ACCOUNTING THOUGHT IN THE UNITED STATES, 1815 - 1860

The subject of accounting history in the United States, as I have witnessed, has received noticeably less attention than other business subjects. Moreover, whatever has been written on this subject has focussed primarily on *general* evolutionary trends in procedure and thought. This means that there has been little attention given to, or little concern shown for, detail — detail of particular procedures used and particular ideas expressed by individuals. It is with this concern or attention that I have tempered this study on accounting history and, furthermore, found it rewarding. But you may ask in what way is concern for detail of this sort rewarding, or what does such a concern accomplish. And I would reply that it helps to explain various stages of business development in terms of *gradual transition* and makes us less inclined, as a result, to look for major events to explain them. The moral here is that headaches need not arise from alleged unexplainable gaps between these stages of development. Detail is better than Dristan!

Most of this study is taken up with accounting procedures and thought on the railway industry, and to a lesser extent on certain New England firms in, for example, the textile machinery industries. Now due to time restrictions, I shall focus primarily on the railway industry. In my research I examined, among other things, annual reports of ten railroads[1], selected newspaper items from the *American Railway Times* and *American Railroad Journal,* and reports of investigating committees on two railroads — Concord and Boston & Maine.

Among the various accounting matters examined in this study are depreciation, surplus and surplus appropriations, conservatism, and reflections on the notion of stewardship. I should like to spend the remainder of my time pointing out some of the things uncovered on these matters.

I

The attention given depreciation during this period, particularly in the railway industry, is perhaps second only to the attention given the assets subject to depreciation. Such assets were grouped under what is called the "construction account." This represented a general classification of items which included road and equipment items, e.g., rights of way, buildings, track, road machinery and tools, locomotives, cars of all types, etc. It is not difficult to understand why so much attention was given depreciation. One reason is that the assets subject to depreciation comprised anywhere from 80% to 90% of total assets. Another reason is the importance it played relative to the interests of various groups of people. Proper allowances for depreciations were important (1) to stockholders, since they had definite bearing on future dividend policies; (2) to management teams, since they were essential to maintaining capital in good working condition; (3) to the public, since they were necessary to provide satisfactorily on a continuing basis the services expected by those who used and needed them.

The depreciation methods followed by the railroad whose annual reports were examined reflected varying conceptions of depreciation. There was, however, one widely accepted method which may be considered the parent of these varying conceptions. It is called the "renewal" method. In order that you may get some perspective on the conception of depreciation reflected in this method, the following contrast is made between it and the current conception. Depreciation today is a systematic allocation of incurred cost on certain tangible assets over the period of their expected useful lives; it is not a process of valuation. The factors considered in determining useful life and hence contributory to depreciation are *physical* (wear and tear, deterioration, damage, etc.) and *functional* (inadequacy, obsolescence, etc.). The important points to keep in mind are (1) periodically (yearly) only a portion of the cost involved is expensed and (2) allocation is achieved by means of a depreciation reserve or allowance which is neither a cash fund nor a liability to replace. The renewal method, on the other hand, is linked with replacement or renewal of physically worn-out or dissipated assets. This meant that physical factors only were considered and that charges to operating expense were made only when replacement took place. These features are illustrated in the example below.[2]

As for other types of business operations, a common method used before the advent of railroads was what might be called the "inventory" or "mercantile" method. In its application, valuations were made of depreciable properties as though they were unsold merchandise. An illustration of this method is also given below.[3]

Somewhat related to the inventory method was the periodic valuation method, wherein large amounts were periodically written off the values of plant and equipment items. This was done when the companies had sufficient earnings to absorb the write-downs in value. This is a case of making the fat years pay for the lean ones — an antiquated form of "pencil-pushing." Ths method was practiced in the earlier history of the Bigelow-Sanford Carpet Company and Saco-Lowell Shops.

II

Conservatism was hailed in its application as a prudent and wise practice, particularly in respect to dividend and capitalization policies. In respect to dividends, a conservative practice lay in their distribution in amounts less than reported profits, in order that a sufficient amount could be retained (a) to accommodate increases in operations brought about by increased traffic, (b) to meet competition, and (c) to provide for future replacements of road and equipment items. Such a dividend policy was not always considered wise and prudent, however, if, for example, it meant borrowing money to make dividend payments. In short, there is no logical connection between profits and cash. In respect to capitalization policies, a conservative practice lay in minimizing charges to road and equipment accounts. The effect of this practice, as businessmen saw it at that time, was to remove the likelihood of having anything of fictitious value on the books, decrease management burden in maintaining capital equipment in good working condition, and provide some restraint on dividend distributions by loading the expenses and hence reducing the profit figure.

A case in point on alleged conservative policy involves the Pennsylvania Railroad Company. The railroad was experiencing difficulty in raising funds needed to complete construction of its road. As a result, management undertook a plan to induce the needed funds by promising interest on amounts paid in on stock subscriptions. It did so. Now under its charter, management was authorized to charge such interest payments to the company's road and equipment accounts. Over a period of time, more than $2,800,000 was paid as interest and so charged in the accounts. As soon as a substantial part of the road was open for operations, and sufficient earnings had been made and retained, management adjusted these accounts by removing the $2,800,000 plus from them and charging surplus instead. In effect, the interest payments became dividend distributions in advance!

III

Surplus and Surplus Appropriations was one of the more complicated areas of railway accounting procedure at that time, primarily because of the peculiar and cumbersome procedures on surplus appropriations and differences in terminology used by various railroads.

At the outset, it is important that we have an understanding of "surplus" and "surplus appropriation." The former is essentially equivalent to the meaning of "retained earnings." The latter — sometimes called "surplus reserve" — represents an earmarking of surplus for specific purposes. Incidentally, there is a popular misconception today that surplus represents liquid funds and that surplus appropriations represent something like sums of money stored away for rainy days. These are, in a manner of speaking, merely bookkeeping phenomena and are unrelated to funds.

A strange procedure seen in early railroad records is what essentially represents a duplication in the accounting for appropriations. Specifically, there were appropriations set up on the income *and* surplus levels, in contrast to the one level used today. For example, there would be two accounts for dividend appropriations, entitled "Dividend Appropriation of Income" and "Dividend Appropriation of Surplus." The effect of this procedure was to make appropriations before it was even determined whether income and surplus were sufficient to accommodate the appropriations!

The reason or reasons for such duplication could not be conclusively determined, but I did find something suggesting what one reason could be. It concerned the favorable impression of prudent management created by raising funds internally. One of the ways to finance internally to create this impression would be the prevention of high dividend distributions by means of income appropriations, which in turn would constitute a strong defense against stockholders' charges about low dividends.

In respect to terminology, some of the terms used then were the same as certain ones used today but unfortunately with different meanings. The following terms and explanations will illustrate some of the technical complications involved: (1) profit-and-loss account, functioning similarly to a surplus or retained earnings account; (2) profit-and-loss accounts, representing changes in the profit-and-loss account. These accounts include surplus appropriations; (3) profit and loss statement, functioning similarly to a statement of retained earnings in which the objective is to determine the balance in the profit-and-loss account at the end of a period. This statement included information on surplus appropriations.

To complicate matters even further, not every railroad management used the name "profit and loss." For example, Concord used "Contingent Fund," and Boston & Maine used a series of names, including "Statement of Surplus Account," "Statement of Unexpended Earnings," and "Statement of Undivided Earnings." Beginning with 1873, Boston & Maine used "Profit and Loss." Surplus appropriation account titles also differed. Eastern used "Sinking Fund;" Boston & Worcester, "Depreciation Account;" Concord, "Deterioration Account."

IV

Associated with the rise of the corporate form of doing business on a more pronounced scale was a greater resort to stewardship or delegated management. The responsibilities involved in running the shows were shifted from owners to teams of men trained and experienced for that purpose. They were placed in a position of trust and empowered to act in behalf of the owners.

Now the *particular* responsibilities of management to owner-interests and the degree to which management should be charged for carrying out these responsibilities were matters on which there were differences of opinion

On matters pertaining to particular responsibilities, in one instance the indication was that most directors and presidents did not consider themselves obliged to tell what some critics called the "whole truth." The whole truth, whatever that may be, was being concealed, according to articles in the *American Railway Times* and *American Railroad Journal,* by bunching or lumping together expenses and omitting depreciation deductions from the reports. One source said that the "lumping system covers up too many dead horses and possibly many dead heads — at all events many very thick ones." Dionysius Lardner, in his *Railway Economy,* said similarly that inadequate detail was being given in the railroad reports. He also maintained that the honesty of management (which he said is a much more ordinary quality than ability) was insufficient to good management of business affairs.

Speaking of honesty, an interesting contention made in an editorial of the *Railway Times* was that railroad management teams were controlled by temporary investors (those who held stock to sell) rather than by permanent investors (those who held stock as an investment), and that as a result dividends were being paid out at the expense of deferring badly needed repairs in order to raise the market value of railroad stock.

Concerning the degree of responsibility with which management should be charged, a rather unique view was given by an investigating committee of the Concord Railroad in 1857. It essentially ignored the distinction between corporate entities run by management teams and proprietorships run by owners. I should like to close this summary by quoting it.

> The proprietors of railroads have no right to complain that their investment is unproductive if the very unproductiveness is directly or indirectly attributable to the improvidence, slothfulness, extravagance, ruthlessness, unskillfulness, incapacity, or unfaithfulness of their own agents and servants in the control and management of their investment. If any considerable share of the legitimate earnings of their property is squandered — whether... in extravagant salaries or wasteful expenditures... or through carelessness, incapacity, fraud, or dishonesty of their own public officers and servants — the responsibility just rests and the loss properly falls on the stockholders themselves.

L. E. Andrade
University of Nebraska

1 *These annual railroad reports, together with the years examined are: (1) Baltimore & Ohio — 1833; (2) Boston & Lowell — 1844-1849, 1855, 1856, 1859, 1860; (3) Boston & Maine—1846-1849, 1852-1856, 1859, 1860; (4) Boston & Worcester — 1843-1850, 1854-1857, 1859, 1860; (5) Boston & Providence — 1844, 1856; (6) Concord — 1845-1849, 1855, 1856, 1859, 1860; (7) Eastern — 1846-1849, 1855, 1856, 1859, 1860; (8) Northern Railroad Company of New York — 1850; (9) Old Colony & Fall River — 1856; (10) Western — 1856.*

2 *Facts: Passenger car; $4,000 cost; expected useful life, 8 years; replacement cost at end of 8th year, $4,000.*

	A *Early* *accounting procedure*	*B* *Current* *accounting procedure*
1. annual depr.	*no entry*	*Depr. Expense 500* *Res. for Depr. 500*
2. replacement for cash	*Maintenance (or Renewals and Replacements) — 4,000* *Cash 4,000*	*Res. for Depr. 4,000* *Equip. (old) 4,000* *Equip. (new) 4,000*

Differences in procedure:

(a) In each case, $4,000 is expensed but at different times. Under A, it is expensed at end of 8th year; under B, in each of the 8 years in the amount of $500.

(b) No asset account is affected under A.

(c) The expense account under A is a maintenance rather than a depreciation account. This exemplifies the early railroad perspective on depreciation, namely, that depreciation is essentially a maintenance cost rather than something over and above maintenance. This perspective arose as a result of treating expenditures of this sort from the point of view of the entire inventory of road and equipment items in contrast to individual items, as is done today. In short, there is this analogy: a renewal or replacement is to the entire inventory as a repair is to one piece of it.

(d) *Expenses under A are charged for the replacement cost rather than the cost of the item replaced. To illustrate this more clearly, if the replacement cost of the car were $5,000 instead of $4,000, due to changes in the price level, the $5,000 would be expensed.*

3 *Facts: At the end of 1830, a ship account had an unadjusted balance of $50,000, and valuation of the ship at that time was $47,000.*

SHIP

1-1-30	*50,000*	*12-31-30 present value*	*47,000*
		12-31-30 profit & loss for wear, age, etc	*3,000*
	50,000		*50,000*
1-1-31 present value	*47,000*		

In this case, a "depreciation" expense would be recorded in the amount of $3,000. This method reflects a conception of a business entity in terms of a venture in contrast to a going concern.