12.5	Notes	Speyer & Co.			NO
23. L. Shore & Mich. So.	12.0	Notes	J. P. Morgan			MT?
24. Int & Gt Northern	11.0	Notes	Redmond & Co.			NO
25. Pere Marquette RR	11.0	Stock	J. P. Morgan?			?
26. Kansas City, Mexico & Orient	10.0	Bonds	None (placed by company executives in Paris)			NO
27. C., C., C., & St. Louis	10.0	Bonds	Guaranty Trust Co., NY			NO
28. Montreal Tramways	10.0	Bonds	Harris, Forbes	N. W. Harris	Harris Trust	NO
29. Illinois Central	10.0	Bonds	Kuhn, Loeb			MTA
30. Chic., R. I. & Pac (St P & K. Co)	10.0	Bonds	Speyer & Co.			MTA
31. Interborough Rapid Trans.	10.0	Notes	J. P. Morgan			NO
32. Baltimore & Ohio	10.0	Notes	Kuhn, Loeb	Speyer & Co		MTA
<b>Utility Issues</b>						
1. Miss River Pow Bost	15.0	Bonds	Kidder, Peabody & Co.	Stone & Webster		NO
2. Amer Tel & Tel	10.0	Bonds	Kidder,	Harris,		NO

			Peabody & Co.	Forbes & Co.		
<b>Industrial Issues</b>						
1. International Shoe	21.0	Stock	?			NO
2. Baldwin Locomotive Works	20.0	Stock	Drexel & Co.	White, Weld & Co.		NO
3. Frick (H. C.) Coke, Pittsburgh	18.0	Bonds	Union Trust Co. of Pitt.			NO
4. Swift & Co.	15.0	Stock	?			NO
5. Studebaker Co.	13.5	Stock	Lehman Bros.	Kleinwort Sons & Co.	Goldman, Sachs	NO
6. Amalgamated Copper	12.5	Notes	National City Bank	Guaranty Trust Co.		MT
7. Texas Co.	12.0	Bonds	Blair & Co.	Harris, Winthrop & Co.		NO
8. Federal Biscuit	12.0	Stock	?			NO
9. Comp. Tabulating Rec.	10.5	Stock	J. K. Rice & Co.			NO
10. Jones & Laughlin Steel	10.0	Bonds	Blair & Co.	First Trust & Savings Bank, Chicago		MTA

<sup>1</sup>MT refers to an issue classified by the Pujo report as a money trust issue and verified as such on further inspection. An "A" is added to "MT" when further inspection reveals ambiguity about an issue's classification as a money trust issue (see text for further discussion). "No" means an issue not classified by the Pujo report as a money trust issue.

Source: author's analysis based on issue data from the *Journal of Commerce* and information on underwriters from the *Chronicle*.

Table 5 Underwriters for Industrial Securities Issues of between \$1m and \$10m in 1911

	Financial House	Number of Issues	Proceeds of Issues (\$m)
1	William Salomon & Co.	8	14.15
2	Lee, Higginson & Co., NY & Chicago	6	10.55
3	Higginson & Co., London	4	5.20
4	Pomroy Bros. & Co., NY	4	3.75
5	George H. Burr & Co., Chicago	4	3.25
6	Harvey Fisk & Co., NY	3	10.00
7	Hallgarten & Co., NY	3	9.70
8	White, Weld & Co., NY & Chicago	3	8.75
9	Spencer Trask & Co.,	3	6.50
10	Eugene Meyer, Jr. & Co., NY	2	8.00
11	Kissel, Kinnicutt & Co.	2	6.30
12	Goldman, Sachs & Co., NY	2	5.90
13	Lehman Bros., NY	2	5.90
14	First National Bank of NY	2	5.40
15	Citizens' Saving & Trust Co., Cleveland	2	4.50
16	Brown Bros. & Co., NY	2	4.40
17	Blair & Co., NY	2	4.00
18	Hayden, Stone & Co., Boston & NY	2	4.00
19	Ladenburg, Thalmann & Co., NY	2	3.90
20	Peabody, Houghteling & Co., Chicago	2	2.80
21	Chas. D. Barney & Co., NY & Phila	2	2.40
22	Edward B. Smith & Co., Phila & NY	2	2.40
23	Clark L. Poole & Co., Chicago	2	1.60
24	Cassatt & Co., Phila	2	0.90
25	Montgomery, Clothier & Tyler, Phila	2	0.90
	<b>Top 25 houses</b>	<b>70 (63%)</b>	<b>135.2 (64%)</b>
		<b>111</b>	<b>212.7</b>

Source: author's analysis based on data on industrial issues from the *Journal of Commerce* and on underwriters from the *Commercial and Financial Chronicle*.

Table 6 Estimates of the Control of Other People's Money by the Money Trust

Financial Institution	Resources (\$m)	
<i>Inner Group of Money Trust</i>		
National City Bank	284	
First National Bank	185	
J. P. Morgan & Co.	163 <sup>1</sup>	632
<i>Financial Institutions under their influence</i>		
Bankers Trust Co.	205	
Guaranty Trust Co.	232	
Astor Trust Co.	27	
National Bank of Commerce	190	
Liberty National Bank	29	
Chase National Bank	150	
Farmers Loan & Trust Co	135	968
<b>Grand Total</b>		<b>1,600</b>

Source: Pujo Investigation, pp. 86-87

<sup>1</sup> Deposits since data on total resources were not forthcoming.

Table 7 Correspondents, Correspondent Deposits and Collateral Loans of Leading Financial Institutions in New York, 1911

Financial institution ( <sup>MT</sup> denotes an institution associated with the money trust)	No. of CSP Banks	Deposits by csps	Collateral loans for csps	Total collateral loans
1. Bankers Trust Co. <sup>MT</sup>	237	22.9	31.2	97.2
2. National City Bank <sup>MT</sup>	1,889	75.2	10.2	95.0
3. Chase National Bank <sup>MT</sup>	3,103	70.0	58.0	92.9
4. First National Bank <sup>MT</sup>	579	40.1	43.5	85.8
5. National Bank of Commerce <sup>MT</sup>	1,671	42.9	18.1	56.3
6. National Park Bank <sup>MT</sup>	2,426	49.1	14.8	52.2
7. Guaranty Trust Co. <sup>MT</sup>	182	9.7	13.1	43.3
8. New York Trust Co.	30	1.8	0.0	23.0
9. Corn Exchange Bank	96	3.0	0.6	21.2
10. Mechanics & Metals Nat'l	1,010	17.9	4.2	17.7
11. Hanover National Bank	4,074	47.1	5.4	16.4
Designated as money trust institutions	15,483	338.2	172.2	522.7
All 34 institutions	19,015	483.4	240.5	776.8
MT as share of 34	81.4%	70.0%	71.6%	67.3%

Source: author's analysis based on data in Pujo investigation, pp. xxx

Table 8 National City Bank's Position as a Lender in the Call Loan Market

In millions of \$s	1908	1909	1910	1911	1912
Loans on collateral					
For correspondents	2.1	11.4	2.7	4.8	10.2
Own loans	145.0	109.4	103.0	96.6	84.8
Total loans on collateral	147.1	120.8	105.7	101.4	95.0
Total resources	334.1	317.1	290.4	307.0	313.8
Collateral loans as % of resources	44.0%	38.1%	36.4%	33.0%	30.3%
% of loans on collateral, all New York banks (All-Bank Stats)	22.3%	17.3%	18.0%	17.0%	15.1%

Source: Data for loans on collateral from Pujo Investigation, p. 1208; for total resources from U.S. Comptroller of the Currency, various years.

Table 9 Prominent New York Financiers on Corporate Boards

Name	Firm	Connection to Money Trust <sup>1</sup>	Board Seats
Stotesbury, Edward T.	J. P. Morgan & Co.	Primary	60
Baker, George F.	First National Bank of NY	Primary	57
Iselin, Adrian, Jr.	A. Iselin & Co.	Weak <sup>2</sup>	36
Hine, Francis L.	First National Bank of NY	Primary	35
Sabin, Charles H.	Guaranty Trust Co. of NY	Secondary	35
Stillman, James	National City Bank of NY	Primary	35
Wallace, James M.	Central Trust Co. of NY	None	35
Wiggin, Albert H.	Chase National Bank of NY	Secondary	34
Marston, Edgard Lewis	Blair & Co.	None <sup>3</sup>	32
Bronner, Henry	Hallgarten & Co.	None	31
Vanderlip, Frank A.	National City Bank of NY	Primary	27
Byllesby, H. M.	H. M. Byllesby & Co.	None	26
Rosen, Walter T.	Ladenburg, Thalmann & Co.	None	26
Hayden, Charles	Hayden, Stone & Co.	None	24
Belmont, August	August Belmont & Co.	None	21
Cannon, James G.	Fourth National Bank of NY	Primary	21
Chapman, Elverton R.	Moore & Schley	None	21
Hamilton, William P.	J. P. Morgan & Co.	Primary	21

Source: Directory of Directors in the City of New York. 1913/14, Audit Company, New York.

<sup>2</sup> "Primary" refers to men who are closely associated with the six firms deemed by the Pujo report to be "the most active agents" in the concentration of control of money and credit (see p. 5 above). "Secondary" refers to men involved through their active participation in banks or trust companies identified as under the control of the money trust. "None" refers to men involved in companies of which no mention was made of any business link with the money trust in the course of the Pujo investigation.

<sup>2</sup> The only evidence of a connection between Adrian Iselin, Jr. and the money trust was through the seat he occupied on the National Bank of Commerce's board. No mention was made of any business links his firms might have with it in the course of the investigation.

<sup>3</sup> Blair & Co's directors were included in the Pujo investigation's analysis of interlocking directorates. However, the company was not included in the table of certain-named banking houses' joint transactions. Nor was any evidence presented in the course of the investigation to show that it had ties to the money trust institutions other than a reference to its involvement with J. P. Morgan & Co., the First National Bank of NY and Kidder, Peabody & Co. in the joint purchase of U.S. Rubber notes in 1908 (Pujo investigation, p. 1868).

Table 10 Money Trust Representation on Corporate Boards  
**To be completed**

% of board seats	Transportation	Producing & Trading	Utilities	All Corporations
>= 50%				
>= 25%				
< 25%				
Total number of companies				
Average representation of MT				

Source: analysis based on Table of Interlocking Directorates, Exhibit 134-A, Pujo investigation and *Moody's Manual* for numbers of board members.

Table 11 List of Largest U.S. Securities Issues for Steel Companies not listed by Pujo investigation as money trust issues, 1908-1912

Year	Issuer	Underwriters	Security	Amount (\$m)
1910	Lackawanna Steel	Speyer & Co.	Bonds	20.0
1909	Jones & Laughlin Steel	First Trust; Blair & Co.	Bonds	15.0
1912	Bethlehem Steel	William Salomon; Harvey Fisk; Hallgarten	Bonds	10.0
1909	Republic Iron & Steel	Hallgarten & Co.; J. & W. Seligman	Bonds	10.0
1911	Kayser (Julius) Steel	?	Stocks	8.9
1912	Pittsburg Steel	Speyer & Co.	Stock	8.0

Source: author's analysis based on data on issues by steel companies from the *Journal of Commerce* and on underwriters from the *Commercial and Financial Chronicle*.