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American Railroad Accounting Practices

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American railroad accounting practices in the mid-nineteenth century

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Introduction

The nineteenth century was a significant time for the United States and for American business. The United States emerged as a world power in this century, evolving from a fledgling coastal state into a continental giant. Much of this geopolitical expansion was fueled through the rapid growth of the American economy. In order to understand how the American economy was transformed, it is first helpful to understand how American business was transformed. This research paper seeks to answer this question by analyzing the accounting practices of railroads in the mid-nineteenth century. Accounting is the language of business and can be used to analyze the dynamics of mid-nineteenth century business. Contemporarily, managers, investors, and regulators use accounting-based financial reports to try to better understand a firm's operations and economic situation. Therefore, financial reports and commentary on them from the period will yield critical knowledge on how different economic agents (managers, investors, creditors, regulators, and others) interacted and communicated with each other in the adolescent phase of both American capitalism and corporate culture.

The railroad industry was chosen because it was the most significant industry of the mid-nineteenth century and perhaps the most significant industry of the whole period. Railroads were the first to adopt a corporate business organization that would later mature to the corporate organization recognizable today. The reason the railroad industry adopted large corporate structures was its need to raise large amounts of capital. Railroads needed to construct and maintain hundreds of miles of track, purchase expensive engines, and build stations to operate the tracks. Railroad managers turned to the public to find both investors and creditors in order to afford the massive initial costs required to start railroad. Since the investors were the actual owners of the railroad, managers needed to integrate investors into the administration of the firm. This was done almost exclusively through forming a corporation, with investors electing a board of directors to appoint managers. The number of investors and size of railroads made them massive organizations, and the capital needs and scope of railroads led to further development of the corporate form of business organization. A critically important feature of the American economy's growth in the nineteenth century was the maturation and widespread adoption of corporations in the United States. Since railroads were the most influential corporations of the mid-nineteenth century, it is logical to focus on them to understand the wider economy. Finally, focusing on the mid-nineteenth century will be insightful because it was the period where annual reports became truly sophisticated while also remaining unstandardized by national legislation. Railroads weren't universally regulated by the federal government until the passage of the Interstate Commerce Act of 1887 and annual reports weren't standardized until 1906 with the passage of the Hepburn Act, although the federal government did have some reporting requirements for railroads that received federal money. Instead, individual states had a wide variety of regulations and requirements for financial reporting. Since an important theme of the nineteenth-century American economy was the early development of modern business, understanding how firms acted without strict guidelines or standards will be especially valuable.

Financial reporting developed significantly in this period, prompted by the demands of corporations such as railroads. While financial information had been considered proprietary during most of the First Industrial Revolution, it was necessary for railroads to report this information publicly to their owners

– the shareholders. This rapid development in the sophistication of financial reporting was driven both by the legal requirements of the federal and state governments and by the demands of investors. During this period, the novelty of financial reporting and the lack of standardization meant that managers were able to experiment greatly with how reports were made. Occasionally, this allowed unscrupulous managers to create misleading or fraudulent reports. For the most part, however, financial reports of this period were impressively informative and enlightening. Accounting theory also reached high levels of sophistication, although it was inhibited by a lack of standardization. This lack of standardization incentivized managers to choose the accounting methods that reflected well on the firm over methods that reflected the real economic situation. Much like today, financial reports were primarily focused on the status of the company and its profitability. Annual reports usually contained only information on the balance sheet and income statement. Since railroads usually used a cash basis, the income statement somewhat mirrored the cash flows from operating activities, which could be used to evaluate the firm's ability to pay debt and distribute dividends. Managers also used accounting to better understand their operations and gather detailed statistical summaries. Similar to how investors used accounting to evaluate a firm, managers often used these figures to aid in strategic decision making. Overall, railroad accounting in this period was impressively sophisticated.

<u>Federal and State Requirements for Financial Reports</u>

In contemporary America, anyone familiar with business has some familiarity with a Form 10-K. In the United States and most modern economies, financial reporting for public companies is a strictly regulated and standardized practice. Governments and standard setting authorities have created detailed methods on how a firm should assemble and present its books to regulators and investors. Beyond government authorities, groups like the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) have created detailed rules on how to prepare financial statements. These rules, US GAAP from FASB and IFRS from IASB, have been made by regulators to be the standard method for accounting in public companies. However ubiquitous now, this state of affairs should not be taken for granted. Rigorous and detailed accounting standards did not exist in the mid-nineteenth century.

Since their inception, railroads have been closely connected to the federal and state governments. The federal and state governments were very interested in the development and success of railroad companies, because populating and connecting America's quickly expanding territory required an extensive infrastructural network. Furthermore, at the beginning of the nineteenth century, a state charter was usually required or desired for incorporation, so most railroads wanted some level of state recognition. Therefore, both the federal and state governments were very involved in the establishment and funding of railroads; meanwhile, other investors welcomed government participation as a means to receive a favorable charter and continued state support. The Baltimore and Ohio Railroad, or 'the B&O,' provides an excellent example of how this close relationship between state governments and railroads was reflected in railroad accounting. When the Baltimore and Ohio Railroad, or the B&O, was created, "civic pride rather than profits made the B&O from its origin a 'community enterprise'."[1] Beyond civic pride, the B&O almost functioned as a state company and "in granting the charter for incorporating the B&O, the Maryland legislature retained the authority to set rates… [and] exempted the railroad from tax."[2] The railroad's charter played a very significant role in developing financial reporting in railroads and beyond. When B&O was incorporated, "the B&O Charter… required that stockholders be issued an annual 'Statement of Affairs.'"[3] However, that was the limit of the detail in the statutory requirement. Impressively, this 'Statement of Affairs' evolved from "a five-page letter from the president to the investors" in 1827 into an impressively sophisticated annual report that included "the first modern example of a private corporation reporting revenues and expenses to stockholders" in 1832.[4] Therefore, the business environment in which railroads developed not only legally required some form of financial reporting, but also encouraged the development of sophisticated accounting and reports.

The federal government also fostered the development of financial reporting through statutes and requirements. Similar to the states, the widespread and generous use of federal funds in supplying capital to railroads prompted the federal government to legally require railroads to provide vital information regarding their operations and status. In 1862, Congress passed the renowned Pacific Railroad Act, which enabled the Treasury to issue bonds to railroads for the construction of a transcontinental railroad. In Section 20 of the legislation, the government required railroads to

> [submit to] the Secretary of the Treasury an annual report wherein shall be … First. The names of the stockholders… Second. The names and residences of the directors… Third. The amount of stock subscribed, and the amount thereof actually paid in… Fourth. A description of the lines of road surveyed, of the lines thereof fixed upon for the construction of the road, and the cost of such surveys ; Fifth. The amount received from passengers on the road ; Sixth. The amount received for freight thereon ; Seventh. A statement of the expense of said road and its fixtures ; Eighth. A statement of the indebtedness of said company, setting forth the various kinds thereof.[5]

The complex and detailed requirements of this legislation demonstrates that the annual reports were, indeed, becoming more and more sophisticated. Further, the evolution of the required information from the annual reports of the B&O charter to the requirements here reveals that governments were becoming more exacting in the reports they received, acting as both investors and regulators. Outlined in the legislation, regulators were requiring the railroads to report on their capital structure, their revenue and expenses, and the current lines they were developing or operating.

By 20 years later, railroads had already become the largest business in the world. Pursuant to statutory reporting requirements, the Auditor of Railroad Accounts sent the Secretary of the Interior an annual report containing information on all railroads that had received some form of federal aid. This report contained vital information on what financial reports really consisted of in the mid-nineteenth century. In Appendix E of the report, there were three forms the railroads were required to submit. These were Form No. 8-001, essentially the balance sheet, Form No. 8-002, a report on the financial and statistical status of the railroad, and Form No. 8-003, essentially the income statement.[6] Remarkably, annual reports had evolved in the span of just a few decades from brief letters to complex logs analogous with modern reports. Contained in the 1880 Annual Report of the Auditor of Railroad Accounts, many railroads' financials were displayed in such a way that even modern readers can have some grasp of their business' operations and status. That ability is the power of financial reports.

Both the federal and state governments mandated the creation of financial reports for several reasons. Governments' financial stakes in many railroads is an obvious reason. Much like other shareholders, governments hoped to ensure that their investments, grants, or other forms of aid were being used wisely by management to promote the development and success of the firm. Another reason for governments to observe railroads' businesses through financial reporting was due to the use of railroads as a quasi-state agency. As previously discussed, the government often had the authority to decide the rates railroads could charge or limit the profit margins of a firm. This was done purposefully because governments saw the railroad as a means of promoting commerce and economic activity in the region. This was the tradeoff that firms faced when they accepted governmental investments. The state vigorously promoted the expansion of railroads but did this in order to pursue additional economic and political objectives. Managers, who were content with receiving government aid, also had to accept this level of oversight.

The development of financial reports is an important piece of evidence in revealing this relationship. This is a very significant observation about the origins of American corporations. The government participated in an intimate way with the creation and funding of the first American corporations. This differs greatly from the free-market ideology or politics associated with American corporate culture today. Early railroads were often created and incorporated by legislatures and later railroads received significant funding from the federal and state governments in order to achieve government goals, which were partially aligned with private investors. Therefore, from its beginning financial reporting was not only just a method to remedy information asymmetries between managers and investors but was also a mechanism allowing the government to watch over and control industries it identified as nationally significant.

Management – Goals and Uses for Financial Reports

Although the practice of reporting was required under legal statutes, managers had a great deal of flexibility in how they created their annual reports, as comprehensive industry standards like US GAAP or IFRS had yet to be introduced. Since managers had such a high degree of agency over their reports, studying the various reporting methods used by managers can reveal their differentiated prerogatives with financial reporting. Managers had to report the status of the business to regulators and investors, but they were often at the liberty of adjusting their accounting methods to make their firm look more attractive. Perhaps most interestingly, it seems that managers also used the creation of annual reports and detailed accounting to inform themselves about their firm's financial situation. In a time before the internet and data science, managers could often be unaware of many of the details of the railroad's operations. Therefore, managers often created detailed microeconomic analyses of their business while making their financials. Much like investors, managers were able to use detailed information on their earnings and operations for strategic decision making.

Early railroad managers' chief difficulty in creating annual reports lies in the lack of precedents in business. Unlike contemporary CEO's and CFO's, they were never exposed to a Form 10-K in a business school class. Instead, many railroad executives chose to mimic existing firms' annual reports. Since the B&O was the oldest railroad in the United States, it "was known as 'the B&O University' and its annual reports were viewed as textbooks about railroading, and engineering and financial developments disclosed were closely followed by other railroads."[7] Again, the influence of regulators can be seen, for the Maryland legislature's reporting requirements impacted the practices of railroads far outside of the state. This mimicking highlights that while there was great variety in annual reporting, managers were not operating in a bubble and industry standards did exist within a range of acceptability.

The formal arrangement of three primary statements (the balance sheet, income statement, and statement of cash flows) did not yet exist but reports generally contained substantial information for all three categories. Firms seem to have almost universally presented a balance sheet (listing assets, liabilities, and stockholders' equity) and an income statement with revenues and expenses. The combination of the balance sheet and income statement captured some of the information typically found in a statement of cash flows since "initially most railroad accounting records were kept on a cash basis."[8] The primary focus of managers seems to have been reporting and analyzing their revenues and expenses. Similar to contemporary managerial focuses on 'free cash flow' and EBITDA, railroad managers of the mid-nineteenth century were deeply interested in their ability to generate cash to fund expansions and pay dividends and "as a result their reports primarily dealt with the sources and disposition of cash and with statistical measure of the flow of traffic."[9] How firms measured their revenues and expenses, which was an approximation of cash flow, had significant implications for their reported profitability. All of these reports together (the balance sheet, income statement, and statistical analysis) gave both managers and investors an incredible view into the operations and health of the railroad.

The creation of annual reports led to many challenges for accountants, because they often had to develop accounting theory ad hoc. One of the major challenges of this sort for railroads was accounting for long-lived fixed assets. Valuing the many miles of railroad tracks was difficult for accountants, but critically important for managers, since a huge portion of the total assets of a railroad were in fixed assets like tracks. Even contemporarily, there are many methods of accounting for long-lived assets and reporting methods in the United States that don't match with the methods employed by taxing authorities. US GAAP allows for straight-line depreciation, sum-of-the-year's-digits, and several other methods. Meanwhile, the IRS uses a system called MACRS.

Going back over a century, managers had even less precedent or theory to work with. As explained by James Boockhodlt, there were several popular methods, each with their own pros and cons. It bears to keep in mind that despite the relative youth of annual reporting, some of these methods were surprisingly sophisticated and resemble modern accounting standards. Three quasi-popular methods included: "periodic revaluation," which was similar to mark-to-market valuation with pretty frequent upward adjustments; an annuity method, which paid the annuity in order to create a future fund to pay for the replacement of the assets; finally, there was the 'renewal method,' which was similar to accumulated depreciation and expensed the decline of an assets value over time.[10] All of these methods had advantages and disadvantages, but they achieved something significant: expensing the costs of capitalized assets. Overall, the development of these methods was evidence of the impressive improvements in accounting theory during this period. Admittedly, mid-nineteenth century managers had a level of discretion over the creation of their reports that today would be deeply unsettling. Despite that, some managers and railroads did produce high quality reports that attempted to give investors a pretty objective view of their property.

However, some managers were not as noble because these expenses could have such a major impact on the bottom line of a railroad. Many wanted to be slyer in their expensing of capital assets and, in the absence of strict accounting standards, they could get away with what is today euphemistically called "creative accounting". While some of the methods tried to periodically expense some part of their capital assets, most firms used "the retirement method of accounting for fixed assets… under this method, the expense due to the exhaustion of property was recognized at the time of the retirement of a unit of the property."[11] This method ultimately replaced the other three as the most popular among managers. The justification for this method was that "as long as the property was maintained in good repair then no decrease in the value of the asset had occurred." In contemporary business, this accounting theory would not be accepted. Depreciation has man[12]y definitions, but economic depreciation is usually characterized as the decline in the future benefits (or cash flows) from the asset due to its use that year. These assets had a limited lifespan and would eventually need to be replaced, regardless of what amount of repair the railroad companies conducted on tracks, engines, and other capital equipment. Therefore, firms should have accounted for this decline with some sort of record of the implied expense. For shareholders, this was really dubious accounting; the intrinsic value of their equity was the net of assets and liabilities. With the retirement method, a railroad track would be worth its capitalized costs until the day it was to be retired and replaced with new track. Instead of gradual depreciation, on the day of retirement investors would be faced with a massive loss in the value of their equity in the firm caused by a sudden drop in the net value of assets. So, while the accounting justification of the method was not very firm, there was another justification for its use: retirement accounting was very beneficial for management. Through the use of this method, managers could boost their bottom line significantly. Furthermore, many states set the rates railroads could charge customers, which was often done by placing a cap on the railroad's profit as a percentage of its assets. Therefore, a railroad could set higher rates and earn a larger profit with a higher asset valuation. In that situation, the interests of managers and investors were closely aligned against regulators.

Management's uses for accounting didn't end at the creation of annual reports for investors and regulators. Accounting could also enable management to get an analytical and objective look at the numbers of their operations. An 1879 treatise written by Marshall Kirkman in *The Railroad Gazette* captures many of the managerial uses for accounting and reports. Kirkman was a unique authority on the development and codification of railroad accounting. He served as the General Accountant and later Vice President of the Chicago and North Western Railway, and he was also one of the founders of the Accounting Division of the American Association of Railroads. In the treatise, Kirkman lays out modern accounting theory and practices for other managers and accountants in the industry. He confirms the prevailing standard of two statement accounting, saying both "a general balance sheet, then, should embrace a clear, concise summary of the liabilities of the company, including its capital stock, also the property and assets owned by it" and "the income account" which should embrace "the earnings and incidental expense accounts of the company" with earnings appearing "upon the ledger as a credit balance" and expenses appearing "as debit balances upon the general ledger" with "the difference or balance between the credit and debit" constituting "the Undivided Income of the property."[13] More interestingly, he points out that accountants and their reports served as vitally important sources of information for management in this period, since "to the ignorant and unthinking, the various sub-divisions of railway service have apparently little or no relation to each other… [but] the accountant should possess an intimate knowledge of the minutiae of the different classes of accounts."[14] His approach is decentralized, and he suggests "the returns from agents and others are, so far as practicable, allowed to reach the general accounting officer through the hands of the department officers and division superintendents of the company."[15] He maintained that decentralization ensures that middle management becomes far more familiar with their operations since "[the] plan enables the officers to acquaint themselves generally with the details of their several branches of business without requiring special reports."[16] This use of accounting was significant and valuable to management. Managers who were neither able to look into databases to see revenue numbers nor access client information were now able to view detailed reports of their receipts and operations and have an objective view of their true situation.

Marshall Kirkman was not the only manager who saw the potential of detailed annual reports for managerial analysis. Albert Fink, the Vice President and General Superintendent of the Louisville & Nashville and Great Southern Railroad, also wrote a treatise on railroad accounting. In his work, Fink clearly lays out the importance of detailed and accurate accounting, saying:

> If the percentage of operating expenses to net earnings, or the cost of one ton of freight or one passenger transported one mile, can not be used as an absolute measure of economy, or even as a measure of comparison, and we have seen it can not, the question arises, what is the proper course to pursue in ascertaining whether a railroad is economically operated or not?
> To this the answer must be given that the only mode of ascertaining this fact thoroughly is to make an examination of each item of expenditure incurred in the operation of a railroad, and see whether this has been reduced to a minimum and the service rendered to a maximum… but even that knowledge would be of little avail unless the accounts of the operating expenditures of railroads are kept in such a manner as to exhibit in detail not only the expenditures, but also the amount of work performed for each item of expenditures.[17]

Here, Fink touches on very deep ideas. Fink is coming close to writing microeconomic theory, approaching railroad management as an in-depth exercise in cost minimization and profit maximization. Accounting is central to this managerial approach and therefore becomes a powerful manager tool for analysis and informed decision making. One of Fink's annual reports composed between the years 1873 and 1874 was even included as one of the course readings, which includes some of his statistical measures. Fink and other managers developed and produced many tables of data and statistics for use by investors and managers alike. Similar to the statistics used in the nascent art of sabermetrics during this period, managers created all sorts of interesting ratios and measures. One such statistic was a 'movement expenses per ton-mile' which is equal to the movement expenses per train mile (sourced from their own data table) over the average number of tons of freight in each train. Combining this with three other measures (station expenses per ton-mile, maintenance of road per ton-mile, and interest per ton-mile) added up to find the total cost per ton-mile.[18] Like a baseball manager analyzing a player's batting average and fielding percentage, railroad managers could use these measures to closely analyze their cost structure. The work of these two writers, each important and influential managers of the time, highlight just how sophisticated and powerful accounting had become. Quickly rising from short memos to investors, annual reports eventually became sophisticated and detailed enough to enable managers to use them in order to make strategic decisions.

Shareholders' Expectations and Frustrations with Financial Reports

Just like the federal and state governments, private investors were very interested in railroads. Similar to the tech stocks of the 1990's into the present, railroads were the exciting and disruptive industry of the future during the mid-nineteenth century. However, the motivations of private investors obviously differed from those of the government. While the government sought to promote railroads in order to develop the economy of the country and build infrastructure to connect its distant regions together, private investors were interested in making money from their investment. With this motivation for investment, private shareholders were deeply interested in the annual financial reports of the railroads. These reports were used by shareholders to assess the position of the firm and the value of their property; a dependable and trustworthy report was the only way a shareholder could measure the value of his ownership objectively. Financial reports existed because of government requirements and investor demand for them, however, their lack of standardization was a source of aggravation. Many managers were incentivized, as they still are, to fudge or outright manipulate numbers in their annual report to make their firm look like a better investment. The variety in methods of reporting and the desire of some managers to make inaccurate or fraudulent reports meant that the quality of annual reports differed greatly from one report to the next. This was a major issue for investors, and one that caused a good deal of frustration and fear.

In an 1879 edition of the *North American Review*, an article entitled "The Mysteries of American Railway Accounting" captured many of the contemporary issues that investors had with railroad securities. The article zeros in on the lax and perhaps fraudulent accounting standards of the New York Central Railroad, one of the premier railroads at this time. Investors could have forgiven the industry if the managers of some fringe regional railroad were making questionable decisions with their accounting. Yet, the New York Central, on the other hand, was one of the country's premier railroads. If there were serious issues with this railroad, that would have represented an indictment of the whole industry.

The author alleges many issues with the company, starting with a failure of the New York State regulating authorities. As the author makes clear, "the laws of New York, which, as they now stand, render possible, either the rendering of no account whatever of their financial condition, by companies whose stocks may constitute the sole means of subsistence of otherwise helpless families, or the publishing of such statements, or reports, as are a mockery of the law, and an insult to the common sense of every business man."[19] Without proper enforcement of some level of quality in financial reporting, the state of business in New York would enter into a bad state. Honest and objective reporting was critical since "every well-regulated State very properly undertakes to control many of its public corporation, so that, through a perfect knowledge of their financial condition, only to be ascertained through complete and enforced reports, the public at large may know to what extent it is safe to trust their promises to pay, losses, interest, or dividends, as the case may be."[20] Because of their business, railroads were dependent on the public as a source of capital.

The erosion of public trust and faith in the honesty of financial reports could threaten the legitimacy of state authorities and honest businesses in New York. However, at the writing of the article, the demand for New York Central stock was healthy as the railroad was able to consistently pay a dividend on the stock. The author makes this clear, saying, "for some ten years, no perfect "general balance-sheet" has been published by the company… instead of awakening the suspicions of brokers and investors, [this] seems to have been entirely ignored. The market price of the stock has been governed by the fact that it has paid eight per cent dividends, regardless of the absence of any proof of its intrinsic value, as indicated by the existence of a due proportion of assets to liabilities."[21] Just like contemporary bubbles and accounting scandals, investors were either uninterested in any problems with annual reports, despite their objective importance, or were unaware of these issues with New York Central's accounting. This yields a significant observation: regulation was critically important, for the public often did not review annual reports closely as long as superficial indicators of success like dividends were present.

Despite some investors' ignorance about dubious reporting, railroads companies were still very sensitive to public doubts about their securities. The impact of the *New York Review* article was damning on the railroad industry as a whole, and it certainly was not the only place such opinions could have been found. Enough public doubt in the industry could have led to a severe drop in the share prices of firms across the nation. Yet beyond the dubious or potentially fraudulent annual reports of the New York Central, the accounting methods used in formulating such annual reports of many other railroads could also easily lead to public distrust. As discussed earlier, conventions such as the retirement method for valuing long-lived fixed assets produced annual reports that kept in mind only the interests of the management, rather than those of the stockholders. The management of an individual firm was often deeply interested in dispelling any doubts about the value of the property behind their own firm's stocks, especially if these doubts were already being vocalized by stockholders.

In response to the fear of shareholders in their firm, the Board of Directors of the Pennsylvania Railroad Company launched a committee, headed by William Stokely, the Mayor of Philadelphia, to investigate its accounts and perform a full audit of their balance sheet. Made in response to complaints from stockholders, its explicit goal was to "meeting to examine all the property of the Company… to make an appraisement of the value of the roads, shops, machinery, real estate, depots, bonds, stocks, and all other assets of the Company; also, to examine into the liabilities and obligations of the Company."[22] Similar to the use of annual reports to generate insightful statistics for management, this committee also attempted to investigate "the wisdom of the past policy of your Company, and to make any suggestions that we may deem likely to conduce to its greater prosperity in the future."[23] Therefore management could use the report along with shareholders in order to better understand the realities of their operations. As always, accurate reporting could benefit both groups, since objective measurements of the operation allows both investors and managers to make strategic decisions regarding the company.

The committee quickly proved itself to be much more than a public relations stunt from the board through the clear repudiation of several decisions of the firm. For instance, the committee removed a several million-dollar investment in the United New Jersey Railroad and Canal Company from their balance sheet because it was a "mythical account" which was neither "part of the assets or liabilities of the Pennsylvania Railroad Company."[24] Apparently, this investment was really the property of a New Jersey railroad from which the Pennsylvania Railroad Company leased railroad lines. Whether this mistake was intentional or unintentional is unclear and the committee doesn't make a great effort to investigate this, preferring correction over investigation.

The committee also specifically mentions several costly mistakes made by management over the years. The report zeros in on a group of investments on railroad lines south of Baltimore. The Pennsylvania Railroad focused its operations mainly in the Mid-Atlantic and the Midwest, so expansion southwards was a move out of the norm for the firm. This expansion resulted in failure, with the revenues from the lines barely breaking past the operating expenses incurred. The committee held nothing back in their criticism of the management's decision to expand, stating that "in making investments south of Baltimore without your consent, by which nearly $5,000,000 have been lost to your Company."[25] However, the committee immediately sought to rebuild the confidence of its shareholders, pointing out that this loss "illustrates the dangers against which we endeavor to guard, as explained in other parts of this report."[26] Through open admission of the mistakes and an effort in the report to explain methods to avoid another mistake like this in the future, the committee attempted to win back stockholder confidence not just in their reports but also their operations. Overall, it is impressive to see the committee attempting to win back stockholder confidence by cleaning up past mistakes and proposing methods to avoid future mistakes. Many other firms would have not had the same integrity to correct for past mistakes. The zealous efforts of the committee demonstrates the Board of Directors' devotion to its fiduciary duty. Any past mistakes made by management could be corrected by the committee, with shareholders associating the governance of the firm more with the committee than with the management.

It is apparent that investor confidence in the veracity and accuracy of annual reports was shaky at best. Especially for more business savvy investors, the methods of assembling annual reports could often be seen as unsatisfactory as it could be difficult to divine the true value of an investment in a firm from their financial reports. While many firms attempted to remedy this through investigation committees like that of the Pennsylvania Railroad Company, these efforts were perhaps unnecessary. Overall, it seems that the regular payment of dividends was the most important factor in winning investors over, regardless of whether such dividends were sustainable. The author of "The Mysteries of American Railway Accounting" was an accountant, or at least anonymously claimed to be one, so naturally as a professional he was able to zero in on issues in the New York Central's financial reports. Laymen investors who were less able to interpret annual reports, let alone tease out discrepancies, would have been less sensitive about their quality so long as such issues were not directly brought to their attention. This highlights both the importance of honest management and firm regulators, both then and now. Through a combination of the two, business would remain in high repute, and people of all stripes could participate in corporate ownership.

Conclusion

The accounting practices of the railroad industry in the mid-nineteenth century were truly remarkable in both for their sophistication and rapid development. Prior to the railroads, businesses were never expected to release any sort of substantial reports. The business of railroads required not only large numbers of investors and creditors but also an unprecedented amount of equity and debt. The demand of the investors eventually led to the demand for annual reports. Furthermore, the federal and state governments, heavily invested in the railroad business and interested in overseeing their operations, required annual reports to be made to supervise over the railroads' status and operations. Thus, both the state and private investors demanded annual reports as evidence of the value of their property. Coincidentally, the development of railroads as large and sophisticated corporations was mirrored by the evolution of their annual reports from brief letters to comprehensive and sophisticated documents. Beyond the demand from governments and private investors, managers also used accounting and annual reports as an opportunity to analyze their operations and gain a better strategic understanding of their firm's positions.

Although railroads declined in national importance with the rise of cars, trucks, and planes, they had lasting impacts on American business. Other corporations adopted and expanded on the model of railroads, and their corporate organizations and practices were highly influenced by them. With that in mind, these annual reports are especially significant. They not only offer critical insights into the relationships of firms, investors, and regulators in the 1870's, but they also have significant implications on how those relationships are formed even today.

Notes

[1] Dale L. Flesher, William D. Samson, and Gary J. Previts, "Accounting, Economic Development and Financial Reporting: The Case of Three Pre-Civil War US Railroads," *Accounting History* 8, no. 2 (2003), 65.

[2] *Ibid*.

[3] *Ibid*, 66.

[4] *Ibid*.

[5] United States Congress, "An Act to Aid in the Construction of a Railroad and Telegraph Line from the Missouri River to the Pacific Ocean: And to Secure to the Government the Use of the Same for Postal, Military, and Other Purposes," July 1, 1862, National Archives.

[6] "Annual Report of the Auditor of Railroad Accounts Made to the Secretary of the Interior" (Office of the Auditor of Railroad Accounts, 1880), 119.

[7] Dale L. Flesher, William D. Samson, and Gary J. Previts, "Accounting, Economic Development and Financial Reporting: The Case of Three Pre-Civil War US Railroads," 67.

[8] J. L. Bookholdt, "Influence of Nineteenth and Early Twentieth Century Railroad Accounting on the Development of Modern Accounting Theory," *The Accounting Historians Journal* 5, no. 1 (Spring 1978): 16.

[9] *Ibid*.

[10] *Ibid*, 10-11.

[11] *Ibid*, 13.

[12] *Ibid*.

[13] Marshall Kirkman, "Railway Revenue: A Treatise on the Organization of Railroads and the Collection of Railway Receipts," *The Railroad Gazette*, 1879, 487-491.

[14] *Ibid*, 385.

[15] *Ibid*.

[16] *Ibid*.

[17] Albert Fink, "Cost of Railroad Transportation, Railroad Accounts, and Governmental Regulation of Railroad Tariffs: Extract from the Annual Report of the Louisville & Nashville Railroad Co.," 1875, 8.

[18] Alfred D. Chandler, *The Railroads: The Nation's First Big Business* (New York, NY: Harcourt, Brace, 1965), 117.

[19] "An Accountant," "The Mysteries of American Railway Accounting," *North American Review*, no. 267 (1879): 135.

[20] *Ibid*.

[21] *Ibid*, 136.

[22] Pennsylvania Railroad Company, *Report of the Investigating Committee of the Pennsylvania Railroad Company*. (Philadelphia, PA: Allen, Lane, & Scott's Printing House, 1874), 3.

[23] *Ibid*.

[24] *Ibid*, 9.

[25] *Ibid*, 15.

[26] *Ibid*.