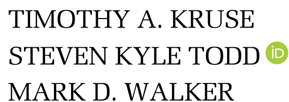
Innovation in Urban Transit at the Start of the Twentieth Century: A Case Study of Metropolitan Street Railway's Stealth Hostile Takeover of Third Avenue Railroad



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In 1900, a syndicate of investors used open market purchases and manipulative trading strategies to exploit an ongoing financial crisis at the Third Avenue Railroad Company and stealthily gain control of the company. The acquisition occurred during the first great merger wave in U.S. history and represented the street railway industry's response to a new technology, namely electrification. The lax regulatory environment of the period allowed operators and insiders to profit handsomely and may have benefited consumers, but possibly harmed some minority shareholders. Our case study illuminates an unusual acquisition, when capital markets were less transparent.

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> Metropolitan does not want Third Avenue, has not been trying to get it and is not trying to get it.… The possibilities of Third Avenue have been thoroughly canvassed by the Metropolitan management and the conclusion not to touch the road at any price has been reached after mature deliberation.[1]

> The Metropolitan Street Railway interests were in fact engaged in buying control of the wronged and maligned Third Avenue road. A fortnight before, for reasons unprofitable to seek, their mouthpiece had been induced to explain publicly that the Metropolitan had positively no intention of buying the Third Avenue, and it may be imagined that this pronouncement had quickened the tendency of the price to decline.… It is difficult to resist the conviction that the entire movement of the stock was the product of superior design.[2]

> Technological progress is like an axe in the hands of a pathological criminal.—Albert Einstein

Introduction

Imagine your daily commute to work from Midtown Manhattan to Wall Street in the year 1890. You leave your home at 6:00 a.m. and walk south to catch the top-heavy and hard to brake horse-drawn streetcar operated by the Third Avenue Railroad Company. After dodging ill-treated and skittish horses, pedestrians, wagons, and mounds of manure and urine infested with disease-ridden insects, you board the car, breathe a sigh of relief, and take a seat, all while fruitlessly hoping for a smooth ride. Over the next ninety minutes, you change cars three times and finally arrive at work at 7:30 a.m. Your morning commute has left you exhausted and you start your workday feeling as if you need a bath.

Over the next two decades, your daily commute would have changed dramatically. Horses are replaced by electric motors drawing on a rail placed in a conduit just below street level. Routes are consolidated and extended. An underground subway is built, dramatically reducing your commute time. Manhattan's bustling avenues are cleaned and the air quality improves markedly. Technological innovation is a wondrous thing, but it advances in a herky-jerky manner that often leaves a trail of destruction in its wake.

Our study focuses on a transformative episode in 1900, during a period when a new technology, street railways driven by electric

1. An anonymous "authoritative" source, *Wall Street Journal*, March 2, 1900, 1.
2. Stedman and Easton "History," 387.

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power, emerged to revolutionize the transport systems of large, urban centers like New York City. Between 1890 and 1902, commuter rail mileage in the United States nearly tripled, with electricity's modal share growing from 15 percent to 97 percent, and the proportion traversed by animals (mostly horses) declining from 70 percent to 1 percent. Compared with horse-drawn streetcars, electric railcars had lower marginal operating costs. Transit companies could achieve significant economies of scale by constructing larger, strategically placed power stations. Electric rail transformed the urban landscape, allowing workers to live farther from their places of work. Thereupon suburban land values increased substantially.

We focus on the Metropolitan Street Railway Company (henceforth, Metropolitan), the largest player in Manhattan's transportation industry and a fascinating antagonist to illustrate how capital markets can finance, facilitate, promote, and stifle innovation during a lightly regulated period when U.S. capital markets had limited depth and breadth. Metropolitan owned or controlled 219 miles of track in 1899. Its primary competitor was the Third Avenue Railroad Company (Third Avenue), which controlled or operated 143 miles of track. Third Avenue had begun a switch to electricity as its primary means of propulsion in 1899, financing the investment with a mix of new equity and unsecured debt. The increased debt burden damaged the company's financial health and market capitalization and made Third Avenue an attractive takeover target.

Our story involves colorful characters. Henry Hart, the octogenarian vice president of Third Avenue is the consummate company man; he has dedicated more than forty years to the firm and has amassed a dominant ownership position in the firm's shares. Hart increased his ownership stake in Third Avenue throughout the bull market of 1899 to nearly one-third of the shares outstanding by borrowing against these shares and using the proceeds to purchase additional shares (thus creating a chain of hypothecation). However, the loans carried punitive interest rates of up to 36 percent per year. Opposing Hart are Thomas Fortune Ryan and William Collins Whitney, the driving forces of a syndicate that had assembled Metropolitan as Third Avenue's primary competitor through the consolidation of many independent firms with street railway operations in Manhattan. Attempting to rescue Hart is James R. Keene, a well-known stock operator and sworn enemy of Whitney and Ryan, who had attempted bear raids on Metropolitan and other Whitney/Ryan interests in 1898 and 1899.

Some of these characters enjoy insider status and engage in unsavory but not illegal schemes such as stock price manipulation and tunneling. Operators, very likely including Keene and Ryan, routinely planted rumors and negative stories in the press to temporarily inflate or

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depress the share prices of Third Avenue, Metropolitan, and other companies. With no restrictions on short selling, and active call loan and securities lending markets where funds and securities could be borrowed, operators were able to take highly levered long and short positions in stocks.[3] They could camouflage their trading activities by using multiple brokers and submitting matched (simultaneous) buy and sell orders. The Whitney/Ryan syndicate created shell companies to purchase rail lines that they would eventually sell or lease to Metropolitan at higher prices, thereby enriching themselves at the expense of Metropolitan's minority shareholders.

Metropolitan's stealth, hostile takeover of Third Avenue was so expertly done that almost nobody knew it happened until it was announced after the close of trading on March 20, 1900. In fact, it cornered the market in Third Avenue shares, sparking a short squeeze and panicked trading the next day. Whitney and Ryan were able to gain control of Third Avenue without paying an acquisition premium. We estimate the Whitney and Ryan syndicate earned returns in excess of 60 percent. These gains came mostly at the expense of Third Avenue shareholders who were manipulated and chose to sell their shares while prices fell over the prior seven-week period. It was during this previous period that the rumor mill was running in full force and short sellers were levering their positions.

Consolidation in the street railway industry initially produced significant benefits for commuters. They now could transfer from one line to another and travel anywhere in Manhattan for five cents, although full integration of the Third Avenue and Metropolitan systems progressed slowly. The gains in transport efficiency likely had broad, positive spillover effects for economic growth in New York City. Manhattan's high population density engendered squalor and fears of epidemic diseases. Urban reformers advocated for improvements in transportation infrastructure to alleviate these health concerns.[4] Without question, pedestrians and conservationists celebrated the shift from horses to electricity and the consequent reduction in horse manure, urine, and carcasses polluting the streets.[5]

Ultimately, Metropolitan shareholders would lose their capital (though not Whitney, who had unloaded his shares before his death in 1904) as Metropolitan's efforts to maintain its monopoly power in the market for street railway transport utterly failed. Under the terms of the acquisition, Third Avenue maintained its existence as a separate company and leased its lines to Metropolitan at unsustainable rates for

3. O'Sullivan, *Dividends of Development*, 54.
4. Cheape, *Moving the Masses*, 28.
5. Morris, "Horse Power to Horsepower," 5.

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999 years. Furthermore, the first line of the New York subway opened on October 27, 1904. It was a hit with the public and immediately began stealing market share and profits from Metropolitan. By 1907, Metropolitan was unable to make its lease payments to Third Avenue and other subsidiaries, forcing the companies into receivership.

The 1900 hostile takeover of Third Avenue was anomalous. Most of the mergers during the 1897–1903 merger wave were friendly and involved interstate consolidations.[6] Still, our case study illustrates broad features of early twentieth-century U.S. financial markets: a lax regulatory environment, a massive call loan market, and a narrow, concentrated stock market enabled speculators to take highly levered long and short positions, operators to manipulate market prices, and insiders to extract excess profits. More generally, the Third Avenue takeover shows us the capabilities of capital markets and reveals how they can enable or impede disruptive technologies. We describe how investing syndicates could use an information advantage and complex and overcapitalized financial structures to extract excess profits. Ideally, the regulatory framework would provide incentives for socially valuable consolidations while discouraging those transactions motivated by insiders' efforts to extract private benefits.[7] Our analysis of the Third Avenue takeover suggests that the ability to do a stealth acquisition—unavailable today due to disclosure requirements—provided significant incentives for financiers to initiate a potentially valuable consolidation, but at a substantial cost to uninformed market participants.

Evolution of the Two Primary Street Railways Serving Manhattan at the End of 1899

Metropolitan Street Railway Company

The origins of the Metropolitan Street Railway Company can be traced to 1884, when a syndicate of investors led by Whitney and Ryan (henceforth, the Whitney/Ryan syndicate) began their consolidation of control of the street railways of Manhattan.[8] At the time, the street railways

6. Armour and Cheffins, "Origins."

7. Kahan, "Sales of Corporate Control"; Bebchuk, "Efficient and Inefficient Sales."

8. Carman, *Street Surface Railway Franchises*; *Manual of Statistics*, 1903, 570. Other syndicate members included Peter A. B. Widener, Thomas Dolan, and William L. Elkins of Philadelphia, who previously refined in that city many of the techniques used by the syndicate. According to Hendrick, Ryan brought industry, resourcefulness as a stock manipulator, and Tammany connections; Whitney brought connections to County Democracy, the other dominant political force and national

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were poorly run, fragmented, and characterized by corruption: "Backwardness, stupidity, deterioration were apparent on every hand."[9]

Whitney and Ryan came from different backgrounds. Whitney was born in comfortable surroundings, went to Yale, and married the daughter of a wealthy U.S. senator and brother of a partner of John D. Rockefeller. He was instrumental in the fight against Boss Tweed and Tammany Hall in the early 1870s, earning him a reputation as a political reformer. He also was the secretary of the Navy from 1885 to 1889 and played a significant role in the nomination of Grover Cleveland as the Democratic presidential candidate in 1892.[10]

In contrast to Whitney, Ryan was born in much more humble surroundings near Charlottesville, Virginia. He came to New York and bought a seat on the New York Stock Exchange (NYSE) in 1874. He worked for Jay Gould and other stock operators, earning a brilliant reputation of his own. While heavily involved with street railways throughout his career, he also had interests in intercity rail, banking, tobacco (as one of the organizers of the American Tobacco Company, which at one point controlled 80 percent of the U.S. tobacco market), insurance, and the Congo.[11] The last investment was at the invitation of King Leopold II of Belgium, who wanted to work with the "ablest Catholic capitalist in the United States."[12] Ryan attended a daily Mass officiated by his family's personal priest and generously contributed toward the construction of several churches, including the Cathedral of the Sacred Heart in Richmond, Virginia. According to a diocesan official, it was the only cathedral in the world "ever constructed by the sole munificence of one family."[13] He died in 1928 at age 77, leaving a fortune exceeding $100 million.[14]

In 1884, Whitney and Ryan were members of separate groups fighting for a lucrative new franchise to provide railway service on lower Broadway. The third competitor for the franchise was Jacob Sharp, who wanted to incorporate the new franchise into his existing Broadway

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importance through his position as secretary of the Navy; and the Philadelphians brought extensive capital and the practical knowledge of running street railways to the partnership ("Great American Fortunes and Their Making: Street Railway Financiers." *McClure's Magazine*, November 1907, 41; hereafter "Great American Fortunes and Their Making—I"). *McClure's* refers to a three-part investigative *McClure's Magazine* series: "Great American Fortunes and Their Making: Street Railway Financiers" by Burton Hendrick (1907–1908) and is an important source regarding the history of Metropolitan and Third Avenue.

9. "Great American Fortunes and Their Making—I", 34.
10. Swanberg, *Whitney Father*, 99.
11. *New York Times*, May 18, 1907.
12. Baruch, *My Own Story*, 211.
13. Beard, *After the Ball*, 260, Slipek, "The Tycoon."
14. *New York Times*, November 24, 1928.

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and Seventh Avenue Railroad. Sharp won the franchise rights because his bribe of $500,000 to the board of alderman was all cash. The Ryan group's bribe, while larger, was half cash and half bonds.[15] The episode highlights city government corruption in the awarding of street franchises in New York and many other cities.[16] Whitney, Ryan, and the Philadelphia trio joined forces after the franchise initially was awarded to Sharp. In 1886, they succeeded in wresting control of it and the Broadway and Seventh Avenue lines away from Sharp.[17]

Whitney undertook his portion of the work while simultaneously serving as secretary of the Navy from 1885 to 1889. The unsavory nature of the Broadway and Seventh Avenue transaction, and his many discreet trips to New York, resulted in unwelcome attention and questioning of his motives.[18] For example, the *New York Tribune* reported:

> Mr. Whitney was in town a week ago yesterday, although few New Yorkers discovered it. He did not proclaim his presence on the house-tops. But the Philadelphia men who were in the city were informed of it and they spent hours in consultation with the Secretary of the Navy in his house at Fifty-seventh St and Fifth Ave. Mr. Whitney returned to Washington, but was soon back here again and quiet conferences at which few were present, but in which those few were deeply absorbed, have been going on day after day in the Whitney mansion.[19]

The syndicate created the Metropolitan Traction Company, which eventually went public in 1892, to acquire control of four smaller street railways in Manhattan. The syndicate then created the first of three iterations of the Metropolitan Street Railway in 1893 as a wholly owned operating subsidiary of Metropolitan Traction and went on to acquire control of additional lines. Metropolitan Street Railway itself went public in October 1897 with a market capitalization of $30 million, using the proceeds to absorb its former parent, Metropolitan Traction, from within. One fierce critic of the structure claims it afforded the syndicate the opportunity to skim millions of dollars from Metropolitan's minority shareholders.[20] Amory claimed a typical transaction would begin with the syndicate independently buying control of a new railway, which would then be sold at an inflated price to Metropolitan Traction, thereby creating "water" (i.e., overcapitalized assets

15. "Great American Fortunes and Their Making—I", 40–41.
16. Speirs, *Street Railway System*; Speirs, "Regulation of Cost."
17. "Great American Fortunes and Their Making—I," 42.
18. Most, *Race Underground*, 141; Swanberg, *Whitney Father*,17.
19. *New York Tribune*, February 28, 1886, 1.
20. Amory, *Truth*.

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bought by excess liquidity) in the stock. Metropolitan Traction would in turn, sell control to Metropolitan Street Railway, the wholly owned subsidiary. One 1896 transaction supposedly netted a $4 million profit to the syndicate. In 1897, Whitney was able to get elected as a director for the Second Avenue Railroad Company, another line that ran the length of Manhattan. In January 1898, Metropolitan negotiated a lease for the line with the interest-conflicted Whitney on both boards.[21] Ryan frankly admitted in 1908 that "there was considerable stock-jobbing and stock watering" involved in the formation of the second and third iterations of the Metropolitan Street Railway.[22]

The Metropolitan Street Railway continued to acquire independent companies throughout the 1890s. By 1899, it controlled fifteen operating companies through the ownership of large blocks of stock or lease. The leases typically spanned 999 years, provided total control to Metropolitan, and guaranteed a fixed dividend to the shareholders of the leased companies. These dividends typically exceeded the earnings capacity of the lines.[23] In some cases the control was indirect, with one of the subsidiaries making the purchase or acquiring the lease. In essence, Metropolitan was a holding company.[24] As of 1899, it owned and leased 50.41 and 168.90 miles of track, respectively, controlling an aggregate of 219.31 miles.

Third Avenue Railroad Company

As of the end of 1899, the Third Avenue Railroad Company was the only significant street-level system in Manhattan not controlled by Metropolitan. It was incorporated on October 8, 1853. Vice President Henry Hart had been with the company at least forty years and was the largest shareholder.[25] As of 1899, it owned 29.38 miles of track and controlled four companies operating an additional 112.71 miles.[26]

Hart owned a pawn shop near the southern extent of the Third Avenue system and became interested in the rail line's operations in the late 1850s. Though illiterate, he did a fine job of operating Third

21. Hirsch, *Modern Warwick*, 446.

22. Carman, *Street Surface Railway Franchises*. The injection of water was a typical feature in trust formation at the time. The Rich Man's Panic of 1903 was the result of small investors suddenly catching hydrophobia.

23. *Poor's Manual*, 1899, 1045; "Great American Fortunes and Their Making: Street Railway Financiers—II," *McClure's Magazine*, December 1907, 242 (hereafter "Great American Fortunes and Their Making—II"); Hendrick, *Age of Big Business*.

24. "Great American Fortunes and Their Making—II," 243.

25. Sixty-eight years later, the percentage of Hart's ownership would be considered as "controlling" per the Williams Act.

26. *Poor's Manual*, 1899, 1059.

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Avenue.[27] In fact, he dedicated his life to the company. According to Edward Lauterbach, Third Avenue's counsel, "Henry Hart had one idol, the Third Avenue Railroad. He went to the office on Sunday as he did on the other six days in the week. It was his only worship."[28]

Hart became alarmed by Metropolitan's growing reach. In defense, Third Avenue began its own series of acquisitions beginning with the Forty-Second Street, Manhattanville and St. Nicholas Avenue Railway in 1895. While Metropolitan and Third Avenue did not operate on the same streets, they operated many parallel lines along the primary north–south avenues in Manhattan. A strong network of cross-island lines was necessary to feed these main lines. The surface routes also faced competition from the Manhattan Railway Company, which operated four elevated north–south routes. However, the elevated routes typically catered to riders who were commuting longer distances, as their steam engines limited their use for short-distance, stop-and-start routes.[29]

Third Avenue began the process of electrification in 1899, funded by an increase in equity capital of $4 million and the issuance of $5,860,360 in additional unfunded (unsecured) debt. However, the Republican Hart's initial reluctance to use contractors allied with the Democratic Tammany Hall political machine led to delays in obtaining the necessary permits. Construction began once the Tammany contractor was hired; however, little meaningful construction actually occurred despite the expenditure of millions.[30] Furthermore, the upgrade required the construction of a not yet completed powerhouse estimated to cost $5 million.[31] The increase in unfunded debt to pay for the acquisitions and for the switch to electric power was a primary cause of Third Avenue's financial distress in early 1900.[32]

By 1899, Hart's concern that the Whitney/Ryan syndicate would secretly purchase a controlling stake in Third Avenue became acute. He began a risky strategy of borrowing against his shares to purchase additional shares. He then created a chain of hypothecation, whereby the newly purchased shares would be put up as collateral for even more purchases. Fear of losing his dominant ownership position and his overextended personal debt obligations led Hart to vote against the issuance of additional shares in the fall of 1899 and in favor of more corporate debt. This decision, which was opposed by several members

27. "Great American Fortunes and Their Making—I."
28. *New York World*, March 5, 1900, 2.
29. Cheape, *Moving the Masses*, 39, 73.
30. "Great American Fortunes and Their Making—I," 46.
31. *New York Tribune*, January 19, 1900, 3.
32. *Manual of Statistics*, 1903, 714

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of Third Avenue's board, sowed the seeds for Third Avenue's eventual receivership.[33]

Hart had increased his ownership to at least 50,000 of the 160,000 outstanding shares by the end of 1899. However, some of his loans carried crippling interest rates of up to 36 percent.[34] A brief market panic in December 1899 and the ongoing fall in Third Avenue shares beginning in January 1900 impacted the value of his collateral and left him dangerously exposed to financial distress.

James R. Keene

Contemporaries of James R. Keene frequently cited him as the best stock operator in U.S. market history.[35] Keene was known for his manipulative pools and for his ability to create markets for new, typically waterlogged, stock issues. In fact, J. P. Morgan hired Keene to handle the sale of shares of United States Steel, the first $1 billion corporation created in the United States.[36] Keene was known for his ability to find inside information in support of his campaigns and for his secrecy in turn.[37] He had been involved in several pools with Whitney and Ryan in the early 1890s, some of which involved betrayal and resulted in their becoming bitter enemies.[38] Keene executed attacks on several Whitney/Ryan stocks in late 1899, including Electric Vehicle, Electric Storage Battery, and even Metropolitan itself. Whitney supposedly suffered a loss of $9 million in the Metropolitan attack.[39]

The Transformation of an Industry

While rudimentary battery-powered street railways date to 1835, commercially viable electric systems did not exist until the 1880s.[40] Frank Sprague initiated the transformation of the street railway industry with a successful demonstration using electricity as the "motive power" in Richmond, Virginia, in 1888.[41] This proof of concept and subsequent improvements in the technology induced street and elevated commuter

33. *New York Times*, February 27, 1900.
34. "Great American Fortunes and Their Making—I," 46.
35. See especially Edwin Lefevre's profile of Keene in *The Cosmopolitan*, November 1902, 91. See also *Everybody's Magazine*, September 1905, 366; *New York Times*, January 30, 1910, M2; Burnley, *Millionaires and Kings*, 229; Hall, *How Money Is Made*, 142.
36. Strouse, *Morgan*, 407. Keene reportedly earned commissions of $1 million.
37. *Everybody's Magazine*, September 1905, 366; regarding inside information and *Munsey's Magazine*, April 1913, 11.
38. *New York Times*, January 30, 1910, M2.
39. *Brooklyn Daily Eagle*, March 21, 1900, 8.
40. Durand and Martin, *Street and Electric Railways*.
41. Most, *Race Underground*.

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Table 1 Commuter rail mileage in the United States, by motive power source

	1890		1902	
Aggregate U.S. miles	8,123		22,577	
Animal	5661	69.7%	259	1.1%
Electricity	1262	15.5%	21,908	97.0%
Cable	488	6.0%	241	1.1%
Steam	711	8.8%	170	0.8%

Note: Animal power is mostly horse, and steam power is primarily on the limited number of elevated lines in the largest cities. Elevated lines in New York were operated by the Manhattan Railway and portions of the operations of the Brooklyn Rapid Transit Company. Cable power was introduced in 1873, but rapidly became obsolete. Our source is Durand and Martin, *Street and Electric Railways*, table 4.

railway systems throughout the United States to switch from horse and cable power. Durand and Martin prepared a comprehensive study of the state of the industry in 1902 for the newly created U.S. Department of Commerce and Labor. Table 1 summarizes their comparative data for 1890 and 1902 on the aggregate number of U.S. commuter rail miles subdivided by the four methods for moving cars.[42] A large increase in ridership accompanied the transformation of the industry. The total number of passengers carried were 2,023,010,202 and 4,774,211,904 in 1890 and 1902, respectively. The U.S. population increased by 20.7 percent to 75,994,575 over the same period.

Durand and Martin report as of 1890 that 557 of the 691 street railway companies in the United States (81 percent) operated less than ten miles of track. These smaller companies typically operated on one major street with a few feeder routes on side streets.[43] The largest company operated somewhere between 90 and 100 miles of track. By 1902, 394 of 817 (48 percent) companies operated on less than ten miles of track. Moreover twenty-five companies nationally operated more than 100 miles of track. As for Manhattan, there were fifteen independent operating companies with a total of 210 miles of track in 1890, none of which controlled more than 30 miles. Only Third Avenue and the elevated Manhattan Railway Company traded on the NYSE at that time. A few other lines traded on the informal "curb" market.

Durand and Martin discuss the benefits of the move toward electric power and consolidation. Companies could offer longer routes at faster average speeds.[44] The longer routes attracted more riders, allowing companies to minimize the number of transfer passengers, who often paid reduced rates. Commuters could live in more desirable neighborhoods farther from their places of work (the most common destination).

42. Durand and Martin, *Street and Electric Railways*, 6.
43. Ibid., 12.
44. Ibid., 120.

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In fact, residential development followed the expansion of the street railways, with newly developed areas consisting of "long fingers or tentacles." Land values substantially increased with the arrival of a new route. Another significant benefit came from cost savings. Electric cars were less expensive to operate than those drawn by animals. Larger companies could achieve significant economies of scale by constructing larger, more strategically placed powerhouses.[45]

The State of the Stock Market and the Merger Wave of 1897–1903

The street railways' transformation, like that of many other industries, coincided with remarkable increases in NYSE trading volume and the first merger movement in U.S. history. The movement was part of a broader trend that Hansen characterizes as a period in which economic laissez-faire facilitated financial innovation and rent-seeking.[46] The events we describe do share characteristics with laissez-faire policies, especially the lax regulatory environment of the stock market. However, government played an important, corruption-inducing role, as the street railways were the product of lucrative government franchises and were subject to the political winds of the day, notably those blowing from Tammany Hall.[47]

The Panic of 1893 had sparked a crippling depression and suppressed stock market activity. NYSE trading revived in 1897 following the post-panic low of 49,275,736 shares traded in 1894. By early 1899, Wall Street was enjoying a strong bull market with annual trading volume totaling 175,073,855 shares. Trading reached its apex in 1901 with record volumes of 265,277,354 shares, or 319 percent of the shares outstanding. These years marked the most active period in NYSE history in terms of shares traded to total shares outstanding.[48]

45. Severe congestion in Manhattan placed limits on the potential economies of scale available. Cars filled beyond safe capacity and frequent delays prompted many calls for improved service. One call, from the Merchants Association of New York, precipitated a series of hearings before the Railroad Commission. A traffic study presented to the Commission laid the blame on obstructions from other vehicles, especially delivery trucks. Moreover, it would have been difficult for the street railways to add additional cars, especially at rush hour. A traffic count executed on January 13, 1903, indicated 580 cars per hour passed through the intersection of Twenty-Third Street and Fourth Avenue (*Street Railway Journal*, January 31, 1903, 180).

46. Hansen, "150 Years of Financial History," 612.

47. Speirs, *Street Railway System*; Speirs, "Regulation of Cost"; Hood, *722 Miles*.

48. Sobel, *Big Board*, 159. Despite the advent of high-frequency trading, volume to shares outstanding ratios hit their modern high of 138% in 2008 (see history data

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In 1900, U.S. securities markets lacked breadth and depth. Railroad companies were the dominant issuers of corporate securities, and financial institutions (mostly banks, life insurance companies, and trust companies) were the dominant investors in stocks and bonds. Compared with the markets in London, the U.S. financial system was much less diversified. At the same time, New York's massive call loan market was a critical supplier of credit and securities for speculators. Call loans constituted between 30 percent and 40 percent of the total loans held by New York's national banks during the period 1898 to 1912. New York's trust companies were also active participants in this market, which largely sustained the speculative demand for railroad stocks. [49]

O'Sullivan argues that U.S. securities markets evolved in an erratic and protracted fashion that mirrored the country's idiosyncratic economic and industrial developments. At first, securities were created to finance the development of the nation's railroad network. The industrial sector developed slowly and suffered from instability and low profits. It only overtook the railroad sector as a supplier of corporate securities after World War I.

Nelson dates the first U.S. merger wave to the period 1897 to 1903, a period marked by strong stock returns and a growing economy.[50] Rapid expansion in the number of securities traded on the NYSE was associated with lower interest rates, increased corporate production and profits, overconfidence in the new trusts, and increased institutional investments.[51] Speculative fever precipitated the remarkable trading volumes, which in turn allowed the promoters of the great consolidations (e.g., U.S. Steel) to easily sell new debt and equity securities.[52] The cash raised made it easy for parent companies to acquire constituent companies. Most mergers were friendly and often involved legal insider purchases of the target firms' stock before any public announcement. Furthermore, financing syndicates typically injected water into the parents' capital before selling to the public.[53]

In one sense, the hostile acquisition of Third Avenue was inconsistent with the typical trust formation, as an intransigent Hart was dead set against selling the company. Even so, trading up through an acquisition was emblematic of that time. The press carried frequent breathless accounts of the operations of Keene and others, which were made

reported by the New York Stock Exchange at http://www.nyxdata.com/nysedata/asp/factbook/viewer_edition.asp?mode=table&key=2992&category=3, accessed August 14, 2017).

49. O'Sullivan, *Dividends of Development*, 54.
50. Nelson, *Merger Movements*.
51. Smiley, "Expansion of New York Market."
52. Sobel, *Big Board*.
53. Banerjee and Eckard, "Why Regulate Insider Trading?"

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possible, and also furthered, by the remarkable trading volumes. The Third Avenue acquisition was a foretaste of the battle for control and corner of Northern Pacific a little more than one year later.[54]

Durand and Martin discuss three methods used in the consolidation of the street railways: (1) a regular merger with either cash or shares as the means of payment; (2) a lease in which "the controlling company takes over the entire operation of the system of the lessor, often for nine hundred and ninety-nine years," and agrees to pay a definite rental to the lessor company, the latter continuing at least nominally in existence; and (3) purchase of a controlling stake on the open market.[55] The Whitney/Ryan syndicate and Metropolitan acquired control of Third Avenue using a combination of the second and third methods.

The local street railways were similar to the interstate freight and passenger railways, which were particularly attractive for consolidation due to their fragmentation, high fixed costs, and heavy capital needs at the end of the nineteenth century.[56] They had the added feature of having greater disclosure, reducing information asymmetries. Railroads fell under the purview of the Interstate Commerce Act of 1887 that established the Interstate Commerce Commission, which in turn required annual statistical reports from railroads.[57] These reports typically were submitted to state boards of railroad commissioners. In contrast, disclosure for industrials was sparse before the regulatory requirements associated with the Security Exchange Act in the 1930s.[58] The merger movement fostered the creation of many large companies, and growing sophistication among investors sparked calls for better disclosure from the NYSE and the Investment Bankers Association. Even so, many industrial companies continued to provide only the most basic information.[59]

Main Events

Third Avenue in Financial Distress

News concerning the extent of Third Avenue's difficulties broke on January 14, 1900. In particular, there were serious rumors concerning the excessive debt associated with the transition to electric power.[60]

54. See Haeg, *Harriman vs. Hill*, for a detailed account of the Northern Pacific affair.

55. Durand and Martin, *Street and Electric Railways*, 120.

56. Strouse, *Morgan*.

57. Armour and Cheffins, "Origins."

58. See Rutterford, "Shareholder Voice," for a discussion of the evolution of disclosure as a shareholder right.

59. Hawkins, "Development of Reporting Practices."

60. *New York Times*, January 14, 1900, 6.

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Two days later, the company released its quarterly report showing floating (i.e., unsecured) debt of approximately $16 million. Moreover, revenues were down from the previous year, because the upgrade to electric power temporarily interrupted services. To lead the effort to refund (refinance) its debt, Third Avenue engaged the banking firm of Kuhn, Loeb & Co., which anticipated no difficulties.[61]

A lack of reliable information regarding Third Avenue's financial health meant the real and rumored difficulties in the refunding effort could be used by bear operators over the next month.[62] There also were repeated denials of trouble: "There is no hitch (in the financing) as reported, and the rumors of the hitch are looked upon by the officials of the company as intended simply for stock jobbing purposes."[63]

At the same time, Third Avenue insiders were concerned Henry Hart would be forced to sell some of his shares. Hart was nearly ninety years old and had suffered significant losses throughout late 1899, which were exacerbated by a brief market panic in December 1899. Therefore, Edward Lauterbach, Third Avenue's counsel, led efforts to form a syndicate composed of "some very strong interests" to protect Hart's holdings: "Mr. Hart's holdings have been fully protected by a syndicate, the arrangements contemplating a partial sale of his stock."[64] It later came out that Keene was the central figure in the syndicate. News of the syndicate's existence coincided with the election of William Curtiss as Third Avenue's new treasurer. Curtiss had been the confidential secretary of William Rockefeller, and his appointment was "generally considered an indication that Standard Oil interests are taking action on the bull side."[65] Third Avenue increased four points on a volume of almost eighteen thousand shares, ten thousand of which were said to have been purchased by those Standard Oil interests.[66]

Two other significant rumors regularly began to circulate. One involved the extent of the short interest in Third Avenue. The *New York Times* and the *Wall Street Journal* both made several mentions of a large short interest immediately following the news of Third Avenue's debt trouble. The other rumor involved oft-repeated suggestions of alliances among the various New York commuter railways, now with heavy attention on Third Avenue. In fact, there were a minimum of seven reports of interest on the part of the Metropolitan and/or the

61. *Wall Street Journal*, January 20, 1900, 2.

62. It was common practice to plant rumors for stockjobbing purposes (*The Ticker*, March, 1908, 33). See Appendix 1 for a timeline of rumors and major events.

63. *Wall Street Journal*, January 20, 1900, 2.

64. *New York Tribune*, January 23, 1900, 10.

65. *Wall Street Journal*, January 23, 1900, 1.

66. *New York Times*, January 23, 1900, 10.

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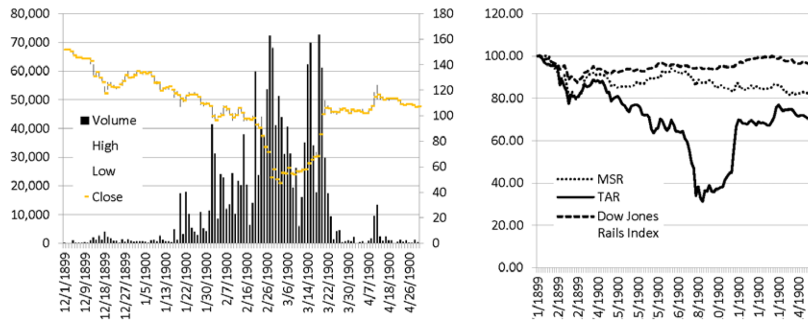

Figure 1 Performance of Third Avenue Railroad and Metropolitan Street railway shares.

(A) Daily high, low, and closing prices (right scale) and trading volume (left scale) for Third Avenue Railroad. (B) An index of closing prices, scaled to 100, for Third Avenue Railroad, Metropolitan Street Railway, and the Dow Jones Rails Index.

elevated Manhattan Railway by the end of January. The rumors involving Metropolitan were given special credence, as acquiring Third Avenue would give Metropolitan a near monopoly of the surface lines in Manhattan and the Bronx. Even so, most of these rumors were met with denials from corporate executives.

Uneasy investors began selling small amounts of Third Avenue shares.[67] Prices fell to 107⅞ dollars by the end of January from the 1899 close of 132, representing a loss of 18.3 percent. We report in Figure 1 price and trading volume data for Third Avenue (Figure 1A) and relative performance data for Third Avenue, Metropolitan, and the Dow Jones Rails Index (Figure 1B). Both Third Avenue and Metropolitan suffered during the short panic of December 1899, though prices started to recover by the end of the month. The price pressure coincided with growing concerns about Third Avenue's debt burden.

Failed Refunding Effort

Third Avenue's troubles came to a climax in February. It opened the month losing 8¼ to close at 99⅝ on rumors of a dividend cut, more negative speculation regarding the debt, and manipulative attempts to force tired holders to sell: "There is admitted to be a good sized short interest and a rather general bearish feeling on the stock which might suit the purposes very well of a strong set of syndicate of buyers."[68] The *Wall Street Journal* went on to report (officially denied) rumors that

67. *New York Tribune*, January 14, 1900, 4, *Wall Street Journal*, January 30, 1900, 1.

68. *Wall Street Journal*, February 2, 1900, 1.

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Metropolitan interests "were back of the effort to secure lower prices for Third Avenue stock in order to get control of it."[69]

Refunding negotiations with Kuhn, Loeb dominated the news during the first week of February. At various times, rumors swirled regarding the type of new debt to be used to pay off the floating debt (e.g., would the new debt be convertible with the associated possibility of a change in control?), the magnitude of the company's indebtedness, the status of the auditor's reports, and, most importantly, whether the dividend would be cut. In the end, the quarterly dividend was cut from 1.25 percent to 1 percent of par on February 14 (it was 1.75 percent the previous August).[70] The cut added to the selling pressure, especially by long-term shareholders previously attracted to Third Avenue's steady dividends.

On February 6, Third Avenue directors approved a general proposition from Kuhn, Loeb contemplating the issuance of new mortgage notes, which would be convertible to new stock at the end of three years.[71] However, following several days of rumors of a hitch in the proceedings, Kuhn, Loeb pulled out of the negotiations on February 15. As a result, Third Avenue experienced another fall in price and a remarkable spike in daily trading volumes to around 40 percent of the shares outstanding. Kuhn, Loeb officially stated there were disagreements over commissions. However, other rumors suggested they disapproved of the recently announced, but reduced, dividend and clashed with Hart's rescue syndicate regarding the new composition of Third Avenue's board.[72]

Kuhn, Loeb's departure elicited much commentary. In his weekly market commentary, the *Tribune*'s Cuthbert Mills likened Third Avenue's shareholders to "a mendicant ordering a dinner at Delmonico's, while he holds out his hand for alms."[73] The *New York Times* did not blame Kuhn, Loeb, but was critical of Third Avenue's situation: "Not all of the Third Avenue story is yet told: extraordinary chapters in that story may not so far have been even hinted at. What certainly the management of the corporation stands clearly indictable for is the making of false pretense – in the declaration of dividends which earnings do not warrant, do not provide, do not even approach."[74]

Following Kuhn, Loeb's departure, a group of unsecured creditors formed a protective committee to defend their interests (see Figure 2 for

69. *Wall Street Journal*, February 16, 1900, 6.

70. *Wall Street Journal*, February 15, 1900, 1.

71. *New York Tribune*, February 7, 1900, 12.

72. *New York Tribune*, February 10, 1900, 1; February 11, 1900, 14; February 15, 1900, 12; and February 20, 1900, 10; *Wall Street Journal*, February 16, 1900, 1

73. *New York Tribune*, February 18, 1900, 4.

74. *New York Times*, February 16, 1900, 8.

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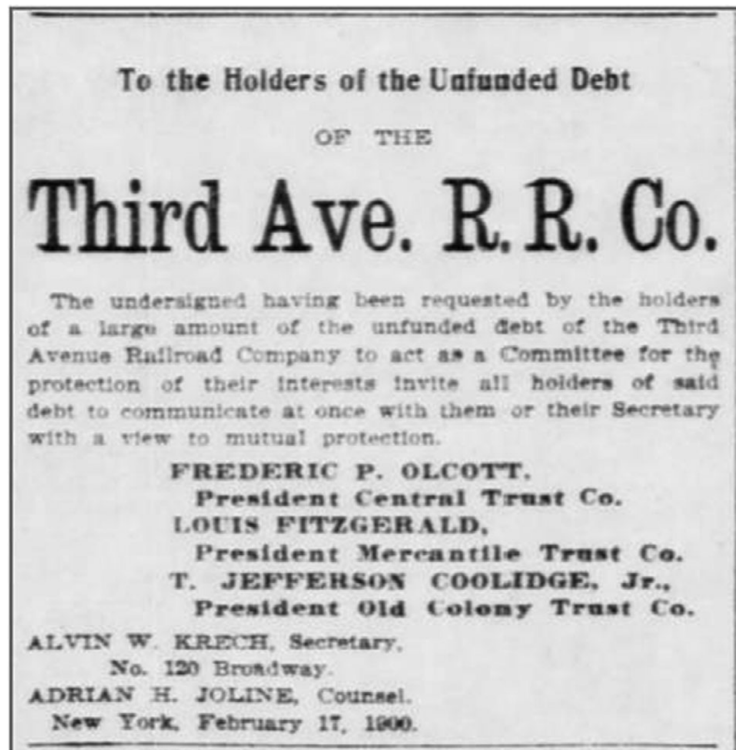
To the Holders of the Unfunded Debt

OF THE

Third Ave. R. R. Co.

The undersigned having been requested by the holders of a large amount of the unfunded debt of the Third Avenue Railroad Company to act as a Committee for the protection of their interests invite all holders of said debt to communicate at once with them or their Secretary with a view to mutual protection.

FREDERIC P. OLCOTT,
President Central Trust Co.
LOUIS FITZGERALD,
President Mercantile Trust Co.
T. JEFFERSON COOLIDGE, Jr.,
President Old Colony Trust Co.

ALVIN W. KRECH, Secretary,
No. 120 Broadway.
ADRIAN H. JOLINE, Counsel.
New York, February 17, 1900.

Figure 2 Creditor committee advertisement.

This ad alerting creditors of a new committee formed to protect their interests appeared regularly beginning February 18, 1900, in several newspapers including the *New York Times*, the *New York Tribune*, and the *Wall Street Journal*.

an ad that regularly ran in several New York newspapers).[75] Third Avenue hired another bank, Vermilye & Co., to continue with the refunding effort, which took on some urgency, as a portion of the debt was coming due on March 1.

Third Avenue as a "Football of Speculation"

The existence of the rescue syndicate and Keene's involvement became public knowledge immediately following the termination of Kuhn, Loeb's refunding efforts. Both the *New York Times* and *Tribune* reported Keene was the preeminent member of a syndicate that bought thirty thousand of Hart's shares at par for $3 million, even though the stock was selling at 120 at the time.[76] The agreement stipulated Hart could repurchase the shares at par within the year. Moreover, the

75. *New York Tribune*, February 17, 1900, 1.
76. Other reports suggest the syndicate purchased twenty thousand shares.

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syndicate lent Hart $2 million at 6 percent. In return the syndicate received a call on the stock for 125, which was good for one year. Keene himself was a bit more cryptic, "I have loaned some money on Third Avenue stock at par, but I never bought or sold 100 shares of it in my life. The stock at par is different from what it was at 240. The company's indebtedness, I admit, is somewhat greater than I believed at the time I advanced the money."[77] However, three days later Keene released a published statement claiming he was "now the holder of a large amount of the stock"[78]

Conflicting reports in leading newspapers contributed to uncertainty over whether outsiders were attempting to gain control of Third Avenue. In the days surrounding Kuhn, Loeb's withdrawal, both the *Tribune* and the *Wall Street Journal* pointed to the presence of Curtiss and another Standard Oil representative as evidence that the Standard interests were supporting Third Avenue.[79] However, on the same day that Keene's involvement was disclosed, the *New York Times* claimed that Standard was not involved and that Curtiss did not represent them. Plus, there were more denials of interest from the Metropolitan people, this time from Ryan: "The intimation that the Metropolitan Street Railway Company, or any one [*sic*] connected with its management or control, proposes to take any part in the affairs of the Third Avenue Railway Company is absolutely false, and those who helped spread the story know it to be so."[80] However, the very next day, Third Avenue's new treasurer, Curtiss, disagreed, claiming no less than J. P. Morgan agreed to lease Third Avenue on behalf of Metropolitan (which, in turn, met with official denial).[81] The rumors and counter-rumors branded Third Avenue even more as "one of the footballs of speculation, the quotations of price being controlled by Wall Street manipulation and therefore conservative investors are quitting it."[82]

Turmoil in Third Avenue affairs had a broader impact on market sentiment throughout late February. Additionally, rumors spread that Keene (with or without the aid of Standard Oil interests) was attacking Metropolitan and other syndicate interests such as People's Gas and Brooklyn Rapid Transit in retaliation.[83] Asked to comment on the widespread perception Keene was a loser in Third Avenue, a Metropolitan insider said, "We have given him a dose of the medicine he gave

77. *New York Times*, February 20, 1900, 3.
78. *Wall Street Journal*, February 23, 1900, 2.
79. *New York Tribune*, February 14, 1900, 12; *Wall Street Journal*, February 19, 1900, 1.
80. *New York Times*, February 20, 1900, 3.
81. *New York Times*, February 21, 1900, 1.
82. *Wall Street Journal*, February 21, 1900, 2.
83. *New York Tribune*, February 25, 4–5; *New York Tribune*, February 27, 10.

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us last December."[84] Regardless of which party had the upper hand, the general belief was that the public and small "fry" had abandoned Third Avenue by this point and that "the big cannibals were eating each other."[85]

At this time, the rumors that Metropolitan was buying shares of Third Avenue were likely true. In testimony before a 1907 New York Public Service Commission investigation of Metropolitan affairs (discussed later), Grant Schley of the brokerage firm Moore & Schley produced trading schedules suggesting the Whitney/Ryan syndicate held a large, probably controlling, block of Third Avenue shares by the end of February.[86] Hendrick, without documentation, asserts Ryan's campaign began on February 19 and that the stock was cornered three weeks later.[87] There were emphatic denials of Metropolitan interest from both Ryan and Metropolitan president Herbert Vreeland. His denial was particularly telling: "We do not purchase roads the net earnings of which are not sufficient to pay the interest on their debt, nor have we ever bought a property that gave no prospect of future development."[88] On February 22, Vreeland went further: "I have been persistently denying for the past five years statements that we had bought or would ultimately buy the control of the Third Avenue Railroad. Notwithstanding these repeated denials the story is again revived and the persistence of it seems to have convinced a number of people that there is some truth in it." Following these denials, Third Avenue share prices began a final descent from 98¼ to an intraday low of 45¼ on March 2.

The bear campaigners scored a major victory on February 27 when Third Avenue shares fell by 17 points, or 27.6 percent, to 51¾, on yet another spike in trading volume. Rumors were rife that Third Avenue was about to be thrown into receivership and even liquidated. Moreover, the *Wall Street Journal* released a report suggesting the shares were worth about 50 inside or outside of receivership.[89] At least some of the rumors came true the very next day when the company was placed in receivership. A former mayor of New York (and a Tammany man[90]), Hugh J. Grant, was appointed receiver, and the most recent dividend was placed in abeyance. The stock bounced to 58¼, with many traders believing the worst of the news was now known.

84. *New York Tribune*, February 25, 4.
85. *New York Tribune*, February 14, 1900, 14.
86. *New York Times*, October 19, 1907, 3.
87. "Great American Fortunes and Their Making—I," 46-47.
88. *New York Times*, February 20, 1900, 3
89. *Wall Street Journal*, February 28, 1.
90. *Wall Street Journal*, March 1, 1900, 1.

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In early March, traders were focused on the receiver's report, especially the magnitude of Third Avenue's debt. Grant's first announcement that the accounts were "such a tangle and chaos" provided additional evidence of Third Avenue's poor management.[91] Moreover, President Albert Elias resigned, a grand jury was convened to look into Third Avenue affairs, and Henry Hart vacated his office in a "pathetic scene."[92] The preliminary receiver's report was released on March 14. It detailed the steps necessary to fully convert to electric power and tried to get a handle on the company's indebtedness, which seemed to be less than expected.[93] However, "Receiver Grant, of Third Avenue, has nothing to say regarding his report, which is not regarded as preeminently satisfactory nor altogether intelligible."[94]

The release of the receiver's report immediately precipitated a minor short squeeze, with Third Avenue shares jumping 10 points as many speculators had incorrectly surmised the report would contain new explosive negative details.[95] One broker, Provost Brothers, was said to have purchased more than fifty thousand shares, with more speculation as to which party or parties stood behind the purchases.[96] Naturally many of the rumors (and strong denials) centered on the Metropolitan interests. In fact, some traders began selling Metropolitan on the belief it would be expensive to buy Third Avenue and assume its debt, necessitating a new issue of Metropolitan shares.[97] Other purported buyers included Keene, Standard Oil interests, and Chicago street railway magnate Charles Yerkes.[98]

Trading in Third Avenue entered a new phase following the release of the receiver's report. In particular, conditions were ripe for a short squeeze: "But what counts on the Stock Exchange much more than the company's actual condition is that almost every little speculator has gone short of the stock on what has been considered the certainty of further severe declines: and this has provided a short interest so extensive that it has become unwieldy and can be scared into nervousness by

91. *New York Times*, March 5, 1900, 7.
92. *New York Times*, March 6, 1900, 3.
93. *New York Times*, March 15, 1900, 7.
94. *Wall Street Journal*, March 16, 1900, 1.
95. *New York Times*, March 15, 1900, 10.
96. *Wall Street Journal*, March 15, 1900, 1. *New York Tribune*, March 15, 1900, 3.
97. *Wall Street Journal*, March 17, 1900, 1.
98. While consolidating the street railways in Chicago, Yerkes previously had perfected many of the techniques used by the Whitney/Ryan syndicate in New York. He retired to London after reducing the Chicago system to "financial pulp and physical dissolution" and selling it at a handsome profit to Whitney and Ryan (Hendrick, *Age of Big Business*). Yerkes also was the model for the Frank Cowperwood character in Theodore Dreiser's novels *The Financier*, *The Titan*, and *The Stoic* (Franch, *Robber Baron*).

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very little manipulative effort upon the part of interests disposed to give the crowding bears a squeeze."[99] Given the large short interest and the shares held by Henry Hart, the amount of stock freely available for trading was limited. In fact, the *Wall Street Journal* reported a strong bull clique managed to trigger several large stop orders placed by shorts, precipitating a rapid advance at the close "giving the impression that the movements were apart from the merits of the concern in light of the receiver's report."[100]

Third Avenue shares continued their erratic ascent over the next few days. Provost Brothers continued to be a heavy buyer, but the party behind it was a mystery. Was the unknown party buying for control, simply buying to boost prices of a heavily demoralized stock to earn a quick profit, or was it a short looking to cover his position?

Third Avenue's weekly return of 21.2 percent prompted the *New York Times* to run some critical commentary on Sunday, March 18:

> We have had during the week much ado over the local traction [street railway] stocks, largely because of the extraordinary conditions that have developed in the Third Avenue Street Railway's affairs. … Official statements are issued which to some extent disclose…a phenomenal case of mismanagement, or worse. Professional speculators have, however, been so much overselling the stock of this unfortunate corporation that is has finally been found easy by manipulators to squeeze the quotation upward sharply. … No such change to higher figures denotes, however, anything that is good discoverable in the property's condition. The company is bankrupt. It has been bankrupted by its managers. … Third Avenue happens to be but more than generally sensational in its illustration of the abiding fact that blind-poolism is destructive.[101]

However, everything was about to change.

A Stealth Hostile Takeover on the Open Market

The acquisition of control of Third Avenue was so expertly done that almost nobody knew it happened until it was announced. A regular feature in the *Wall Street Journal* provided updates on trading activity at various times during the day. Table 2 reports the March 19 commentary pertaining to Third Avenue, providing a real-time view of this activity.

99. *New York Times*, March 15, 1900, 10.
100. *Wall Street Journal*, March 16, 1900, 6.
101. *New York Times*, March 18, 1900, 26.

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Table 2 *Wall Street Journal* reports of trading activity in Third Avenue and the other street railway stocks for March 19, 1900

Time	Report
10:00 a.m.	Market opening
11:05 a.m.	Street railways were the feature, and unconfirmed rumors that the recent purchases of Third Avenue stock were made to obtain control for Metropolitan interests strengthened Third Avenue, but caused selling in Metropolitan, as considerable opposition to such a policy was expected. The selling in all the street railways apparently came from a well-known Wall Street interest and shorts.
12:25 p.m.	In spite of repeated denials from Metropolitan sources of any attempt or wish to take over Third Avenue, there was noticeable pressure on Metropolitan stock. Third Avenue continued to show strength, although the room was unable to trace the source of buying.
3:00 p.m.	The street railway stocks had quite a rally in the last hour in sympathy with the strength of the rest of the market. Some of the selling in street railways in the earlier part of the day was ascribed to the liquidation of a weak bull account now closed. Pressure on shorts and the rumor of the forced closing of a bear account in Third Avenue caused a sensational advance in the last few minutes.
3:30 p.m.	Third Avenue was perhaps a shade below the market rate of 4% to 4½%, but beyond this the demand was normal. The sensational advance in Third Avenue at the close was the subject of wide comment, but it was not generally believed that the market had been able to catch short the same operator who was said to have been long of the stock on the fall, although this view was current. It was suspected that the interest in question had retaliated by catching the shorts, who had previously squeezed him on the other side. The movement was regarded as pure manipulation and quite apart from any ascertainable value.

As indicated in the table, there were rumors of Metropolitan interest, but nothing certain is reported. In the rather colorful words of the *New York Times*, "All of Wall Street was overcome by mystery; a hundred theories had circulation.… The names of conspicuous operators were bandied freely. Some representations had it that Mr. Keene had hurt Mr. William C. Whitney; some others were to the effect that Mr. Whitney had overwhelmed Mr. James R. Keene."[102] While it was Whitney (more accurately Ryan) who prevailed, Whitney's representative continued to deny his or Metropolitan's interest after the market closed at 3 p.m.[103] The *Eagle* also reported Metropolitan president Vreeland (the mouthpiece mentioned in the second quote at the start of this paper) told a friend Metropolitan was not interested in Third Avenue as late as 10:30 that morning. Lauterbach and Grant similarly were in the dark as late as 4:30 and 5 p.m., respectively.[104] Ultimately,

102. *New York Times*, March 20, 1900, 1.
103. *New York Tribune*, March 20, 1900, 1.
104. *Brooklyn Daily Eagle*, March 21, 1900, 1.

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Metropolitan president Vreeland announced the syndicate had control of Third Avenue at 6 p.m.[105]

The post-close 3:30 report pertained to the final "loan crowd" activity when margin loans were settled and short sellers found lenders for the shares needed for delivery. The fact the loan rate for Third Avenue "was perhaps a shade below the market rate" indicated short sellers had minimal difficulty finding shares for delivery.[106] In fact, as discussed in the next section, the short sellers were about to have considerable difficulty covering their positions. After a small fall at the open to 66½ from the previous day's close of 68½, Third Avenue finished the day at 85½, an increase of 24.8 percent.

The typical news story suggested Metropolitan had purchased control of Third Avenue. However, the facts were a bit more complicated. Metropolitan was controlled by the Whitney/Ryan syndicate. This same syndicate bought control of Third Avenue with the intention that Metropolitan would take over Third Avenue's day-to-day operations. In fact, the *New York Tribune* reported that it was Ryan who did the masterful job of acquiring control without most people being aware of it.[107]

After the excitement immediately following the takeover announcement (discussed in the next section), trading volumes returned to historically low levels. The only two days of note were April 10 and 11, when Metropolitan issued $50 million in debt for the purposes of taking on Third Avenue's debt and leased the Third Avenue railway lines for 999 years while promising to gradually increase the dividend to 7 percent.[108]

One outcome of the acquisition was the remaining holders of Third Avenue securities were compensated for enduring the gyrations of their assets over the previous months. The promised dividend of 7 percent was in line with the historical dividends paid by Third Avenue. Moreover, Metropolitan successfully placed Third Avenue's debt on a much sounder footing. However, it was arguable that Metropolitan and/or the syndicate were behind much of the trouble in the first place.

The acquisition also added to an already complex ownership structure for Metropolitan. As noted, Metropolitan generally did not fully purchase its operating subsidiaries, preferring to use leases or the purchase of controlling stakes. Following the Third Avenue deal, Metropolitan had a total of 23 subsidiaries, of which ten were leased and consolidated into Metropolitan's primary financial statements and five

105. *New York Times*, March 20, 1900, 1.
106. *Wall Street Journal*, March 20, 1900, 6.
107. *New York Tribune*, March 22, 1900, 1.
108. *New York Times*, April 11, 1900, 11; April 12, 1900, 5.

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with controlling stakes were not consolidated. One of the five was a subsidiary of a subsidiary controlled via a pyramid of ownership stakes. The remaining eight subsidiaries comprised Third Avenue and its three direct (which all reported separately) and four indirect subsidiaries.[109] This complex structure of controlling stakes and leases afforded the syndicate the opportunity to control a vast network of lines with minimal capital outlay. As discussed later, it also created many opportunities for expropriation.

Trading Issues and Manipulation

Shorting and the Loan Market

A short sale involves borrowing shares of a company and then selling them for cash with the hope of purchasing the shares later at a lower price.[110] The cash would remain at the lending broker as collateral against the borrowed shares, and the short seller would be required to add to the account if the market value of the shares increased. The loans were said to be callable. That is, the lender could require a return of the shares at his discretion. Because the lender had free use of the cash, he typically would agree to pay interest to the borrower of the shares, at an interest rate known as the loan rate. If a stock was easy to borrow, the loan rate matched the call money rate paid by individuals borrowing to buy shares on margin. However, if there was a considerable short interest and shares for loaning were scarce, the loan rate would be less than the call rate, "loan flat," or at a premium. If flat, no interest was paid or received. If the loan rate was at a premium, the lender would be able to charge the short seller for the use of the shares while holding onto the short seller's cash. The premium loan rate prevailing on Third Avenue throughout much of March and April was indicative of a very large short interest outstanding.

The loan crowd met most days at 3:30, just after the market closed, to allow shorts to find lenders for the shares they had sold that day. As with share prices, operators occasionally tried to manipulate loan rates. For example, bull operators would purposely lend freely, making the shares appear more plentiful than they truly were in an effort to encourage additional shorting (the loaned shares later would be suddenly withdrawn to precipitate covering purchases). In contrast, there was

109. *Poor's Manual*, 1901, 992.

110. See Huebner, *Stock Market*, 164, for a description of contemporary practices regarding short sales, including an example transaction and Jones and Lamont, "Short Sale Constraints," for a discussion of the role of premium loan rates as a constraint on short sales in the 1920s.

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"artificial scarcity" designed to deter short selling of Third Avenue on Saturday, February 17, a day that experienced the second lowest trading volume from the beginning of February through the acquisition of control.[111]

One danger of shorting on a large scale is that another operator can come along and buy most of the available shares (i.e., corner the stock). In this event, the short seller would not be able to purchase sufficient shares to cover his position. In such a short squeeze, the short is at the mercy of the trader accomplishing the corner, and special terms must be reached for the fulfillment of the short's obligations. In the case of Third Avenue, once Ryan and Whitney were known to have acquired control, speculation naturally turned to the questions of what would happen to short sellers in general and Keene in particular. Was he about to be squeezed?

It was widely known that considerable animosity existed between Keene and Whitney/Ryan—the "reverse of amicable."[112] Keene's bear raids on Metropolitan in 1898 and 1899 were among the many grievances.[113] Whitney and Ryan later "tried to put James R. Keene in prison behind bars" due to Keene's attack on a bank.[114] The bank in question was likely the State Trust Company, which was controlled by Whitney and whose president accused Keene of being in a conspiracy to depress State Trust's prices around the same time as the Third Avenue events.[115] The rivalry even extended to the track, as they were both avid horsemen.[116]

While there were conflicting reports concerning the number of shares Ryan had acquired, the holdings of individuals unlikely to sell and the extent of the short interest suggest the number of shares held short vastly exceeded the number of shares available for purchase. We provide a summary of the situation in Table 3.

An inspection of Third Avenue's trading books indicated there were a total of 1350 shareholders. Of these, 800 were small investors holding an average of thirty shares each. Another 50 lots totaling 16,000 shares were in the hands of trustees or guardians. General opinion had it that neither the scattered small investors nor the trustees/guardians were likely or able to sell. Keene's involvement as part of the rescue syndicate that had purchased shares from Henry Hart the previous December was common knowledge. The syndicate acquired a minimum of 90,000 shares and perhaps as many as 104,000 as one Metropolitan officer

111. *Wall Street Journal*, February 19, 1900, 6.
112. *New York Tribune*, March 20, 1900, 1.
113. *New York Times*, January 30, 1910, M2.
114. Baruch, *My Own Story*, 117.
115. *New York Times*, March 14, 1900; *New York Tribune*, March 21, 1900, 1.
116. Hirsch, *Modern Warwick*, 588–589.

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Table 3 Estimates of the ownership and short interest in Third Avenue as of the market opening on March 20, 1900

Number of shares outstanding	160,000
Shares held:	
by the syndicate	Minimum of 90,000
by Henry Hart	28,000 to 32,000
by small investors	24,000
in trust	16,000
Short interest	50,000 to 60,000

Note: The data come from "M.S.R. Gets Third Ave," *New York Tribune*, March 20, 1900, 1–2; "Sharp Stick for Keene," *New York Tribune*, March 21, 1900, 1–2; "News and Views about Stocks," *Wall Street Journal*, March 20, 1900, 1; and "Metropolitan in Official Control," *New York Times*, March 22, 1900, 1–2. The shares held by the small investors and in trust were reported by the *Tribune* on March 22 ("Now in Full Control," p. 1) and were obtained through an analysis of Third Avenue's ownership books. The March 21 *Tribune* article cited one Metropolitan representative who estimated the syndicate had control of as many as 104,000 shares.

stated that the syndicate held 65 percent of the shares.[117] Widespread speculation existed that Keene had sold the 30,000 shares he had bought from Hart. It is unlikely Ryan would have been about to purchase 90,000 to 104,000 shares aside from Hart's out of the 160,000 shares outstanding, especially given the 40,000 shares from small investors and trusts (though some of the 16,000 trust shares might have been lent in the shorting market).

In fact, it generally was believed that Keene had unsuccessfully attempted to persuade Hart to vacate their agreement giving Hart a call on the thirty thousand shares at par (a price Third Avenue hit on March 20). When asked about the source of the shares held by Metropolitan interest, President Vreeland would only note they had bought their shares on the open market, refusing to speculate where they came from.[118] Even if denials "by those in a position to know" that Keene had sold the shares held in trust were true, it was certain the stock was thoroughly cornered.[119] Other than one statement "Dictated Exclusively" to *The World*, Keene refused all questions asked of him that week. In this statement, Keene claimed that the reports he had sold Hart's shares were false and that "every share of stock belonging to Mr. Hart is here in my office safe and always ready for delivery on demand." He added: "You can also tell my friends not to worry about me. I am all right."[120]

Had Keene shorted stock extending his losses beyond his call obligation to Hart? There were no short sales directly registered to Keene, but the *New York Times* reported gossip that "Keene broker" Arthur

117. *New York Tribune*, March 21, 1900, 1–2.
118. *New York Times*, March 20, 1900, 1.
119. *New York Tribune*, March 21, 1900, 1–2.
120. *The World*, March 21, 1900, 9.

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M. Hunter was caught short five thousand shares. While Whitney was cagey regarding the matter, it was clear that he hoped they had caught Keene short. Hendrick suggests Ryan masterfully manipulated Keene, whereby Ryan lent Keene shares to short via brokers and then repurchased them on the open market. Thus Keene was thoroughly cornered and at Ryan's mercy once control of Third Avenue was announced.[121] If so, Keene was not alone; as attention turned to the extent of the short interest and the fate of short sellers, it quickly became clear that the stock was cornered. The market opening of March 20 was expected to be dramatic and it did not disappoint:

> Third Avenue met all expectations, going up by leaps and bounds; and all the other traction stocks also advanced sharply in sympathy with it. At the opening of business on the Stock Exchange the galleries were filled with spectators, and around the Third Avenue trading point was the largest crowd of brokers which had gathered to trade in any single stock in years. At 10 o'clock the whole crowd began yelling and gesticulating at once, the brokers for the hapless shorts bidding wildly and desperately in the effort to effect purchases which would enable their customers to close out their contracts and escape threatened further loss. Third Avenue closed on Monday at 85, but yesterday morning opened "wide" at a minimum advance of five points, sales being effected simultaneously in different parts of the crowd at prices ranging all the way from 90 to 100. These transactions represented the transfer of nearly six thousand shares.[122]

That was the first five minutes. Overall, the trading volume was 61,285 shares. One speculator admitted to losses of $250,000, with ten or more losing between $10,000 and $100,000.[123]

The loan rate on Third Avenue was punitive, at one point reaching 4 percent *per day* premium, meaning traders had to pay $400 per day to borrow 100 shares for delivery. The new controlling shareholders helped keep panic under control by freely lending their newly acquired shares for the first couple of days.[124] Even so, the short interest was still extensive the next day with shorts paying a ⅛ to ¼ percent premium in the morning and ½ percent in the afternoon.[125] The *Wall Street Journal* reported that manipulators tried to bid up the premium, attempting to force shorts to cover, thereby increasing prices. It further reported the short interest remained at ten thousand shares on March 26, and "the

121. "Great American Fortunes and Their Making—I," 48.
122. *New York Tribune*, March 21, 1900, 1.
123. *New York Times*, March 21, 1900, 1.
124. *New York Times*, March 22, 1900, 10.
125. *Wall Street Journal,* March 21, 1900, 6.

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already small account was much reduced" by April 9. While price volatility settled down on reduced volumes, the stock continued to loan flat or at a small premium for more than a month.

As for Keene, the press coverage at the time and Hendrick's detailed examination of traction affairs indicate Keene suffered large losses.[126] For example, one contemporaneous rumor "quoted his losses as being far beyond $1,000,000."[127] Keene's precise losses likely will never be known, with estimates ranging from $1 million to as high as $5 million. To start, Keene was on the wrong side of the call with Hart, but it is unknown when the call was settled. The average closing price of Third Avenue from March 21 to the end of April was 107⅝ providing an estimated loss on the call of $227,750. More likely, given the amount of shares needed, Keene's delivery was later in the year, greatly increasing Keene's loss, as Third Avenue's stock generally traded in the 110 to 120 range for the rest of 1900.[128]

The estimates of Keene's losses of $1 million and beyond imply that he shorted stock at unfavorable prices (Third Avenue's stock went as low as 45¼ on March 2 in intra-day trading) and suffered from the high premium loan rates in the days following the acquisition. That Keene was squeezed by Ryan comports with established views that operations such as Ryan's were common. Hendrick suggests Ryan wanted to leave Keene with nothing, while Whitney counseled a degree of charity.[129] On April 30, the *New York Times* began its markets coverage with this note: "Speculators upon the bear side are heavy losers in the departure of Mr. James R. Keene for an extended European vacation. They will miss him especially in their campaigns against the local traction stocks and a number of industrials, notably the tobacco and iron and steel shares."[130]

Manipulative Trading

> If the Metropolitan officers had frankly proclaimed their desire to buy a majority of the Third Avenue stock they could have done it if at all only by paying an enormous price for it, and the next best thing to not desiring to do it was to make the holders of the stock and competing purchasers believe that they did not desire it. The mischief they were doing to their reputation for veracity, they do not seem to have considered, and, thus their present indignant denials that they

126. *New York Tribune*, March 21, 1900, 1–2; *Brooklyn Daily Eagle*, March 21, 1900, 1; "Great American Fortunes and Their Making—I," 48.

127. *New York Times*, March 21, 1900, 1.

128. Keene's call from Hart at $125 remained underwater, as Third Avenue's stock remained below that level for the following year.

129. "Great American Fortunes and Their Making—I," 48.

130. *New York Times*, April 30, 1900, 9.

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> contemplate a fresh issue of Metropolitan stock is received with the incredulity it deserves.[131]

Three broad strategies exist for manipulators when they attempt to move stocks away from fundamental valuations and earn abnormal trading profits. First, manipulators might inflate the price of a stock beyond its fundamental value and then sell before the broader market is aware of the mis-valuation. This method was referred to as a "bull raid" during the time of our story. A modern term for this strategy is "pump and dump." Second, investors can take short positions and engage in a "bear raid." Finally, as just discussed, if an extended short interest exists, manipulators can acquire sufficient shares in an attempt to corner the market and squeeze those with short positions.

Allen, Litov, and Mei dissect market corners, examine the risks involved for the manipulator, and provide a history of successful and failed corner attempts.[132] As with the Third Avenue case (which is not in their sample), a successful corner forces short sellers to buy stock from the manipulator at a high price to cover their short positions. Corners are more likely to be successful when short interest is especially high and where there is sufficient liquidity to allow the manipulator to acquire a substantive long position. Allen, Litov, and Mei also provide evidence that large investors and insiders had market power allowing them to manipulate prices.

Outside of market corners, there are only a few studies of manipulative trading in the early part of the twentieth century. These studies find little evidence of price manipulation, and instead document that unusual pool activity was driven by informed trading.[133]

Armour and Cheffins argue the likelihood of success of a typical open market bid (OMB) of the era was influenced by the willingness of existing shareholders to sell at prevailing prices.[134] Their discussion hinges on the elasticity of supply and whether it is possible for shareholders to determine whether a bid is underway. If they can make the determination, they will demand higher prices. Consistent with the quote at the start of this section, most OMB acquirers would engage in significant manipulation to camouflage the acquisition effort, thereby reducing the potential cost of obtaining control.

Ryan was able to use the press and incomplete information surrounding Third Avenue's financial difficulties to camouflage his trading activity. Indeed, he and other Metropolitan insiders helped keep the

131. *The Sun*, March 26, 1900, 7.
132. Allen, Litov, and Mei, "Large Investors."
133. Mahoney, "Stock Pools"; Jiang, Mahoney, and Mei, "Market Manipulation."
134. Armour and Cheffins, "Stock Market Prices."

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tone of coverage negative with their regular public statements indicating a disinterest in acquiring control. Keene inadvertently helped draw attention away from Ryan through his participation in the syndicate to bail out Hart and his revealed disgust with the state of Third Avenue's finances. Ultimately, Keene's (atypical) recklessness afforded Ryan the opportunity to do a short squeeze.

Allen and colleagues investigate a modern market corner in which Porsche briefly squeezed the shares of Volkswagen in 2008, causing the price to spike from €210 to €1005 over the course of two trading days, an event that had many parallels to the corner and short squeeze in Third Avenue.[135] In particular, they show the comparative lack of investor protections in German financial markets reduced market quality and increased information risk. Porsche and Metropolitan officials both engaged in information campaigns to camouflage their activity and dupe analysts or journalists. Moreover, Porsche is controlled via a complex pyramidal ownership structure similar to that employed by Metropolitan. The controlling shareholders in both cases also found it necessary to provide liquidity to limit the effects of their respective short squeezes. In the end, both cases show that manipulative activity hampered efficient price discovery.

Various twentieth-century market reforms have had the effect of making Ryan's Third Avenue operations illegal. First, the NYSE modified its rules in 1910 to limit market manipulation, especially fictitious trading practices such as matched orders. These rules were put in place in response to a 1908 investigation instigated by New York's governor Hughes into Wall Street's speculative practices.[136] Second, the Securities and Exchange Act (1934) empowered the board of the Federal Reserve to set more stringent margin requirements and made providing false information or spreading false rumors with the intent to manipulate stock prices illegal. Finally, the Williams Act (1968) requires a 13D filing within ten days of hitting the 5 percent ownership threshold. Had either of these last two regulations been in effect in 1900, Ryan's ability to accumulate stock at favorable prices would have been severely compromised.

Winners and Losers

We explore several themes that emerge from the acquisition of Third Avenue. We begin with a discussion of the capital market environment

135. Allen et al., "Market Efficiency."

136. Milburn and Taylor, "NYSE Brief"; see also, O'Sullivan, *Dividends of Development*, 231–241, for more on these early reform efforts.

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that provided incentives for consolidation. Next, we discuss how Whitney and Ryan systematically tunneled wealth from Metropolitan's minority shareholders. Finally, we discuss the syndicate's ongoing efforts to keep Metropolitan afloat concluding with its collapse in 1907.

Industry Consolidation and Acquisitions in 1900

Mitchell and Mulherin and Andrade, Mitchell, and Stafford document that merger waves tend to be clustered in industries where exogenous shocks such as technological advances, financing innovations, changes in input costs including increases in foreign competition, sudden changes in the price of oil, and deregulation disrupt the business environment.[137] White cites innovations such as barbed wire, bicycles, the Bessemer process in refining steel, and the Bonsack machine in making cigarettes as innovations that sparked the creation of large companies in the late nineteenth century.[138] These shocks precipitate waves of mergers and other restructurings as the optimal firm size or scope for firms might change, offering constituent companies the opportunity to create more effective operating structures and earn economic rents (or survive a more adverse environment).

Vreeland referred to the benefits of consolidation in his official statement upon the announcement of the change of control. He cited the "good many millions" in savings arising from the use of Metropolitan's power plant to run Third Avenue's electrified routes. He also noted Third Avenue was worth more when operated in cooperation with Metropolitan, and that the consolidation was urged upon him by his "own people" and Third Avenue's creditors.[139]

One regularity in the empirical data in the M&A literature examining more recent merger waves (beginning with the 1960s) is that the acquiring firms tend to average a very modest return.[140] On average, the returns appear to be captured by the target firms' shareholders, and quite possibly the target firms' managers through golden parachutes. Several explanations have been proffered to clarify why a firm, or other entity, would choose to initiate consolidations, given the relatively poor average returns for acquirers. For example, agency considerations such as empire building might explain some acquisitions.[141] Alternatively, rent-seeking managers might be responding to a shock where

137. Mitchell and Mulherin, "Industry Shocks"; Andrade, Mitchell, and Stafford, "Evidence and Perspectives."

138. White, *Republic*, 790.

139. *New York Times*, March 20, 1900, 1–2.

140. Andrade, Mitchell, and Stafford, "Evidence and Perspectives."

141. The Whitney/Ryan syndicate seemingly willingly paid large premiums during the initial phase of their consolidation of control of the Manhattan street railways (*Street Railway Journal*, 1899, 876). However, as discussed in the next

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consolidation is viewed as inevitable, thus taking an "eat or be eaten" view with a willingness to overpay in an effort to survive.[142] The economic incentives for the consolidators were more straightforward during the merger wave of 1897–1903. These incentives included strong potential returns available to those able to successfully pursue OMBs. As such, the motivations for making an acquisition do not require agency-based explanations.

The returns earned by the syndicate and/or Metropolitan likely were spectacular. Hendrick dates the start of the campaign to the day of the dual Metropolitan denials (February 19) and claims it lasted three weeks.[143] In turn, Grant Schley of the brokerage Schley & Moore handled Metropolitan's purchases of Ryan's Third Avenue shares at the orders of Whitney and Vreeland. The purchases totaled $6,585,070.36 and occurred between March 19 and June 27, 1900. The *Times* also reported Ryan had obtained control before the beginning of March.[144]

We cannot know Ryan's exact purchase prices, the number of shares he purchased, or whether he later sold the shares to Metropolitan at cost or at prevailing prices. Regarding the last point, it was understood the Public Service Commission intended to investigate. However, we can find no further information.

At the very least, we can estimate the returns per share earned by the syndicate or Metropolitan, whichever it was. Assuming Ryan distributed his trades in line with overall Third Avenue trading, his volume-weighted acquisition price over Hendrick's three weeks beginning February 19 was $64.35. If we assume the shares were acquired from February 19 to February 28, the volume-weighted price was $72.73.[145] Third Avenue's closing price on March 20, the day after the control announcement, was $101.25. Altogether, these prices imply the returns to the syndicate and/or Metropolitan were between 39.2 percent and 64.4 percent. Furthermore, Metropolitan officially signed the lease on April 11 when Third Avenue was at 117, suggesting overall returns of 60.9 percent to 81.8 percent. The syndicate likely earned further

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section, they were able to turn around and sell their targets to Metropolitan at even higher prices.

142. Gorton, Kahl, and Rosen. "Eat or Be Eaten."

143. "Great American Fortunes and Their Making—I," 46. Keene's involvement in Third Avenue became public knowledge the same day.

144. *New York Times*, October 19, 1907, 3. This information came to light during the Public Service Commission's hearings on street railway affairs.

145. Schley's testimony indicated Metropolitan paid $6,585,070.29 for the Third Avenue shares (*New York Times*, October 19, 1907, 3). Assuming ninety thousand shares, this amount implies an average transfer price of $73.17. This price is in line with our estimates, suggesting that in this instance Metropolitan purchased the shares at Ryan's cost.

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returns via lending stock and earning premium loan rates in the weeks following the acquisition.

Given the changes in acquisition methods and disclosure rules, we cannot make an apples-to-apples comparison of returns in the merger wave of 1897–1903 relative to those of the more recent merger waves. Even so, the contrast is striking. Andrade, Mitchell, and Stafford report an average 1.8 percent announcement period return for acquiring firms and a 16.0 percent average announcement return for target firms over the period 1973–1998.[146] This stylized finding that target firms capture the lion's share of synergistic gains has been confirmed in a variety of studies and stands in stark contrast to the gains earned by the Whitney/Ryan syndicate in the Third Avenue takeover.

The wealth gains for the Whitney/Ryan syndicate as well as those earned by existing Third Avenue shareholders who held their shares during the period in question came at the expense of Third Avenue shareholders who sold their shares in February and early March in the wake of the misinformation campaign. For Metropolitan shareholders, the results were mixed. They appear to have garnered control of Third Avenue's assets through a lease. However, Metropolitan took on $50 million in new debt on April 10, and the lease terms were generous and ultimately unsustainable. In contrast, Third Avenue bondholders were paid in full as the new debt issue was used to eliminate Third Avenue's floating debt.

Tunneling and Corporate Governance

In response to the corporate governance failures associated with the Asian financial crisis in 1997, financial economists have discussed how insiders can take advantage of ownership pyramids to control large companies with minimal capital investments while "tunneling" out wealth from inside the pyramids for private benefit.[147] Notably, Johnson and colleagues argue different legal regimes can assist or hinder tunneling attempts.[148] Atanasov, Black, and Ciccotello provide a detailed discussion of how to extract wealth through tunneling, such as by cash flow tunneling, asset tunneling, or equity tunneling.[149]

The Whitney/Ryan syndicate created a similar pyramid structure at Metropolitan and successfully used all three methods to amass a fortune, but most particularly via asset tunneling. Whitney was estimated to be

146. Andrade, Mitchell, and Stafford, "Evidence and Perspectives."
147. Bertrand and Mullainathan, "Pyramids."
148. Johnson et al., "Tunneling."
149. Atanasov, Black, and Ciccotello, "Law and Tunneling."

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worth $40 million at the time of his death in 1904, and Ryan was estimated to be worth $50 million as of 1905.[150] These fortunes would both exceed $1 billion in current value. Much of this wealth was generated by growing valuable businesses, investing in new technologies, and engaging in valuable consolidations. However, both Whitney and Ryan were dogged by accusations that some of their wealth was earned by tunneling.

The treatment of Metropolitan's minority shareholders comports with that of the modern era in many countries. A voluminous literature examines the agency conflicts between large controlling shareholders and minority shareholders.[151] A typical problem in this context is the expropriation of minority shareholders via asset tunneling, which can involve either selling assets cheaply to related parties (tunneling out) or, as with the accusations levied against the Whitney/Ryan syndicate, having the firm overpay for assets from a related party (tunneling in). The syndicate had effective control over Metropolitan, even though the firm had a substantial shareholder base. Metropolitan was able to raise capital to fund its expansion through new stock and bond offerings on an ongoing basis.

As Metropolitan fell under the purview of the Interstate Commerce Act of 1887 requiring railways to submit annual reports to the Interstate Commerce Commission, it is possible to gain a reasonably clear picture of its financing activities. The Third Avenue acquisition was the culminating transaction in the ongoing effort to achieve control of street transport in Manhattan. To facilitate its activities, the syndicate created two shell companies, first the Metropolitan Traction Company and then Metropolitan Street Railway. The syndicate bought lines for itself and would in turn sell them at a profit to Metropolitan Traction and then Metropolitan Street Railway. As such, the syndicate was on both sides of each transaction, shifting capital from Metropolitan Street Railway toward Metropolitan Traction. As mentioned earlier, the cash to purchase or lease assets frequently came from newly issued securities (creating water in the stock as described next). In one notable example, in 1894, Metropolitan issued $16 million (par value) in securities, comprising $8,300,000 in equity and the rest in bonds, to raise capital to pay the Whitney/Ryan syndicate for sixteen miles of cable railway lines. Hendrick estimated that these lines could not have a capitalized cost greater than $3 million.[152] The syndicate liquidated Metropolitan Traction in 1897 after having shifted capital

150. These estimates appeared in "Great American Fortunes and Their Making—II." Hendrick attributed his estimate of Whitney's wealth to a representative of his estate. Ryan's wealth was estimated by Ryan's official representative.

151. See Shleifer and Vishny, "Survey of Corporate Governance," for a thorough discussion of these agency conflicts.

152. "Great American Fortunes and Their Making—II," 240.

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raised from a series of securities issued by Metropolitan Street Railway Company.[153]

Financial economists debate the trade-offs of holding excess capital (financial slack), with information asymmetries increasing value and agency problems decreasing value.[154] At the time of our story, the agency problems associated with raising excess capital to purchase overvalued assets were considered severe, far overwhelming any possible benefits of retaining financial slack. Given the very real concerns over insider tunneling, companies would provide precise estimates of capital needs and uses as part of the book-building process for equity issues.[155] Nonetheless, investors routinely accused firms of issuing watered stock. Even so, market participants were willing to overlook the water, because they hoped to get rich via their own speculations, as is common in speculative manias.

It is not clear exactly when Whitney and Ryan set their sights on Third Avenue. The December 1899 issue of the *Street Railway Journal* suggests it had been a long-standing goal, as Third Avenue was the only entity preventing Metropolitan from gaining monopoly control of the street railways in Manhattan. Events from fall 1899 suggest that interests aligned with Whitney and Ryan hindered Third Avenue's survival as a stand-alone firm. That summer, Third Avenue authorized a capital increase of $24 million to continue the changeover from horse-drawn lines to electric power. Hart attempted to expand electrification without Tammany Hall support, but he was stymied by a lack of regulatory approvals. Third Avenue ultimately was forced to use a notorious Tammany-connected contractor, costing the company $10 million but yielding little progress. In contrast to Hart, Ryan was well aligned with Tammany Hall.[156] As noted earlier, Whitney had an adversarial relationship with Tammany interests earlier in his career. Moreover, he had fought against Tammany's preferred candidate and on behalf of Cleveland for the Democratic nomination in 1892. However, in the intervening years, Whitney included some Tammany figures in the syndicate's street railway investments.

Muckraker journalists made repeated accusations that the syndicate overloaded Metropolitan with water, including the money they raised to pay for the Third Avenue acquisition. Metropolitan bought the

153. As discussed later, a 1908 grand jury investigation of the syndicate's traction operations failed to find evidence of indictable crimes.

154. Myers and Majluf, "Corporate Financing"; Jensen, "Agency Costs."

155. Walker and Yost, "Seasoned Equity Offerings," report the recent routine trend is for firms to state in SEC-mandated filings that capital is being raised for "general corporate purposes" with no further guidance as to the intended use of funds.

156. "Great American Fortunes and Their Making—I," 39; *New York Times*, February 18, 1900, 22.

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shares Ryan had purchased on behalf of the syndicate during the March operations using this newly raised money.

Third Avenue maintained its existence as a separate company and leased the streetcar lines to Metropolitan for 999 years. The lease rate at 7 percent of par value was in line with expectations but was phased in. Third Avenue's shares had traded as low as 45¼ intraday on March 2, and on the day the lease was announced (April 11), closed at 117. Ultimately, as the next section details, Metropolitan's inability to make these lease payments was the critical factor in forcing Metropolitan and Third Avenue into receivership in 1907.

Subsequent Events: The Creation of Metropolitan Securities

The Third Avenue acquisition was the culminating event of Metropolitan's quest to gain control of street railway transportation in Manhattan. However, it "was nevertheless financially embarrassed; greatly overcapitalized and water-logged."[157] Looking to restructure the debt taken on through their many acquisitions and raise funds necessary for additional electrical upgrades, the Whitney/Ryan syndicate, on February 14, 1902, proposed the creation of a new superstructure to assume control of Metropolitan. Coincidentally, it afforded the syndicate the opportunity to exit from its position.[158]

The syndicate brought in a new group of investors to form new parent and operating companies above Metropolitan in the ownership pyramid. The new holding company, capitalized at $30 million, the Metropolitan Securities Company, would be the 100 percent owner of the Interurban Street Railway Company, which in turn would lease the Metropolitan and its subsidiary lines for 999 years. The three entangled railways—the newly created Interurban, Metropolitan, and Third Avenue—had almost identical sets of directors creating conflicts of interests.[159] Interurban, with newly raised capital, agreed to pay Metropolitan shareholders a guaranteed 7 percent dividend as well as paying all rentals due to Metropolitan subsidiaries. Moreover, it committed $23.4 million dollars to pay for the electrification of various crosstown lines and provide reserve capital. In return, Metropolitan assigned its holdings in various smaller lines it had acquired over the years to Interurban. Existing Metropolitan shareholders had the opportunity to buy 45 percent of Metropolitan Securities, with new investors providing the remainder. Moreover, $65 million in new 100-year

157. Carman, *Street Surface Railway Franchises*.

158. Whitney passed away in 1904. His estate contained zero Metropolitan shares ("Great American Fortunes and Their Making—II," 242).

159. Hirsch, *Modern Warwick*, 527.

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4 percent mortgage bonds would be issued for the purpose of retiring existing Metropolitan debt carrying higher rates, including the unsecured bonds issued following the Third Avenue acquisition.[160]

The Merger with Interborough Rapid Transfer

Attempts to build a subway in Manhattan began with an 1849 article by Alfred Beach in *Scientific American* proposing the construction of a Pneumatic Tube subway and the secret construction twenty years later of a one-block model.[161] After decades of delay due to competing political claims and, by the 1890s, the syndicate's obstructive strategies, including their own early 1899 proposal to privately build the subway, the New York Rapid Transit Commission finally approved the subway in December 1899.[162] The city would pay for the construction of the subway and call for bids for its actual construction and operation.[163] The commission awarded the rights to build it to John McDonald on January 16, 1900.

The only other bidder was secretly supported by the syndicate, which continued its efforts to delay construction by convincing most of the banks in New York to not fund McDonald until he found a kindred spirit in the financier Augustus Belmont. The syndicate next blocked his efforts to obtain the necessary permits from the state legislature in Albany. However, Whitney came through, secretly paving the way (a fact that Belmont reluctantly revealed on the witness stand in a trial on a different matter in 1913).[164]

The subway opened on October 27, 1904. It was a hit with the public and immediately began stealing market share and profits from Metropolitan. Direct comparisons are impossible due to the creation of Metropolitan Securities, but Metropolitan had an average surplus margin (profit margin) of 22.7 percent over the period 1900 to 1903. In contrast, Interurban (by now renamed the New York City Railway) had a margin of −16 percent in 1905. When McDonald proposed extensions to the subway, the syndicate co-opted him by hiring him away from Belmont and paying him $500,000 essentially to do nothing.[165] They also hinted they were ready to build the extensions and garnered public support for

160. For more details, see the *New York Times*, March 21, 1902, 1; *Street Railway Journal*, February 22, 1902, 222.

161. Most, *Race Underground*; Hood, *722 Miles*.

162. Katz, "Rapid Transit Decision."

163. Hood, *722 Miles*, 71.

164. Katz, "Rapid Transit Decision"; Most, *Race Underground*; *New York Times*, October 2, 1913.

165. *New York Times*, October 8, 1907, 1.

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their proposals through the promise of free transfers to the surface lines.[166] Ryan, firmly in control of the syndicate following Whitney's death, was able to effect a tie-up with Belmont in January 1906. They created yet another holding company, the Interborough-Metropolitan, which now had monopoly control over all public transportation (elevated, street level, and the subway) in Manhattan.

The Collapse of the System

By 1907, the system of rental payments emanating from the New York City Railway at the top of the operating pyramid was unsustainable. It was showing a deficit of $2,286,315 on gross revenue of $17,425,660 (a margin of −13.1 percent) for the 1906 fiscal year, the last year with independent data. While the rentals allowed Metropolitan to pay its own dividends each year, it in turn was finding it difficult to maintain the promised dividends payable to Third Avenue shareholders.

The New York Public Service Commission held a series of explosive public hearings examining congestion, the lack of progress toward completing electrification, and the generally poor condition of the rolling stock. The controlling syndicate had just made a final effort to prop up the system's poor finances in May. Metropolitan Securities would provide $15 million to Metropolitan, through the New York City Railway, for the purposes of paying its dividends. Metropolitan would issue new debt to Metropolitan Securities in return.[167] However, the cash flow problems were insurmountable, and the New York City Railway went into receivership on September 24, 1907. Metropolitan, Third Avenue, and three other subsidiaries went into separate receivers' hands in the succeeding months, and Metropolitan's Third Avenue's lease was dissolved in 1908, ending the practice of free transfers between the systems.[168]

In the end, Third Avenue did not emerge from receivership until 1912. Metropolitan and New York City Railway took until March 1916, with New York City Railway returning to receivers' hands in 1919.[169]

The Final Word

The Public Service Commission hearings sparked public outrage over Metropolitan's affairs. This outrage prompted New York district attorney William Travers Jerome to institute grand jury investigations into Metropolitan, Thomas Ryan, and other surviving syndicate members in

166. Conveniently, these plans never went anywhere. Walker, *Fifty Years*, reports construction on additional subways did not begin until 1911.

167. *New York Times*, September 6, 1907, 1.

168. *Manual of Statistics*, 1910.

169. Swaine, *Cravath Firm*.

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November 1907 and then again in January 1908.[170] These investigations found no evidence of wrongdoing. Outraged investors, in turn, demanded an investigation of Jerome on corruption grounds. The *New York Times* gave Jerome the opportunity to explain his decisions. Finding no evidence of a crime, Jerome also said, "I believe the attitude of the 'Traction Trust,' so-called, was that expressed by the late Commodore Vanderbilt, when he said, 'The people be damned.' I do not think that these persons are actuated by an unselfish desire to help the people but seek to make out of the people every dollar they can, too often by means most unscrupulous."[171]

Summary

> For at least another hundred years we must pretend to ourselves and to every one that fair is foul and foul is fair; for foul is useful and fair is not. Avarice and usury and precaution must be our gods for a little longer still.—John Maynard Keynes

Trading volumes (relative to shares outstanding) peaked on the NYSE during the years 1899 – 1901. This period overlaps with the first U.S. merger wave, an era marked by incredible capital market development, strong stock returns, and a growing economy. The most actively traded shares included the street railway companies located in New York City. During this period, rail electrification began in earnest. This disruptive technology created challenges and opportunities for companies servicing urban commuters.

The Third Avenue Railway began the process of electrification in 1899, financing the investment with a mix of new equity and unsecured debt. The debt burden damaged the company's financial health and made Third Avenue an attractive target for manipulation and then acquisition. We research the period surrounding the stealth hostile takeover of Third Avenue by a syndicate in control of the Metropolitan Street Railway Company and document the activities of insiders who tried to prosper from the uncertainty surrounding the industry's future. We compile a historical record of the information and misinformation that insiders planted in the press. This extensive misinformation campaign included rumors about excessive debt, refinancing activities,

170. Jerome also pursued Metropolitan investigations upon first becoming district attorney in 1903 to investigate claims of fraud leveled by William Amory, a former Third Avenue officer. Later, the claims were made public in Amory, *Truth*.

171. *New York Times*, May 31, 1909, 1–2. Though Jerome's statement was an indirect quote from William H. Vanderbilt, Commodore Vanderbilt's son, who actually said the "public be damned."

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short interest, dividend cuts, a forced liquidation, an impending receivership, forced stock sales by Henry Hart, the formation of a trading syndicate led by James Keene, attempts by Metropolitan to take control of the company, and the elements of the auditor's report.

We provide evidence that a trading syndicate led by William Whitney and Thomas Ryan was able to gain control of Third Avenue and earn significant returns in March 1900 at the expense of certain Third Avenue shareholders. We also show how Whitney and Ryan used their interconnected rail investments as a means to transfer wealth from Metropolitan's minority shareholders to themselves.

Finally, we argue that the lax regulatory environment of the period, which afforded speculators greater opportunities to profit, facilitated the stealth hostile takeover. Ultimately, Metropolitan, the industry behemoth, could not make a profit and a newer, cleaner, more efficient technology, namely underground rail, reduced the viability of street railway operations.

The birth of the subway, its history, and its place in New York City history have been extensively studied.[172] While profitable from the start, the subway was burdened with a public/private ownership structure that made it financially unwieldy. There were further battles over the rights to build additional lines.[173] These difficulties were exacerbated by the creation of the Interborough-Metropolitan in 1905 and the collapse of the system in 1907. Ultimately, the sensational disclosures of a transit monopoly run amok in the 1907 Public Service Commission hearings fed Progressive outrage and paved the way for a new era of public ownership.

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172. See, for example, Walker, *Fifty Years*; Hood, *722 Miles*; Most, *Race Underground*; Cheape, *Moving the Masses*.

173. Hood, *722 Miles*, 14, 113–126.

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APPENDIX 1

Summary of rumors and significant news events pertaining to the Third Avenue Railroad and its interactions with the Metropolitan Street Railway

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Date	Event	Rumor/actual	Closing price[a]	Source[b]
Jan. 2			135	Ti, 1/12, 10
Jan. 11	New bidder for right to build subway	Rumor	126	Ti, 1/14, 6
Jan. 13	Metropolitan acquisition, with denials from Edward Lauterbach	Rumor	122½	Tr, 1/14, 4
Jan. 15	No significant rumors		123¼	
Jan. 16	Opening of bids for building subway hurts prices of all street railways	News	120½	Ti, 1/17, 13
Jan. 17	Kuhn, Loeb to lead syndicate to reorganize the debt	Rumor		Tr, 1/18, 8
	Extent of indebtedness better understood/Company to be reorganized	News/rumor		Ti, 1/18, 2
	Company to issue stock	Rumor	117½	WSJ, 1/18, 1
Jan. 18	Supposed confirmation of rumor Third Avenue previously offered to Metropolitan, but Metropolitan refused. Manhattan Railway to offer transfer arrangement and make loan to Third Avenue	Rumors		Tr, 1/19, 3
	Metropolitan ties to party refunding the debt	Rumor	116½	WSJ, 1/19, 1
Jan. 19	Hitch in refunding efforts/Hart obstructed share issues in fall and Kuhn, Loeb is to head refunding syndicate	Rumor/news	113¾	Ti, 1/20, 9
Jan. 20	No significant rumors		112	
Jan. 22	Report of refunding plan imminent/ Syndicate formed to protect Hart's shares/ William Curtiss to become treasurer	Rumor/news/news	116	Ti, 1/23, 10
	Standard Oil to be involved in Third Avenue	Rumor		Tr, 1/23, 10
Jan. 23	Refunding efforts flourishing/Standard Oil interests own 10,000 to 15,000 shares	Rumors	116¾	Ti, 1/24, 10
Jan. 24	Syndicate protecting Hart connected to Metropolitan interests and a closer relation to Metropolitan will come	Rumor		Ti, 1/25, 10
	On good authority: company will have no trouble righting itself and go to 150 with change of control and policy	Unattributed statement	117	WSJ, 1/25, 1

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Date	Event	Rumor/actual	Closing price[a]	Source[b]
Jan. 25	Authorized representative of the Whitney syndicate denied Metropolitan interest in either refining or Hart rescue syndicate	Denial		Ti, 1/26, 10
	Unattributed statement: radical change in management imminent with new president closely identified with Metropolitan/Manhattan Railway interests have bought considerable Third Avenue stock	Unattributed statement Rumor	116¾116¾	WSJ, 1/26, 1
Jan. 26	Short interest of considerable size; concerns about refunding	Rumors	114¾	WSJ, 1/27, 1
Jan. 27	Concerns about refunding	Rumor		Ti, 1/28, 25
	Price manipulated down to get better refunding terms; exchange offer with Metropolitan; other selling because Hart supposedly sold his shares; books kept in antique fashion	Rumors	110	WSJ, 18, 1
Jan. 29	Concerns about refunding	Rumor		Ti, 1/30, 10
	Exchange offer with Metropolitan – denied by both sides	Rumor		Ti, 1/30, 5
	Structure of refunding	Rumor		Tr, 1/30, 8
	Increased odd lot selling/Company now in stronger hands	News/rumor	109½	WSJ, 1/30, 1
Jan. 30	Metropolitan and Brooklyn Rapid Transit to jointly operate new subway once completed	Rumor	109⅞	WSJ, 1/31, 1
Jan. 31	Concerns about refunding and its structure	Rumor	107⅞	Ti, 2/1, 10
Feb. 1	Rumors about refunding arrangements, about forced insider selling and selling in general, about Metropolitan efforts to push down the price to gain control (anonymously denied)	Rumors		WSJ, 2/2, 1
	Passing (cancellation) of dividend	Rumor	99⅝	Ti, 2/2, 8
Feb. 2	Standard oil interests buying Third Avenue	Rumor	96⅝	Ti, 2/3, 8
Feb. 3	Proposition to lease Third Avenue with possibility Metropolitan is behind the offer	Confirmed rumor		Tr, 2/4, 2, Ti 2/4, 24
	Elias to resign/retire as President	Rumor		Ti, 2/4, 24 WSJ, 2/5, 1

(*Continued*)

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(Continued)

Date	Event	Rumor/actual	Closing price[a]	Source[b]
	Details regarding refunding; Metropolitan interest	Rumors		Ti, 2/4, 24
	Standard Oil interests have control	Rumor	99⅜	WSJ, 2/5, 1
Feb. 5	Third Avenue financial position not as bad as feared	Rumor	100½	WSJ, 2/6, 6
Feb. 6	Whitney and Ryan heavy buyers of several railroads and American Tobacco	Rumor	106¾	Ti, 2/7, 10
Feb. 7	Denial of Metropolitan interest in Third Avenue by unnamed official	Denied rumor		Ti, 2/8, 8, Tr, 2/8, 10
	Metropolitan President Vreeland toured			Ti, 2/8, 8
	Third Avenue facilities	Rumor		WSJ, 2/8, 1
	Metropolitan to play large role in construction of subway tunnel	Rumor	105¼	WSJ, 2/8, 1
Feb. 8	Hitch in refunding negotiations	Rumor		WSJ, 2/9, 1/ Tr, 2/9, 10
	Alliance with Metropolitan	Rumor		WSJ, 2/9, 1
	Change in dividend	Rumor	101	Ti, 2/9, 8
Feb. 9	Hitch in refunding negotiations due to disagreement about board membership	Confirmed rumor		Tr, 2/10, 5
	Metropolitan acquisition, dividend cut	Rumors	98½	WSJ, 2/10, 1 Ti, 2/10, 10
Feb. 10	Disagreements between Keene syndicate and Kuhn-Loeb refunding syndicate	Rumor	100¾	Tr, 2/11, 14
Feb. 12	Market closed for Lincoln's birthday			
Feb. 13	Refunding efforts concluded, but not yet signed along with formal statement from Lauterbach	News		Tr, 2/14, 3
	Merger with Metropolitan facilitated by Standard Oil interests	Rumor	106	Tr, 2/14, 12
Feb. 14	Possible alliance between Metropolitan, Manhattan, and Third Avenue	Rumor		WSJ, 2/15, 1
	Delay in signing refunding agreement due to dissatisfaction with dividend declaration; Keene investor in Third Avenue	Rumors	102⅝	Tr, 2/15, 12

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(Continued)

Date	Event	Rumor/actual	Closing price[a]	Source[b]
Feb. 15	Kuhn, Loeb withdrawing from refunding	News	97⅞	Ti, 2/16, 9
Feb. 16	Standard Oil interests to be involved with Third Avenue affairs	Rumor		Tr, 2/17, 1
	Prominent operator has covered short position of 15,000 to 20,000 shares; injunction proceedings against recently declared dividend	Rumors	98	WSJ, 2/17, 1
Feb. 17	Construction company bleeding Third Avenue	Rumor	97	Tr, 2/18, 4
Feb. 19	Keene's interest disclosed, Vreeland and Ryan formally indicate disinterest in Third Avenue (after the close), Standard Oil not owners	News		Tr, 2/20, 10 Ti, 2/20, 3
	Control in more capable hands	Rumor	98¼	WSJ, 2/20, 6
Feb. 20	Conflicting versions of stories concerning J.P. Morgan's interest; Third Avenue to divest certain properties	Rumors	93	Ti, 2/21, 1
Feb. 21	"Wonderful output of fancy which mushroom syndicates supply"	Rumors	90½	Ti, 2/22, 8
Feb. 22	Market closed for Washington's birthday			
Feb. 23	Block of shares offered to Metropolitan at 54	Rumor		Ti, 2/24, 1
	John Rockefeller, Keene, and Curtiss working together in Third Avenue operations	Rumor	84½	Tr, 2/24, 1
Feb. 24	Second refunding effort unlikely to succeed; Short selling by Metropolitan interests; Keene attacking various Whitney stocks in retaliation	Rumors		Tr, 2/25, 5
	Receiver to be appointed soon, Keene a loser on his Third Avenue holdings	Rumors		Tr, 2/25, 4
	Metropolitan to absorb Third Avenue	Rumor	75⅝	Ti, 2/26, 8
Feb. 26	Resignation of one board member/Other directors selling out; Whitney syndicate behind declines & Keene selling too	News/rumors	71½	Tr, 2/27, 10
Feb. 27	Receivership almost certain	Rumor	51¾	WSJ, Tr, Ti
Feb. 28	Receivership announced	News	58¼	WSJ, Tr, Ti

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(Continued)

Date	Event	Rumor/actual	Closing price[a]	Source[b]
Mar. 1	Insiders committed criminal acts; Metropolitan behind efforts to have Grant appointed receiver	Rumors		Ti, 3/2, 10 WSJ, 3/2, 1
	Third Avenue indebtedness worse than feared	Rumor	50	WSJ, 3/2, 6
	Metropolitan wants Third Avenue	Rumor	50	WSJ, Tr, Ti
Mar. 2	Third Avenue offered Naughton & Co $1 million to surrender the electrification contract (in fall 1899)	Rumor	47½	Tr, 3/3, 2
Mar. 3	No significant rumors		55⅜	
Mar. 5	Assessment on stock of up to 50%	Rumor		Ti, 3/6, 3
	Edward Harriman interested in Third Avenue	Rumor	55	WSJ, 3/6, 1
Mar. 6	Kuhn, Loeb likely to lead reorganization with no assessment necessary after all; new operating company to be formed to take over Third Ave	Rumors	59¼	WSJ, 3/7, 1
Mar. 7	"hardly interest enough to keep observers awake"		55	Ti, 3/8, 10
Mar. 8	Insiders willing to let Metropolitan's share price fall	Rumor	54¼	WSJ, 3/9, 1
Mar. 9	Contrary to rumor, Kuhn, Loeb stated it had not denied revived subscriptions to refund Third Ave	Rumor	56½	Ti, 3/10, 13
	Insider selling of Metropolitan	Rumor		WSJ, 3/10, 1
Mar. 10	No significant rumors		56½	
Mar. 12	No significant rumors		57¾	
Mar. 13	No significant rumors		58	
Mar. 14	Receivers report released/Provost Bros are thought to have acquired 50,000 shares for Yerkes or for a syndicate of other street railway magnates	News/rumor	63	WSJ, 3/15, 1
Mar. 15	Yerkes, Standard Oil, Keene buying Third Avenue, either jointly or alone, possibly with view of cornering stock	Rumors	65½	WSJ, Tr, Ti

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(Continued)

Date	Event	Rumor/actual	Closing price[a]	Source[b]
Mar. 16	Metropolitan to issue new shares to provide resources to buy Third Avenue	Rumor		WSJ, 3/17, 1
	Persistent belief Third Avenue cornered – Yerkes or Keene thought to be driving force	Rumor	68	Tr, 3/17, 3
Mar. 17	Third Avenue obviously manipulated	comment	68½	WSJ, 3/18, 6
Mar. 19	Third Avenue advance due to short covering; Metropolitan buying (denied by unnamed sources)	Rumors		WSJ, 3/20, 1
	Metropolitan announces they have control after the close	News	85½	Ti, 3/20, 1

[a] Closing prices are given in $US.

[b] We abbreviate the sources as follows: Ti, *New York Times*; Tr, *New York Tribune*; WSJ, *Wall Street Journal*; date and page data: month/date, page number (e.g., Ti, 1/12, 10 = *New York Times*, January 12, 1900, 10). The *Times* and the *Tribune* were morning papers, so their coverage would be for news of the previous day. The *Journal* was an evening paper that carried a few important items from that day, plus more extensive coverage of news of the previous day.