Accounting Historians Notebook

Volume 21
Number 1 *April 1998*

Article 7

April 1998

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ANNUAL REPORTS OF THE MINEHILL AND SCHUYLKILL HAVEN RAILROAD COMPANY: 1844-1864

by
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The Minehill and Schuylkill Haven Railroad Company (MSH) was one of the first commercial carrier railroads chartered in the U.S. The stock traded on the Philadelphia Stock Exchange and the company managers faithfully issued annual reports to the stockholders beginning in 1828. Fifteen annual reports were discovered at the Library Company of Philadelphia, covering most years from 1844-1864. The purpose of this paper is to conduct a content analysis of these annual reports.

Few articles describe the financial reporting characteristics of specific 19th century railroads. Several histories exist of early major railroads (Baltimore and Ohio, Pennsylvania, New York Central, and Erie), but with limited accounting analysis. Each railroad responded to financial circumstances and problems in unique ways. Particularly important was the financing of railroads, largely through the burgeoning capital markets. What information was presented to demonstrate credibility to corporate stakeholders? What compensation (cash and stock dividends, interest payments) must be made and why? Before much headway is made on generalizing the contributions of railroads to accounting, these specific stories must be told.

Minehill and Schuylkill Haven Railroad Company

The early history of MSH was described in the earliest annual reports of the company, which is presented below. No financial statements were presented before the 1848 Report and little financial information of any kind discussed.

The Pennsylvania State Assembly granted a charter to establish the Minehill and Schuylkill Haven Railroad Company in 1828, with capital of $25,000 to "constitute a railroad from the canal at Schuylkill Haven, up the valley of the West Branch to the coal seams in the Mine Hill, a distance of nine miles." Initial track construction was completed in 1831 at a cost of $186,000. Coal was hauled in cars pulled by horse and mule teams, 17,559 tons in 1831.

The lines were expanded as new coal fields were opened. Locomotives were first acquired in 1847, requiring improved infrastructure. During 1863, 1.5 million tons of coal were hauled, a total of 25 million tons over 32 years (1831-63). The end of the line connected to the docks of Schuylkill Navigation Co. or the rail of the Philadelphia & Reading Railroad Company at Schuylkill Haven. MSH was acquired by the Philadelphia & Reading in the 1930s. Thus, the MSH continued in existence for over 100 years.

The initial $25,000 in stock (1828) was subscribed by local coal land owners and company managers. As more capital was needed, mortgages were obtained from Philadelphia capitalists. The mortgages were convertible to common stock. The stock traded on the Philadelphia Stock Exchange, the first stock exchange founded in the U.S. (1790) and the premier stock exchange at the time the company was chartered.

Schuylkill Haven & Lehigh River Railroad was acquired by MSH in 1863. Also in 1863, MSH managers agreed to lease the railroad to the Philadelphia and Reading Railroad for an annual fee of 8% of total assets. MSH stock price rose from $48\frac{1}{2}$ at the start of 1863 to $62\frac{1}{2}$ in December. No mention was made in the 1864 annual report of the consequences of the Civil War. The 1879 balance sheet of the Philadelphia and Reading showed $175,300 of MSH stock as an asset (Previts and Merino, 1979, pp. 82-83).

Format of the Annual Reports

MSH had a December 31 fiscal year-end. The annual meetings were early in January at which was presented the "Report by the Board of Managers to the Stockholders of the Mine Hill and Schuylkill Haven Rail Road Company." The report was signed by the president of the railroad. The form of the report was a narrative, usually of the previous year's operations and not much different than a president's letter in a modern annual report. In some years financial statements and supplementary reports were attached, such as the "Report of Engineer and Superintendents." The trend was to report more information in later years. No audit opinions were included in any of the annual reports. The fifteen annual reports available for analysis were for the years 1844, 1846, 1848-1849, 1851-1852, 1854-1861, and 1864.

The managers' reports were written for the annual meetings, but it is not clear to what extent the reports were distributed. The 1852 cover from the Library Company of Philadelphia was addressed to a Mr. Tucker in Philadelphia. This suggests that the report was at least distributed regionally.

Reporting practices of MSH reflect that documented in prior literature. Previts and Merino (1979) described the Utica and Schenectady report of 1841 and other railroads. The emphasis was cash-basis, with limited reporting vaguely resembling balance sheets and income statements. On the other hand, a substantial number of corporations refused to disclose any financial information. For example, until 1910 the New York Stock Exchange had an "unlisted" department for traded firms not disclosing financial information. However, many firms were most likely to disclose a balance sheet rather than a complete set of financial statements. This was based, in part, on state regulations; e.g., the Massachusetts law of 1852 on railroad security issues (Hawkins, 1986).

According to Boockholdt (1978) railroading was the first industry to have a large fixed asset base, to require extensive outside capital, and to be regulated by governments. Thus, the industry was the first to attempt to value fixed assets, to attempt to deal with depreciation and other accrual issues, and to report publicly to outside investors and creditors. Early accounting reports were cash based, with periodic reporting of receipts and expenditures.

Financial Statement Information

Initially, MSH financial statements seemed to represent supplementary information rather than represent the main part of the annual reports. The discussion differed somewhat from year to year. Operating and construction activity and repairs were discussed, sometimes at great length. Financial activities were usually mentioned briefly. A summary of annual report disclosure by year is presented in Table 1 (see page 30).

The first financial statement, Statement of the Receipts and Payments of Cash, from January 1st to December 31st, appeared in the 1848 report (for the 1847 fiscal year). This "cash statement" appeared in every annual report after 1848 until 1861 (but not the 1864 report). Schedules on railroad operations and taxes began in 1849 and were presented in most years. These included net tonnage of coal, duty performed by engines, and taxes on dividends paid into the Treasury [of Pennsylvania].

"Complete" financial statements were prepared only for the fiscal years of 1850 and 1851. These included the equivalent of a balance sheet, an income statement, and the previously mentioned cash statement. It was not stated in the annual reports why these were prepared or why the balance sheet was discontinued after 1852. On the other hand, the income statement and cash statement equivalents were included in all years through 1860. The financial statements for fiscal year 1850 are presented in Table 2 (see page 31).

Balance Sheet

The balance sheet equivalent for fiscal year 1850 (1851 report) was called "Summary of Debits and Credits, or Ledger

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Balance." Total assets were $900,000, of which over 90% represented fixed assets, primarily the track and track bed. The term "stock" apparently meant horses and mules. Fixed assets were listed first, followed by cash and other current assets. Presumably, all amounts represented original cost, but this was not mentioned in the annual reports.

The credit side was predominately capital stock, $800,000 or 89% of total assets. The Depreciation Fund at over $30,000 can best be considered a reserve equity account. This was treated as a residual amount (see separate section on depreciation) and was roughly analogous to retained earnings. The remaining items were liabilities. The large use of capital stock was unusual at the time. Most railroads, including the B&O, relied on long-term bonds for the majority of their fixed asset acquisition and construction.

The "Summary of Debts [sic] and Credits" for fiscal year 1851 differed from the prior year. Below the assets on the left side were expense-related accounts; below the equity and liabilities were revenue-related items (these revenue and expense type items also were reported on the income statement). Why the change in format was not stated. The result was a less useful statement.

Only the first summary of debits and credits was similar to a modern balance sheet. Format differs slightly (e.g., fixed assets and equity items were listed first). The information seems relevant and is comprehensible today. Why the managers changed the statement for fiscal year 1851 and discontinued the presentation after 1852 is unknown.

The 1848 annual report of the B&O presented a Statement of Affairs of the Baltimore and Ohio Railroad Company (for the year ended September 30, 1848). This was the only statement for the entire company (operating statements were prepared for the two B&O railroad lines) and resembled the 1851 "balance sheet" of MSH. That is, it included both operating and position

Table 1

Discussion of Stockholders' Reports by Year

Year	Financial Statements	Discussion
1844	None	Operations summarized in short tables throughout the report
1846	None	Board resolved to create "The Depreciation Fund"
1848	Receipts and Payments of Cash, for 1847	Dividends reduced to leave a surplus to be applied to the restoration of the Depreciation Fund for "extraordinary repairs"
1849	Receipts and Payments of Cash, Statement of Taxes on Dividends, Net Tonnage of Coal, Duty Performed by Engines	Described introduction of locomotives two years before, decision to expand the line (required supplement to charter)
1851	Complete set of financial statements: Debits & Credits, Statement showing, Income & Expenditures, Statement of Taxes, Receipts & Payments of Cash, tonnage by branch, duty of engines for 1850	Capital stock expanded by 4,000 to 16,000 shares
1852	Complete set of financial statements (similar to previous year) for 1851	
1854	Cash Receipts & Payments, Statement of Income, Taxes, Tonnage	Act of Pennsylvania to extend line passed by Assembly
1855	Cash Receipts & Payments, Statement of Income, Taxes, Tonnage	Detailed discussion of early years of railroad
1856	Cash Receipts & Payments, Statement of Income, Taxes, Tonnage	Report of Engineer & Superintendent on construction
1857	Cash Receipts & Payments, Statement of Income, Taxes, Tonnage	Report of Engineer
1858	Cash Receipts & Payments, Statement of Income, Taxes, Tonnage	Report of Engineer: on rolling stock, performance of engines, and track in use
1859	Cash Receipts & Payments, Statement of Income, Tonnage, Engines	Report of Engineer
1860	Cash Receipts & Payments, Statement of Income, Tonnage	Report of Engineer
1861	Cash Receipts & Payments, Tonnage, Engine Performance	Report of Engineer
1864	Tonnage, Lease contract attached	Acquisition of Schuylkill Haven & Lehigh River; MSH leased to Philadelphia & Reading for 8% of assets; discussion of stock price

Table 2

Financial Statement of MSH for fiscal year 1850

A.

Statement of the Receipt and Payment of Cash by The Treasurer of the Mine Hill and Schuylkill Haven Rail Road Company, from Jan. 1, to Dec. 31, 1850.

RECEIPTS		PAYMENTS	
Balance on hand Jan 1, 1850	$ 18,819.85	Expenses of motive power dep't	$ 37,851.79
Received for new stock issued	80,000.00	Machinery for shop	302.70
for bills receivable taken for tolls	142,292.39	Paid order in favor of Sup't, for disbursements on account new road, re-location of old road, and current expenses	52,178.57
from Wm. Newell, coll'r,	6,729.85	Iron rails purchased	23,754.87
for iron rails and c. sold	1,120.87	Engines bought	3,829.99
for bills payable	19,880.00	Bills payable, note discounted	20,000.00
for dividend and interest	257.89	Dividends and interest	83,033.59
for locomotive engine sold	9,300.00	State taxes on dividends of 1849	3,600.00
for advance (on account water station: returned	100.00	Real estate to straighten road	2,440.00
		Spikes	715.32
		Trucks	500.00
		Note discounted	991.50
		Expenses, damages, and sundry claims paid in Phila.	4,888.01
		Balance of cash on hand, Dec. 31, 1850	44,414.51
	$278,500.85		$ 278,500.85

E.E.

SAMUEL MASON, Treasurer

B.

Summary Statement of Debits and Credits or Ledger Balances, January 7, 1850.

DEBITS		CREDITS	
Cost of road and laterals	$742,582.07	Capital Stock	$ 800,000.00
Cost of engines and trucks	76,335.23	Depreciation Fund	31,332.58
Real estate	8,442.93		
Machinery for shop	2,433.90		831,332.38
Stock	2,500.00	Philadelphia and Reading Rail Road	1,250.00
		R. A. Wilder, for Iron sold	2,761.05
	832,294.13	R. A. Wilder, Superintendent motive	
Cash on hand	44,414.51	power department	2,699.89
Bills receivable	14,756.89	Dividends and Interest	56,412.34
Due by Collector	5,232.35	State Tax	4,600.00
Due by Superintendent	2,218.89	Relief Fund	189.95
Amounts due by sundry persons	1,359.06	Unpaid Tolls	1,030.02
	$900,275.83		$ 900,275.83

C.

Statement showing the Income of the Company for the year 1850, and the expenditures chargeable thereto.

RECEIPTS		PAYMENTS	
Amount charged for tolls and use of motive power, & c.	$157,095.22	On account of motive power department. Fuel, repairs and other expenses	$ 39,830.28
Collections from old dues	120.87	On account of wages, materials and other expenses in the repair and maintenance of the road	11806.65
Rents of tenements	138.53	Old claim for materials	102.19
For loan of engines	372.50	Expenses of office, salaries, & C. in Philadelphia	4467.18
	157,727.12	Interest allowed upon installments for new stock	1167.78
Less tolls likely to be lost	574.42	Dividend No. 33, August, 1850, on $7200,000, 5 p. c.	36000.00
		Dividend No. 34, January, 1851, on $800,000, 7 p. c.	56000.00
Net income for the year	$157,152.70	State tax on dividends	4600.00
		Balance appropriated tot he depreciation fund	3178.62
			$ 157,152.70

statement accounts. Stock (equity) totaled $7 million and liabilities about $5 million. The major assets were cost of road and improvements and stock in subsidiary railroads.

Income Statement

Income statement presentation and calculations were substantially different from modern practice. For 1851 the statement was titled: "Statement Showing the Income of the Company for the year 1850, and the Expenditures Chargeable Thereto." The receipts were revenues; when estimated bad debts were deducted ("less tolls likely to be lost"), the result was called net income. The railroad charged tolls for hauling coal by ton mile (2¢ per ton mile in 1843, reduced to 1½¢ in 1847).

Expenditures were deducted from net income. Expenditures were essentially payments for the acquisition of goods and services. The major operating categories were wages, fuel, repairs, and head office costs. Payments included dividends and state taxes on dividends. Capital expenditures were not included. The balance was "appropriated to the depreciation fund." Thus, all financial statements for this year balanced debits with credits.

Dividends added to the depreciation fund, or $95,000 for fiscal year 1850 would approximately be the equivalence of modern net income. This would be a return on capital stock of 12%. Most of this was paid out in dividends ($92,000 or 59% of net revenues). The dividends were paid as a percentage of capital stock par value. The percentage varied from year-to-year, but was as high as 15%. In typical years, most available income was paid out as dividends. The only reported taxes were the state taxes on dividends ($4,600 in 1850 or 5% of dividends). No mention was made of state and local property taxes. The approach was close to cash basis accounting.

The format of the income statement changed somewhat from year-to-year. For fiscal year 1859 receipts less bad debts was called "making total income" rather than "net income." The amount at $504,000 was triple that of 1851. Payments totaled $496,483, leaving a "balance to repair fund" of $7,800. This was stated as a "bottom line" amount. Dividends of $254,750 were again payments (51% of net receipts).

Receipts and Payments of Cash

The cash statement was the earliest statement presented, first appearing in 1848, and reported each year through 1861. In a period of virtually no accruals, this statement represented the most reliable information and, perhaps, useful data to stockholders.

The left side included the beginning cash balance and receipts. The right side presented payments and ending balance. No attempt was made to segment (categorize) the line items. Receipts were revenue (bills receivable taken for tolls), new capital (new stock issued), and other items (such as locomotive engines sold). Payments included expenditures (expenses of motive power dep't.), capital acquisitions (engines bought), and dividends and interest. Several items were difficult to determine if they were expense- or capital-related (such as iron rails parchased [*sic*]). Unfortunately, the specific line items and balances did not articulate from one statement to another.

Fixed Assets and Depreciation

Balance sheets were presented only for two years. To understand fixed assets and depreciation, the available balance sheets, the cash receipts and payments, the narrative discussion of the president, and separate reports such as the Report of Engineer and Superintendent must be reviewed. The analysis is still incomplete.

Accumulated construction costs, rolling stock, real estate, and related items were capitalized on the balance sheet. Cash payments were recorded for capital items (e.g., "engines bought, iron rails purchased") that were not on the income statement. There is no evidence that fixed assets were written up (or down) based on fair value or other calculations, nor that scrapped fixed assets were written off.

Some maintenance and repair costs were expensed. The income statement showed payments for:

(1) "fuel, repairs and other expenses,

(2) ... repair and maintenance of the road" [Report, 1851, p. 13], for example.

New acquisitions and construction replacing outdated fixed assets were capitalized. Some of the replaced or no longer needed assets were sold, which was noted in the reports. For example: "...the Board was induced...to sell to the Reading Company the large 8 wheel engine No. 10...The sale was made at cost..." [Report, *1851*, p. *7]*.

During the 1845 fiscal year the Board established "The Depreciation Fund." The balance sheet of the 1851 report showed the depreciation fund as an equity item with a balance of over $31,000. The income statement for the same year recorded "Balance appropriated to the depreciation fund, $3,178.62." Thus, the depreciation fund seemed roughly analogous to retained earnings, rather than a contra asset account.

The income statement of the 1852 report showed a payment to: "depreciation of engines and machinery, $6,842.35." Again, this was the residual balance on the income statement (net earnings); however, the depreciation fund had the same balance ($31,332.58) as the previous year. As previously stated, the summary of debits and credits was no longer a balance sheet in that year. The residual balance was called the "repair fund" in later years. Unfortunately, it was not clear how it was used.

Thus, MSH managers understood some of the problems associated with fixed assets that wear out and need replacing. The railroad experimented with depreciation-related techniques. Since the managers changed procedures, presumably they did not discover a satisfactory procedure. Of course, none of the techniques resemble modern depreciation methods.

Conclusions

This paper reviewed 15 annual reports of the MSH over a 20 year period from the mid-19th century. The primary focus of the reports was a verbal summary of annual operations and construction activity, with limited fiscal information. The 1848 report was the first to present a financial statement, "Statement of the Receipts and Payments of Cash." The 1851 and 1852 reports presented virtually complete financial statements. The cash statement and income statement continued to be presented through the 1860 fiscal year, but the balance sheet did not. Accounting was cash-based. Although the railroad experimented with a "Depreciation Fund," no depreciation allowance was used. Key points included the lack of obvious articulation across financial statements, a changing format of statements presented over the period analyzed, and a lack of accruals.

I would like to thank Sharon Hurley for discovering the annual reports of the Minehill and Schuylkill Haven, the Library Company of Philadelphia for making them available, and Sarah Holmes for helpful suggestions on an earlier draft of this paper. An earlier version of this paper was presented at the 1997 of Accounting Historians Research Conference.

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CONTRIBUTIONS TO SILENT AUCTION

The Academy will host a silent auction at the 1998 Research Conference in Atlanta on November 12-14. If you have some old accounting books or publications you would like to contribute to the Academy for use in the silent auction, please contact Jeanette Sanfilippo at (314) 529-9571 or E-mail: jsan@maryville.edu.